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Technical Note 129A

THE THERMODYNAMIC PROPERTIES OF NITROGEN FROM 114 TO 540° R BETWEEN 1.0 AND 3000 PSIA

SUPPLEMENT A (BRITISH UNITS)

THOMAS R. STROBRIDGE

U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

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PREFACE

This is a supplementary edition of the National Bureau of Standards Technical Note No. 129, and presents the same data in the dimensional units of the British system. The original text has been included to indicate the methods used to generate the property tables. Pressure and temperature ranges have been modified slightly to allow the use of integer increments. Computations were performed in the metric unit system and converted using the following relations:

Pressure. . . . . atm x 14.696006 = psia

Specific Volume . . . . cc/gram x 0.016018 = ft^3/lb

Temperature. . . . . °K x 1.8 = °R

Enthalpy . . . . . j/gram x 0.429929 = Btu/lb

Internal Energy . . . . j/gram x 0.429929 = Btu/lb

Entropy . . . . . j/gram - °K x 0.238849 = Btu/lb - °R

THE THERMODYNAMIC PROPERTIES OF NITROGEN FROM 114 TO 540°R BETWEEN 1.0 AND 3000 PSIA

by

Thomas R. Strobridge

ABSTRACT

The internal energy, enthalpy, entropy, and specific volume of molecular nitrogen are derived and tabulated as functions of temperature and pressure. In addition to a mathematical model for the pressure-volume-temperature surface, accurate functions are given for the representation of the vapor pressure, density of saturated liquid, specific heat of saturated liquid, and the specific heat at zero pressure.

Tabular values in metric units over the same pressure and temperature range are available as Technical Note 129.

1. INTRODUCTION

Cryogenic process calculations involving molecular nitrogen as a refrigeration medium require a continuous set of data over a wide pressure and temperature range. Such data in tabulated form suitable for digital computer use are not available in the literature. Experimental data from the literature were correlated and analytical expressions for the representation of certain properties were derived. These expressions were then used to generate tables of values of internal energy, enthalpy, entropy, and specific volume as functions of pressure and temperature.

2. SYMBOLS

R	-	Gas constant in liter atm/gm-mol^{o}K
P	-	Pressure in atmospheres
T	-	Temperature in degrees Kelvin
V	-	Molar volume in liter/gm-mol.
ρ	-	Density in gm-mol/liter
Z	-	Compressibility factor, $\frac{PV}{RT}$.
U	-	Internal energy.
H	-	Enthalpy
S	-	Entropy
^{o}K	-	Degree Kelvin
^{o}C	-	Degree Celsius
T_o	-	Temperature at saturation at 1 atm (77.364^{o}K)
$j_1, j_2 \ldots$	-	Coefficients for vapor pressure
$k_1, k_2 \ldots$	-	Coefficients for density of saturated liquid
$\ell_1, \ell_2 \ldots$	-	Coefficients for specific heat of saturated liquid
$m_1, m_2 \ldots$	-	Coefficients for specific heat at zero pressure
$n_1, n_2 \ldots$	-	Coefficients for model of PVT surface

ℓn - Natural logarithm

Subscripts

sat - Saturated liquid state

p - Constant pressure

ρ - Constant density or a state at density ρ

T - Constant temperature or a state at temperature T

v - Constant volume

vap - Vaporization

Superscript

o - Ideal gas state or zero pressure

3. VALUES USED FOR SOME PHYSICAL CONSTANTS AND CONVERSION FACTORS

$$R = 8.20574\ (10^{-2})\ \text{liter atm/gm-mol°K}$$

$$1\ \text{atmosphere} = 1.013250\ (10^{6})\ \text{dynes/cm}^2$$

$$0°C = 273.15°K$$

$$\text{Molecular weight of Nitrogen} = 28.016$$

$$1\ \text{joule} = 9.86896\ (10^{-3})\ \text{liter atm}$$

4. VAPOR PRESSURE

An accurate representation of the vapor pressure-temperature relationship from the triple point to the critical point was needed for interpolation between experimental data and for obtaining the derivative, $\frac{dP}{dT}$, along the two-phase boundary. Experimental values for the

critical pressure and temperature have been published by White, Friedman, and Johnston [1951]. Armstrong [1954], and Friedman and White [1950] have published vapor pressure data which, when combined, extend from the triple point up to within 1 K° of the critical temperature. These sources of data were chosen from those available because of the apparently reasonable agreement in temperature scales used and the consistency of the three sets of data. A total of 91 points was then available for consideration.

The constants for (1) were found by the method of least squares [Jones, 1962].

$$\mathrm{Log}_{10}P(\mathrm{atm}) = j_1 + j_2/T + j_3T + j_4T^2 + j_5T^3 + j_6T^4 + j_7T^5 \quad (1)$$

where $j_1 = 5.27805 \quad (10^{-1})$ $\qquad j_5 = 2.9857103 \ (10^{-5})$

$j_2 = -3.0507339 \ (10^{2})$ $\qquad j_6 = -1.4238458 \ (10^{-7})$

$j_3 = 1.6441101 \ (10^{-1})$ $\qquad j_7 = 2.7375282 \ (10^{-10})$

$j_4 = -3.1389205 \ (10^{-3})$

Armstrong [1954] gave an equation which represented his data with a mean absolute deviation of 0.063 mm Hg. The agreement between (1) and the Armstrong data is excellent; the mean absolute deviation is 0.061 mm Hg. Equation (1) more closely represents the data of Friedman and White [1950] than an equation given in their paper except at one observed point. The critical point (126.26 ± 0.04°K and 33.54 ± 0.02 atm) according to White, Friedman, and Johnston [1951] is approximated by (1) within the estimated errors. The temperature of the normal boiling point (77.3640 + °K) predicted by (1) agrees to five places with the figure given by Armstrong [1954].

5. DENSITY OF SATURATED LIQUID

The functional form of (2), which may be used to represent the density of saturated liquid, was suggested by Hou and Martin [1959].

$$\rho_{sat}(\mathrm{gm\text{-}mol}/\ell) = k_1 + k_2x + k_3x^2 + k_4x^3 + k_5x^4 \quad (2)$$

where $x = \left[1 - \frac{T}{126.26}\right]^{1/3}$ and

$k_1 = 1.1230207\ (10^1)$ $\quad k_4 = 2.7790397\ (10^1)$

$k_2 = 2.1082073\ (10^1)$ $\quad k_5 = -1.1764704\ (10^1)$

$k_3 = -9.8177403$

Equation (2) was fitted [Jones, 1962] to the data of Mathias, Kamerlingh Onnes, and Crommelin [1914] with a maximum error of 0.85%. With the exception of two points the agreement with the data, which extend almost from the triple point to the critical point, is better than 0.13%. A deviation plot shows that the largest differences are near the critical point. The experimenters remarked that the greatest experimental difficulties occurred near the critical and that there is a larger uncertainty in the data in this region.

6. SPECIFIC HEAT OF SATURATED LIQUID

The available experimental data (65.02 to 116.99°K) on the specific heat of saturated liquid appeared to be of the lowest accuracy of the various types of data considered. The differences between (3) and the data of Giauque and Clayton [1933] and of Wiebe and Brevoort [1930] are in some instances almost 2%. There is not, however, any significant trend in the deviations which, if present, would indicate an unsatisfactory form for (3).

$$C_{sat}(j/gm\text{-}mol) = \ell_1 \frac{T}{(126.26-T)^2} + \ell_2 + \ell_3 T + \ell_4 T^2 + \ell_5 T^3 \qquad (3)$$

where $\ell_1 = 6.246881860$

$\ell_2 = 3.939006895\ (10)$

$\ell_3 = 6.821295539\ (10^{-1})$

$\ell_4 = -1.052432772\ (10^{-2})$

$\ell_5 = 6.001046981\ (10^{-5})$

The reader is cautioned against the use of (3) above 120°K.

7. SPECIFIC HEAT AT ZERO PRESSURE

The data of Goff and Gratch [1951] are represented by (4) with a maximum error of ± 1 in the fifth significant figure.

$$C_p^\circ \text{ (j/gm-mol °K)} = m_1 + m_2 T + m_3 T^2 + m_4 T^3 + m_5 T^4 \quad (4)$$

where $m_1 = 2.9109996\ (10)$

$m_2 = -8.0820995\ (10^{-4})$

$m_3 = 8.6142037\ (10^{-6})$

$m_4 = -3.6893228\ (10^{-8})$

$m_5 = 5.6750880\ (10^{-11})$

8. DATA OF STATE

Several equations were fitted to the PVT data described below in an attempt to find a functional form which would adequately describe the surface. The form chosen, (5), was greatly influenced by the modifications which Bloomer and Rao [1952] made to the Benedict-Webb-Rubin equation [Benedict, Webb, and Rubin , 1940], and by the equation given by Benedict [1937].

$$\begin{aligned} P(\text{atm}) = {} & RT\rho + (Rn_1 T + n_2 + \frac{n_3}{T} + \frac{n_4}{T^2} + \frac{n_5}{T^4})\rho^2 + \\ & (Rn_6 T + n_7)\rho^3 + n_8 T \rho^4 + \\ & \rho^3 (\frac{n_9}{T^2} + \frac{n_{10}}{T^3} + \frac{n_{11}}{T^4}) e^{-n_{16}\rho^2} + \\ & \rho^5 (\frac{n_{12}}{T^2} + \frac{n_{13}}{T^3} + \frac{n_{14}}{T^4}) e^{-n_{16}\rho^2} + n_{15}\rho^6 \end{aligned} \quad (5)$$

where $R = 0.820574 \quad (10^{-1})$

$n_1 = 0.3371608442 \quad (10^{-1})$

$n_2 = -0.5771942866$

$n_3 = -0.1142108127 \quad (10^{3})$

$n_4 = 0.8522634899 \quad (10^{3})$

$n_5 = 0.3440176200 \quad (10^{7})$

$n_6 = 0.1650365874 \quad (10^{-2})$

$n_7 = -0.1578905910 \quad (10^{-1})$

$n_8 = 0.4168356912 \quad (10^{-5})$

$n_9 = 0.3211549057 \quad (10^{3})$

$n_{10} = 0.1080120452 \quad (10^{6})$

$n_{11} = -0.1066657899 \quad (10^{8})$

$n_{12} = -0.3304489192 \quad (10^{1})$

$n_{13} = 0.1223693626 \quad (10^{4})$

$n_{14} = -0.5693539048 \quad (10^{5})$

$n_{15} = 0.1675167178 \quad (10^{-5})$

$n_{16} = 0.56 \quad (10^{-2})$

and T is in °K and ρ is in g-mol/ℓ.

Data for the density of saturated liquid and for the vapor pressure plus data from Benedict [1937], Friedman [1950], Kamerlingh Onnes and Van Urk [1924], Michels, Wouters, and DeBoer [1936], and Bartlett et. al. [1930] provided a total of 522 points on the PVT surface. Preliminary calculations indicated that five of these points were not consistent with the other data, and they were not considered in any subsequent calculations. Four of the discarded points were from Kamerlingh Onnes and Van Urk [1924]: 35.985 atm at 0°C, 47.325 atm at -23.62°C, 54.60 atm at -81.10°C, and 30.92 atm at -148.58°C. One point from Friedman [1950] was omitted: 4.8428 atm at 120.02°K. The available data then describe a surface having a temperature range from about 64 to 350°K, extending from low pressures to about 3400 atm, and having a maximum density of about 3 times the critical density. Equation (5) was fitted [Jones, 1962] to the data with a root-mean-square error in Z of 0.0087. Although the density deviations were small and thermodynamic properties calculated from this model probably would be satisfactory, it was decided to try to improve the accuracy of the desired properties by fitting (5) to only the data below 300 atm. A comparison of (5) with these 393 observations gives the following results:

Sum of squares of deviations in Z	= 0.0017
Root mean squared error in Z	= 0.0020
Average absolute error in P (excluding saturated liquid)	= 0.108 atm
Average percent error in P (excluding saturated liquid)	= 0.148%
Average absolute error in ρ	= 0.0345 g-mol/ℓ
Average percent error in ρ	= 0.386%

The agreement between (5) and the experimental data is better in certain regions than in others. Exclusive of the saturated liquid states, there are eight points where the deviations of (5) from the observed data are greater than 1% in pressure. Four of these points are in the compressed liquid data from Benedict [1937] where $\left[\frac{\partial P}{\partial \rho}\right]_T$ is large and a very small error in density at constant temperature produces a relatively large error in pressure. Near the critical point where $\left[\frac{\partial P}{\partial \rho}\right]_T$ is close to zero, the pressure approximation is quite good, but here the densities are subject to larger deviations.

The coefficient of ρ^2 in (5) was divided by R T and evaluated at various temperatures. A plot of this curve along with values for the second virial coefficient from Friedman [1950] and those from Hall and Ibele [1950] as calculated from the data of Kamerlingh Onnes and Van Urk [1924] is shown in figure 1.

The first and second partial derivatives of pressure with respect to density at constant temperature given by (5) are zero at a point 0.86°K and 1.34 atm higher than the values in White, Friedman, and Johnston [1951]. An investigation of $\left[\frac{\partial^2 P}{\partial T^2}\right]_\rho$ near the critical point shows that (5) predicts a maximum and minimum of C_v with temperature as indicated by Rowlinson [1959]. However, because there are no calorimetric data over most of the area covered in this note, no estimate can be made of the accuracy of specific heats calculated using (5).

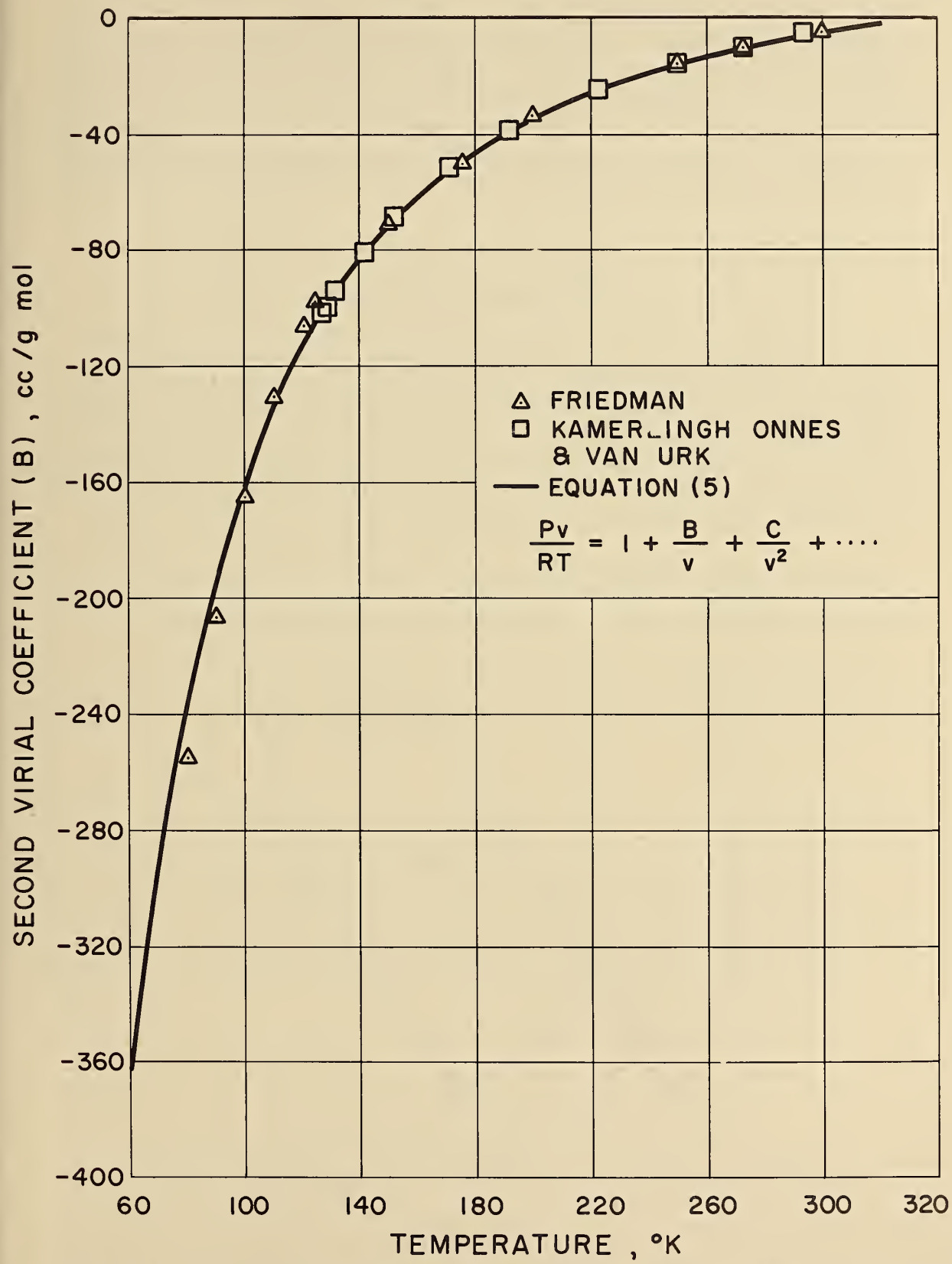

Figure 1 -- Comparison of experimental and calculated second virial coefficients.

The 8 to 10 figures given for the coefficients of the various equations do not imply 8 or 10 place accuracy. However, it has been found that the equations will give a better approximation to the experimental data if as many figures as possible are used in the coefficients. Because most of the work was semi-empirical, all the first and second derivatives of (1), (2), (3), and (5) were evaluated at closely spaced intervals to make sure that the slopes and curvatures do not exhibit any physically unrealistic behavior.

9. DERIVED PROPERTIES

Values for internal energy, enthalpy, entropy, and specific volume are given in the tables as functions of pressure and temperature. The calculations were made in the following sequence. First the properties along the two-phase boundary were established. The entropy and enthalpy of saturated vapor were calculated from (6) and (7). The upper limits of integration were established using (1) and (5). The entropy and enthalpy of vaporization, ΔS_{vap} and ΔH_{vap}, were computed using the Clapeyron relation, (8), where $\frac{dP}{dT}$ was evaluated from (1), and the volume difference was as predicted by (5).

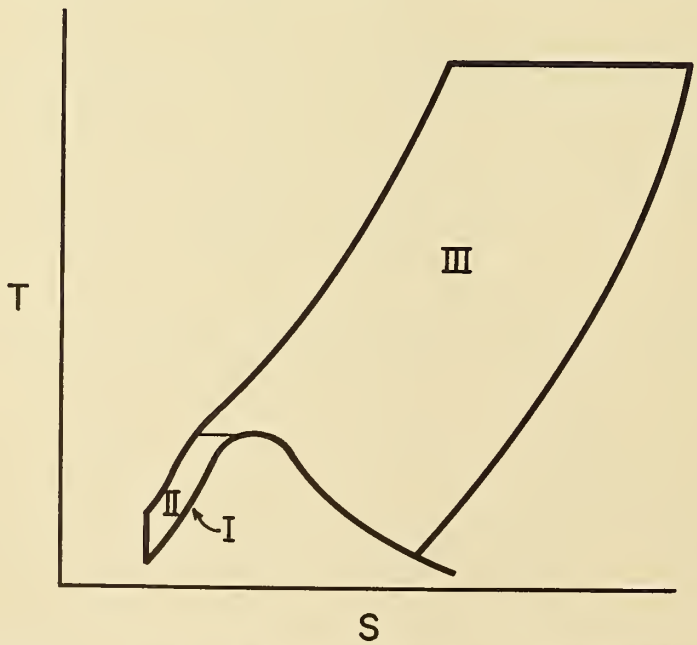

Figure 2 -- Regions of different calculational procedures

Then the quantities ΔS_{vap} and ΔH_{vap} were subtracted from the entropy and enthalpy, respectively, of saturated vapor to give values along the saturated liquid line, line I in figure 2. At a pressure of 760 mm Hg, Giauque [1933] gives a ΔH_{vap} of 5576.8 ± 4.2 j/gm - mol. The Clapeyron equation yields 5582.3 j/gm - mol at 77.364°K in this work, while Furukawa and McCoskey [1953] measured a value of 5592.3 j/gm - mol at 77.395°K.

$$S_{T,\rho} = S^{o}_{T_o} + \int_{T_o}^{T} C^{o}_{p} d(\ell n T) - R\ell n(RT\rho) + \int_{o}^{\rho} \left[\frac{R}{\rho} - \frac{1}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_{\rho} \right]_{T} d\rho \quad (6)$$

where $S^{o}_{T_o}$ (3.014610292 j/gm °K) is the reference entropy of the ideal gas at T_o and 1 atm.

$$H_{T,\rho} = H^{o}_{T_o} + \int_{T_o}^{T} C^{o}_{p} dT + (Z-1)RT + \int_{o}^{\rho} \left[\frac{P}{\rho^2} - \frac{T}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_{\rho} \right]_{T} d\rho \quad (7)$$

where $H^{o}_{T_o}$ (231.1885783 j/gm) is the reference enthalpy of the ideal gas at T_o.

$$\Delta S_{vap} = \frac{dP}{dT} \Delta V_{vap} \quad (8)$$

The reference temperature, T_o, is the temperature of the normal boiling point, 77.364°K. The values of $S^{o}_{T_o}$ and $H^{o}_{T_o}$ were selected on the basis of zero entropy and enthalpy for the saturated liquid at the triple point.

As a check on the accuracy of the method of calculation, using the values for ΔS_{vap} and ΔH_{vap} from (8) to establish a common reference, the entropy and enthalpy of saturated liquid were recalculated from information given by (1), (2), and (3). Then using the values of entropy and enthalpy along the saturated vapor line, ΔH_{vap} and ΔS_{vap} were found. In the temperature range covered by the data for C_{sat}, 65-117°K, the maximum difference in values for ΔS_{vap} computed by the different methods is 0.61%. Although the calculations are not entirely independent, this comparison would tend to disclose any inconsistencies between the relationships used for vapor pressure, ρ_{sat}, C_{sat}, and C_p^o and the model of the PVT surface.

In region II, figure 2, the isothermal changes in entropy and enthalpy from saturated liquid states were calculated from (9) and (10). Equations (6) and (7) were used in region III, figure 2, and the internal energy was computed from (11) over the entire surface.

$$\Delta S = \int_{\rho_{sat}}^{\rho} \left[-\frac{1}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_{\rho} \right]_T d\rho \tag{9}$$

$$\Delta H = \frac{P}{\rho} - \left(\frac{P}{\rho} \right)_{sat} + \int_{\rho_{sat}}^{\rho} \left[\frac{P}{\rho^2} - \frac{T}{\rho^2} \left(\frac{\partial P}{\partial T} \right)_{\rho} \right]_T d\rho \tag{10}$$

$$U = H - PV \tag{11}$$

It was found that the calculated properties did not match at the mutual boundary of regions II and III. This was due possibly to a small error in the prediction of the specific volume of saturated vapor by (5). A small correction which was applied to the values for ΔS_{vap} given by (8), was found graphically. This correction δS_{vap}, given in table 1, when added to ΔS_{vap} decreases the previous values for the entropy of saturated liquid by a maximum of 1.12% at 122°K. The correction appears in tables 2 and 3.

Table 1

Corrections for entropy of vaporization

T (°K)	δS_v (j/gm °K)
105	0
106	0.000251
107	0.000585
108	0.001004
109	0.001506
110	0.002092
111	0.002761
112	0.003472
113	0.004351
114	0.005230
115	0.006234
116	0.007363
117	0.008786
118	0.010460
119	0.012384
120	0.014644
121	0.016443
122	0.016736
123	0.016736
124	0.016736
125	0.016736
126	0.016736

The accuracy of the tabulated properties varies over the surface. It is estimated that in general the tables are accurate within 5%, but the error may be considerably larger in some regions. The number of figures given in the tables is not justified on the basis of a possible 5% error, but is presented to maintain internal consistency.

In Supplement A of this Technical Note, Strobridge [1962], the same tables are presented in the British system of units (pressure in pounds per square inch, temperature in degrees Rankine, energy in British Thermal Units, mass in pounds, and volume in cubic feet).

10. ACKNOWLEDGEMENT

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11 REFERENCES

Armstrong, G. T., The vapor pressure of liquid nitrogen, J. Research NBS 53, No. 4, 263-266 (Oct. 1954) RP 2543.

Bartlett, E. P., H. C. Hetherington, H. M. Kvalnes, and T. H. Tremearne, The compressibility isotherms of hydrogen, nitrogen, and a 3:1 mixture of these gases at temperatures of -70, -50, -25, and 20° and at pressures to 1000 atmospheres, J. Am. Chem. Soc. 52, No. 4, 1363-1373 (Apr. 1930).

Benedict, M., Pressure, volume, temperature properties of nitrogen at high density, I and II, J. Am. Chem. Soc. 59, No. 11, 2224-2242 (Nov. 1937).

Benedict, M., G. B. Webb, and L. C. Rubin, An empirical equation for the thermodynamic properties of light hydrocarbons and their mixtures. I., J. Chem. Phys. 8, No. 4, 334-345 (Apr. 1940).

Bloomer, O. T., and K. N. Rao, Thermodynamic properties of nitrogen, Inst. Gas Techn. Res. Bul. 18, (Oct. 1952).

Furukawa, G. T., and R. E. McCoskey, The condensation line of air and the heats of vaporization of oxygen and nitrogen, NACA Tech. Note 2969, (Jun. 1953).

Friedman, A. S., Pressure, volume, temperature relationships of gaseous hydrogen, nitrogen and a hydrogen-nitrogen mixture, PhD Thesis, The Ohio State University, (1950).

Friedman, A. S., and D. White, The vapor pressure of liquid nitrogen, J. Am. Chem. Soc. 72, No. 9, 3931-3932 (Sept. 1950).

Giauque, W. F., and J. O. Clayton, The heat capacity and entropy of nitrogen. Heat of vaporization. Vapor pressures of solid and liquid. The reaction $1/2N + 1/2O_2 = NO$ from spectroscopic data, J. Am. Chem. Soc. 55, No. 12, 4875-4889 (Dec. 1933).

Goff, J. A., and S. Gratch, Zero-pressure thermodynamic properties of carbon monoxide and nitrogen, Trans. ASME 72, No. 6, 741-749 (Aug. 1950)

Hall, N. A., and W. E. Ibele, Thermodynamic properties of air, nitrogen, and oxygen as imperfect gases, Tech. Paper 85, Eng. Exp. Sta., Inst. of Technology, University of Minnesota, (Dec. 1951).

Hou, Y. C., and J. J. Martin, Physical and thermodynamic properties of trifluoromethane, AIChE J. 5, No. 1, 125-129 (Mar. 1959).

Jones, W. B. (to be published), (1962).

Kamerlingh Onnes, H., and A. Th. Van Urk, Isotherms of di-atomic substances and their binary mixtures. XXV III. On the isotherms of nitrogen at low temperatures. Commun. Phys. Lab. University of Leiden, 169d, (1924).

Mathias, E., H. Kamerlingh Onnes, and C. A. Crommelin, The rectilinear diameter of nitrogen, Commun. Phys. Lab., University of Leiden, 145c, (1914).

Michels, A., H. Wouters, and J. De Boer, Isotherms of nitrogen between 200 and 3000 atm and 0° and 150°, Physica 3, No. 7, 585-589 (Jul. 1936).

Rowlinson, J. S., Liquids and liquid mixtures, pp. 95-99 (Academic Press Inc., New York, N. Y., 1959).

Strobridge, T. R., The thermodynamic properties of nitrogen from 64 to 300°K between 0.1 and 200 atmospheres, National Bureau of Standards Technical Note No. 129, PB 161630, Supplement A, (British Units) (1962).

White, D., A. S. Friedman, and H. L. Johnston, The critical temperature and pressure of nitrogen, J. Am. Chem. Soc. 73, No. 12, 5713-5715 (Dec. 1951).

Wiebe, R., and M. J. Brevoort, The heat capacity of saturated liquid nitrogen and methane from the boiling point to the critical temperature, J. Am. Chem. Soc. 52, No. 2, 622-633 (Feb. 1930).

TABLE 2

THERMODYNAMIC PROPERTIES OF NITROGEN AT SATURATION

TEMPERATURE (R)	PRESSURE (PSIA)	ENTROPY (BTU/LB-R)			ENTHALPY (BTU/LB)			SPECIFIC VOLUME (CU-FT/LB)	
		LIQUID	VAPOR	ΔS_{vap}	LIQUID	VAPOR	ΔH_{vap}	LIQUID	VAPOR
113.670	1.813	.00000	.81720	.81720	.000	92.891	92.891	.01845	23.812
114.000	1.876	.00142	.81551	.81409	.162	92.968	92.806	.01846	23.086
116.000	2.290	.00994	.80551	.79558	1.143	93.429	92.287	.01856	19.214
118.000	2.774	.01833	.79596	.77762	2.127	93.886	91.759	.01865	16.105
120.000	3.337	.02661	.78681	.76020	3.113	94.337	91.224	.01875	13.589
122.000	3.988	.03476	.77804	.74329	4.102	94.782	90.681	.01886	11.538
124.000	4.735	.04278	.76964	.72686	5.091	95.221	90.130	.01896	9.8545
126.000	5.589	.05068	.76156	.71089	6.081	95.653	89.572	.01907	8.4635
128.000	6.558	.05845	.75381	.69536	7.072	96.077	89.006	.01918	7.3071
130.000	7.654	.06610	.74634	.68025	8.062	96.494	88.432	.01929	6.3401
132.000	8.888	.07362	.73915	.66553	9.052	96.902	87.850	.01940	5.5267
134.000	10.270	.08102	.73222	.65120	10.041	97.302	87.260	.01952	4.8390
136.000	11.813	.08831	.72552	.63722	11.030	97.692	86.662	.01964	4.2545
138.000	13.527	.09547	.71905	.62358	12.019	98.072	86.054	.01976	3.7554
139.255	14.696	.09992	.71510	.61518	12.639	98.306	85.668	.01984	3.4791
140.000	15.425	.10253	.71279	.61026	13.006	98.443	85.436	.01989	3.3271
142.000	17.520	.10948	.70672	.59724	13.994	98.802	84.809	.02001	2.9581
144.000	19.823	.11632	.70084	.58451	14.981	99.151	84.170	.02015	2.6387
146.000	22.349	.12307	.69512	.57205	15.968	99.488	83.519	.02028	2.3612
148.000	25.110	.12972	.68955	.55984	16.956	99.812	82.856	.02042	2.1191
150.000	28.120	.13628	.68414	.54786	17.945	100.124	82.179	.02056	1.9071
152.000	31.392	.14276	.67886	.53610	18.936	100.423	81.487	.02070	1.7209
154.000	34.940	.14916	.67370	.52454	19.929	100.708	80.780	.02085	1.5568
156.000	38.778	.15548	.66866	.51317	20.925	100.979	80.055	.02100	1.4116
158.000	42.921	.16175	.66372	.50197	21.924	101.235	79.311	.02116	1.2828
160.000	47.383	.16795	.65888	.49093	22.928	101.476	78.548	.02132	1.1682
162.000	52.179	.17410	.65413	.48002	23.937	101.701	77.764	.02148	1.0660
164.000	57.322	.18020	.64945	.46925	24.952	101.909	76.957	.02165	.9745
166.000	62.829	.18627	.64485	.45859	25.975	102.100	76.125	.02183	.8924
168.000	68.713	.19229	.64032	.44802	27.005	102.273	75.268	.02201	.8186
170.000	74.991	.19829	.63584	.43754	28.045	102.427	74.383	.02219	.7521
172.000	81.677	.20427	.63141	.42714	29.094	102.562	73.468	.02239	.6919
174.000	88.786	.21023	.62702	.41679	30.155	102.677	72.522	.02258	.6375
176.000	96.334	.21617	.62267	.40650	31.227	102.770	71.543	.02279	.5880
178.000	104.336	.22211	.61834	.39623	32.312	102.841	70.529	.02301	.5431
180.000	112.808	.22805	.61404	.38599	33.411	102.889	69.478	.02323	.5021
182.000	121.765	.23399	.60975	.37575	34.525	102.913	68.387	.02346	.4646
184.000	131.223	.23994	.60546	.36552	35.656	102.910	67.255	.02370	.4304
186.000	141.198	.24591	.60117	.35526	36.803	102.881	66.078	.02395	.3990
188.000	151.705	.25189	.59686	.34497	37.968	102.823	64.855	.02422	.3701
190.000	162.761	.25789	.59254	.33464	39.153	102.735	63.582	.02449	.3435
192.000	174.382	.26382	.58818	.32436	40.337	102.614	62.277	.02479	.3191
194.000	186.585	.26977	.58378	.31400	41.543	102.459	60.916	.02509	.2964
196.000	199.386	.27576	.57932	.30356	42.770	102.267	59.497	.02542	.2755
198.000	212.803	.28176	.57479	.29303	44.014	102.034	58.020	.02576	.2560
200.000	226.853	.28780	.57017	.28237	45.283	101.757	56.474	.02613	.2380
202.000	241.555	.29388	.56546	.27158	46.574	101.433	54.859	.02652	.2211
204.000	256.927	.30001	.56061	.26060	47.894	101.055	53.162	.02695	.2054
206.000	272.991	.30624	.55561	.24937	49.249	100.619	51.370	.02740	.1907
208.000	289.766	.31255	.55042	.23787	50.638	100.115	49.478	.02790	.1769
210.000	307.276	.31894	.54501	.22607	52.061	99.536	47.474	.02845	.1639
212.000	325.543	.32546	.53932	.21386	53.529	98.868	45.339	.02906	.1516
214.000	344.594	.33213	.53328	.20115	55.049	98.095	43.046	.02974	.1399
216.000	364.457	.33903	.52680	.18778	56.636	97.195	40.560	.03051	.1287
218.000	385.160	.34650	.51975	.17325	58.369	96.137	37.768	.03141	.1180
220.000	406.739	.35494	.51192	.15698	60.336	94.872	34.536	.03249	.1075
222.000	429.228	.36427	.50297	.13870	62.529	93.320	30.792	.03381	.0972
224.000	452.668	.37491	.49227	.11736	65.044	91.333	26.289	.03555	.0867
226.000	477.104	.38789	.47826	.09037	68.123	88.546	20.423	.03806	.0755

1.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	69.6268	109.946	97.0611	0.9768
					184.00	70.3948	110.443	97.4158	0.9795
					186.00	71.1627	110.939	97.7704	0.9822
					188.00	71.9305	111.436	98.1250	0.9848
					190.00	72.6983	111.933	98.4796	0.9874
					192.00	73.4661	112.429	98.8342	0.9900
					194.00	74.2338	112.926	99.1888	0.9926
					196.00	75.0014	113.423	99.5434	0.9952
					198.00	75.7691	113.919	99.8979	0.9977
					200.00	76.5367	114.416	100.253	1.0002
					202.00	77.3042	114.912	100.607	1.0026
					204.00	78.0718	115.409	100.962	1.0051
					206.00	78.8392	115.906	101.316	1.0075
					208.00	79.6067	116.402	101.671	1.0099
					210.00	80.3741	116.899	102.025	1.0123
					212.00	81.1415	117.395	102.380	1.0146
					214.00	81.9089	117.892	102.734	1.0170
					216.00	82.6762	118.388	103.089	1.0193
					218.00	83.4435	118.885	103.443	1.0216
					220.00	84.2108	119.381	103.798	1.0238
					222.00	84.9781	119.878	104.152	1.0261
					224.00	85.7453	120.374	104.507	1.0283
					226.00	86.5125	120.870	104.861	1.0305
					228.00	87.2797	121.367	105.216	1.0327
					230.00	88.0468	121.863	105.570	1.0349
					232.00	88.8139	122.360	105.925	1.0370
					234.00	89.5810	122.856	106.279	1.0392
					236.00	90.3481	123.353	106.633	1.0413
118.00	45.0140	94.0394	85.7095	0.8691	238.00	91.1152	123.849	106.988	1.0434
120.00	45.7847	94.5366	86.0640	0.8732	240.00	91.8822	124.345	107.342	1.0454
122.00	46.5553	95.0339	86.4187	0.8773	242.00	92.6493	124.842	107.697	1.0475
124.00	47.3257	95.5311	86.7734	0.8814	244.00	93.4163	125.338	108.051	1.0495
126.00	48.0961	96.0284	87.1281	0.8854	246.00	94.1833	125.834	108.406	1.0516
128.00	48.8663	96.5257	87.4828	0.8893	248.00	94.9502	126.331	108.760	1.0536
130.00	49.6364	97.0229	87.8376	0.8931	250.00	95.7172	126.827	109.114	1.0556
132.00	50.4064	97.5202	88.1924	0.8969	252.00	96.4841	127.323	109.469	1.0575
134.00	51.1763	98.0175	88.5472	0.9007	254.00	97.2510	127.820	109.823	1.0595
136.00	51.9461	98.5148	88.9020	0.9044	256.00	98.0180	128.316	110.178	1.0615
138.00	52.7158	99.0120	89.2568	0.9080	258.00	98.7848	128.812	110.532	1.0634
140.00	53.4853	99.5092	89.6116	0.9116	260.00	99.5517	129.309	110.886	1.0653
142.00	54.2548	100.006	89.9664	0.9151	262.00	100.319	129.805	111.241	1.0672
144.00	55.0241	100.504	90.3213	0.9186	264.00	101.085	130.301	111.595	1.0691
146.00	55.7934	101.001	90.6761	0.9220	266.00	101.852	130.798	111.950	1.0710
148.00	56.5626	101.498	91.0309	0.9254	268.00	102.619	131.294	112.304	1.0728
150.00	57.3316	101.995	91.3857	0.9287	270.00	103.386	131.790	112.658	1.0747
152.00	58.1006	102.492	91.7405	0.9320	272.00	104.153	132.286	113.013	1.0765
154.00	58.8695	102.989	92.0952	0.9353	274.00	104.919	132.783	113.367	1.0783
156.00	59.6384	103.486	92.4500	0.9385	276.00	105.686	133.279	113.722	1.0801
158.00	60.4071	103.983	92.8048	0.9416	278.00	106.453	133.775	114.076	1.0819
160.00	61.1758	104.480	93.1595	0.9448	280.00	107.220	134.272	114.430	1.0837
162.00	61.9444	104.977	93.5143	0.9478	282.00	107.986	134.768	114.785	1.0855
164.00	62.7129	105.474	93.8690	0.9509	284.00	108.753	135.264	115.139	1.0872
166.00	63.4814	105.971	94.2237	0.9539	286.00	109.520	135.760	115.493	1.0890
168.00	64.2498	106.468	94.5784	0.9569	288.00	110.287	136.257	115.848	1.0907
170.00	65.0181	106.965	94.9332	0.9598	290.00	111.053	136.753	116.202	1.0924
172.00	65.7863	107.462	95.2878	0.9627	292.00	111.820	137.249	116.556	1.0941
174.00	66.5546	107.959	95.6425	0.9656	294.00	112.587	137.745	116.911	1.0958
176.00	67.3227	108.455	95.9972	0.9684	296.00	113.353	138.241	117.265	1.0975
178.00	68.0908	108.952	96.3519	0.9712	298.00	114.120	138.738	117.619	1.0992
180.00	68.8588	109.449	96.7065	0.9740	300.00	114.887	139.234	117.974	1.1008

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	115.653	139.730	118.328	1.1025	422.00	161.640	169.499	139.587	1.1855
304.00	116.420	140.226	118.683	1.1041	424.00	162.407	169.995	139.941	1.1866
306.00	117.186	140.723	119.037	1.1057	426.00	163.173	170.491	140.296	1.1878
308.00	117.953	141.219	119.391	1.1073	428.00	163.939	170.987	140.650	1.1890
310.00	118.720	141.715	119.746	1.1089	430.00	164.706	171.483	141.004	1.1901
312.00	119.486	142.211	120.100	1.1105	432.00	165.472	171.979	141.358	1.1913
314.00	120.253	142.707	120.454	1.1121	434.00	166.238	172.476	141.713	1.1924
316.00	121.019	143.204	120.809	1.1137	436.00	167.005	172.972	142.067	1.1936
318.00	121.786	143.700	121.163	1.1153	438.00	167.771	173.468	142.421	1.1947
320.00	122.552	144.196	121.517	1.1168	440.00	168.537	173.964	142.776	1.1958
322.00	123.319	144.692	121.872	1.1184	442.00	169.303	174.460	143.130	1.1969
324.00	124.086	145.188	122.226	1.1199	444.00	170.070	174.956	143.484	1.1981
326.00	124.852	145.684	122.580	1.1214	446.00	170.836	175.452	143.839	1.1992
328.00	125.619	146.181	122.935	1.1229	448.00	171.602	175.948	144.193	1.2003
330.00	126.385	146.677	123.289	1.1245	450.00	172.369	176.444	144.547	1.2014
332.00	127.152	147.173	123.643	1.1260	452.00	173.135	176.941	144.902	1.2025
334.00	127.918	147.669	123.998	1.1274	454.00	173.901	177.437	145.256	1.2036
336.00	128.685	148.165	124.352	1.1289	456.00	174.668	177.933	145.610	1.2047
338.00	129.451	148.661	124.706	1.1304	458.00	175.434	178.429	145.965	1.2058
340.00	130.218	149.158	125.060	1.1319	460.00	176.200	178.925	146.319	1.2068
342.00	130.984	149.654	125.415	1.1333	462.00	176.966	179.421	146.673	1.2079
344.00	131.751	150.150	125.769	1.1348	464.00	177.733	179.917	147.027	1.2090
346.00	132.517	150.646	126.123	1.1362	466.00	178.499	180.414	147.382	1.2101
348.00	133.284	151.142	126.478	1.1376	468.00	179.265	180.910	147.736	1.2111
350.00	134.050	151.638	126.832	1.1391	470.00	180.032	181.406	148.091	1.2122
352.00	134.817	152.135	127.186	1.1405	472.00	180.798	181.902	148.445	1.2132
354.00	135.583	152.631	127.541	1.1419	474.00	181.564	182.398	148.799	1.2143
356.00	136.349	153.127	127.895	1.1433	476.00	182.330	182.894	149.154	1.2153
358.00	137.116	153.623	128.249	1.1447	478.00	183.097	183.390	149.508	1.2164
360.00	137.882	154.119	128.604	1.1460	480.00	183.863	183.887	149.862	1.2174
362.00	138.649	154.615	128.958	1.1474	482.00	184.629	184.383	150.217	1.2184
364.00	139.415	155.111	129.312	1.1488	484.00	185.396	184.879	150.571	1.2195
366.00	140.182	155.608	129.667	1.1501	486.00	186.162	185.375	150.925	1.2205
368.00	140.948	156.104	130.021	1.1515	488.00	186.928	185.871	151.280	1.2215
370.00	141.715	156.600	130.375	1.1528	490.00	187.694	186.367	151.634	1.2225
372.00	142.481	157.096	130.729	1.1542	492.00	188.461	186.864	151.988	1.2235
374.00	143.247	157.592	131.084	1.1555	494.00	189.227	187.360	152.343	1.2245
376.00	144.014	158.088	131.438	1.1568	496.00	189.993	187.856	152.697	1.2255
378.00	144.780	158.584	131.792	1.1581	498.00	190.759	188.352	153.052	1.2265
380.00	145.547	159.080	132.147	1.1595	500.00	191.526	188.848	153.406	1.2275
382.00	146.313	159.577	132.501	1.1608	502.00	192.292	189.345	153.760	1.2285
384.00	147.079	160.073	132.855	1.1621	504.00	193.058	189.841	154.115	1.2295
386.00	147.846	160.569	133.210	1.1633	506.00	193.824	190.337	154.469	1.2305
388.00	148.612	161.065	133.564	1.1646	508.00	194.591	190.833	154.824	1.2315
390.00	149.379	161.561	133.918	1.1659	510.00	195.357	191.329	155.178	1.2324
392.00	150.145	162.057	134.272	1.1672	512.00	196.123	191.826	155.533	1.2334
394.00	150.911	162.553	134.627	1.1684	514.00	196.889	192.322	155.887	1.2344
396.00	151.678	163.049	134.981	1.1697	516.00	197.656	192.818	156.241	1.2353
398.00	152.444	163.546	135.335	1.1709	518.00	198.422	193.314	156.596	1.2363
400.00	153.210	164.042	135.690	1.1722	520.00	199.188	193.811	156.950	1.2373
402.00	153.977	164.538	136.044	1.1734	522.00	199.954	194.307	157.305	1.2382
404.00	154.743	165.034	136.398	1.1746	524.00	200.721	194.803	157.659	1.2392
406.00	155.509	165.530	136.753	1.1759	526.00	201.487	195.299	158.014	1.2401
408.00	156.276	166.026	137.107	1.1771	528.00	202.253	195.796	158.368	1.2411
410.00	157.042	166.522	137.461	1.1783	530.00	203.019	196.292	158.723	1.2420
412.00	157.809	167.018	137.815	1.1795	532.00	203.786	196.788	159.077	1.2429
414.00	158.575	167.514	138.170	1.1807	534.00	204.552	197.285	159.432	1.2439
416.00	159.341	168.011	138.524	1.1819	536.00	205.318	197.781	159.786	1.2448
418.00	160.108	168.507	138.878	1.1831	538.00	206.084	198.277	160.141	1.2457
420.00	160.874	169.003	139.233	1.1843	540.00	206.851	198.774	160.495	1.2466

1.81 PSIA ISOBAR

	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
*	113.670	0.01845	0.0000	-0.0062	0.0000
*	113.670	23.8125	92.8911	84.9000	0.8172
	114.00	23.8830	92.9732	84.9585	0.8179
	116.00	24.3104	93.4714	85.3132	0.8223
	118.00	24.7376	93.9696	85.6681	0.8265
	120.00	25.1648	94.4679	86.0231	0.8307
	122.00	25.5917	94.9662	86.3781	0.8348
	124.00	26.0186	95.4646	86.7333	0.8389
	126.00	26.4454	95.9631	87.0885	0.8429
	128.00	26.8720	96.4615	87.4438	0.8468
	130.00	27.2985	96.9599	87.7991	0.8506
	132.00	27.7249	97.4584	88.1544	0.8545
	134.00	28.1511	97.9568	88.5098	0.8582
	136.00	28.5773	98.4552	88.8652	0.8619
	138.00	29.0033	98.9535	89.2205	0.8655
	140.00	29.4292	99.4518	89.5759	0.8691
	142.00	29.8551	99.9501	89.9313	0.8726
	144.00	30.2808	100.448	90.2867	0.8761
	146.00	30.7064	100.947	90.6421	0.8796
	148.00	31.1320	101.445	90.9974	0.8830
	150.00	31.5574	101.943	91.3528	0.8863
	152.00	31.9827	102.441	91.7081	0.8896
	154.00	32.4080	102.939	92.0634	0.8929
	156.00	32.8332	103.437	92.4187	0.8961
	158.00	33.2583	103.935	92.7740	0.8992
	160.00	33.6833	104.433	93.1293	0.9024
	162.00	34.1083	104.931	93.4845	0.9055
	164.00	34.5332	105.429	93.8398	0.9085
	166.00	34.9580	105.926	94.1950	0.9115
	168.00	35.3827	106.424	94.5502	0.9145
	170.00	35.8074	106.922	94.9053	0.9175
	172.00	36.2320	107.419	95.2605	0.9204
	174.00	36.6566	107.917	95.6156	0.9232
	176.00	37.0811	108.414	95.9707	0.9261
	178.00	37.5055	108.912	96.3258	0.9289
	180.00	37.9299	109.410	96.6809	0.9317
	182.00	38.3543	109.907	97.0359	0.9344
	184.00	38.7786	110.404	97.3910	0.9371
	186.00	39.2028	110.902	97.7460	0.9398
	188.00	39.6270	111.399	98.1010	0.9425
	190.00	40.0511	111.896	98.4559	0.9451
	192.00	40.4752	112.394	98.8109	0.9477
	194.00	40.8993	112.891	99.1658	0.9503
	196.00	41.3233	113.388	99.5208	0.9529
	198.00	41.7473	113.885	99.8757	0.9554
	200.00	42.1713	114.383	100.231	0.9579
	202.00	42.5952	114.880	100.586	0.9603
	204.00	43.0190	115.377	100.940	0.9628
	206.00	43.4429	115.874	101.295	0.9652
	208.00	43.8667	116.371	101.650	0.9676
	210.00	44.2905	116.868	102.005	0.9700
	212.00	44.7142	117.365	102.360	0.9724
	214.00	45.1379	117.862	102.714	0.9747
	216.00	45.5616	118.359	103.069	0.9770
	218.00	45.9852	118.856	103.424	0.9793
	220.00	46.4089	119.353	103.779	0.9816
	222.00	46.8325	119.850	104.134	0.9838
	224.00	47.2560	120.347	104.488	0.9860
	226.00	47.6796	120.843	104.843	0.9882
	228.00	48.1031	121.340	105.198	0.9904
	230.00	48.5266	121.837	105.552	0.9926
	232.00	48.9501	122.334	105.907	0.9948
	234.00	49.3736	122.831	106.262	0.9969
	236.00	49.7970	123.327	106.616	0.9990
	238.00	50.2204	123.824	106.971	1.0011
	240.00	50.6438	124.321	107.326	1.0032
	242.00	51.0672	124.818	107.680	1.0052
	244.00	51.4905	125.314	108.035	1.0073
	246.00	51.9139	125.811	108.390	1.0093
	248.00	52.3372	126.308	108.744	1.0113
	250.00	52.7605	126.804	109.099	1.0133
	252.00	53.1838	127.301	109.454	1.0153
	254.00	53.6070	127.798	109.808	1.0173
	256.00	54.0303	128.294	110.163	1.0192
	258.00	54.4535	128.791	110.517	1.0211
	260.00	54.8767	129.288	110.872	1.0231
	262.00	55.2999	129.784	111.226	1.0250
	264.00	55.7231	130.281	111.581	1.0268
	266.00	56.1463	130.777	111.936	1.0287
	268.00	56.5695	131.274	112.290	1.0306
	270.00	56.9926	131.770	112.645	1.0324
	272.00	57.4158	132.267	112.999	1.0343
	274.00	57.8389	132.763	113.354	1.0361
	276.00	58.2620	133.260	113.708	1.0379
	278.00	58.6851	133.756	114.063	1.0397
	280.00	59.1082	134.253	114.417	1.0415
	282.00	59.5313	134.749	114.772	1.0432
	284.00	59.9543	135.246	115.126	1.0450
	286.00	60.3774	135.742	115.481	1.0467
	288.00	60.8004	136.239	115.835	1.0484
	290.00	61.2234	136.735	116.190	1.0502
	292.00	61.6465	137.232	116.544	1.0519
	294.00	62.0695	137.728	116.899	1.0536
	296.00	62.4925	138.225	117.253	1.0552
	298.00	62.9155	138.721	117.608	1.0569
	300.00	63.3385	139.218	117.962	1.0586

* PHASE CHANGE

TEMPER-ATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPER-ATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	63.7614	139.714	118.317	1.0602	422.00	89.1293	169.490	139.580	1.1432
304.00	64.1844	140.210	118.671	1.0619	424.00	89.5520	169.987	139.935	1.1444
306.00	64.6074	140.707	119.026	1.0635	426.00	89.9747	170.483	140.289	1.1456
308.00	65.0303	141.203	119.380	1.0651	428.00	90.3974	170.979	140.643	1.1468
310.00	65.4533	141.700	119.735	1.0667	430.00	90.8200	171.475	140.998	1.1479
312.00	65.8762	142.196	120.089	1.0683	432.00	91.2427	171.971	141.352	1.1491
314.00	66.2991	142.692	120.444	1.0699	434.00	91.6654	172.468	141.706	1.1502
316.00	66.7221	143.189	120.798	1.0715	436.00	92.0880	172.964	142.061	1.1513
318.00	67.1450	143.685	121.152	1.0730	438.00	92.5107	173.460	142.415	1.1525
320.00	67.5679	144.181	121.507	1.0746	440.00	92.9334	173.956	142.769	1.1536
322.00	67.9908	144.678	121.861	1.0761	442.00	93.3560	174.452	143.124	1.1547
324.00	68.4137	145.174	122.216	1.0777	444.00	93.7787	174.948	143.478	1.1559
326.00	68.8366	145.670	122.570	1.0792	446.00	94.2013	175.445	143.832	1.1570
328.00	69.2594	146.167	122.925	1.0807	448.00	94.6240	175.941	144.187	1.1581
330.00	69.6823	146.663	123.279	1.0822	450.00	95.0466	176.437	144.541	1.1592
332.00	70.1052	147.159	123.633	1.0837	452.00	95.4693	176.933	144.896	1.1603
334.00	70.5280	147.656	123.988	1.0852	454.00	95.8919	177.429	145.250	1.1614
336.00	70.9509	148.152	124.342	1.0867	456.00	96.3146	177.926	145.604	1.1625
338.00	71.3737	148.648	124.697	1.0882	458.00	96.7372	178.422	145.959	1.1636
340.00	71.7966	149.145	125.051	1.0896	460.00	97.1598	178.918	146.313	1.1646
342.00	72.2194	149.641	125.405	1.0911	462.00	97.5825	179.414	146.667	1.1657
344.00	72.6422	150.137	125.760	1.0925	464.00	98.0051	179.910	147.022	1.1668
346.00	73.0651	150.634	126.114	1.0940	466.00	98.4278	180.407	147.376	1.1679
348.00	73.4879	151.130	126.469	1.0954	468.00	98.8504	180.903	147.730	1.1689
350.00	73.9107	151.626	126.823	1.0968	470.00	99.2730	181.399	148.085	1.1700
352.00	74.3335	152.122	127.177	1.0982	472.00	99.6957	181.895	148.439	1.1710
354.00	74.7563	152.619	127.532	1.0997	474.00	100.118	182.391	148.794	1.1721
356.00	75.1791	153.115	127.886	1.1011	476.00	100.541	182.888	149.148	1.1731
358.00	75.6019	153.611	128.241	1.1024	478.00	100.964	183.384	149.502	1.1742
360.00	76.0247	154.107	128.595	1.1038	480.00	101.386	183.880	149.857	1.1752
362.00	76.4475	154.604	128.949	1.1052	482.00	101.809	184.376	150.211	1.1762
364.00	76.8703	155.100	129.304	1.1066	484.00	102.231	184.873	150.566	1.1773
366.00	77.2930	155.596	129.658	1.1079	486.00	102.654	185.369	150.920	1.1783
368.00	77.7158	156.093	130.013	1.1093	488.00	103.077	185.865	151.274	1.1793
370.00	78.1386	156.589	130.367	1.1106	490.00	103.499	186.361	151.629	1.1803
372.00	78.5614	157.085	130.721	1.1120	492.00	103.922	186.857	151.983	1.1813
374.00	78.9841	157.581	131.076	1.1133	494.00	104.344	187.354	152.338	1.1823
376.00	79.4069	158.077	131.430	1.1146	496.00	104.767	187.850	152.692	1.1833
378.00	79.8296	158.574	131.784	1.1159	498.00	105.190	188.346	153.046	1.1843
380.00	80.2524	159.070	132.139	1.1172	500.00	105.612	188.842	153.401	1.1853
382.00	80.6751	159.566	132.493	1.1185	502.00	106.035	189.339	153.755	1.1863
384.00	81.0979	160.062	132.847	1.1198	504.00	106.458	189.835	154.110	1.1873
386.00	81.5206	160.559	133.202	1.1211	506.00	106.880	190.331	154.464	1.1883
388.00	81.9433	161.055	133.556	1.1224	508.00	107.303	190.827	154.819	1.1893
390.00	82.3661	161.551	133.911	1.1237	510.00	107.725	191.324	155.173	1.1902
392.00	82.7888	162.047	134.265	1.1250	512.00	108.148	191.820	155.528	1.1912
394.00	83.2115	162.544	134.619	1.1262	514.00	108.571	192.316	155.882	1.1922
396.00	83.6342	163.040	134.974	1.1275	516.00	108.993	192.813	156.237	1.1931
398.00	84.0570	163.536	135.328	1.1287	518.00	109.416	193.309	156.591	1.1941
400.00	84.4797	164.032	135.682	1.1300	520.00	109.838	193.805	156.946	1.1951
402.00	84.9024	164.528	136.037	1.1312	522.00	110.261	194.302	157.300	1.1960
404.00	85.3251	165.025	136.391	1.1324	524.00	110.683	194.798	157.655	1.1970
406.00	85.7478	165.521	136.745	1.1337	526.00	111.106	195.294	158.009	1.1979
408.00	86.1705	166.017	137.100	1.1349	528.00	111.529	195.790	158.364	1.1988
410.00	86.5932	166.513	137.454	1.1361	530.00	111.951	196.287	158.718	1.1998
412.00	87.0159	167.009	137.808	1.1373	532.00	112.374	196.783	159.073	1.2007
414.00	87.4386	167.506	138.163	1.1385	534.00	112.796	197.280	159.427	1.2017
416.00	87.8613	168.002	138.517	1.1397	536.00	113.219	197.776	159.782	1.2026
418.00	88.2840	168.498	138.872	1.1409	538.00	113.642	198.272	160.136	1.2035
420.00	88.7066	168.994	139.226	1.1421	540.00	114.064	198.769	160.491	1.2044

3.00 PSIA ISOBAR

	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
*	118.838	0.01870	2.5401	2.5297	0.0218
*	118.838	14.9869	94.0759	85.7559	0.7921
	120.00	15.1380	94.3664	85.9625	0.7945
	122.00	15.3979	94.8665	86.3182	0.7986
	124.00	15.6578	95.3667	86.6741	0.8027
	126.00	15.9175	95.8669	87.0301	0.8067
	128.00	16.1771	96.3671	87.3862	0.8106
	130.00	16.4366	96.8672	87.7424	0.8145
	132.00	16.6959	97.3674	88.0985	0.8183
	134.00	16.9551	97.8675	88.4547	0.8221
	136.00	17.2142	98.3676	88.8110	0.8258
	138.00	17.4732	98.8676	89.1672	0.8295
	140.00	17.7321	99.3676	89.5235	0.8331
	142.00	17.9908	99.8675	89.8797	0.8366
	144.00	18.2495	100.367	90.2360	0.8401
	146.00	18.5081	100.867	90.5922	0.8435
	148.00	18.7665	101.367	90.9484	0.8469
	150.00	19.0249	101.866	91.3045	0.8503
	152.00	19.2832	102.366	91.6607	0.8536
	154.00	19.5414	102.865	92.0168	0.8569
	156.00	19.7995	103.365	92.3729	0.8601
	158.00	20.0575	103.864	92.7290	0.8633
	160.00	20.3155	104.363	93.0850	0.8664
	162.00	20.5733	104.862	93.4410	0.8695
	164.00	20.8311	105.362	93.7969	0.8726
	166.00	21.0889	105.861	94.1529	0.8756
	168.00	21.3465	106.359	94.5088	0.8786
	170.00	21.6041	106.858	94.8646	0.8815
	172.00	21.8617	107.357	95.2204	0.8845
	174.00	22.1191	107.856	95.5762	0.8873
	176.00	22.3765	108.355	95.9320	0.8902
	178.00	22.6339	108.853	96.2877	0.8930
	180.00	22.8912	109.352	96.6434	0.8958
	182.00	23.1485	109.850	96.9990	0.8985
	184.00	23.4057	110.349	97.3547	0.9013
	186.00	23.6628	110.847	97.7103	0.9040
	188.00	23.9199	111.345	98.0658	0.9066
	190.00	24.1770	111.843	98.4214	0.9093
	192.00	24.4340	112.342	98.7769	0.9119
	194.00	24.6910	112.840	99.1323	0.9144
	196.00	24.9479	113.338	99.4878	0.9170
	198.00	25.2048	113.836	99.8432	0.9195
	200.00	25.4616	114.334	100.199	0.9220
	202.00	25.7185	114.832	100.554	0.9245
	204.00	25.9752	115.330	100.909	0.9270
	206.00	26.2320	115.828	101.265	0.9294
	208.00	26.4887	116.325	101.620	0.9318
	210.00	26.7454	116.823	101.975	0.9342
	212.00	27.0020	117.321	102.330	0.9365
	214.00	27.2586	117.819	102.686	0.9389
	216.00	27.5152	118.316	103.041	0.9412
	218.00	27.7718	118.814	103.396	0.9435
	220.00	28.0283	119.311	103.751	0.9458
	222.00	28.2848	119.809	104.106	0.9480
	224.00	28.5413	120.306	104.461	0.9502
	226.00	28.7978	120.804	104.817	0.9524
	228.00	29.0542	121.301	105.172	0.9546
	230.00	29.3106	121.799	105.527	0.9568
	232.00	29.5670	122.296	105.882	0.9590
	234.00	29.8234	122.793	106.237	0.9611
	236.00	30.0797	123.291	106.592	0.9632
	238.00	30.3360	123.788	106.947	0.9653
	240.00	30.5923	124.285	107.302	0.9674
	242.00	30.8486	124.783	107.657	0.9695
	244.00	31.1049	125.280	108.012	0.9715
	246.00	31.3611	125.777	108.367	0.9735
	248.00	31.6173	126.274	108.721	0.9755
	250.00	31.8735	126.771	109.076	0.9775
	252.00	32.1297	127.268	109.431	0.9795
	254.00	32.3859	127.765	109.786	0.9815
	256.00	32.6420	128.263	110.141	0.9834
	258.00	32.8982	128.760	110.496	0.9854
	260.00	33.1543	129.257	110.851	0.9873
	262.00	33.4104	129.754	111.206	0.9892
	264.00	33.6665	130.251	111.560	0.9911
	266.00	33.9226	130.748	111.915	0.9930
	268.00	34.1787	131.245	112.270	0.9948
	270.00	34.4347	131.741	112.625	0.9967
	272.00	34.6908	132.238	112.980	0.9985
	274.00	34.9468	132.735	113.334	1.0003
	276.00	35.2028	133.232	113.689	1.0021
	278.00	35.4588	133.729	114.044	1.0039
	280.00	35.7148	134.226	114.399	1.0057
	282.00	35.9708	134.723	114.753	1.0075
	284.00	36.2267	135.220	115.108	1.0092
	286.00	36.4827	135.716	115.463	1.0110
	288.00	36.7387	136.213	115.817	1.0127
	290.00	36.9946	136.710	116.172	1.0144
	292.00	37.2505	137.207	116.527	1.0161
	294.00	37.5064	137.703	116.881	1.0178
	296.00	37.7624	138.200	117.236	1.0195
	298.00	38.0183	138.697	117.591	1.0212
	300.00	38.2741	139.194	117.945	1.0228

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	38.5300	139.690	118.300	1.0245	422.00	53.8722	169.478	139.570	1.1075
304.00	38.7859	140.187	118.655	1.0261	424.00	54.1278	169.974	139.925	1.1087
306.00	39.0418	140.684	119.009	1.0278	426.00	54.3833	170.471	140.279	1.1099
308.00	39.2976	141.180	119.364	1.0294	428.00	54.6389	170.967	140.634	1.1110
310.00	39.5535	141.677	119.719	1.0310	430.00	54.8945	171.463	140.988	1.1122
312.00	39.8093	142.174	120.073	1.0326	432.00	55.1501	171.960	141.343	1.1134
314.00	40.0651	142.670	120.428	1.0342	434.00	55.4056	172.456	141.697	1.1145
316.00	40.3210	143.167	120.782	1.0357	436.00	55.6612	172.952	142.051	1.1156
318.00	40.5768	143.664	121.137	1.0373	438.00	55.9168	173.448	142.406	1.1168
320.00	40.8326	144.160	121.492	1.0389	440.00	56.1724	173.945	142.760	1.1179
322.00	41.0884	144.657	121.846	1.0404	442.00	56.4279	174.441	143.115	1.1190
324.00	41.3442	145.153	122.201	1.0419	444.00	56.6835	174.937	143.469	1.1202
326.00	41.6000	145.650	122.555	1.0435	446.00	56.9390	175.434	143.823	1.1213
328.00	41.8558	146.146	122.910	1.0450	448.00	57.1946	175.930	144.178	1.1224
330.00	42.1115	146.643	123.265	1.0465	450.00	57.4501	176.426	144.532	1.1235
332.00	42.3673	147.140	123.619	1.0480	452.00	57.7057	176.922	144.887	1.1246
334.00	42.6231	147.636	123.974	1.0495	454.00	57.9612	177.419	145.241	1.1257
336.00	42.8788	148.133	124.328	1.0510	456.00	58.2168	177.915	145.596	1.1268
338.00	43.1346	148.629	124.683	1.0525	458.00	58.4723	178.411	145.950	1.1279
340.00	43.3903	149.126	125.037	1.0539	460.00	58.7279	178.908	146.304	1.1289
342.00	43.6461	149.622	125.392	1.0554	462.00	58.9834	179.404	146.659	1.1300
344.00	43.9018	150.119	125.746	1.0568	464.00	59.2390	179.900	147.013	1.1311
346.00	44.1575	150.615	126.101	1.0583	466.00	59.4945	180.397	147.368	1.1322
348.00	44.4133	151.112	126.455	1.0597	468.00	59.7500	180.893	147.722	1.1332
350.00	44.6690	151.608	126.810	1.0611	470.00	60.0056	181.389	148.077	1.1343
352.00	44.9247	152.105	127.164	1.0625	472.00	60.2611	181.885	148.431	1.1353
354.00	45.1804	152.601	127.519	1.0639	474.00	60.5167	182.382	148.785	1.1364
356.00	45.4361	153.098	127.873	1.0653	476.00	60.7722	182.878	149.140	1.1374
358.00	45.6918	153.594	128.228	1.0667	478.00	61.0277	183.374	149.494	1.1385
360.00	45.9475	154.091	128.582	1.0681	480.00	61.2832	183.871	149.849	1.1395
362.00	46.2032	154.587	128.937	1.0695	482.00	61.5388	184.367	150.203	1.1405
364.00	46.4589	155.083	129.291	1.0708	484.00	61.7943	184.863	150.558	1.1416
366.00	46.7146	155.580	129.646	1.0722	486.00	62.0498	185.360	150.912	1.1426
368.00	46.9703	156.076	130.000	1.0736	488.00	62.3053	185.856	151.267	1.1436
370.00	47.2259	156.573	130.355	1.0749	490.00	62.5608	186.352	151.621	1.1446
372.00	47.4816	157.069	130.709	1.0762	492.00	62.8164	186.848	151.975	1.1456
374.00	47.7373	157.565	131.064	1.0776	494.00	63.0719	187.345	152.330	1.1466
376.00	47.9929	158.062	131.418	1.0789	496.00	63.3274	187.841	152.684	1.1476
378.00	48.2486	158.558	131.773	1.0802	498.00	63.5829	188.337	153.039	1.1486
380.00	48.5042	159.055	132.127	1.0815	500.00	63.8384	188.834	153.393	1.1496
382.00	48.7599	159.551	132.482	1.0828	502.00	64.0939	189.330	153.748	1.1506
384.00	49.0155	160.047	132.836	1.0841	504.00	64.3494	189.826	154.102	1.1516
386.00	49.2712	160.544	133.191	1.0854	506.00	64.6050	190.323	154.457	1.1526
388.00	49.5268	161.040	133.545	1.0867	508.00	64.8605	190.819	154.811	1.1536
390.00	49.7824	161.537	133.899	1.0880	510.00	65.1160	191.315	155.166	1.1545
392.00	50.0381	162.033	134.254	1.0892	512.00	65.3715	191.812	155.520	1.1555
394.00	50.2937	162.529	134.608	1.0905	514.00	65.6270	192.308	155.875	1.1565
396.00	50.5493	163.026	134.963	1.0918	516.00	65.8825	192.805	156.229	1.1574
398.00	50.8049	163.522	135.317	1.0930	518.00	66.1380	193.301	156.584	1.1584
400.00	51.0606	164.018	135.672	1.0943	520.00	66.3935	193.797	156.938	1.1594
402.00	51.3162	164.515	136.026	1.0955	522.00	66.6490	194.294	157.293	1.1603
404.00	51.5718	165.011	136.381	1.0967	524.00	66.9045	194.790	157.648	1.1613
406.00	51.8274	165.507	136.735	1.0980	526.00	67.1600	195.286	158.002	1.1622
408.00	52.0830	166.004	137.089	1.0992	528.00	67.4155	195.783	158.357	1.1632
410.00	52.3386	166.500	137.444	1.1004	530.00	67.6709	196.279	158.711	1.1641
412.00	52.5942	166.996	137.798	1.1016	532.00	67.9264	196.776	159.066	1.1650
414.00	52.8498	167.493	138.153	1.1028	534.00	68.1819	197.272	159.420	1.1660
416.00	53.1054	167.989	138.507	1.1040	536.00	68.4374	197.769	159.775	1.1669
418.00	53.3610	168.485	138.862	1.1052	538.00	68.6929	198.265	160.130	1.1678
420.00	53.6166	168.982	139.216	1.1064	540.00	68.9484	198.761	160.484	1.1687

5.00 PSIA ISOBAR

TEMPER-ATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018753	3.1173	3.1000	0.0266
122.00	0.018856	4.1040	4.0865	0.0347
124.00	0.018960	5.0916	5.0741	0.0428
* 124.649	0.01900	5.4123	5.3947	0.0454
* 124.649	9.37414	95.3621	86.6886	0.7670
126.00	9.48064	95.7021	86.9300	0.7697
128.00	9.63820	96.2055	87.2876	0.7737
130.00	9.79561	96.7088	87.6453	0.7776
132.00	9.95289	97.2120	88.0030	0.7814
134.00	10.1100	97.7152	88.3607	0.7852
136.00	10.2671	98.2182	88.7185	0.7889
138.00	10.4240	98.7212	89.0763	0.7926
140.00	10.5808	99.2241	89.4341	0.7962
142.00	10.7374	99.7268	89.7918	0.7998
144.00	10.8940	100.229	90.1496	0.8033
146.00	11.0505	100.732	90.5073	0.8067
148.00	11.2068	101.234	90.8649	0.8102
150.00	11.3631	101.736	91.2225	0.8135
152.00	11.5193	102.238	91.5801	0.8169
154.00	11.6753	102.740	91.9376	0.8201
156.00	11.8313	103.242	92.2951	0.8234
158.00	11.9872	103.744	92.6525	0.8266
160.00	12.1431	104.245	93.0098	0.8297
162.00	12.2988	104.747	93.3671	0.8328
164.00	12.4545	105.248	93.7243	0.8359
166.00	12.6101	105.749	94.0815	0.8390
168.00	12.7656	106.250	94.4386	0.8420
170.00	12.9211	106.751	94.7956	0.8449
172.00	13.0765	107.252	95.1526	0.8478
174.00	13.2318	107.752	95.5095	0.8507
176.00	13.3871	108.253	95.8664	0.8536
178.00	13.5423	108.753	96.2232	0.8564
180.00	13.6975	109.254	96.5799	0.8592
182.00	13.8526	109.754	96.9366	0.8620
184.00	14.0077	110.254	97.2933	0.8647
186.00	14.1627	110.754	97.6498	0.8674
188.00	14.3177	111.254	98.0064	0.8701
190.00	14.4726	111.754	98.3628	0.8727
192.00	14.6275	112.254	98.7193	0.8754
194.00	14.7823	112.753	99.0756	0.8779
196.00	14.9371	113.253	99.4320	0.8805
198.00	15.0918	113.752	99.7883	0.8830
200.00	15.2465	114.252	100.145	0.8856
202.00	15.4012	114.751	100.501	0.8880
204.00	15.5559	115.250	100.857	0.8905
206.00	15.7105	115.749	101.213	0.8929
208.00	15.8650	116.248	101.569	0.8953
210.00	16.0196	116.747	101.925	0.8977
212.00	16.1741	117.246	102.281	0.9001
214.00	16.3285	117.745	102.637	0.9024
216.00	16.4830	118.244	102.993	0.9048
218.00	16.6374	118.743	103.349	0.9071
220.00	16.7918	119.241	103.705	0.9093
222.00	16.9461	119.740	104.060	0.9116
224.00	17.1005	120.239	104.416	0.9138
226.00	17.2548	120.737	104.772	0.9160
228.00	17.4091	121.236	105.128	0.9182
230.00	17.5633	121.734	105.483	0.9204
232.00	17.7176	122.232	105.839	0.9226
234.00	17.8718	122.731	106.194	0.9247
236.00	18.0260	123.229	106.550	0.9268
238.00	18.1801	123.727	106.906	0.9289
240.00	18.3343	124.225	107.261	0.9310
242.00	18.4884	124.723	107.617	0.9331
244.00	18.6425	125.221	107.972	0.9351
246.00	18.7966	125.719	108.328	0.9372
248.00	18.9507	126.217	108.683	0.9392
250.00	19.1048	126.715	109.038	0.9412
252.00	19.2588	127.213	109.394	0.9432
254.00	19.4128	127.711	109.749	0.9451
256.00	19.5668	128.209	110.104	0.9471
258.00	19.7208	128.707	110.460	0.9490
260.00	19.8748	129.204	110.815	0.9509
262.00	20.0288	129.702	111.170	0.9528
264.00	20.1827	130.200	111.525	0.9547
266.00	20.3366	130.697	111.881	0.9566
268.00	20.4906	131.195	112.236	0.9585
270.00	20.6445	131.693	112.591	0.9603
272.00	20.7984	132.190	112.946	0.9622
274.00	20.9522	132.688	113.301	0.9640
276.00	21.1061	133.185	113.657	0.9658
278.00	21.2600	133.683	114.012	0.9676
280.00	21.4138	134.180	114.367	0.9694
282.00	21.5676	134.678	114.722	0.9711
284.00	21.7215	135.175	115.077	0.9729
286.00	21.8753	135.672	115.432	0.9747
288.00	22.0291	136.170	115.787	0.9764
290.00	22.1829	136.667	116.142	0.9781
292.00	22.3366	137.164	116.497	0.9798
294.00	22.4904	137.662	116.852	0.9815
296.00	22.6442	138.159	117.207	0.9832
298.00	22.7979	138.656	117.562	0.9849
300.00	22.9517	139.153	117.917	0.9865

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	23.1054	139.651	118.272	0.9882	422.00	32.3186	169.457	139.554	1.0713
304.00	23.2591	140.148	118.627	0.9898	424.00	32.4720	169.954	139.908	1.0725
306.00	23.4128	140.645	118.982	0.9915	426.00	32.6254	170.450	140.263	1.0736
308.00	23.5665	141.142	119.337	0.9931	428.00	32.7789	170.947	140.618	1.0748
310.00	23.7202	141.639	119.692	0.9947	430.00	32.9323	171.443	140.972	1.0760
312.00	23.8739	142.136	120.047	0.9963	432.00	33.0857	171.940	141.327	1.0771
314.00	24.0276	142.633	120.401	0.9979	434.00	33.2391	172.436	141.681	1.0783
316.00	24.1813	143.130	120.756	0.9994	436.00	33.3926	172.933	142.036	1.0794
318.00	24.3350	143.627	121.111	1.0010	438.00	33.5460	173.429	142.390	1.0805
320.00	24.4886	144.124	121.466	1.0026	440.00	33.6994	173.926	142.745	1.0817
322.00	24.6423	144.621	121.821	1.0041	442.00	33.8528	174.422	143.099	1.0828
324.00	24.7959	145.118	122.176	1.0057	444.00	34.0062	174.919	143.454	1.0839
326.00	24.9496	145.615	122.530	1.0072	446.00	34.1596	175.415	143.808	1.0850
328.00	25.1032	146.112	122.885	1.0087	448.00	34.3130	175.911	144.163	1.0861
330.00	25.2568	146.609	123.240	1.0102	450.00	34.4664	176.408	144.517	1.0872
332.00	25.4104	147.106	123.595	1.0117	452.00	34.6198	176.904	144.872	1.0883
334.00	25.5641	147.603	123.950	1.0132	454.00	34.7732	177.401	145.226	1.0894
336.00	25.7177	148.100	124.304	1.0147	456.00	34.9266	177.897	145.581	1.0905
338.00	25.8713	148.597	124.659	1.0162	458.00	35.0800	178.394	145.935	1.0916
340.00	26.0249	149.094	125.014	1.0176	460.00	35.2334	178.890	146.290	1.0927
342.00	26.1785	149.591	125.369	1.0191	462.00	35.3868	179.387	146.645	1.0938
344.00	26.3320	150.088	125.723	1.0205	464.00	35.5402	179.883	146.999	1.0948
346.00	26.4856	150.584	126.078	1.0220	466.00	35.6936	180.380	147.354	1.0959
348.00	26.6392	151.081	126.433	1.0234	468.00	35.8470	180.876	147.708	1.0970
350.00	26.7928	151.578	126.788	1.0248	470.00	36.0004	181.372	148.063	1.0980
352.00	26.9463	152.075	127.142	1.0263	472.00	36.1538	181.869	148.417	1.0991
354.00	27.0999	152.572	127.497	1.0277	474.00	36.3071	182.365	148.772	1.1001
356.00	27.2535	153.068	127.852	1.0291	476.00	36.4605	182.862	149.126	1.1012
358.00	27.4070	153.565	128.206	1.0305	478.00	36.6139	183.358	149.481	1.1022
360.00	27.5605	154.062	128.561	1.0318	480.00	36.7673	183.855	149.835	1.1033
362.00	27.7141	154.559	128.916	1.0332	482.00	36.9207	184.351	150.190	1.1043
364.00	27.8676	155.055	129.271	1.0346	484.00	37.0740	184.848	150.544	1.1053
366.00	28.0212	155.552	129.625	1.0359	486.00	37.2274	185.344	150.899	1.1063
368.00	28.1747	156.049	129.980	1.0373	488.00	37.3808	185.840	151.253	1.1074
370.00	28.3282	156.546	130.335	1.0386	490.00	37.5341	186.337	151.608	1.1084
372.00	28.4817	157.042	130.689	1.0400	492.00	37.6875	186.833	151.963	1.1094
374.00	28.6352	157.539	131.044	1.0413	494.00	37.8409	187.330	152.317	1.1104
376.00	28.7888	158.036	131.398	1.0426	496.00	37.9942	187.826	152.672	1.1114
378.00	28.9423	158.532	131.753	1.0440	498.00	38.1476	188.323	153.026	1.1124
380.00	29.0958	159.029	132.108	1.0453	500.00	38.3010	188.819	153.381	1.1134
382.00	29.2493	159.526	132.462	1.0466	502.00	38.4543	189.316	153.735	1.1144
384.00	29.4028	160.022	132.817	1.0479	504.00	38.6077	189.812	154.090	1.1154
386.00	29.5563	160.519	133.172	1.0492	506.00	38.7611	190.309	154.444	1.1164
388.00	29.7097	161.015	133.526	1.0504	508.00	38.9144	190.805	154.799	1.1173
390.00	29.8632	161.512	133.881	1.0517	510.00	39.0678	191.302	155.154	1.1183
392.00	30.0167	162.009	134.235	1.0530	512.00	39.2211	191.798	155.508	1.1193
394.00	30.1702	162.505	134.590	1.0542	514.00	39.3745	192.294	155.863	1.1202
396.00	30.3237	163.002	134.945	1.0555	516.00	39.5278	192.791	156.217	1.1212
398.00	30.4771	163.499	135.299	1.0568	518.00	39.6812	193.287	156.572	1.1222
400.00	30.6306	163.995	135.654	1.0580	520.00	39.8345	193.784	156.927	1.1231
402.00	30.7841	164.492	136.008	1.0592	522.00	39.9879	194.280	157.281	1.1241
404.00	30.9375	164.988	136.363	1.0605	524.00	40.1412	194.777	157.636	1.1250
406.00	31.0910	165.485	136.717	1.0617	526.00	40.2946	195.273	157.990	1.1260
408.00	31.2445	165.981	137.072	1.0629	528.00	40.4479	195.770	158.345	1.1269
410.00	31.3979	166.478	137.427	1.0641	530.00	40.6012	196.266	158.700	1.1279
412.00	31.5514	166.974	137.781	1.0653	532.00	40.7546	196.763	159.054	1.1288
414.00	31.7048	167.471	138.136	1.0665	534.00	40.9079	197.260	159.409	1.1297
416.00	31.8582	167.968	138.490	1.0677	536.00	41.0613	197.756	159.764	1.1307
418.00	32.0117	168.464	138.845	1.0689	538.00	41.2146	198.253	160.118	1.1316
420.00	32.1651	168.961	139.199	1.0701	540.00	41.3679	198.749	160.473	1.1325

7.00 PSIA ISOBAR

	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
	120.00	0.018753	3.1220	3.0977	0.0266
	122.00	0.018855	4.1086	4.0842	0.0347
	124.00	0.018960	5.0962	5.0717	0.0428
	126.00	0.019067	6.0843	6.0596	0.0507
	128.00	0.019177	7.0725	7.0476	0.0584
*	128.835	0.01922	7.4851	7.4602	0.0617
*	128.835	6.88253	96.2523	87.3369	0.7507
	130.00	6.94876	96.5474	87.5462	0.7529
	132.00	7.06236	97.0540	87.9056	0.7568
	134.00	7.17582	97.5604	88.2651	0.7606
	136.00	7.28915	98.0666	88.6245	0.7644
	138.00	7.40235	98.5727	88.9839	0.7681
	140.00	7.51542	99.0786	89.3433	0.7717
	142.00	7.62838	99.5843	89.7027	0.7753
	144.00	7.74123	100.090	90.0620	0.7788
	146.00	7.85396	100.595	90.4213	0.7823
	148.00	7.96659	101.100	90.7805	0.7857
	150.00	8.07912	101.605	91.1396	0.7891
	152.00	8.19155	102.110	91.4986	0.7925
	154.00	8.30388	102.614	91.8576	0.7958
	156.00	8.41613	103.118	92.2165	0.7990
	158.00	8.52829	103.623	92.5753	0.8022
	160.00	8.64037	104.126	92.9340	0.8054
	162.00	8.75237	104.630	93.2926	0.8085
	164.00	8.86429	105.134	93.6511	0.8116
	166.00	8.97614	105.637	94.0095	0.8147
	168.00	9.08791	106.140	94.3679	0.8177
	170.00	9.19962	106.643	94.7261	0.8207
	172.00	9.31126	107.146	95.0843	0.8236
	174.00	9.42284	107.648	95.4424	0.8265
	176.00	9.53436	108.151	95.8004	0.8294
	178.00	9.64582	108.653	96.1583	0.8322
	180.00	9.75723	109.155	96.5161	0.8350
	182.00	9.86858	109.657	96.8739	0.8378
	184.00	9.97987	110.159	97.2315	0.8405
	186.00	10.0911	110.661	97.5891	0.8432
	188.00	10.2023	111.162	97.9466	0.8459
	190.00	10.3135	111.664	98.3041	0.8486
	192.00	10.4246	112.165	98.6614	0.8512
	194.00	10.5356	112.666	99.0187	0.8538
	196.00	10.6467	113.167	99.3759	0.8564
	198.00	10.7576	113.668	99.7331	0.8589
	200.00	10.8686	114.169	100.090	0.8614
	202.00	10.9795	114.670	100.447	0.8639
	204.00	11.0903	115.170	100.804	0.8664
	206.00	11.2012	115.671	101.161	0.8688
	208.00	11.3120	116.171	101.518	0.8712
	210.00	11.4227	116.671	101.875	0.8736
	212.00	11.5335	117.172	102.231	0.8760
	214.00	11.6442	117.672	102.588	0.8784
	216.00	11.7548	118.172	102.945	0.8807
	218.00	11.8655	118.671	103.301	0.8830
	220.00	11.9761	119.171	103.658	0.8853
	222.00	12.0867	119.671	104.014	0.8875
	224.00	12.1972	120.171	104.371	0.8898
	226.00	12.3078	120.670	104.727	0.8920
	228.00	12.4183	121.170	105.083	0.8942
	230.00	12.5287	121.669	105.440	0.8964
	232.00	12.6392	122.168	105.796	0.8985
	234.00	12.7496	122.668	106.152	0.9007
	236.00	12.8601	123.167	106.508	0.9028
	238.00	12.9705	123.666	106.864	0.9049
	240.00	13.0808	124.165	107.220	0.9070
	242.00	13.1912	124.664	107.576	0.9091
	244.00	13.3015	125.163	107.932	0.9111
	246.00	13.4118	125.662	108.288	0.9132
	248.00	13.5221	126.160	108.644	0.9152
	250.00	13.6324	126.659	109.000	0.9172
	252.00	13.7427	127.158	109.356	0.9192
	254.00	13.8529	127.657	109.712	0.9211
	256.00	13.9632	128.155	110.068	0.9231
	258.00	14.0734	128.654	110.423	0.9250
	260.00	14.1836	129.152	110.779	0.9270
	262.00	14.2938	129.651	111.135	0.9289
	264.00	14.4039	130.149	111.491	0.9308
	266.00	14.5141	130.647	111.846	0.9326
	268.00	14.6242	131.146	112.202	0.9345
	270.00	14.7344	131.644	112.557	0.9364
	272.00	14.8445	132.142	112.913	0.9382
	274.00	14.9546	132.640	113.269	0.9400
	276.00	15.0647	133.138	113.624	0.9418
	278.00	15.1747	133.636	113.980	0.9436
	280.00	15.2848	134.134	114.335	0.9454
	282.00	15.3949	134.632	114.690	0.9472
	284.00	15.5049	135.130	115.046	0.9489
	286.00	15.6149	135.628	115.401	0.9507
	288.00	15.7250	136.126	115.757	0.9524
	290.00	15.8350	136.624	116.112	0.9541
	292.00	15.9450	137.122	116.467	0.9559
	294.00	16.0550	137.620	116.823	0.9576
	296.00	16.1649	138.118	117.178	0.9592
	298.00	16.2749	138.615	117.533	0.9609
	300.00	16.3849	139.113	117.889	0.9626

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	16.4948	139.611	118.244	0.9642	422.00	23.0813	169.436	139.537	1.0474
304.00	16.6048	140.108	118.599	0.9659	424.00	23.1910	169.933	139.892	1.0486
306.00	16.7147	140.606	118.954	0.9675	426.00	23.3006	170.430	140.247	1.0497
308.00	16.8246	141.104	119.309	0.9691	428.00	23.4103	170.926	140.601	1.0509
310.00	16.9346	141.601	119.665	0.9707	430.00	23.5199	171.423	140.956	1.0521
312.00	17.0445	142.099	120.020	0.9723	432.00	23.6296	171.920	141.311	1.0532
314.00	17.1544	142.596	120.375	0.9739	434.00	23.7392	172.416	141.665	1.0544
316.00	17.2643	143.094	120.730	0.9755	436.00	23.8489	172.913	142.020	1.0555
318.00	17.3742	143.591	121.085	0.9771	438.00	23.9585	173.410	142.375	1.0566
320.00	17.4841	144.089	121.440	0.9786	440.00	24.0681	173.906	142.729	1.0578
322.00	17.5939	144.586	121.795	0.9802	442.00	24.1778	174.403	143.084	1.0589
324.00	17.7038	145.083	122.151	0.9817	444.00	24.2874	174.900	143.439	1.0600
326.00	17.8137	145.581	122.506	0.9833	446.00	24.3970	175.396	143.793	1.0611
328.00	17.9235	146.078	122.861	0.9848	448.00	24.5067	175.893	144.148	1.0622
330.00	18.0334	146.576	123.216	0.9863	450.00	24.6163	176.390	144.502	1.0634
332.00	18.1432	147.073	123.571	0.9878	452.00	24.7259	176.886	144.857	1.0645
334.00	18.2530	147.570	123.926	0.9893	454.00	24.8355	177.383	145.212	1.0656
336.00	18.3629	148.067	124.281	0.9908	456.00	24.9451	177.879	145.566	1.0666
338.00	18.4727	148.565	124.636	0.9923	458.00	25.0548	178.376	145.921	1.0677
340.00	18.5825	149.062	124.991	0.9937	460.00	25.1644	178.873	146.276	1.0688
342.00	18.6923	149.559	125.346	0.9952	462.00	25.2740	179.369	146.630	1.0699
344.00	18.8021	150.056	125.701	0.9966	464.00	25.3836	179.866	146.985	1.0710
346.00	18.9119	150.554	126.056	0.9981	466.00	25.4932	180.363	147.339	1.0720
348.00	19.0217	151.051	126.411	0.9995	468.00	25.6028	180.859	147.694	1.0731
350.00	19.1315	151.548	126.765	1.0009	470.00	25.7124	181.356	148.049	1.0742
352.00	19.2413	152.045	127.120	1.0023	472.00	25.8220	181.852	148.403	1.0752
354.00	19.3511	152.542	127.475	1.0037	474.00	25.9316	182.349	148.758	1.0763
356.00	19.4609	153.039	127.830	1.0051	476.00	26.0412	182.846	149.113	1.0773
358.00	19.5707	153.536	128.185	1.0065	478.00	26.1508	183.342	149.467	1.0783
360.00	19.6804	154.033	128.540	1.0079	480.00	26.2604	183.839	149.822	1.0794
362.00	19.7902	154.530	128.895	1.0093	482.00	26.3700	184.335	150.176	1.0804
364.00	19.8999	155.027	129.250	1.0107	484.00	26.4796	184.832	150.531	1.0814
366.00	20.0097	155.524	129.605	1.0120	486.00	26.5892	185.328	150.886	1.0825
368.00	20.1194	156.021	129.959	1.0134	488.00	26.6988	185.825	151.240	1.0835
370.00	20.2292	156.518	130.314	1.0147	490.00	26.8084	186.322	151.595	1.0845
372.00	20.3389	157.015	130.669	1.0161	492.00	26.9180	186.818	151.950	1.0855
374.00	20.4487	157.512	131.024	1.0174	494.00	27.0276	187.315	152.304	1.0865
376.00	20.5584	158.009	131.379	1.0187	496.00	27.1372	187.811	152.659	1.0875
378.00	20.6681	158.506	131.733	1.0200	498.00	27.2468	188.308	153.013	1.0885
380.00	20.7779	159.003	132.088	1.0214	500.00	27.3564	188.805	153.368	1.0895
382.00	20.8876	159.500	132.443	1.0227	502.00	27.4659	189.301	153.723	1.0905
384.00	20.9973	159.997	132.798	1.0240	504.00	27.5755	189.798	154.077	1.0915
386.00	21.1070	160.494	133.153	1.0253	506.00	27.6851	190.294	154.432	1.0925
388.00	21.2167	160.991	133.507	1.0265	508.00	27.7947	190.791	154.787	1.0935
390.00	21.3264	161.488	133.862	1.0278	510.00	27.9043	191.288	155.141	1.0944
392.00	21.4361	161.985	134.217	1.0291	512.00	28.0138	191.784	155.496	1.0954
394.00	21.5458	162.481	134.572	1.0303	514.00	28.1234	192.281	155.851	1.0964
396.00	21.6555	162.978	134.926	1.0316	516.00	28.2330	192.777	156.205	1.0973
398.00	21.7652	163.475	135.281	1.0329	518.00	28.3425	193.274	156.560	1.0983
400.00	21.8749	163.972	135.636	1.0341	520.00	28.4521	193.771	156.915	1.0993
402.00	21.9846	164.469	135.990	1.0353	522.00	28.5617	194.267	157.269	1.1002
404.00	22.0943	164.965	136.345	1.0366	524.00	28.6713	194.764	157.624	1.1012
406.00	22.2040	165.462	136.700	1.0378	526.00	28.7808	195.260	157.979	1.1021
408.00	22.3136	165.959	137.055	1.0390	528.00	28.8904	195.757	158.333	1.1030
410.00	22.4233	166.456	137.409	1.0402	530.00	29.0000	196.254	158.688	1.1040
412.00	22.5330	166.953	137.764	1.0414	532.00	29.1095	196.750	159.043	1.1049
414.00	22.6427	167.449	138.119	1.0426	534.00	29.2191	197.247	159.397	1.1059
416.00	22.7523	167.946	138.473	1.0438	536.00	29.3286	197.744	159.752	1.1068
418.00	22.8620	168.443	138.828	1.0450	538.00	29.4382	198.240	160.107	1.1077
420.00	22.9717	168.939	139.183	1.0462	540.00	29.5478	198.737	160.462	1.1086

10.00 PSIA ISOBAR

	TEMPER-ATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
	120.00	0.018752	3.1291	3.0944	0.0265
	122.00	0.018854	4.1156	4.0807	0.0347
	124.00	0.018959	5.1031	5.0680	0.0427
	126.00	0.019066	6.0911	6.0558	0.0506
	128.00	0.019176	7.0792	7.0437	0.0584
	130.00	0.019288	8.0670	8.0313	0.0661
	132.00	0.019403	9.0543	9.0184	0.0736
*	133.626	0.01950	9.8563	9.8202	0.0796
*	133.626	4.95920	97.2277	88.0506	0.7335
	134.00	4.97430	97.3234	88.1183	0.7342
	136.00	5.05492	97.8348	88.4805	0.7380
	138.00	5.13540	98.3458	88.8426	0.7417
	140.00	5.21575	98.8566	89.2047	0.7454
	142.00	5.29597	99.3670	89.5667	0.7490
	144.00	5.37607	99.8771	89.9285	0.7526
	146.00	5.45605	100.387	90.2903	0.7561
	148.00	5.53592	100.896	90.6519	0.7596
	150.00	5.61568	101.405	91.0134	0.7630
	152.00	5.69534	101.914	91.3748	0.7664
	154.00	5.77490	102.423	91.7360	0.7697
	156.00	5.85437	102.931	92.0971	0.7730
	158.00	5.93374	103.439	92.4581	0.7762
	160.00	6.01303	103.946	92.8189	0.7794
	162.00	6.09224	104.453	93.1796	0.7825
	164.00	6.17136	104.960	93.5402	0.7856
	166.00	6.25041	105.467	93.9006	0.7887
	168.00	6.32939	105.974	94.2608	0.7918
	170.00	6.40829	106.480	94.6210	0.7947
	172.00	6.48713	106.986	94.9810	0.7977
	174.00	6.56590	107.491	95.3408	0.8006
	176.00	6.64461	107.997	95.7006	0.8035
	178.00	6.72326	108.502	96.0602	0.8064
	180.00	6.80185	109.007	96.4197	0.8092
	182.00	6.88038	109.511	96.7791	0.8120
	184.00	6.95886	110.016	97.1383	0.8147
	186.00	7.03729	110.520	97.4974	0.8175
	188.00	7.11567	111.024	97.8565	0.8202
	190.00	7.19401	111.528	98.2154	0.8228
	192.00	7.27229	112.032	98.5742	0.8255
	194.00	7.35053	112.535	98.9329	0.8281
	196.00	7.42873	113.039	99.2915	0.8307
	198.00	7.50689	113.542	99.6499	0.8332
	200.00	7.58500	114.045	100.008	0.8357
	202.00	7.66308	114.547	100.367	0.8382
	204.00	7.74112	115.050	100.725	0.8407
	206.00	7.81913	115.552	101.083	0.8432
	208.00	7.89710	116.055	101.441	0.8456
	210.00	7.97503	116.557	101.799	0.8480
	212.00	8.05294	117.059	102.157	0.8504
	214.00	8.13081	117.561	102.515	0.8527
	216.00	8.20865	118.063	102.872	0.8551
	218.00	8.28646	118.564	103.230	0.8574
	220.00	8.36425	119.066	103.587	0.8597
	222.00	8.44201	119.567	103.945	0.8619
	224.00	8.51974	120.068	104.302	0.8642
	226.00	8.59744	120.569	104.660	0.8664
	228.00	8.67512	121.070	105.017	0.8686
	230.00	8.75277	121.571	105.374	0.8708
	232.00	8.83041	122.072	105.731	0.8730
	234.00	8.90801	122.573	106.088	0.8751
	236.00	8.98560	123.073	106.445	0.8772
	238.00	9.06317	123.574	106.802	0.8794
	240.00	9.14071	124.074	107.159	0.8815
	242.00	9.21823	124.575	107.516	0.8835
	244.00	9.29574	125.075	107.873	0.8856
	246.00	9.37323	125.575	108.230	0.8876
	248.00	9.45069	126.075	108.586	0.8897
	250.00	9.52814	126.575	108.943	0.8917
	252.00	9.60557	127.075	109.299	0.8937
	254.00	9.68299	127.575	109.656	0.8956
	256.00	9.76039	128.074	110.013	0.8976
	258.00	9.83777	128.574	110.369	0.8995
	260.00	9.91514	129.074	110.725	0.9015
	262.00	9.99249	129.573	111.082	0.9034
	264.00	10.0698	130.073	111.438	0.9053
	266.00	10.1472	130.572	111.794	0.9072
	268.00	10.2245	131.071	112.151	0.9090
	270.00	10.3018	131.570	112.507	0.9109
	272.00	10.3790	132.070	112.863	0.9127
	274.00	10.4563	132.569	113.219	0.9146
	276.00	10.5336	133.068	113.575	0.9164
	278.00	10.6108	133.567	113.931	0.9182
	280.00	10.6880	134.066	114.287	0.9200
	282.00	10.7653	134.565	114.643	0.9217
	284.00	10.8425	135.064	114.999	0.9235
	286.00	10.9197	135.562	115.355	0.9252
	288.00	10.9969	136.061	115.711	0.9270
	290.00	11.0740	136.560	116.067	0.9287
	292.00	11.1512	137.058	116.423	0.9304
	294.00	11.2284	137.557	116.779	0.9321
	296.00	11.3055	138.056	117.134	0.9338
	298.00	11.3827	138.554	117.490	0.9355
	300.00	11.4598	139.053	117.846	0.9372

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	11.5369	139.551	118.202	0.9388	422.00	16.1534	169.405	139.513	1.0221
304.00	11.6140	140.049	118.557	0.9405	424.00	16.2302	169.902	139.868	1.0232
306.00	11.6911	140.548	118.913	0.9421	426.00	16.3070	170.399	140.222	1.0244
308.00	11.7682	141.046	119.269	0.9437	428.00	16.3838	170.896	140.577	1.0256
310.00	11.8453	141.544	119.624	0.9453	430.00	16.4606	171.393	140.932	1.0267
312.00	11.9224	142.042	119.980	0.9469	432.00	16.5375	171.890	141.287	1.0279
314.00	11.9995	142.541	120.335	0.9485	434.00	16.6143	172.387	141.642	1.0290
316.00	12.0765	143.039	120.691	0.9501	436.00	16.6911	172.884	141.997	1.0302
318.00	12.1536	143.537	121.046	0.9517	438.00	16.7679	173.381	142.351	1.0313
320.00	12.2306	144.035	121.402	0.9532	440.00	16.8447	173.878	142.706	1.0324
322.00	12.3077	144.533	121.757	0.9548	442.00	16.9215	174.375	143.061	1.0336
324.00	12.3847	145.031	122.113	0.9563	444.00	16.9983	174.871	143.416	1.0347
326.00	12.4617	145.529	122.468	0.9579	446.00	17.0751	175.368	143.771	1.0358
328.00	12.5388	146.027	122.824	0.9594	448.00	17.1519	175.865	144.125	1.0369
330.00	12.6158	146.525	123.179	0.9609	450.00	17.2287	176.362	144.480	1.0380
332.00	12.6928	147.023	123.534	0.9624	452.00	17.3055	176.859	144.835	1.0391
334.00	12.7698	147.521	123.890	0.9639	454.00	17.3822	177.356	145.190	1.0402
336.00	12.8468	148.018	124.245	0.9654	456.00	17.4590	177.853	145.544	1.0413
338.00	12.9238	148.516	124.600	0.9669	458.00	17.5358	178.350	145.899	1.0424
340.00	13.0008	149.014	124.956	0.9683	460.00	17.6126	178.847	146.254	1.0435
342.00	13.0777	149.512	125.311	0.9698	462.00	17.6894	179.343	146.609	1.0446
344.00	13.1547	150.010	125.666	0.9712	464.00	17.7662	179.840	146.964	1.0456
346.00	13.2317	150.507	126.022	0.9727	466.00	17.8429	180.337	147.318	1.0467
348.00	13.3087	151.005	126.377	0.9741	468.00	17.9197	180.834	147.673	1.0478
350.00	13.3856	151.503	126.732	0.9755	470.00	17.9965	181.331	148.028	1.0488
352.00	13.4626	152.000	127.087	0.9770	472.00	18.0733	181.828	148.383	1.0499
354.00	13.5395	152.498	127.443	0.9784	474.00	18.1500	182.324	148.737	1.0509
356.00	13.6165	152.995	127.798	0.9798	476.00	18.2268	182.821	149.092	1.0520
358.00	13.6934	153.493	128.153	0.9812	478.00	18.3036	183.318	149.447	1.0530
360.00	13.7703	153.990	128.508	0.9826	480.00	18.3803	183.815	149.802	1.0541
362.00	13.8473	154.488	128.863	0.9839	482.00	18.4571	184.312	150.156	1.0551
364.00	13.9242	154.985	129.218	0.9853	484.00	18.5339	184.808	150.511	1.0561
366.00	14.0011	155.483	129.573	0.9867	486.00	18.6106	185.305	150.866	1.0571
368.00	14.0780	155.980	129.929	0.9880	488.00	18.6874	185.802	151.221	1.0582
370.00	14.1549	156.478	130.284	0.9894	490.00	18.7641	186.299	151.575	1.0592
372.00	14.2318	156.975	130.639	0.9907	492.00	18.8409	186.796	151.930	1.0602
374.00	14.3087	157.473	130.994	0.9920	494.00	18.9176	187.292	152.285	1.0612
376.00	14.3856	157.970	131.349	0.9934	496.00	18.9944	187.789	152.640	1.0622
378.00	14.4625	158.467	131.704	0.9947	498.00	19.0711	188.286	152.994	1.0632
380.00	14.5394	158.965	132.059	0.9960	500.00	19.1479	188.783	153.349	1.0642
382.00	14.6163	159.462	132.414	0.9973	502.00	19.2246	189.279	153.704	1.0652
384.00	14.6932	159.959	132.769	0.9986	504.00	19.3014	189.776	154.059	1.0662
386.00	14.7701	160.456	133.124	0.9999	506.00	19.3781	190.273	154.413	1.0672
388.00	14.8470	160.954	133.479	1.0012	508.00	19.4549	190.770	154.768	1.0681
390.00	14.9238	161.451	133.834	1.0025	510.00	19.5316	191.267	155.123	1.0691
392.00	15.0007	161.948	134.189	1.0037	512.00	19.6084	191.763	155.478	1.0701
394.00	15.0776	162.445	134.544	1.0050	514.00	19.6851	192.260	155.832	1.0711
396.00	15.1544	162.943	134.899	1.0063	516.00	19.7618	192.757	156.187	1.0720
398.00	15.2313	163.440	135.254	1.0075	518.00	19.8386	193.254	156.542	1.0730
400.00	15.3081	163.937	135.609	1.0088	520.00	19.9153	193.751	156.897	1.0739
402.00	15.3850	164.434	135.964	1.0100	522.00	19.9921	194.247	157.252	1.0749
404.00	15.4618	164.931	136.319	1.0112	524.00	20.0688	194.744	157.606	1.0758
406.00	15.5387	165.428	136.674	1.0125	526.00	20.1455	195.241	157.961	1.0768
408.00	15.6155	165.925	137.029	1.0137	528.00	20.2223	195.738	158.316	1.0777
410.00	15.6924	166.423	137.383	1.0149	530.00	20.2990	196.234	158.671	1.0787
412.00	15.7692	166.920	137.738	1.0161	532.00	20.3757	196.731	159.025	1.0796
414.00	15.8461	167.417	138.093	1.0173	534.00	20.4524	197.228	159.380	1.0805
416.00	15.9229	167.914	138.448	1.0185	536.00	20.5292	197.725	159.735	1.0815
418.00	15.9997	168.411	138.803	1.0197	538.00	20.6059	198.222	160.090	1.0824
420.00	16.0765	168.908	139.158	1.0209	540.00	20.6826	198.719	160.445	1.0833

14.70 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018751	3.1401	3.0891	0.0265
122.00	0.018853	4.1265	4.0752	0.0347
124.00	0.018958	5.1139	5.0623	0.0427
126.00	0.019065	6.1017	6.0499	0.0506
128.00	0.019174	7.0897	7.0375	0.0584
130.00	0.019286	8.0774	8.0249	0.0660
132.00	0.019401	9.0645	9.0117	0.0736
134.00	0.019518	10.0508	9.9978	0.0810
136.00	0.019638	11.0364	10.9830	0.0883
138.00	0.019761	12.0210	11.9673	0.0955
* 139.255	0.01984	12.6387	12.5847	0.0999
* 139.255	3.47910	98.3061	88.8446	0.7151
140.00	3.49995	98.4994	88.9811	0.7165
142.00	3.55585	99.0179	89.3476	0.7202
144.00	3.61162	99.5359	89.7139	0.7238
146.00	3.66725	100.053	90.0800	0.7274
148.00	3.72276	100.570	90.4458	0.7309
150.00	3.77816	101.086	90.8114	0.7343
152.00	3.83344	101.602	91.1768	0.7377
154.00	3.88861	102.117	91.5418	0.7411
156.00	3.94368	102.632	91.9067	0.7444
158.00	3.99866	103.146	92.2713	0.7477
160.00	4.05354	103.659	92.6357	0.7509
162.00	4.10833	104.173	92.9998	0.7541
164.00	4.16304	104.685	93.3637	0.7573
166.00	4.21766	105.198	93.7274	0.7604
168.00	4.27221	105.709	94.0909	0.7634
170.00	4.32669	106.221	94.4541	0.7665
172.00	4.38109	106.732	94.8171	0.7695
174.00	4.43542	107.242	95.1799	0.7724
176.00	4.48969	107.752	95.5425	0.7753
178.00	4.54389	108.262	95.9049	0.7782
180.00	4.59804	108.772	96.2671	0.7810
182.00	4.65212	109.281	96.6291	0.7839
184.00	4.70615	109.789	96.9909	0.7866
186.00	4.76013	110.298	97.3525	0.7894
188.00	4.81405	110.806	97.7140	0.7921
190.00	4.86793	111.314	98.0753	0.7948
192.00	4.92176	111.821	98.4364	0.7974
194.00	4.97554	112.329	98.7973	0.8001
196.00	5.02927	112.835	99.1581	0.8027
198.00	5.08297	113.342	99.5188	0.8052
200.00	5.13662	113.849	99.8792	0.8078
202.00	5.19024	114.355	100.240	0.8103
204.00	5.24381	114.861	100.600	0.8128
206.00	5.29735	115.366	100.960	0.8153
208.00	5.35085	115.872	101.320	0.8177
210.00	5.40432	116.377	101.680	0.8201
212.00	5.45775	116.882	102.039	0.8225
214.00	5.51116	117.387	102.399	0.8249
216.00	5.56453	117.891	102.758	0.8272
218.00	5.61787	118.396	103.118	0.8296
220.00	5.67118	118.900	103.477	0.8319
222.00	5.72447	119.404	103.836	0.8341
224.00	5.77772	119.907	104.195	0.8364
226.00	5.83095	120.411	104.554	0.8386
228.00	5.88416	120.915	104.912	0.8409
230.00	5.93734	121.418	105.271	0.8431
232.00	5.99050	121.921	105.630	0.8452
234.00	6.04363	122.424	105.988	0.8474
236.00	6.09674	122.927	106.346	0.8495
238.00	6.14983	123.429	106.705	0.8517
240.00	6.20290	123.932	107.063	0.8538
242.00	6.25595	124.434	107.421	0.8558
244.00	6.30898	124.937	107.779	0.8579
246.00	6.36199	125.439	108.137	0.8600
248.00	6.41498	125.941	108.495	0.8620
250.00	6.46795	126.443	108.853	0.8640
252.00	6.52091	126.944	109.211	0.8660
254.00	6.57385	127.446	109.568	0.8680
256.00	6.62677	127.948	109.926	0.8700
258.00	6.67967	128.449	110.283	0.8719
260.00	6.73256	128.950	110.641	0.8738
262.00	6.78544	129.452	110.998	0.8758
264.00	6.83829	129.953	111.356	0.8777
266.00	6.89114	130.454	111.713	0.8796
268.00	6.94397	130.955	112.070	0.8814
270.00	6.99679	131.455	112.427	0.8833
272.00	7.04959	131.956	112.784	0.8851
274.00	7.10238	132.457	113.142	0.8870
276.00	7.15516	132.957	113.499	0.8888
278.00	7.20793	133.458	113.855	0.8906
280.00	7.26068	133.958	114.212	0.8924
282.00	7.31343	134.458	114.569	0.8942
284.00	7.36616	134.959	114.926	0.8959
286.00	7.41888	135.459	115.283	0.8977
288.00	7.47159	135.959	115.640	0.8994
290.00	7.52429	136.459	115.996	0.9012
292.00	7.57698	136.959	116.353	0.9029
294.00	7.62965	137.458	116.709	0.9046
296.00	7.68232	137.958	117.066	0.9063
298.00	7.73498	138.458	117.422	0.9080
300.00	7.78763	138.958	117.779	0.9096

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/L8)	ENTHALPY (8TU/L8)	INTERNAL ENERGY (8TU/L8)	ENTROPY (8TU/L8-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/L8)	ENTHALPY (8TU/L8)	INTERNAL ENERGY (8TU/LB)	ENTROPY (8TU/L8-R)
302.00	7.84028	139.457	118.135	0.9113	422.00	10.9879	169.356	139.474	0.9947
304.00	7.89291	139.957	118.492	0.9130	424.00	11.0402	169.853	139.829	0.9959
306.00	7.94553	140.456	118.848	0.9146	426.00	11.0926	170.351	140.184	0.9970
308.00	7.99815	140.956	119.204	0.9162	428.00	11.1449	170.848	140.539	0.9982
310.00	8.05076	141.455	119.561	0.9178	430.00	11.1972	171.346	140.894	0.9993
312.00	8.10336	141.954	119.917	0.9194	432.00	11.2496	171.843	141.249	1.0005
314.00	8.15595	142.453	120.273	0.9210	434.00	11.3019	172.341	141.605	1.0017
316.00	8.20853	142.953	120.629	0.9226	436.00	11.3542	172.838	141.960	1.0028
318.00	8.26111	143.452	120.985	0.9242	438.00	11.4066	173.335	142.315	1.0039
320.00	8.31368	143.951	121.342	0.9258	440.00	11.4589	173.833	142.670	1.0051
322.00	8.36624	144.450	121.698	0.9273	442.00	11.5112	174.330	143.025	1.0062
324.00	8.41880	144.949	122.054	0.9289	444.00	11.5635	174.827	143.380	1.0073
326.00	8.47134	145.448	122.410	0.9304	446.00	11.6158	175.325	143.735	1.0084
328.00	8.52389	145.947	122.766	0.9319	448.00	11.6682	175.822	144.090	1.0095
330.00	8.57642	146.446	123.122	0.9334	450.00	11.7205	176.319	144.445	1.0107
332.00	8.62895	146.944	123.478	0.9349	452.00	11.7728	176.817	144.800	1.0118
334.00	8.68147	147.443	123.834	0.9364	454.00	11.8251	177.314	145.155	1.0129
336.00	8.73399	147.942	124.189	0.9379	456.00	11.8774	177.811	145.510	1.0139
338.00	8.78650	148.440	124.545	0.9394	458.00	11.9297	178.308	145.865	1.0150
340.00	8.83901	148.939	124.901	0.9409	460.00	11.9820	178.806	146.220	1.0161
342.00	8.89151	149.438	125.257	0.9423	462.00	12.0343	179.303	146.575	1.0172
344.00	8.94400	149.936	125.613	0.9438	464.00	12.0866	179.800	146.930	1.0183
346.00	8.99649	150.435	125.968	0.9452	466.00	12.1389	180.297	147.285	1.0193
348.00	9.04897	150.933	126.324	0.9467	468.00	12.1912	180.794	147.640	1.0204
350.00	9.10145	151.432	126.680	0.9481	470.00	12.2435	181.292	147.995	1.0215
352.00	9.15392	151.930	127.036	0.9495	472.00	12.2958	181.789	148.350	1.0225
354.00	9.20639	152.428	127.391	0.9509	474.00	12.3481	182.286	148.705	1.0236
356.00	9.25885	152.927	127.747	0.9523	476.00	12.4003	182.783	149.060	1.0246
358.00	9.31131	153.425	128.103	0.9537	478.00	12.4526	183.280	149.415	1.0257
360.00	9.36376	153.923	128.458	0.9551	480.00	12.5049	183.777	149.770	1.0267
362.00	9.41621	154.421	128.814	0.9565	482.00	12.5572	184.275	150.125	1.0277
364.00	9.46865	154.920	129.169	0.9579	484.00	12.6095	184.772	150.480	1.0288
366.00	9.52109	155.418	129.525	0.9592	486.00	12.6618	185.269	150.835	1.0298
368.00	9.57353	155.916	129.880	0.9606	488.00	12.7140	185.766	151.190	1.0308
370.00	9.62596	156.414	130.236	0.9619	490.00	12.7663	186.263	151.545	1.0318
372.00	9.67838	156.912	130.591	0.9633	492.00	12.8186	186.760	151.900	1.0328
374.00	9.73081	157.410	130.947	0.9646	494.00	12.8709	187.257	152.254	1.0338
376.00	9.78323	157.908	131.302	0.9660	496.00	12.9231	187.754	152.609	1.0348
378.00	9.83564	158.406	131.658	0.9673	498.00	12.9754	188.251	152.964	1.0358
380.00	9.88805	158.904	132.013	0.9686	500.00	13.0277	188.748	153.319	1.0368
382.00	9.94046	159.402	132.369	0.9699	502.00	13.0799	189.246	153.674	1.0378
384.00	9.99286	159.900	132.724	0.9712	504.00	13.1322	189.743	154.029	1.0388
386.00	10.0453	160.398	133.079	0.9725	506.00	13.1845	190.240	154.384	1.0398
388.00	10.0977	160.896	133.435	0.9738	508.00	13.2367	190.737	154.739	1.0408
390.00	10.1500	161.393	133.790	0.9751	510.00	13.2890	191.234	155.094	1.0418
392.00	10.2024	161.891	134.145	0.9763	512.00	13.3412	191.731	155.449	1.0427
394.00	10.2548	162.389	134.501	0.9776	514.00	13.3935	192.228	155.804	1.0437
396.00	10.3072	162.887	134.856	0.9789	516.00	13.4458	192.725	156.159	1.0447
398.00	10.3596	163.385	135.211	0.9801	518.00	13.4980	193.222	156.514	1.0456
400.00	10.4120	163.882	135.567	0.9814	520.00	13.5503	193.719	156.869	1.0466
402.00	10.4643	164.380	135.922	0.9826	522.00	13.6025	194.216	157.224	1.0475
404.00	10.5167	164.878	136.277	0.9838	524.00	13.6548	194.713	157.579	1.0485
406.00	10.5691	165.375	136.632	0.9851	526.00	13.7070	195.210	157.934	1.0494
408.00	10.6214	165.873	136.988	0.9863	528.00	13.7593	195.707	158.289	1.0504
410.00	10.6738	166.371	137.343	0.9875	530.00	13.8115	196.204	158.644	1.0513
412.00	10.7262	166.868	137.698	0.9887	532.00	13.8638	196.702	158.998	1.0523
414.00	10.7785	167.366	138.053	0.9899	534.00	13.9160	197.199	159.353	1.0532
416.00	10.8309	167.863	138.408	0.9911	536.00	13.9683	197.696	159.708	1.0541
418.00	10.8832	168.361	138.764	0.9923	538.00	14.0205	198.193	160.063	1.0551
420.00	10.9356	168.858	139.119	0.9935	540.00	14.0728	198.690	160.418	1.0560

20.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018749	3.1525	3.0831	0.0265
122.00	0.018852	4.1388	4.0690	0.0346
124.00	0.018956	5.1260	5.0559	0.0426
126.00	0.019063	6.1138	6.0432	0.0505
128.00	0.019173	7.1016	7.0306	0.0583
130.00	0.019285	8.0891	8.0177	0.0660
132.00	0.019399	9.0760	9.0042	0.0735
134.00	0.019517	10.0622	9.9900	0.0809
136.00	0.019637	11.0475	10.9749	0.0882
138.00	0.019759	12.0320	11.9589	0.0954
140.00	0.019885	13.0157	12.9421	0.1025
142.00	0.020014	13.9987	13.9246	0.1094
144.00	0.020146	14.9813	14.9068	0.1163
* 144.146	0.02016	15.0531	14.9785	0.1168
* 144.146	2.61709	99.1759	89.4899	0.7004
146.00	2.65599	99.6643	89.8343	0.7038
148.00	2.69783	100.190	90.2055	0.7074
150.00	2.73954	100.715	90.5762	0.7109
152.00	2.78112	101.240	90.9466	0.7144
154.00	2.82259	101.763	91.3165	0.7178
156.00	2.86394	102.286	91.6860	0.7211
158.00	2.90518	102.807	92.0551	0.7245
160.00	2.94633	103.328	92.4238	0.7277
162.00	2.98738	103.849	92.7922	0.7310
164.00	3.02833	104.368	93.1602	0.7342
166.00	3.06920	104.887	93.5278	0.7373
168.00	3.10999	105.405	93.8951	0.7404
170.00	3.15070	105.923	94.2621	0.7435
172.00	3.19133	106.440	94.6287	0.7465
174.00	3.23189	106.956	94.9950	0.7495
176.00	3.27238	107.472	95.3610	0.7524
178.00	3.31280	107.988	95.7267	0.7553
180.00	3.35316	108.502	96.0922	0.7582
182.00	3.39346	109.017	96.4573	0.7611
184.00	3.43369	109.530	96.8221	0.7639
186.00	3.47388	110.044	97.1867	0.7666
188.00	3.51401	110.557	97.5511	0.7694
190.00	3.55409	111.069	97.9151	0.7721
192.00	3.59411	111.581	98.2790	0.7748
194.00	3.63409	112.093	98.6426	0.7774
196.00	3.67403	112.604	99.0059	0.7800
198.00	3.71392	113.115	99.3691	0.7826
200.00	3.75377	113.625	99.7320	0.7852
202.00	3.79357	114.135	100.095	0.7877
204.00	3.83334	114.645	100.457	0.7903
206.00	3.87307	115.154	100.820	0.7927
208.00	3.91276	115.663	101.182	0.7952
210.00	3.95242	116.172	101.544	0.7976
212.00	3.99204	116.680	101.905	0.8000
214.00	4.03163	117.188	102.267	0.8024
216.00	4.07119	117.696	102.628	0.8048
218.00	4.11072	118.204	102.990	0.8071
220.00	4.15022	118.711	103.351	0.8094
222.00	4.18969	119.218	103.712	0.8117
224.00	4.22913	119.725	104.072	0.8140
226.00	4.26855	120.231	104.433	0.8163
228.00	4.30793	120.737	104.794	0.8185
230.00	4.34730	121.244	105.154	0.8207
232.00	4.38664	121.749	105.514	0.8229
234.00	4.42595	122.255	105.874	0.8251
236.00	4.46525	122.760	106.234	0.8272
238.00	4.50452	123.266	106.594	0.8293
240.00	4.54377	123.771	106.954	0.8315
242.00	4.58300	124.275	107.313	0.8336
244.00	4.62221	124.780	107.673	0.8356
246.00	4.66139	125.284	108.032	0.8377
248.00	4.70056	125.789	108.392	0.8397
250.00	4.73972	126.293	108.751	0.8418
252.00	4.77885	126.797	109.110	0.8438
254.00	4.81797	127.300	109.469	0.8458
256.00	4.85707	127.804	109.828	0.8477
258.00	4.89615	128.307	110.186	0.8497
260.00	4.93522	128.811	110.545	0.8516
262.00	4.97427	129.314	110.904	0.8536
264.00	5.01331	129.817	111.262	0.8555
266.00	5.05233	130.320	111.621	0.8574
268.00	5.09134	130.822	111.979	0.8593
270.00	5.13034	131.325	112.337	0.8611
272.00	5.16932	131.827	112.695	0.8630
274.00	5.20829	132.330	113.054	0.8648
276.00	5.24724	132.832	113.412	0.8666
278.00	5.28618	133.334	113.770	0.8685
280.00	5.32512	133.836	114.128	0.8703
282.00	5.36404	134.338	114.485	0.8720
284.00	5.40294	134.840	114.843	0.8738
286.00	5.44184	135.341	115.201	0.8756
288.00	5.48073	135.843	115.558	0.8773
290.00	5.51960	136.344	115.916	0.8791
292.00	5.55847	136.846	116.274	0.8808
294.00	5.59732	137.347	116.631	0.8825
296.00	5.63617	137.848	116.988	0.8842
298.00	5.67501	138.349	117.346	0.8859
300.00	5.71383	138.850	117.703	0.8875

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	5.75265	139.351	118.060	0.8892	422.00	8.07078	169.300	139.430	0.9727
304.00	5.79146	139.852	118.418	0.8909	424.00	8.10930	169.798	139.786	0.9739
306.00	5.83026	140.353	118.775	0.8925	426.00	8.14781	170.296	140.141	0.9751
308.00	5.86905	140.853	119.132	0.8941	428.00	8.18632	170.794	140.496	0.9762
310.00	5.90783	141.354	119.489	0.8958	430.00	8.22483	171.292	140.852	0.9774
312.00	5.94661	141.854	119.846	0.8974	432.00	8.26334	171.790	141.207	0.9786
314.00	5.98538	142.355	120.203	0.8990	434.00	8.30184	172.288	141.563	0.9797
316.00	6.02414	142.855	120.560	0.9006	436.00	8.34035	172.786	141.918	0.9809
318.00	6.06289	143.356	120.916	0.9021	438.00	8.37885	173.284	142.273	0.9820
320.00	6.10163	143.856	121.273	0.9037	440.00	8.41734	173.782	142.629	0.9831
322.00	6.14037	144.356	121.630	0.9053	442.00	8.45584	174.280	142.984	0.9843
324.00	6.17910	144.856	121.987	0.9068	444.00	8.49433	174.777	143.339	0.9854
326.00	6.21783	145.356	122.343	0.9083	446.00	8.53282	175.275	143.695	0.9865
328.00	6.25654	145.856	122.700	0.9099	448.00	8.57131	175.773	144.050	0.9876
330.00	6.29525	146.356	123.057	0.9114	450.00	8.60980	176.271	144.405	0.9887
332.00	6.33396	146.856	123.413	0.9129	452.00	8.64828	176.768	144.761	0.9898
334.00	6.37266	147.355	123.770	0.9144	454.00	8.68676	177.266	145.116	0.9909
336.00	6.41135	147.855	124.126	0.9159	456.00	8.72524	177.764	145.471	0.9920
338.00	6.45004	148.355	124.483	0.9174	458.00	8.76372	178.262	145.827	0.9931
340.00	6.48872	148.854	124.839	0.9189	460.00	8.80220	178.759	146.182	0.9942
342.00	6.52739	149.354	125.196	0.9203	462.00	8.84067	179.257	146.537	0.9953
344.00	6.56606	149.853	125.552	0.9218	464.00	8.87914	179.755	146.892	0.9963
346.00	6.60472	150.353	125.908	0.9232	466.00	8.91762	180.252	147.248	0.9974
348.00	6.64338	150.852	126.265	0.9247	468.00	8.95608	180.750	147.603	0.9985
350.00	6.68203	151.351	126.621	0.9261	470.00	8.99455	181.247	147.958	0.9995
352.00	6.72068	151.851	126.977	0.9275	472.00	9.03302	181.745	148.313	1.0006
354.00	6.75932	152.350	127.333	0.9289	474.00	9.07148	182.242	148.668	1.0017
356.00	6.79796	152.849	127.689	0.9303	476.00	9.10994	182.740	149.024	1.0027
358.00	6.83659	153.348	128.046	0.9317	478.00	9.14840	183.238	149.379	1.0037
360.00	6.87522	153.847	128.402	0.9331	480.00	9.18686	183.735	149.734	1.0048
362.00	6.91385	154.346	128.758	0.9345	482.00	9.22532	184.233	150.089	1.0058
364.00	6.95247	154.845	129.114	0.9359	484.00	9.26377	184.730	150.444	1.0068
366.00	6.99108	155.344	129.470	0.9372	486.00	9.30223	185.228	150.800	1.0079
368.00	7.02969	155.843	129.826	0.9386	488.00	9.34068	185.725	151.155	1.0089
370.00	7.06830	156.342	130.182	0.9400	490.00	9.37913	186.223	151.510	1.0099
372.00	7.10690	156.841	130.538	0.9413	492.00	9.41758	186.720	151.865	1.0109
374.00	7.14550	157.340	130.894	0.9426	494.00	9.45603	187.218	152.220	1.0119
376.00	7.18409	157.838	131.250	0.9440	496.00	9.49448	187.715	152.575	1.0129
378.00	7.22268	158.337	131.606	0.9453	498.00	9.53292	188.212	152.931	1.0139
380.00	7.26126	158.836	131.961	0.9466	500.00	9.57136	188.710	153.286	1.0149
382.00	7.29985	159.334	132.317	0.9479	502.00	9.60981	189.207	153.641	1.0159
384.00	7.33842	159.833	132.673	0.9492	504.00	9.64825	189.705	153.996	1.0169
386.00	7.37700	160.332	133.029	0.9505	506.00	9.68669	190.202	154.351	1.0179
388.00	7.41557	160.830	133.385	0.9518	508.00	9.72513	190.699	154.706	1.0189
390.00	7.45414	161.329	133.740	0.9531	510.00	9.76356	191.197	155.061	1.0199
392.00	7.49270	161.827	134.096	0.9544	512.00	9.80200	191.694	155.417	1.0208
394.00	7.53126	162.325	134.452	0.9556	514.00	9.84043	192.192	155.772	1.0218
396.00	7.56982	162.824	134.808	0.9569	516.00	9.87887	192.689	156.127	1.0228
398.00	7.60837	163.322	135.163	0.9581	518.00	9.91730	193.186	156.482	1.0237
400.00	7.64692	163.821	135.519	0.9594	520.00	9.95573	193.684	156.837	1.0247
402.00	7.68547	164.319	135.875	0.9606	522.00	9.99416	194.181	157.192	1.0256
404.00	7.72401	164.817	136.230	0.9619	524.00	10.0326	194.679	157.547	1.0266
406.00	7.76256	165.315	136.586	0.9631	526.00	10.0710	195.176	157.903	1.0275
408.00	7.80109	165.814	136.941	0.9643	528.00	10.1094	195.673	158.258	1.0285
410.00	7.83963	166.312	137.297	0.9655	530.00	10.1479	196.171	158.613	1.0294
412.00	7.87816	166.810	137.653	0.9668	532.00	10.1863	196.668	158.968	1.0304
414.00	7.91669	167.308	138.008	0.9680	534.00	10.2247	197.165	159.323	1.0313
416.00	7.95522	167.806	138.364	0.9692	536.00	10.2631	197.663	159.678	1.0322
418.00	7.99374	168.304	138.719	0.9704	538.00	10.3015	198.160	160.033	1.0332
420.00	8.03226	168.802	139.075	0.9715	540.00	10.3400	198.657	160.389	1.0341

30.00 PSIA 1S08AR

TEMPER-ATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPER-ATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	2.23038	108.508	96.1260	0.7305
					184.00	2.25792	109.032	96.4970	0.7333
					186.00	2.28540	109.555	96.8676	0.7362
					188.00	2.31282	110.078	97.2377	0.7390
					190.00	2.34019	110.599	97.6074	0.7417
					192.00	2.36750	111.120	97.9767	0.7444
					194.00	2.39476	111.640	98.3456	0.7471
					196.00	2.42197	112.160	98.7141	0.7498
					198.00	2.44913	112.679	99.0822	0.7524
					200.00	2.47625	113.197	99.4500	0.7550
					202.00	2.50333	113.715	99.8174	0.7576
					204.00	2.53036	114.232	100.185	0.7602
					206.00	2.55736	114.749	100.551	0.7627
					208.00	2.58431	115.265	100.918	0.7652
					210.00	2.61123	115.780	101.284	0.7676
					212.00	2.63811	116.296	101.650	0.7701
					214.00	2.66496	116.810	102.015	0.7725
					216.00	2.69177	117.324	102.381	0.7749
					218.00	2.71855	117.838	102.746	0.7773
					220.00	2.74530	118.351	103.111	0.7796
					222.00	2.77202	118.864	103.475	0.7819
					224.00	2.79871	119.377	103.840	0.7842
					226.00	2.82538	119.889	104.204	0.7865
					228.00	2.85201	120.401	104.567	0.7888
					230.00	2.87862	120.912	104.931	0.7910
					232.00	2.90521	121.423	105.295	0.7932
					234.00	2.93177	121.934	105.658	0.7954
					236.00	2.95831	122.444	106.021	0.7976
					238.00	2.98482	122.954	106.384	0.7997
120.00	0.018747	3.1760	3.0719	0.0264	240.00	3.01132	123.464	106.746	0.8018
122.00	0.018849	4.1620	4.0574	0.0345	242.00	3.03779	123.973	107.109	0.8040
124.00	0.018954	5.1490	5.0438	0.0425	244.00	3.06424	124.482	107.471	0.8061
126.00	0.019060	6.1364	6.0306	0.0504	246.00	3.09067	124.991	107.833	0.8081
128.00	0.019170	7.1239	7.0175	0.0582	248.00	3.11708	125.500	108.195	0.8102
130.00	0.019282	8.1111	8.0041	0.0659	250.00	3.14347	126.008	108.557	0.8122
132.00	0.019396	9.0977	8.9901	0.0734	252.00	3.16985	126.516	108.918	0.8143
134.00	0.019513	10.0836	9.9753	0.0808	254.00	3.19620	127.024	109.280	0.8163
136.00	0.019633	11.0686	10.9596	0.0881	256.00	3.22254	127.531	109.641	0.8183
138.00	0.019755	12.0527	11.9430	0.0953	258.00	3.24886	128.039	110.002	0.8202
140.00	0.019881	13.0360	12.9256	0.1024	260.00	3.27517	128.546	110.363	0.8222
142.00	0.020009	14.0186	13.9075	0.1093					
144.00	0.020141	15.0008	14.8890	0.1162	262.00	3.30146	129.053	110.724	0.8241
146.00	0.020276	15.9830	15.8704	0.1230	264.00	3.32773	129.559	111.085	0.8261
148.00	0.020414	16.9654	16.8521	0.1297	266.00	3.35399	130.066	111.446	0.8280
150.00	0.020556	17.9488	17.8346	0.1363	268.00	3.38024	130.572	111.806	0.8299
* 151.169	0.02064	18.5243	18.4098	0.1401	270.00	3.40647	131.078	112.167	0.8317
* 151.169	1.79538	100.301	90.3335	0.6810	272.00	3.43269	131.584	112.527	0.8336
152.00	1.80744	100.526	90.4918	0.6825	274.00	3.45889	132.089	112.887	0.8355
154.00	1.83638	101.067	90.8724	0.6861	276.00	3.48509	132.595	113.247	0.8373
156.00	1.86519	101.607	91.2521	0.6895	278.00	3.51126	133.100	113.607	0.8391
158.00	1.89387	102.145	91.6310	0.6930	280.00	3.53743	133.605	113.967	0.8409
160.00	1.92243	102.682	92.0091	0.6963					
162.00	1.95088	103.217	92.3865	0.6997	282.00	3.56359	134.110	114.327	0.8427
164.00	1.97923	103.751	92.7632	0.7029	284.00	3.58973	134.615	114.686	0.8445
166.00	2.00747	104.284	93.1392	0.7062	286.00	3.61586	135.119	115.046	0.8463
168.00	2.03562	104.816	93.5146	0.7094	288.00	3.64198	135.624	115.405	0.8480
170.00	2.06368	105.346	93.8893	0.7125	290.00	3.66809	136.128	115.764	0.8498
172.00	2.09165	105.876	94.2635	0.7156	292.00	3.69419	136.632	116.124	0.8515
174.00	2.11955	106.404	94.6371	0.7186	294.00	3.72028	137.136	116.483	0.8532
176.00	2.14736	106.931	95.0101	0.7217	296.00	3.74636	137.640	116.842	0.8549
178.00	2.17510	107.458	95.3826	0.7246	298.00	3.77243	138.144	117.201	0.8566
180.00	2.20278	107.983	95.7545	0.7276	300.00	3.79849	138.647	117.560	0.8583

* PHASE CHANGE

TEMPER-ATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPER-ATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	3.82454	139.151	117.918	0.8600	422.00	5.37660	169.196	139.347	0.9438
304.00	3.85059	139.654	118.277	0.8617	424.00	5.40235	169.695	139.703	0.9450
306.00	3.87662	140.157	118.636	0.8633	426.00	5.42809	170.194	140.060	0.9461
308.00	3.90264	140.660	118.994	0.8650	428.00	5.45384	170.693	140.416	0.9473
310.00	3.92866	141.163	119.353	0.8666	430.00	5.47958	171.192	140.772	0.9485
312.00	3.95467	141.666	119.711	0.8682	432.00	5.50532	171.691	141.128	0.9496
314.00	3.98067	142.169	120.070	0.8698	434.00	5.53105	172.190	141.484	0.9508
316.00	4.00666	142.671	120.428	0.8714	436.00	5.55678	172.688	141.840	0.9519
318.00	4.03265	143.174	120.786	0.8730	438.00	5.58251	173.187	142.195	0.9531
320.00	4.05863	143.676	121.144	0.8746	440.00	5.60824	173.686	142.551	0.9542
322.00	4.08460	144.178	121.502	0.8761	442.00	5.63397	174.185	142.907	0.9553
324.00	4.11056	144.680	121.860	0.8777	444.00	5.65969	174.683	143.263	0.9565
326.00	4.13652	145.182	122.218	0.8792	446.00	5.68541	175.182	143.619	0.9576
328.00	4.16247	145.684	122.576	0.8808	448.00	5.71113	175.681	143.975	0.9587
330.00	4.18841	146.186	122.934	0.8823	450.00	5.73685	176.179	144.331	0.9598
332.00	4.21435	146.688	123.292	0.8838	452.00	5.76257	176.678	144.687	0.9609
334.00	4.24028	147.190	123.649	0.8853	454.00	5.78828	177.176	145.042	0.9620
336.00	4.26620	147.691	124.007	0.8868	456.00	5.81399	177.675	145.398	0.9631
338.00	4.29212	148.193	124.365	0.8883	458.00	5.83970	178.173	145.754	0.9642
340.00	4.31803	148.694	124.722	0.8898	460.00	5.86541	178.672	146.110	0.9653
342.00	4.34394	149.195	125.080	0.8912	462.00	5.89112	179.170	146.465	0.9664
344.00	4.36984	149.697	125.437	0.8927	464.00	5.91682	179.669	146.821	0.9675
346.00	4.39574	150.198	125.795	0.8942	466.00	5.94252	180.167	147.177	0.9685
348.00	4.42163	150.699	126.152	0.8956	468.00	5.96822	180.666	147.533	0.9696
350.00	4.44751	151.200	126.509	0.8970	470.00	5.99392	181.164	147.888	0.9707
352.00	4.47339	151.701	126.867	0.8985	472.00	6.01962	181.662	148.244	0.9717
354.00	4.49927	152.202	127.224	0.8999	474.00	6.04531	182.161	148.600	0.9728
356.00	4.52514	152.703	127.581	0.9013	476.00	6.07101	182.659	148.955	0.9738
358.00	4.55100	153.203	127.938	0.9027	478.00	6.09670	183.157	149.311	0.9749
360.00	4.57686	153.704	128.295	0.9041	480.00	6.12239	183.655	149.667	0.9759
362.00	4.60272	154.204	128.652	0.9055	482.00	6.14808	184.154	150.022	0.9769
364.00	4.62857	154.705	129.009	0.9069	484.00	6.17376	184.652	150.378	0.9780
366.00	4.65441	155.205	129.366	0.9082	486.00	6.19945	185.150	150.733	0.9790
368.00	4.68026	155.706	129.723	0.9096	488.00	6.22513	185.648	151.089	0.9800
370.00	4.70609	156.206	130.080	0.9109	490.00	6.25081	186.146	151.445	0.9810
372.00	4.73193	156.706	130.437	0.9123	492.00	6.27650	186.645	151.800	0.9820
374.00	4.75776	157.207	130.794	0.9136	494.00	6.30217	187.143	152.156	0.9831
376.00	4.78358	157.707	131.150	0.9150	496.00	6.32785	187.641	152.511	0.9841
378.00	4.80940	158.207	131.507	0.9163	498.00	6.35353	188.139	152.867	0.9851
380.00	4.83522	158.707	131.864	0.9176	500.00	6.37920	188.637	153.222	0.9861
382.00	4.86103	159.207	132.220	0.9189	502.00	6.40488	189.135	153.578	0.9871
384.00	4.88684	159.707	132.577	0.9202	504.00	6.43055	189.633	153.933	0.9880
386.00	4.91265	160.207	132.934	0.9215	506.00	6.45622	190.131	154.289	0.9890
388.00	4.93845	160.706	133.290	0.9228	508.00	6.48189	190.629	154.644	0.9900
390.00	4.96425	161.206	133.647	0.9241	510.00	6.50756	191.127	155.000	0.9910
392.00	4.99005	161.706	134.003	0.9254	512.00	6.53322	191.625	155.356	0.9920
394.00	5.01584	162.205	134.360	0.9267	514.00	6.55889	192.123	155.711	0.9929
396.00	5.04163	162.705	134.716	0.9279	516.00	6.58455	192.621	156.067	0.9939
398.00	5.06741	163.205	135.073	0.9292	518.00	6.61022	193.119	156.422	0.9949
400.00	5.09319	163.704	135.429	0.9304	520.00	6.63588	193.617	156.778	0.9958
402.00	5.11897	164.204	135.785	0.9317	522.00	6.66154	194.115	157.133	0.9968
404.00	5.14475	164.703	136.142	0.9329	524.00	6.68720	194.613	157.488	0.9977
406.00	5.17052	165.202	136.498	0.9341	526.00	6.71286	195.111	157.844	0.9987
408.00	5.19629	165.702	136.854	0.9354	528.00	6.73851	195.609	158.199	0.9996
410.00	5.22206	166.201	137.210	0.9366	530.00	6.76417	196.107	158.555	1.0006
412.00	5.24782	166.700	137.567	0.9378	532.00	6.78982	196.605	158.910	1.0015
414.00	5.27358	167.200	137.923	0.9390	534.00	6.81548	197.103	159.266	1.0024
416.00	5.29934	167.699	138.279	0.9402	536.00	6.84113	197.600	159.621	1.0034
418.00	5.32510	168.198	138.635	0.9414	538.00	6.86678	198.098	159.977	1.0043
420.00	5.35085	168.697	138.991	0.9426	540.00	6.89243	198.596	160.332	1.0052

40.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	1.64822	107.985	95.7845	0.7082
					184.00	1.66945	108.520	96.1623	0.7111
					186.00	1.69062	109.054	96.5394	0.7140
					188.00	1.71172	109.586	96.9159	0.7168
					190.00	1.73276	110.118	97.2917	0.7196
					192.00	1.75375	110.648	97.6669	0.7224
					194.00	1.77467	111.178	98.0415	0.7252
					196.00	1.79555	111.706	98.4155	0.7279
					198.00	1.81638	112.234	98.7890	0.7305
					200.00	1.83715	112.761	99.1620	0.7332
					202.00	1.85788	113.287	99.5345	0.7358
					204.00	1.87857	113.812	99.9065	0.7384
					206.00	1.89921	114.336	100.278	0.7409
					208.00	1.91981	114.860	100.649	0.7435
					210.00	1.94038	115.383	101.020	0.7460
					212.00	1.96090	115.905	101.390	0.7485
					214.00	1.98139	116.426	101.760	0.7509
					216.00	2.00185	116.947	102.129	0.7533
					218.00	2.02227	117.467	102.498	0.7557
					220.00	2.04265	117.987	102.867	0.7581
					222.00	2.06301	118.506	103.235	0.7604
					224.00	2.08334	119.025	103.603	0.7628
					226.00	2.10363	119.542	103.971	0.7651
					228.00	2.12390	120.060	104.339	0.7673
					230.00	2.14415	120.577	104.706	0.7696
					232.00	2.16436	121.093	105.072	0.7718
					234.00	2.18455	121.609	105.439	0.7741
					236.00	2.20472	122.125	105.805	0.7762
					238.00	2.22486	122.640	106.171	0.7784
120.00	0.018744	3.1995	3.0608	0.0263	240.00	2.24498	123.154	106.537	0.7806
122.00	0.018846	4.1852	4.0457	0.0344	242.00	2.26508	123.668	106.902	0.7827
124.00	0.018951	5.1719	5.0317	0.0424	244.00	2.28516	124.182	107.267	0.7848
126.00	0.019058	6.1591	6.0180	0.0503	246.00	2.30522	124.696	107.632	0.7869
128.00	0.019167	7.1463	7.0044	0.0581	248.00	2.32525	125.209	107.997	0.7890
130.00	0.019279	8.1332	7.9905	0.0658	250.00	2.34527	125.721	108.361	0.7911
132.00	0.019393	9.1195	8.9760	0.0733	252.00	2.36527	126.233	108.726	0.7931
134.00	0.019510	10.1051	9.9606	0.0807	254.00	2.38525	126.745	109.090	0.7951
136.00	0.019629	11.0897	10.9444	0.0880	256.00	2.40521	127.257	109.453	0.7971
138.00	0.019752	12.0735	11.9273	0.0952	258.00	2.42516	127.768	109.817	0.7991
140.00	0.019877	13.0564	12.9092	0.1022	260.00	2.44508	128.279	110.180	0.8011
142.00	0.020005	14.0386	13.8905	0.1092					
144.00	0.020137	15.0204	14.8713	0.1161	262.00	2.46500	128.790	110.544	0.8030
146.00	0.020271	16.0020	15.8520	0.1228	264.00	2.48489	129.300	110.907	0.8050
148.00	0.020409	16.9840	16.8330	0.1295	266.00	2.50478	129.810	111.270	0.8069
150.00	0.020551	17.9668	17.8147	0.1361	268.00	2.52464	130.320	111.632	0.8088
152.00	0.020697	18.9511	18.7979	0.1426	270.00	2.54450	130.830	111.995	0.8107
154.00	0.020847	19.9374	19.7831	0.1491	272.00	2.56433	131.339	112.357	0.8126
156.00	0.021001	20.9266	20.7711	0.1555	274.00	2.58416	131.848	112.720	0.8145
* 156.606	0.02105	21.2268	21.0710	0.1574	276.00	2.60397	132.356	113.082	0.8163
* 156.606	1.37098	101.058	90.9103	0.6672	278.00	2.62377	132.865	113.444	0.8181
158.00	1.38668	101.447	91.1826	0.6696	280.00	2.64356	133.373	113.805	0.8200
160.00	1.40907	102.002	91.5720	0.6731					
162.00	1.43133	102.555	91.9601	0.6765	282.00	2.66333	133.881	114.167	0.8218
164.00	1.45347	103.106	92.3470	0.6799	284.00	2.68309	134.389	114.528	0.8236
166.00	1.47549	103.655	92.7328	0.6833	286.00	2.70284	134.896	114.890	0.8253
168.00	1.49740	104.201	93.1175	0.6865	288.00	2.72258	135.404	115.251	0.8271
170.00	1.51921	104.747	93.5011	0.6898	290.00	2.74231	135.911	115.612	0.8289
172.00	1.54093	105.290	93.8839	0.6929	292.00	2.76203	136.418	115.973	0.8306
174.00	1.56255	105.832	94.2656	0.6961	294.00	2.78174	136.925	116.334	0.8323
176.00	1.58409	106.372	94.6466	0.6991	296.00	2.80144	137.431	116.695	0.8341
178.00	1.60554	106.911	95.0267	0.7022	298.00	2.82113	137.937	117.055	0.8358
180.00	1.62692	107.449	95.4060	0.7052	300.00	2.84081	138.444	117.416	0.8375

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	2.86048	138.949	117.776	0.8391	422.00	4.02952	169.092	139.265	0.9232
304.00	2.88014	139.455	118.136	0.8408	424.00	4.04888	169.592	139.621	0.9244
306.00	2.89979	139.961	118.496	0.8425	426.00	4.06824	170.092	139.978	0.9256
308.00	2.91943	140.466	118.856	0.8441	428.00	4.08760	170.592	140.335	0.9267
310.00	2.93906	140.972	119.216	0.8457	430.00	4.10696	171.091	140.691	0.9279
312.00	2.95869	141.477	119.576	0.8474	432.00	4.12631	171.591	141.048	0.9291
314.00	2.97831	141.982	119.936	0.8490	434.00	4.14566	172.091	141.404	0.9302
316.00	2.99792	142.487	120.296	0.8506	436.00	4.16501	172.591	141.761	0.9314
318.00	3.01752	142.991	120.655	0.8522	438.00	4.18436	173.091	142.117	0.9325
320.00	3.03712	143.496	121.015	0.8538	440.00	4.20370	173.590	142.474	0.9336
322.00	3.05671	144.000	121.374	0.8553	442.00	4.22305	174.090	142.830	0.9348
324.00	3.07629	144.504	121.733	0.8569	444.00	4.24238	174.589	143.187	0.9359
326.00	3.09586	145.009	122.093	0.8584	446.00	4.26172	175.089	143.543	0.9370
328.00	3.11543	145.512	122.452	0.8600	448.00	4.28106	175.588	143.900	0.9381
330.00	3.13499	146.016	122.811	0.8615	450.00	4.30039	176.088	144.256	0.9393
332.00	3.15454	146.520	123.170	0.8630	452.00	4.31972	176.587	144.612	0.9404
334.00	3.17409	147.024	123.529	0.8645	454.00	4.33905	177.087	144.969	0.9415
336.00	3.19363	147.527	123.888	0.8661	456.00	4.35838	177.586	145.325	0.9426
338.00	3.21316	148.030	124.246	0.8675	458.00	4.37770	178.085	145.681	0.9437
340.00	3.23269	148.534	124.605	0.8690	460.00	4.39703	178.585	146.037	0.9447
342.00	3.25222	149.037	124.964	0.8705	462.00	4.41635	179.084	146.394	0.9458
344.00	3.27174	149.540	125.322	0.8720	464.00	4.43567	179.583	146.750	0.9469
346.00	3.29125	150.043	125.681	0.8734	466.00	4.45499	180.082	147.106	0.9480
348.00	3.31075	150.546	126.039	0.8749	468.00	4.47430	180.582	147.462	0.9490
350.00	3.33026	151.048	126.397	0.8763	470.00	4.49362	181.081	147.818	0.9501
352.00	3.34975	151.551	126.756	0.8778	472.00	4.51293	181.580	148.175	0.9512
354.00	3.36924	152.053	127.114	0.8792	474.00	4.53224	182.079	148.531	0.9522
356.00	3.38873	152.556	127.472	0.8806	476.00	4.55155	182.578	148.887	0.9533
358.00	3.40821	153.058	127.830	0.8820	478.00	4.57086	183.077	149.243	0.9543
360.00	3.42769	153.560	128.188	0.8834	480.00	4.59016	183.576	149.599	0.9554
362.00	3.44716	154.062	128.546	0.8848	482.00	4.60947	184.075	149.955	0.9564
364.00	3.46662	154.564	128.904	0.8862	484.00	4.62877	184.574	150.311	0.9574
366.00	3.48609	155.066	129.262	0.8875	486.00	4.64807	185.073	150.667	0.9585
368.00	3.50554	155.568	129.620	0.8889	488.00	4.66737	185.572	151.023	0.9595
370.00	3.52500	156.070	129.978	0.8903	490.00	4.68667	186.070	151.379	0.9605
372.00	3.54445	156.572	130.335	0.8916	492.00	4.70596	186.569	151.735	0.9615
374.00	3.56389	157.073	130.693	0.8930	494.00	4.72526	187.068	152.091	0.9625
376.00	3.58333	157.575	131.051	0.8943	496.00	4.74455	187.567	152.447	0.9635
378.00	3.60277	158.076	131.408	0.8956	498.00	4.76384	188.066	152.803	0.9645
380.00	3.62221	158.578	131.766	0.8970	500.00	4.78313	188.564	153.159	0.9655
382.00	3.64163	159.079	132.123	0.8983	502.00	4.80242	189.063	153.515	0.9665
384.00	3.66106	159.580	132.481	0.8996	504.00	4.82171	189.562	153.871	0.9675
386.00	3.68048	160.081	132.838	0.9009	506.00	4.84100	190.060	154.227	0.9685
388.00	3.69990	160.583	133.195	0.9022	508.00	4.86028	190.559	154.583	0.9695
390.00	3.71932	161.084	133.553	0.9035	510.00	4.87956	191.058	154.939	0.9705
392.00	3.73873	161.585	133.910	0.9048	512.00	4.89885	191.556	155.294	0.9715
394.00	3.75814	162.085	134.267	0.9060	514.00	4.91813	192.055	155.650	0.9724
396.00	3.77754	162.586	134.624	0.9073	516.00	4.93741	192.553	156.006	0.9734
398.00	3.79694	163.087	134.982	0.9086	518.00	4.95669	193.052	156.362	0.9744
400.00	3.81634	163.588	135.339	0.9098	520.00	4.97596	193.550	156.718	0.9753
402.00	3.83573	164.088	135.696	0.9111	522.00	4.99524	194.049	157.074	0.9763
404.00	3.85513	164.589	136.053	0.9123	524.00	5.01452	194.548	157.430	0.9772
406.00	3.87451	165.089	136.410	0.9135	526.00	5.03379	195.046	157.785	0.9782
408.00	3.89390	165.590	136.767	0.9148	528.00	5.05306	195.544	158.141	0.9791
410.00	3.91328	166.090	137.124	0.9160	530.00	5.07233	196.043	158.497	0.9801
412.00	3.93266	166.591	137.481	0.9172	532.00	5.09160	196.541	158.853	0.9810
414.00	3.95204	167.091	137.838	0.9184	534.00	5.11087	197.040	159.209	0.9819
416.00	3.97141	167.591	138.194	0.9196	536.00	5.13014	197.538	159.564	0.9829
418.00	3.99079	168.091	138.551	0.9208	538.00	5.14941	198.037	159.920	0.9838
420.00	4.01015	168.591	138.908	0.9220	540.00	5.16867	198.535	160.276	0.9847

50.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018742	3.2230	3.0496	0.0262
122.00	0.018844	4.2085	4.0341	0.0343
124.00	0.018948	5.1949	5.0196	0.0423
126.00	0.019055	6.1818	6.0055	0.0502
128.00	0.019164	7.1687	6.9914	0.0580
130.00	0.019275	8.1553	7.9769	0.0657
132.00	0.019389	9.1413	8.9619	0.0732
134.00	0.019506	10.1265	9.9460	0.0806
136.00	0.019626	11.1108	10.9292	0.0879
138.00	0.019748	12.0942	11.9115	0.0951
140.00	0.019873	13.0767	12.8929	0.1021
142.00	0.020001	14.0586	13.8735	0.1091
144.00	0.020132	15.0399	14.8536	0.1160
146.00	0.020267	16.0211	15.8336	0.1227
148.00	0.020404	17.0026	16.8138	0.1294
150.00	0.020546	17.9849	17.7948	0.1360
152.00	0.020691	18.9686	18.7772	0.1425
154.00	0.020841	19.9544	19.7615	0.1489
156.00	0.020994	20.9429	20.7487	0.1553
158.00	0.021152	21.9351	21.7394	0.1616
160.00	0.021316	22.9318	22.7346	0.1679
* 161.109	0.02141	23.4867	23.2886	0.1714
* 161.109	1.11010	101.603	91.3314	0.6562
162.00	1.11840	101.858	91.5098	0.6578
164.00	1.13691	102.428	91.9089	0.6613
166.00	1.15529	102.996	92.3061	0.6647
168.00	1.17354	103.560	92.7017	0.6681
170.00	1.19168	104.122	93.0957	0.6715
172.00	1.20970	104.681	93.4882	0.6747
174.00	1.22762	105.238	93.8794	0.6779
176.00	1.24545	105.793	94.2692	0.6811
178.00	1.26318	106.346	94.6579	0.6842
180.00	1.28082	106.896	95.0454	0.6873
182.00	1.29838	107.445	95.4317	0.6903
184.00	1.31587	107.992	95.8171	0.6933
186.00	1.33328	108.538	96.2014	0.6963
188.00	1.35062	109.082	96.5848	0.6992
190.00	1.36790	109.624	96.9673	0.7021
192.00	1.38511	110.165	97.3490	0.7049
194.00	1.40227	110.704	97.7298	0.7077
196.00	1.41936	111.243	98.1098	0.7104
198.00	1.43641	111.780	98.4891	0.7132
200.00	1.45340	112.315	98.8677	0.7159
202.00	1.47034	112.850	99.2456	0.7185
204.00	1.48724	113.384	99.6228	0.7212
206.00	1.50408	113.916	99.9994	0.7238
208.00	1.52089	114.448	100.375	0.7263
210.00	1.53765	114.978	100.751	0.7289
212.00	1.55438	115.508	101.126	0.7314
214.00	1.57106	116.036	101.500	0.7339
216.00	1.58771	116.564	101.874	0.7363
218.00	1.60433	117.091	102.247	0.7387
220.00	1.62091	117.618	102.620	0.7411
222.00	1.63746	118.143	102.992	0.7435
224.00	1.65397	118.668	103.364	0.7459
226.00	1.67046	119.192	103.736	0.7482
228.00	1.68692	119.715	104.107	0.7505
230.00	1.70334	120.238	104.477	0.7528
232.00	1.71975	120.760	104.847	0.7550
234.00	1.73612	121.281	105.217	0.7573
236.00	1.75247	121.802	105.587	0.7595
238.00	1.76880	122.322	105.956	0.7617
240.00	1.78510	122.842	106.325	0.7639
242.00	1.80138	123.361	106.693	0.7660
244.00	1.81764	123.879	107.061	0.7682
246.00	1.83387	124.397	107.429	0.7703
248.00	1.85009	124.915	107.797	0.7724
250.00	1.86628	125.432	108.164	0.7744
252.00	1.88246	125.949	108.531	0.7765
254.00	1.89862	126.465	108.898	0.7785
256.00	1.91476	126.980	109.264	0.7806
258.00	1.93088	127.496	109.630	0.7826
260.00	1.94699	128.011	109.996	0.7846
262.00	1.96307	128.525	110.362	0.7865
264.00	1.97915	129.039	110.727	0.7885
266.00	1.99520	129.553	111.092	0.7904
268.00	2.01125	130.067	111.457	0.7923
270.00	2.02727	130.580	111.822	0.7943
272.00	2.04329	131.092	112.187	0.7961
274.00	2.05929	131.605	112.551	0.7980
276.00	2.07527	132.117	112.915	0.7999
278.00	2.09125	132.628	113.279	0.8017
280.00	2.10721	133.140	113.643	0.8036
282.00	2.12315	133.651	114.006	0.8054
284.00	2.13909	134.162	114.370	0.8072
286.00	2.15501	134.672	114.733	0.8090
288.00	2.17093	135.183	115.096	0.8108
290.00	2.18683	135.693	115.459	0.8125
292.00	2.20272	136.202	115.822	0.8143
294.00	2.21860	136.712	116.184	0.8160
296.00	2.23447	137.221	116.547	0.8177
298.00	2.25033	137.730	116.909	0.8195
300.00	2.26618	138.239	117.271	0.8212

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	2.28202	138.748	117.633	0.8228	422.00	3.22128	168.987	139.182	0.9072
304.00	2.29786	139.256	117.995	0.8245	424.00	3.23681	169.488	139.539	0.9084
306.00	2.31368	139.764	118.356	0.8262	426.00	3.25234	169.989	139.896	0.9096
308.00	2.32949	140.272	118.718	0.8278	428.00	3.26787	170.490	140.254	0.9107
310.00	2.34530	140.780	119.079	0.8295	430.00	3.28340	170.991	140.611	0.9119
312.00	2.36110	141.287	119.441	0.8311	432.00	3.29892	171.492	140.968	0.9131
314.00	2.37689	141.794	119.802	0.8327	434.00	3.31444	171.992	141.325	0.9142
316.00	2.39267	142.301	120.163	0.8343	436.00	3.32996	172.493	141.682	0.9154
318.00	2.40844	142.808	120.524	0.8359	438.00	3.34547	172.994	142.039	0.9165
320.00	2.42421	143.315	120.885	0.8375	440.00	3.36099	173.494	142.396	0.9176
322.00	2.43997	143.822	121.245	0.8391	442.00	3.37650	173.995	142.753	0.9188
324.00	2.45572	144.328	121.606	0.8407	444.00	3.39201	174.495	143.110	0.9199
326.00	2.47146	144.834	121.967	0.8422	446.00	3.40752	174.996	143.467	0.9210
328.00	2.48720	145.340	122.327	0.8438	448.00	3.42302	175.496	143.824	0.9222
330.00	2.50293	145.846	122.687	0.8453	450.00	3.43852	175.997	144.181	0.9233
332.00	2.51866	146.352	123.048	0.8469	452.00	3.45402	176.497	144.538	0.9244
334.00	2.53437	146.857	123.408	0.8484	454.00	3.46952	176.997	144.895	0.9255
336.00	2.55009	147.363	123.768	0.8499	456.00	3.48502	177.497	145.252	0.9266
338.00	2.56579	147.868	124.128	0.8514	458.00	3.50051	177.997	145.608	0.9277
340.00	2.58149	148.373	124.487	0.8529	460.00	3.51601	178.498	145.965	0.9288
342.00	2.59718	148.878	124.847	0.8543	462.00	3.53150	178.998	146.322	0.9299
344.00	2.61287	149.383	125.207	0.8558	464.00	3.54699	179.498	146.679	0.9309
346.00	2.62856	149.887	125.566	0.8573	466.00	3.56247	179.998	147.035	0.9320
348.00	2.64423	150.392	125.926	0.8587	468.00	3.57796	180.498	147.392	0.9331
350.00	2.65990	150.896	126.285	0.8602	470.00	3.59344	180.997	147.749	0.9341
352.00	2.67557	151.401	126.645	0.8616	472.00	3.60892	181.497	148.105	0.9352
354.00	2.69123	151.905	127.004	0.8630	474.00	3.62440	181.997	148.462	0.9363
356.00	2.70689	152.409	127.363	0.8645	476.00	3.63988	182.497	148.818	0.9373
358.00	2.72254	152.913	127.722	0.8659	478.00	3.65536	182.997	149.175	0.9384
360.00	2.73818	153.417	128.081	0.8673	480.00	3.67083	183.496	149.531	0.9394
362.00	2.75383	153.920	128.440	0.8687	482.00	3.68631	183.996	149.888	0.9404
364.00	2.76946	154.424	128.799	0.8701	484.00	3.70178	184.496	150.244	0.9415
366.00	2.78510	154.927	129.158	0.8714	486.00	3.71725	184.995	150.601	0.9425
368.00	2.80072	155.431	129.517	0.8728	488.00	3.73272	185.495	150.957	0.9435
370.00	2.81635	155.934	129.875	0.8742	490.00	3.74819	185.994	151.314	0.9446
372.00	2.83197	156.437	130.234	0.8755	492.00	3.76365	186.494	151.670	0.9456
374.00	2.84758	156.940	130.592	0.8769	494.00	3.77912	186.993	152.027	0.9466
376.00	2.86319	157.443	130.951	0.8782	496.00	3.79458	187.493	152.383	0.9476
378.00	2.87880	157.946	131.309	0.8796	498.00	3.81004	187.992	152.739	0.9486
380.00	2.89440	158.449	131.668	0.8809	500.00	3.82550	188.492	153.096	0.9496
382.00	2.91000	158.951	132.026	0.8822	502.00	3.84096	188.991	153.452	0.9506
384.00	2.92560	159.454	132.384	0.8835	504.00	3.85641	189.490	153.808	0.9516
386.00	2.94119	159.956	132.743	0.8848	506.00	3.87187	189.990	154.165	0.9526
388.00	2.95678	160.459	133.101	0.8861	508.00	3.88732	190.489	154.521	0.9536
390.00	2.97236	160.961	133.459	0.8874	510.00	3.90278	190.988	154.877	0.9545
392.00	2.98794	161.463	133.817	0.8887	512.00	3.91823	191.487	155.233	0.9555
394.00	3.00352	161.965	134.175	0.8900	514.00	3.93368	191.986	155.590	0.9565
396.00	3.01910	162.467	134.533	0.8912	516.00	3.94913	192.486	155.946	0.9575
398.00	3.03467	162.969	134.891	0.8925	518.00	3.96458	192.985	156.302	0.9584
400.00	3.05023	163.471	135.248	0.8938	520.00	3.98002	193.484	156.658	0.9594
402.00	3.06580	163.973	135.606	0.8950	522.00	3.99547	193.983	157.014	0.9604
404.00	3.08136	164.475	135.964	0.8963	524.00	4.01091	194.482	157.371	0.9613
406.00	3.09692	164.976	136.322	0.8975	526.00	4.02636	194.981	157.727	0.9623
408.00	3.11247	165.478	136.679	0.8987	528.00	4.04180	195.480	158.083	0.9632
410.00	3.12803	165.979	137.037	0.9000	530.00	4.05724	195.979	158.439	0.9641
412.00	3.14358	166.481	137.395	0.9012	532.00	4.07268	196.478	158.795	0.9651
414.00	3.15912	166.982	137.752	0.9024	534.00	4.08812	196.977	159.151	0.9660
416.00	3.17467	167.484	138.110	0.9036	536.00	4.10355	197.476	159.508	0.9670
418.00	3.19021	167.985	138.467	0.9048	538.00	4.11899	197.975	159.864	0.9679
420.00	3.20574	168.486	138.824	0.9060	540.00	4.13443	198.474	160.220	0.9688

60.00 PSIA 1S08AR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018739	3.2465	3.0385	0.0261
122.00	0.018841	4.2317	4.0225	0.0342
124.00	0.018945	5.2179	5.0075	0.0422
126.00	0.019052	6.2045	5.9929	0.0501
128.00	0.019161	7.1911	6.9783	0.0579
130.00	0.019272	8.1774	7.9634	0.0655
132.00	0.019386	9.1631	8.9478	0.0731
134.00	0.019503	10.1480	9.9314	0.0805
136.00	0.019622	11.1320	10.9141	0.0878
138.00	0.019744	12.1150	11.8958	0.0949
140.00	0.019869	13.0971	12.8765	0.1020
142.00	0.019997	14.0786	13.8565	0.1090
144.00	0.020128	15.0595	14.8360	0.1158
146.00	0.020262	16.0403	15.8153	0.1226
148.00	0.020399	17.0213	16.7948	0.1293
150.00	0.020541	18.0031	17.7750	0.1359
152.00	0.020686	18.9862	18.7565	0.1424
154.00	0.020835	19.9714	19.7400	0.1488
156.00	0.020988	20.9593	20.7263	0.1552
158.00	0.021146	21.9508	21.7160	0.1615
160.00	0.021309	22.9467	22.7101	0.1678
162.00	0.021476	23.9481	23.7097	0.1740
164.00	0.021650	24.9560	24.7156	0.1802
* 164.989	0.02174	25.4572	25.2159	0.1832
* 164.989	0.93278	102.006	91.6490	0.6472
166.00	0.94087	102.303	91.8563	0.6490
168.00	0.95676	102.888	92.2647	0.6525
170.00	0.97252	103.469	92.6707	0.6559
172.00	0.98815	104.046	93.0746	0.6593
174.00	1.00366	104.620	93.4765	0.6626
176.00	1.01906	105.191	93.8766	0.6659
178.00	1.03436	105.760	94.2749	0.6691
180.00	1.04956	106.325	94.6716	0.6722
182.00	1.06467	106.888	95.0667	0.6753
184.00	1.07969	107.448	95.4604	0.6784
186.00	1.09463	108.007	95.8528	0.6814
188.00	1.10950	108.563	96.2438	0.6844
190.00	1.12429	109.117	96.6337	0.6873
192.00	1.13902	109.669	97.0223	0.6902
194.00	1.15368	110.219	97.4099	0.6931
196.00	1.16828	110.768	97.7965	0.6959
198.00	1.18282	111.315	98.1820	0.6987
200.00	1.19731	111.861	98.5666	0.7014
202.00	1.21174	112.404	98.9503	0.7041
204.00	1.22612	112.947	99.3331	0.7068
206.00	1.24045	113.488	99.7151	0.7094
208.00	1.25474	114.028	100.096	0.7120
210.00	1.26899	114.567	100.477	0.7146
212.00	1.28319	115.104	100.857	0.7172
214.00	1.29735	115.640	101.236	0.7197
216.00	1.31147	116.175	101.614	0.7222
218.00	1.32556	116.710	101.992	0.7246
220.00	1.33961	117.243	102.369	0.7271
222.00	1.35363	117.775	102.745	0.7295
224.00	1.36761	118.306	103.121	0.7318
226.00	1.38156	118.836	103.497	0.7342
228.00	1.39548	119.366	103.871	0.7365
230.00	1.40938	119.894	104.246	0.7388
232.00	1.42324	120.422	104.620	0.7411
234.00	1.43708	120.949	104.993	0.7434
236.00	1.45089	121.475	105.366	0.7456
238.00	1.46467	122.001	105.738	0.7478
240.00	1.47844	122.526	106.110	0.7500
242.00	1.49217	123.050	106.482	0.7522
244.00	1.50589	123.573	106.853	0.7544
246.00	1.51958	124.096	107.224	0.7565
248.00	1.53325	124.619	107.595	0.7586
250.00	1.54691	125.140	107.965	0.7607
252.00	1.56054	125.661	108.334	0.7628
254.00	1.57415	126.182	108.704	0.7648
256.00	1.58774	126.702	109.073	0.7669
258.00	1.60132	127.221	109.442	0.7689
260.00	1.61488	127.740	109.810	0.7709
262.00	1.62842	128.259	110.178	0.7729
264.00	1.64195	128.777	110.546	0.7749
266.00	1.65546	129.294	110.914	0.7768
268.00	1.66895	129.811	111.281	0.7788
270.00	1.68243	130.328	111.648	0.7807
272.00	1.69590	130.844	112.015	0.7826
274.00	1.70935	131.360	112.381	0.7845
276.00	1.72278	131.876	112.747	0.7863
278.00	1.73621	132.391	113.113	0.7882
280.00	1.74962	132.905	113.479	0.7901
282.00	1.76302	133.420	113.845	0.7919
284.00	1.77640	133.934	114.210	0.7937
286.00	1.78978	134.447	114.575	0.7955
288.00	1.80314	134.961	114.940	0.7973
290.00	1.81649	135.474	115.305	0.7991
292.00	1.82983	135.986	115.669	0.8008
294.00	1.84316	136.499	116.034	0.8026
296.00	1.85648	137.011	116.398	0.8043
298.00	1.86979	137.522	116.762	0.8060
300.00	1.88309	138.034	117.126	0.8077

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	1.89638	138.545	117.489	0.8094	422.00	2.68246	168.883	139.099	0.8941
304.00	1.90966	139.056	117.853	0.8111	424.00	2.69544	169.385	139.457	0.8953
306.00	1.92293	139.566	118.216	0.8128	426.00	2.70842	169.887	139.815	0.8964
308.00	1.93620	140.077	118.579	0.8145	428.00	2.72139	170.389	140.173	0.8976
310.00	1.94945	140.587	118.942	0.8161	430.00	2.73436	170.890	140.530	0.8988
312.00	1.96270	141.097	119.305	0.8178	432.00	2.74733	171.392	140.888	0.8999
314.00	1.97593	141.606	119.667	0.8194	434.00	2.76030	171.894	141.246	0.9011
316.00	1.98916	142.116	120.030	0.8210	436.00	2.77326	172.396	141.604	0.9023
318.00	2.00238	142.625	120.392	0.8226	438.00	2.78623	172.897	141.961	0.9034
320.00	2.01560	143.134	120.754	0.8242	440.00	2.79918	173.399	142.319	0.9045
322.00	2.02881	143.643	121.116	0.8258	442.00	2.81214	173.900	142.676	0.9057
324.00	2.04200	144.151	121.478	0.8274	444.00	2.82510	174.401	143.034	0.9068
326.00	2.05520	144.659	121.840	0.8289	446.00	2.83805	174.903	143.391	0.9079
328.00	2.06838	145.167	122.202	0.8305	448.00	2.85100	175.404	143.749	0.9091
330.00	2.08156	145.675	122.563	0.8320	450.00	2.86395	175.905	144.106	0.9102
332.00	2.09473	146.183	122.925	0.8336	452.00	2.87690	176.406	144.464	0.9113
334.00	2.10790	146.691	123.286	0.8351	454.00	2.88984	176.907	144.821	0.9124
336.00	2.12106	147.198	123.647	0.8366	456.00	2.90279	177.408	145.178	0.9135
338.00	2.13421	147.705	124.009	0.8381	458.00	2.91573	177.909	145.536	0.9146
340.00	2.14736	148.212	124.370	0.8396	460.00	2.92867	178.410	145.893	0.9157
342.00	2.16050	148.719	124.730	0.8411	462.00	2.94160	178.911	146.250	0.9168
344.00	2.17363	149.225	125.091	0.8426	464.00	2.95454	179.412	146.607	0.9179
346.00	2.18676	149.732	125.452	0.8440	466.00	2.96747	179.913	146.965	0.9189
348.00	2.19989	150.238	125.812	0.8455	468.00	2.98040	180.414	147.322	0.9200
350.00	2.21301	150.744	126.173	0.8469	470.00	2.99333	180.914	147.679	0.9211
352.00	2.22612	151.250	126.533	0.8484	472.00	3.00626	181.415	148.036	0.9221
354.00	2.23923	151.756	126.894	0.8498	474.00	3.01919	181.915	148.393	0.9232
356.00	2.25233	152.262	127.254	0.8512	476.00	3.03211	182.416	148.750	0.9242
358.00	2.26543	152.767	127.614	0.8527	478.00	3.04504	182.916	149.107	0.9253
360.00	2.27852	153.273	127.974	0.8541	480.00	3.05796	183.417	149.464	0.9263
362.00	2.29161	153.778	128.334	0.8555	482.00	3.07088	183.917	149.821	0.9274
364.00	2.30469	154.283	128.694	0.8569	484.00	3.08379	184.418	150.178	0.9284
366.00	2.31777	154.788	129.053	0.8582	486.00	3.09671	184.918	150.535	0.9294
368.00	2.33085	155.293	129.413	0.8596	488.00	3.10963	185.418	150.891	0.9305
370.00	2.34392	155.798	129.773	0.8610	490.00	3.12254	185.918	151.248	0.9315
372.00	2.35698	156.302	130.132	0.8623	492.00	3.13545	186.419	151.605	0.9325
374.00	2.37005	156.807	130.492	0.8637	494.00	3.14836	186.919	151.962	0.9335
376.00	2.38310	157.311	130.851	0.8650	496.00	3.16127	187.419	152.319	0.9345
378.00	2.39616	157.815	131.210	0.8664	498.00	3.17418	187.919	152.675	0.9355
380.00	2.40921	158.319	131.570	0.8677	500.00	3.18708	188.419	153.032	0.9366
382.00	2.42225	158.823	131.929	0.8690	502.00	3.19999	188.919	153.389	0.9375
384.00	2.43529	159.327	132.288	0.8703	504.00	3.21289	189.419	153.746	0.9385
386.00	2.44833	159.831	132.647	0.8716	506.00	3.22579	189.919	154.102	0.9395
388.00	2.46137	160.335	133.006	0.8730	508.00	3.23869	190.419	154.459	0.9405
390.00	2.47440	160.838	133.365	0.8742	510.00	3.25159	190.919	154.816	0.9415
392.00	2.48743	161.342	133.723	0.8755	512.00	3.26449	191.418	155.172	0.9425
394.00	2.50045	161.845	134.082	0.8768	514.00	3.27739	191.918	155.529	0.9435
396.00	2.51347	162.348	134.441	0.8781	516.00	3.29028	192.418	155.885	0.9444
398.00	2.52649	162.852	134.800	0.8794	518.00	3.30318	192.918	156.242	0.9454
400.00	2.53950	163.355	135.158	0.8806	520.00	3.31607	193.417	156.599	0.9464
402.00	2.55251	163.858	135.517	0.8819	522.00	3.32896	193.917	156.955	0.9473
404.00	2.56552	164.360	135.875	0.8831	524.00	3.34185	194.417	157.312	0.9483
406.00	2.57853	164.863	136.233	0.8844	526.00	3.35474	194.916	157.668	0.9492
408.00	2.59153	165.366	136.592	0.8856	528.00	3.36763	195.416	158.025	0.9502
410.00	2.60453	165.869	136.950	0.8868	530.00	3.38052	195.916	158.381	0.9511
412.00	2.61752	166.371	137.308	0.8880	532.00	3.39340	196.415	158.738	0.9521
414.00	2.63052	166.874	137.667	0.8893	534.00	3.40629	196.915	159.094	0.9530
416.00	2.64351	167.376	138.025	0.8905	536.00	3.41917	197.414	159.451	0.9539
418.00	2.65649	167.878	138.383	0.8917	538.00	3.43205	197.914	159.807	0.9549
420.00	2.66948	168.380	138.741	0.8929	540.00	3.44493	198.413	160.164	0.9558

70.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018737	3.2700	3.0273	0.0260
122.00	0.018839	4.2550	4.0109	0.0341
124.00	0.018943	5.2408	4.9955	0.0421
126.00	0.019049	6.2272	5.9804	0.0500
128.00	0.019158	7.2135	6.9653	0.0578
130.00	0.019269	8.1995	7.9499	0.0654
132.00	0.019383	9.1849	8.9338	0.0730
134.00	0.019499	10.1695	9.9169	0.0804
136.00	0.019618	11.1531	10.8990	0.0877
138.00	0.019740	12.1358	11.8801	0.0948
140.00	0.019865	13.1175	12.8602	0.1019
142.00	0.019992	14.0986	13.8396	0.1088
144.00	0.020123	15.0791	14.8184	0.1157
146.00	0.020257	16.0594	15.7970	0.1225
148.00	0.020394	17.0400	16.7758	0.1291
150.00	0.020535	18.0212	17.7552	0.1357
152.00	0.020680	19.0038	18.7360	0.1422
154.00	0.020829	19.9884	19.7186	0.1487
156.00	0.020982	20.9757	20.7039	0.1550
158.00	0.021139	21.9665	21.6927	0.1613
160.00	0.021301	22.9617	22.6858	0.1676
162.00	0.021469	23.9623	23.6842	0.1738
164.00	0.021642	24.9693	24.6890	0.1800
166.00	0.021821	25.9837	25.7011	0.1861
168.00	0.022006	27.0068	26.7217	0.1923
* 168.420	0.02205	27.2231	26.9375	0.1936
* 168.420	0.80404	102.307	91.8919	0.6394
170.00	0.81519	102.783	92.2235	0.6422
172.00	0.82918	103.382	92.6406	0.6457
174.00	0.84303	103.975	93.0550	0.6491
176.00	0.85676	104.565	93.4667	0.6525
178.00	0.87037	105.151	93.8761	0.6558
180.00	0.88386	105.732	94.2832	0.6590
182.00	0.89726	106.311	94.6882	0.6622
184.00	0.91056	106.886	95.0912	0.6654
186.00	0.92377	107.459	95.4925	0.6685
188.00	0.93690	108.028	95.8920	0.6715
190.00	0.94995	108.595	96.2899	0.6745
192.00	0.96292	109.160	96.6863	0.6775
194.00	0.97582	109.722	97.0813	0.6804
196.00	0.98866	110.282	97.4749	0.6833
198.00	1.00143	110.840	97.8672	0.6861
200.00	1.01415	111.395	98.2583	0.6889
202.00	1.02680	111.949	98.6483	0.6916
204.00	1.03941	112.501	99.0371	0.6944
206.00	1.05196	113.052	99.4249	0.6970
208.00	1.06446	113.600	99.8117	0.6997
210.00	1.07691	114.148	100.198	0.7023
212.00	1.08933	114.693	100.582	0.7049
214.00	1.10169	115.237	100.966	0.7075
216.00	1.11402	115.780	101.350	0.7100
218.00	1.12631	116.322	101.732	0.7125
220.00	1.13856	116.862	102.114	0.7149
222.00	1.15078	117.401	102.495	0.7174
224.00	1.16296	117.939	102.875	0.7198
226.00	1.17511	118.476	103.254	0.7222
228.00	1.18722	119.012	103.633	0.7245
230.00	1.19931	119.547	104.011	0.7269
232.00	1.21137	120.081	104.389	0.7292
234.00	1.22340	120.614	104.766	0.7315
236.00	1.23540	121.145	105.142	0.7337
238.00	1.24737	121.676	105.518	0.7360
240.00	1.25932	122.207	105.894	0.7382
242.00	1.27125	122.736	106.269	0.7404
244.00	1.28315	123.265	106.643	0.7426
246.00	1.29503	123.793	107.017	0.7447
248.00	1.30689	124.320	107.391	0.7469
250.00	1.31873	124.846	107.764	0.7490
252.00	1.33055	125.372	108.136	0.7511
254.00	1.34235	125.897	108.508	0.7531
256.00	1.35412	126.421	108.880	0.7552
258.00	1.36588	126.945	109.252	0.7572
260.00	1.37763	127.468	109.623	0.7593
262.00	1.38935	127.990	109.993	0.7613
264.00	1.40106	128.512	110.364	0.7632
266.00	1.41275	129.034	110.734	0.7652
268.00	1.42443	129.555	111.103	0.7672
270.00	1.43609	130.075	111.473	0.7691
272.00	1.44773	130.595	111.842	0.7710
274.00	1.45937	131.114	112.210	0.7729
276.00	1.47098	131.633	112.579	0.7748
278.00	1.48259	132.152	112.947	0.7767
280.00	1.49418	132.670	113.315	0.7785
282.00	1.50576	133.187	113.682	0.7804
284.00	1.51732	133.704	114.050	0.7822
286.00	1.52888	134.221	114.417	0.7840
288.00	1.54042	134.738	114.783	0.7858
290.00	1.55195	135.253	115.150	0.7876
292.00	1.56347	135.769	115.516	0.7894
294.00	1.57498	136.284	115.882	0.7911
296.00	1.58648	136.799	116.248	0.7929
298.00	1.59797	137.314	116.614	0.7946
300.00	1.60944	137.828	116.979	0.7963

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	1.62091	138.341	117.345	0.7980	422.00	2.29759	168.778	139.016	0.8829
304.00	1.63237	138.855	117.710	0.7997	424.00	2.30875	169.281	139.374	0.8841
306.00	1.64382	139.368	118.075	0.8014	426.00	2.31990	169.784	139.733	0.8853
308.00	1.65526	139.881	118.439	0.8031	428.00	2.33105	170.287	140.091	0.8865
310.00	1.66669	140.394	118.804	0.8047	430.00	2.34220	170.790	140.450	0.8877
312.00	1.67812	140.906	119.168	0.8064	432.00	2.35335	171.293	140.808	0.8888
314.00	1.68953	141.418	119.532	0.8080	434.00	2.36449	171.795	141.167	0.8900
316.00	1.70094	141.930	119.896	0.8097	436.00	2.37563	172.298	141.525	0.8912
318.00	1.71234	142.441	120.260	0.8113	438.00	2.38677	172.800	141.883	0.8923
320.00	1.72373	142.952	120.623	0.8129	440.00	2.39790	173.303	142.241	0.8934
322.00	1.73512	143.463	120.987	0.8145	442.00	2.40904	173.805	142.599	0.8946
324.00	1.74649	143.974	121.350	0.8160	444.00	2.42017	174.308	142.957	0.8957
326.00	1.75786	144.484	121.713	0.8176	446.00	2.43130	174.810	143.315	0.8968
328.00	1.76923	144.994	122.076	0.8192	448.00	2.44242	175.312	143.673	0.8980
330.00	1.78058	145.504	122.439	0.8207	450.00	2.45355	175.814	144.031	0.8991
332.00	1.79193	146.014	122.802	0.8223	452.00	2.46467	176.316	144.389	0.9002
334.00	1.80327	146.523	123.164	0.8238	454.00	2.47579	176.818	144.747	0.9013
336.00	1.81461	147.033	123.527	0.8253	456.00	2.48691	177.320	145.105	0.9024
338.00	1.82594	147.542	123.889	0.8268	458.00	2.49803	177.822	145.463	0.9035
340.00	1.83726	148.051	124.251	0.8283	460.00	2.50914	178.323	145.821	0.9046
342.00	1.84858	148.559	124.613	0.8298	462.00	2.52026	178.825	146.178	0.9057
344.00	1.85989	149.068	124.975	0.8313	464.00	2.53137	179.327	146.536	0.9068
346.00	1.87120	149.576	125.337	0.8328	466.00	2.54248	179.828	146.894	0.9079
348.00	1.88250	150.084	125.699	0.8342	468.00	2.55359	180.330	147.251	0.9089
350.00	1.89379	150.592	126.060	0.8357	470.00	2.56469	180.831	147.609	0.9100
352.00	1.90508	151.100	126.422	0.8371	472.00	2.57579	181.332	147.966	0.9111
354.00	1.91637	151.607	126.783	0.8386	474.00	2.58690	181.834	148.324	0.9121
356.00	1.92765	152.114	127.144	0.8400	476.00	2.59800	182.335	148.681	0.9132
358.00	1.93892	152.622	127.505	0.8414	478.00	2.60910	182.836	149.039	0.9142
360.00	1.95019	153.129	127.866	0.8428	480.00	2.62019	183.337	149.396	0.9153
362.00	1.96146	153.635	128.227	0.8442	482.00	2.63129	183.838	149.754	0.9163
364.00	1.97272	154.142	128.588	0.8456	484.00	2.64238	184.340	150.111	0.9174
366.00	1.98397	154.649	128.949	0.8470	486.00	2.65348	184.841	150.468	0.9184
368.00	1.99523	155.155	129.309	0.8484	488.00	2.66457	185.341	150.826	0.9194
370.00	2.00647	155.661	129.670	0.8498	490.00	2.67566	185.842	151.183	0.9204
372.00	2.01771	156.167	130.030	0.8511	492.00	2.68674	186.343	151.540	0.9215
374.00	2.02895	156.673	130.391	0.8525	494.00	2.69783	186.844	151.897	0.9225
376.00	2.04019	157.179	130.751	0.8538	496.00	2.70891	187.345	152.254	0.9235
378.00	2.05142	157.684	131.111	0.8552	498.00	2.72000	187.846	152.612	0.9245
380.00	2.06264	158.190	131.471	0.8565	500.00	2.73108	188.346	152.969	0.9255
382.00	2.07387	158.695	131.831	0.8578	502.00	2.74216	188.847	153.326	0.9265
384.00	2.08508	159.201	132.191	0.8592	504.00	2.75324	189.348	153.683	0.9275
386.00	2.09630	159.706	132.551	0.8605	506.00	2.76432	189.848	154.040	0.9285
388.00	2.10751	160.211	132.911	0.8618	508.00	2.77539	190.349	154.397	0.9295
390.00	2.11872	160.715	133.270	0.8631	510.00	2.78647	190.849	154.754	0.9305
392.00	2.12992	161.220	133.630	0.8644	512.00	2.79754	191.350	155.111	0.9314
394.00	2.14112	161.725	133.989	0.8657	514.00	2.80861	191.850	155.468	0.9324
396.00	2.15232	162.229	134.349	0.8669	516.00	2.81969	192.350	155.825	0.9334
398.00	2.16351	162.734	134.708	0.8682	518.00	2.83076	192.851	156.182	0.9343
400.00	2.17470	163.238	135.068	0.8695	520.00	2.84182	193.351	156.539	0.9353
402.00	2.18589	163.742	135.427	0.8707	522.00	2.85289	193.851	156.896	0.9363
404.00	2.19707	164.246	135.786	0.8720	524.00	2.86396	194.351	157.253	0.9372
406.00	2.20825	164.750	136.145	0.8732	526.00	2.87502	194.852	157.610	0.9382
408.00	2.21943	165.254	136.504	0.8745	528.00	2.88609	195.352	157.966	0.9391
410.00	2.23061	165.758	136.863	0.8757	530.00	2.89715	195.852	158.323	0.9401
412.00	2.24178	166.261	137.222	0.8769	532.00	2.90821	196.352	158.680	0.9410
414.00	2.25295	166.765	137.581	0.8781	534.00	2.91927	196.852	159.037	0.9420
416.00	2.26411	167.268	137.940	0.8793	536.00	2.93033	197.352	159.394	0.9429
418.00	2.27528	167.772	138.299	0.8805	538.00	2.94139	197.852	159.750	0.9438
420.00	2.28644	168.275	138.657	0.8818	540.00	2.95245	198.352	160.107	0.9447

80.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018735	3.2936	3.0162	0.0259
122.00	0.018836	4.2782	3.9994	0.0340
124.00	0.018940	5.2638	4.9834	0.0420
126.00	0.019046	6.2499	5.9679	0.0499
128.00	0.019155	7.2359	6.9524	0.0577
130.00	0.019266	8.2216	7.9364	0.0653
132.00	0.019380	9.2067	8.9198	0.0729
134.00	0.019496	10.1910	9.9023	0.0803
136.00	0.019615	11.1743	10.8839	0.0875
138.00	0.019736	12.1566	11.8644	0.0947
140.00	0.019861	13.1380	12.8440	0.1018
142.00	0.019988	14.1186	13.8227	0.1087
144.00	0.020119	15.0987	14.8009	0.1156
146.00	0.020252	16.0786	15.7788	0.1223
148.00	0.020390	17.0587	16.7568	0.1290
150.00	0.020530	18.0394	17.7355	0.1356
152.00	0.020675	19.0215	18.7154	0.1421
154.00	0.020823	20.0055	19.6972	0.1485
156.00	0.020976	20.9922	20.6816	0.1549
158.00	0.021133	21.9823	21.6694	0.1612
160.00	0.021294	22.9768	22.6615	0.1675
162.00	0.021461	23.9766	23.6589	0.1737
164.00	0.021634	24.9827	24.6624	0.1798
166.00	0.021812	25.9962	25.6733	0.1860
168.00	0.021997	27.0182	26.6926	0.1921
170.00	0.022188	28.0500	27.7215	0.1982
* 171.510	0.02234	28.8361	28.5054	0.2028
* 171.510	0.70611	102.531	92.0777	0.6325
172.00	0.70924	102.683	92.1834	0.6334
174.00	0.72191	103.300	92.6122	0.6369
176.00	0.73444	103.910	93.0375	0.6404
178.00	0.74683	104.516	93.4595	0.6438
180.00	0.75910	105.116	93.8785	0.6472
182.00	0.77126	105.713	94.2947	0.6505
184.00	0.78330	106.304	94.7082	0.6537
186.00	0.79525	106.893	95.1194	0.6569
188.00	0.80710	107.477	95.5284	0.6600
190.00	0.81887	108.058	95.9352	0.6631
192.00	0.83055	108.636	96.3401	0.6661
194.00	0.84216	109.211	96.7432	0.6691
196.00	0.85369	109.783	97.1445	0.6720
198.00	0.86516	110.352	97.5442	0.6749
200.00	0.87656	110.919	97.9423	0.6778
202.00	0.88790	111.484	98.3390	0.6806
204.00	0.89918	112.046	98.7343	0.6834
206.00	0.91041	112.606	99.1283	0.6861
208.00	0.92158	113.164	99.5210	0.6888
210.00	0.93271	113.721	99.9126	0.6915
212.00	0.94378	114.275	100.303	0.6941
214.00	0.95482	114.828	100.692	0.6967
216.00	0.96581	115.379	101.081	0.6992
218.00	0.97676	115.928	101.468	0.7018
220.00	0.98766	116.476	101.855	0.7043
222.00	0.99854	117.023	102.240	0.7068
224.00	1.00937	117.568	102.625	0.7092
226.00	1.02018	118.111	103.008	0.7116
228.00	1.03094	118.654	103.392	0.7140
230.00	1.04168	119.195	103.774	0.7164
232.00	1.05239	119.735	104.155	0.7187
234.00	1.06307	120.274	104.536	0.7210
236.00	1.07371	120.812	104.916	0.7233
238.00	1.08434	121.349	105.296	0.7256
240.00	1.09493	121.884	105.675	0.7278
242.00	1.10550	122.419	106.053	0.7300
244.00	1.11605	122.953	106.431	0.7322
246.00	1.12658	123.486	106.808	0.7344
248.00	1.13708	124.018	107.184	0.7366
250.00	1.14756	124.549	107.561	0.7387
252.00	1.15802	125.080	107.936	0.7408
254.00	1.16845	125.609	108.311	0.7429
256.00	1.17887	126.138	108.686	0.7450
258.00	1.18927	126.666	109.060	0.7470
260.00	1.19965	127.194	109.434	0.7491
262.00	1.21002	127.720	109.807	0.7511
264.00	1.22037	128.246	110.180	0.7531
266.00	1.23070	128.772	110.552	0.7551
268.00	1.24101	129.296	110.924	0.7570
270.00	1.25131	129.821	111.296	0.7590
272.00	1.26159	130.344	111.667	0.7609
274.00	1.27186	130.867	112.038	0.7628
276.00	1.28212	131.390	112.409	0.7647
278.00	1.29236	131.912	112.779	0.7666
280.00	1.30258	132.433	113.149	0.7685
282.00	1.31280	132.954	113.519	0.7703
284.00	1.32300	133.474	113.888	0.7722
286.00	1.33319	133.994	114.257	0.7740
288.00	1.34337	134.513	114.626	0.7758
290.00	1.35353	135.032	114.994	0.7776
292.00	1.36369	135.551	115.363	0.7794
294.00	1.37383	136.069	115.731	0.7811
296.00	1.38397	136.587	116.098	0.7829
298.00	1.39409	137.104	116.466	0.7846
300.00	1.40420	137.621	116.833	0.7864

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	1.41431	138.137	117.200	0.7881	422.00	2.00895	168.674	138.933	0.8733
304.00	1.42440	138.653	117.566	0.7898	424.00	2.01874	169.178	139.292	0.8745
306.00	1.43448	139.169	117.933	0.7915	426.00	2.02852	169.682	139.651	0.8757
308.00	1.44456	139.685	118.299	0.7932	428.00	2.03831	170.186	140.010	0.8768
310.00	1.45462	140.200	118.665	0.7948	430.00	2.04808	170.689	140.369	0.8780
312.00	1.46468	140.714	119.031	0.7965	432.00	2.05786	171.193	140.728	0.8792
314.00	1.47473	141.229	119.397	0.7981	434.00	2.06764	171.697	141.087	0.8803
316.00	1.48477	141.743	119.762	0.7998	436.00	2.07741	172.200	141.446	0.8815
318.00	1.49480	142.257	120.127	0.8014	438.00	2.08718	172.704	141.805	0.8827
320.00	1.50483	142.770	120.492	0.8030	440.00	2.09695	173.207	142.164	0.8838
322.00	1.51485	143.283	120.857	0.8046	442.00	2.10671	173.710	142.522	0.8849
324.00	1.52486	143.796	121.222	0.8062	444.00	2.11648	174.214	142.881	0.8861
326.00	1.53486	144.308	121.586	0.8078	446.00	2.12624	174.717	143.239	0.8872
328.00	1.54486	144.821	121.950	0.8093	448.00	2.13600	175.220	143.598	0.8883
330.00	1.55485	145.333	122.315	0.8109	450.00	2.14575	175.723	143.956	0.8895
332.00	1.56483	145.845	122.678	0.8124	452.00	2.15551	176.225	144.315	0.8906
334.00	1.57480	146.356	123.042	0.8140	454.00	2.16526	176.728	144.673	0.8917
336.00	1.58477	146.867	123.406	0.8155	456.00	2.17501	177.231	145.032	0.8928
338.00	1.59474	147.378	123.769	0.8170	458.00	2.18476	177.734	145.390	0.8939
340.00	1.60469	147.889	124.133	0.8185	460.00	2.19451	178.236	145.748	0.8950
342.00	1.61464	148.399	124.496	0.8200	462.00	2.20425	178.739	146.106	0.8961
344.00	1.62459	148.910	124.859	0.8215	464.00	2.21400	179.241	146.465	0.8972
346.00	1.63453	149.420	125.222	0.8230	466.00	2.22374	179.743	146.823	0.8982
348.00	1.64446	149.930	125.585	0.8244	468.00	2.23348	180.246	147.181	0.8993
350.00	1.65439	150.439	125.947	0.8259	470.00	2.24321	180.748	147.539	0.9004
352.00	1.66431	150.949	126.310	0.8274	472.00	2.25295	181.250	147.897	0.9014
354.00	1.67423	151.458	126.672	0.8288	474.00	2.26268	181.752	148.255	0.9025
356.00	1.68414	151.967	127.034	0.8302	476.00	2.27242	182.254	148.613	0.9036
358.00	1.69405	152.476	127.397	0.8317	478.00	2.28215	182.756	148.971	0.9046
360.00	1.70395	152.984	127.759	0.8331	480.00	2.29188	183.258	149.329	0.9057
362.00	1.71385	153.493	128.121	0.8345	482.00	2.30160	183.760	149.686	0.9067
364.00	1.72374	154.001	128.482	0.8359	484.00	2.31133	184.262	150.044	0.9078
366.00	1.73363	154.509	128.844	0.8373	486.00	2.32105	184.763	150.402	0.9088
368.00	1.74351	155.017	129.205	0.8387	488.00	2.33078	185.265	150.760	0.9098
370.00	1.75339	155.524	129.567	0.8400	490.00	2.34050	185.767	151.117	0.9108
372.00	1.76327	156.032	129.928	0.8414	492.00	2.35022	186.268	151.475	0.9119
374.00	1.77314	156.539	130.290	0.8428	494.00	2.35993	186.770	151.833	0.9129
376.00	1.78300	157.047	130.651	0.8441	496.00	2.36965	187.271	152.190	0.9139
378.00	1.79287	157.554	131.012	0.8455	498.00	2.37937	187.772	152.548	0.9149
380.00	1.80272	158.060	131.373	0.8468	500.00	2.38908	188.274	152.905	0.9159
382.00	1.81258	158.567	131.733	0.8481	502.00	2.39879	188.775	153.263	0.9169
384.00	1.82243	159.074	132.094	0.8494	504.00	2.40850	189.276	153.620	0.9179
386.00	1.83228	159.580	132.455	0.8508	506.00	2.41821	189.777	153.978	0.9189
388.00	1.84212	160.086	132.815	0.8521	508.00	2.42792	190.279	154.335	0.9199
390.00	1.85196	160.593	133.176	0.8534	510.00	2.43763	190.780	154.693	0.9209
392.00	1.86179	161.099	133.536	0.8547	512.00	2.44733	191.281	155.050	0.9218
394.00	1.87163	161.605	133.897	0.8560	514.00	2.45704	191.782	155.407	0.9228
396.00	1.88146	162.110	134.257	0.8572	516.00	2.46674	192.283	155.765	0.9238
398.00	1.89128	162.616	134.617	0.8585	518.00	2.47644	192.784	156.122	0.9248
400.00	1.90110	163.121	134.977	0.8598	520.00	2.48614	193.285	156.479	0.9257
402.00	1.91092	163.627	135.337	0.8610	522.00	2.49584	193.785	156.836	0.9267
404.00	1.92074	164.132	135.697	0.8623	524.00	2.50554	194.286	157.194	0.9277
406.00	1.93055	164.637	136.057	0.8635	526.00	2.51524	194.787	157.551	0.9286
408.00	1.94036	165.142	136.416	0.8648	528.00	2.52493	195.288	157.908	0.9296
410.00	1.95017	165.647	136.776	0.8660	530.00	2.53463	195.788	158.265	0.9305
412.00	1.95997	166.152	137.136	0.8672	532.00	2.54432	196.289	158.622	0.9314
414.00	1.96977	166.656	137.495	0.8685	534.00	2.55402	196.790	158.980	0.9324
416.00	1.97957	167.161	137.855	0.8697	536.00	2.56371	197.290	159.337	0.9333
418.00	1.98937	167.665	138.214	0.8709	538.00	2.57340	197.791	159.694	0.9343
420.00	1.99916	168.169	138.573	0.8721	540.00	2.58309	198.291	160.051	0.9352

90.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.016732	3.3171	3.0051	0.0258
122.00	0.018833	4.3015	3.9878	0.0339
124.00	0.018937	5.2868	4.9714	0.0419
126.00	0.019043	6.2726	5.9554	0.0498
128.00	0.019152	7.2584	6.9394	0.0576
130.00	0.019263	8.2438	7.9230	0.0652
132.00	0.019376	9.2285	8.9058	0.0728
134.00	0.019492	10.2125	9.8878	0.0802
136.00	0.019611	11.1954	10.8688	0.0874
138.00	0.019733	12.1774	11.8488	0.0946
140.00	0.019857	13.1584	12.8277	0.1017
142.00	0.019984	14.1387	13.8058	0.1086
144.00	0.020114	15.1183	14.7833	0.1155
146.00	0.020248	16.0978	15.7606	0.1222
148.00	0.020385	17.0774	16.7379	0.1289
150.00	0.020525	18.0577	17.7158	0.1355
152.00	0.020669	19.0392	18.6950	0.1420
154.00	0.020817	20.0226	19.6759	0.1484
156.00	0.020969	21.0087	20.6594	0.1547
158.00	0.021126	21.9981	21.6463	0.1611
160.00	0.021287	22.9919	22.6374	0.1673
162.00	0.021454	23.9909	23.6336	0.1735
164.00	0.021626	24.9962	24.6360	0.1797
166.00	0.021804	26.0087	25.6456	0.1858
168.00	0.021988	27.0297	26.6635	0.1919
170.00	0.022179	28.0604	27.6910	0.1980
172.00	0.022377	29.1018	28.7292	0.2041
174.00	0.022584	30.1555	29.7794	0.2102
* 174.330	0.02262	30.3306	29.9539	0.2112
* 174.330	0.62898	102.694	92.2181	0.6263
176.00	0.63871	103.224	92.5862	0.6293
178.00	0.65022	103.852	93.0229	0.6329
180.00	0.66158	104.474	93.4555	0.6364
182.00	0.67281	105.090	93.8844	0.6398
184.00	0.68392	105.700	94.3099	0.6431
186.00	0.69492	106.306	94.7323	0.6464
188.00	0.70581	106.907	95.1518	0.6496
190.00	0.71660	107.503	95.5686	0.6527
192.00	0.72731	108.096	95.9829	0.6558
194.00	0.73793	108.685	96.3948	0.6589
196.00	0.74847	109.270	96.8046	0.6619
198.00	0.75894	109.852	97.2123	0.6648
200.00	0.76933	110.431	97.6181	0.6678
202.00	0.77967	111.007	98.0221	0.6706
204.00	0.78993	111.581	98.4243	0.6734
206.00	0.80014	112.151	98.8250	0.6762
208.00	0.81030	112.719	99.2241	0.6790
210.00	0.82040	113.285	99.6218	0.6817
212.00	0.83045	113.849	100.018	0.6844
214.00	0.84045	114.411	100.413	0.6870
216.00	0.85041	114.970	100.807	0.6896
218.00	0.86033	115.528	101.199	0.6922
220.00	0.87020	116.084	101.591	0.6947
222.00	0.88003	116.638	101.981	0.6972
224.00	0.88983	117.190	102.371	0.6997
226.00	0.89959	117.741	102.759	0.7021
228.00	0.90931	118.291	103.146	0.7046
230.00	0.91901	118.839	103.533	0.7069
232.00	0.92867	119.385	103.919	0.7093
234.00	0.93830	119.930	104.303	0.7117
236.00	0.94790	120.474	104.687	0.7140
238.00	0.95747	121.017	105.071	0.7163
240.00	0.96702	121.559	105.453	0.7185
242.00	0.97654	122.099	105.835	0.7208
244.00	0.98604	122.638	106.216	0.7230
246.00	0.99551	123.176	106.597	0.7252
248.00	1.00496	123.714	106.976	0.7274
250.00	1.01438	124.250	107.356	0.7295
252.00	1.02379	124.785	107.734	0.7316
254.00	1.03317	125.319	108.112	0.7338
256.00	1.04253	125.853	108.490	0.7358
258.00	1.05188	126.385	108.867	0.7379
260.00	1.06120	126.917	109.243	0.7400
262.00	1.07051	127.448	109.619	0.7420
264.00	1.07980	127.978	109.995	0.7440
266.00	1.08907	128.508	110.370	0.7460
268.00	1.09833	129.036	110.744	0.7480
270.00	1.10757	129.564	111.118	0.7500
272.00	1.11680	130.092	111.492	0.7519
274.00	1.12601	130.618	111.865	0.7538
276.00	1.13520	131.145	112.238	0.7558
278.00	1.14438	131.670	112.611	0.7576
280.00	1.15355	132.195	112.983	0.7595
282.00	1.16271	132.719	113.354	0.7614
284.00	1.17185	133.243	113.726	0.7632
286.00	1.18098	133.766	114.097	0.7651
288.00	1.19009	134.288	114.468	0.7669
290.00	1.19920	134.810	114.838	0.7687
292.00	1.20829	135.332	115.208	0.7705
294.00	1.21738	135.853	115.578	0.7723
296.00	1.22645	136.373	115.947	0.7740
298.00	1.23551	136.894	116.316	0.7758
300.00	1.24456	137.413	116.685	0.7775

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	1.25360	137.932	117.054	0.7793	422.00	1.78445	168.569	138.850	0.8647
304.00	1.26264	138.451	117.422	0.7810	424.00	1.79318	169.074	139.209	0.8659
306.00	1.27166	138.970	117.790	0.7827	426.00	1.80190	169.579	139.569	0.8671
308.00	1.28067	139.488	118.158	0.7844	428.00	1.81062	170.084	139.929	0.8683
310.00	1.28968	140.005	118.526	0.7860	430.00	1.81933	170.589	140.289	0.8695
312.00	1.29867	140.522	118.893	0.7877	432.00	1.82805	171.094	140.648	0.8707
314.00	1.30766	141.039	119.260	0.7893	434.00	1.83676	171.598	141.008	0.8718
316.00	1.31664	141.555	119.627	0.7910	436.00	1.84547	172.103	141.367	0.8730
318.00	1.32561	142.072	119.994	0.7926	438.00	1.85417	172.607	141.726	0.8741
320.00	1.33457	142.587	120.360	0.7942	440.00	1.86288	173.111	142.086	0.8753
322.00	1.34353	143.103	120.727	0.7958	442.00	1.87158	173.616	142.445	0.8764
324.00	1.35247	143.618	121.093	0.7974	444.00	1.88028	174.120	142.804	0.8776
326.00	1.36141	144.132	121.458	0.7990	446.00	1.88897	174.624	143.163	0.8787
328.00	1.37035	144.647	121.824	0.8006	448.00	1.89767	175.128	143.522	0.8798
330.00	1.37927	145.161	122.189	0.8021	450.00	1.90636	175.631	143.881	0.8809
332.00	1.38819	145.675	122.555	0.8037	452.00	1.91505	176.135	144.240	0.8821
334.00	1.39711	146.188	122.920	0.8052	454.00	1.92374	176.639	144.599	0.8832
336.00	1.40601	146.701	123.285	0.8068	456.00	1.93243	177.142	144.958	0.8843
338.00	1.41491	147.214	123.649	0.8083	458.00	1.94111	177.646	145.317	0.8854
340.00	1.42381	147.727	124.014	0.8098	460.00	1.94980	178.149	145.676	0.8865
342.00	1.43269	148.239	124.378	0.8113	462.00	1.95848	178.652	146.035	0.8876
344.00	1.44157	148.752	124.742	0.8128	464.00	1.96716	179.156	146.393	0.8887
346.00	1.45045	149.263	125.107	0.8143	466.00	1.97583	179.659	146.752	0.8897
348.00	1.45932	149.775	125.470	0.8158	468.00	1.98451	180.162	147.110	0.8908
350.00	1.46819	150.286	125.834	0.8172	470.00	1.99318	180.665	147.469	0.8919
352.00	1.47704	150.798	126.198	0.8187	472.00	2.00185	181.168	147.827	0.8930
354.00	1.48590	151.308	126.561	0.8201	474.00	2.01052	181.671	148.186	0.8940
356.00	1.49475	151.819	126.924	0.8216	476.00	2.01919	182.173	148.544	0.8951
358.00	1.50359	152.330	127.288	0.8230	478.00	2.02786	182.676	148.903	0.8961
360.00	1.51243	152.840	127.651	0.8244	480.00	2.03652	183.179	149.261	0.8972
362.00	1.52126	153.350	128.014	0.8258	482.00	2.04519	183.681	149.619	0.8982
364.00	1.53009	153.860	128.376	0.8272	484.00	2.05385	184.184	149.977	0.8993
366.00	1.53892	154.369	128.739	0.8286	486.00	2.06251	184.686	150.336	0.9003
368.00	1.54774	154.879	129.101	0.8300	488.00	2.07117	185.188	150.694	0.9013
370.00	1.55655	155.388	129.464	0.8314	490.00	2.07982	185.691	151.052	0.9024
372.00	1.56537	155.897	129.826	0.8328	492.00	2.08848	186.193	151.410	0.9034
374.00	1.57417	156.406	130.188	0.8341	494.00	2.09713	186.695	151.768	0.9044
376.00	1.58298	156.914	130.550	0.8355	496.00	2.10579	187.197	152.126	0.9054
378.00	1.59177	157.423	130.912	0.8368	498.00	2.11444	187.699	152.484	0.9064
380.00	1.60057	157.931	131.274	0.8382	500.00	2.12309	188.201	152.842	0.9074
382.00	1.60936	158.439	131.636	0.8395	502.00	2.13173	188.703	153.200	0.9084
384.00	1.61815	158.947	131.997	0.8408	504.00	2.14038	189.205	153.558	0.9094
386.00	1.62693	159.455	132.359	0.8422	506.00	2.14903	189.707	153.915	0.9104
388.00	1.63571	159.962	132.720	0.8435	508.00	2.15767	190.209	154.273	0.9114
390.00	1.64448	160.470	133.081	0.8448	510.00	2.16631	190.710	154.631	0.9124
392.00	1.65326	160.977	133.442	0.8461	512.00	2.17496	191.212	154.989	0.9134
394.00	1.66203	161.484	133.804	0.8474	514.00	2.18360	191.714	155.347	0.9144
396.00	1.67079	161.991	134.165	0.8486	516.00	2.19223	192.215	155.704	0.9153
398.00	1.67955	162.498	134.525	0.8499	518.00	2.20087	192.717	156.062	0.9163
400.00	1.68831	163.005	134.886	0.8512	520.00	2.20951	193.218	156.420	0.9173
402.00	1.69707	163.511	135.247	0.8525	522.00	2.21814	193.720	156.777	0.9182
404.00	1.70582	164.018	135.608	0.8537	524.00	2.22678	194.221	157.135	0.9192
406.00	1.71457	164.524	135.968	0.8550	526.00	2.23541	194.722	157.492	0.9201
408.00	1.72331	165.030	136.329	0.8562	528.00	2.24404	195.224	157.850	0.9211
410.00	1.73206	165.536	136.689	0.8574	530.00	2.25267	195.725	158.207	0.9220
412.00	1.74080	166.042	137.049	0.8587	532.00	2.26130	196.226	158.565	0.9230
414.00	1.74953	166.547	137.409	0.8599	534.00	2.26993	196.727	158.922	0.9239
416.00	1.75827	167.053	137.770	0.8611	536.00	2.27856	197.229	159.280	0.9249
418.00	1.76700	167.559	138.130	0.8623	538.00	2.28718	197.730	159.637	0.9258
420.00	1.77573	168.064	138.490	0.8635	540.00	2.29581	198.231	159.995	0.9267

100.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018730	3.3406	2.9940	0.0257
122.00	0.018831	4.3248	3.9763	0.0338
124.00	0.018935	5.3098	4.9595	0.0419
126.00	0.019041	6.2953	5.9430	0.0497
128.00	0.019149	7.2808	6.9265	0.0575
130.00	0.019260	8.2659	7.9095	0.0651
132.00	0.019373	9.2504	8.8919	0.0726
134.00	0.019489	10.2340	9.8733	0.0800
136.00	0.019608	11.2166	10.8538	0.0873
138.00	0.019729	12.1982	11.8332	0.0945
140.00	0.019853	13.1789	12.8115	0.1015
142.00	0.019980	14.1587	13.7890	0.1085
144.00	0.020110	15.1380	14.7659	0.1153
146.00	0.020243	16.1170	15.7424	0.1221
148.00	0.020380	17.0962	16.7190	0.1288
150.00	0.020520	18.0759	17.6962	0.1353
152.00	0.020664	19.0569	18.6745	0.1418
154.00	0.020811	20.0398	19.6546	0.1482
156.00	0.020963	21.0252	20.6373	0.1546
158.00	0.021119	22.0140	21.6232	0.1609
160.00	0.021280	23.0071	22.6133	0.1671
162.00	0.021447	24.0053	23.6084	0.1734
164.00	0.021618	25.0097	24.6097	0.1795
166.00	0.021795	26.0213	25.6180	0.1856
168.00	0.021979	27.0413	26.6346	0.1918
170.00	0.022169	28.0708	27.6606	0.1978
172.00	0.022367	29.1111	28.6972	0.2039
174.00	0.022572	30.1634	29.7457	0.2100
176.00	0.022787	31.2293	30.8076	0.2161
* 176.931	0.02289	31.7302	31.3066	0.2189
* 176.931	0.56658	102.806	92.3213	0.6207
178.00	0.57237	103.155	92.5633	0.6226
180.00	0.58306	103.801	93.0117	0.6262
182.00	0.59360	104.440	93.4553	0.6298
184.00	0.60400	105.072	93.8944	0.6332
186.00	0.61428	105.697	94.3295	0.6366
188.00	0.62444	106.316	94.7608	0.6399
190.00	0.63448	106.930	95.1887	0.6432
192.00	0.64443	107.539	95.6134	0.6463
194.00	0.65429	108.143	96.0352	0.6495
196.00	0.66406	108.743	96.4543	0.6525
198.00	0.67374	109.339	96.8708	0.6556
200.00	0.68335	109.931	97.2849	0.6585
202.00	0.69289	110.519	97.6968	0.6615
204.00	0.70237	111.104	98.1066	0.6644
206.00	0.71177	111.686	98.5145	0.6672
208.00	0.72112	112.265	98.9205	0.6700
210.00	0.73042	112.841	99.3247	0.6727
212.00	0.73966	113.415	99.7273	0.6755
214.00	0.74884	113.986	100.128	0.6781
216.00	0.75798	114.555	100.528	0.6808
218.00	0.76708	115.121	100.926	0.6834
220.00	0.77613	115.685	101.323	0.6860
222.00	0.78514	116.247	101.718	0.6885
224.00	0.79411	116.808	102.113	0.6910
226.00	0.80304	117.366	102.506	0.6935
228.00	0.81194	117.923	102.898	0.6960
230.00	0.82080	118.478	103.289	0.6984
232.00	0.82963	119.031	103.679	0.7008
234.00	0.83843	119.583	104.068	0.7032
236.00	0.84719	120.133	104.456	0.7055
238.00	0.85593	120.682	104.843	0.7078
240.00	0.86464	121.229	105.229	0.7101
242.00	0.87332	121.775	105.614	0.7124
244.00	0.88198	122.320	105.999	0.7146
246.00	0.89061	122.864	106.383	0.7168
248.00	0.89922	123.406	106.766	0.7190
250.00	0.90781	123.948	107.149	0.7212
252.00	0.91637	124.488	107.530	0.7234
254.00	0.92491	125.027	107.911	0.7255
256.00	0.93343	125.565	108.292	0.7276
258.00	0.94193	126.102	108.672	0.7297
260.00	0.95042	126.639	109.051	0.7318
262.00	0.95888	127.174	109.430	0.7338
264.00	0.96733	127.708	109.808	0.7358
266.00	0.97575	128.242	110.185	0.7379
268.00	0.98417	128.775	110.563	0.7398
270.00	0.99256	129.307	110.939	0.7418
272.00	1.00094	129.838	111.315	0.7438
274.00	1.00931	130.368	111.691	0.7457
276.00	1.01766	130.898	112.066	0.7477
278.00	1.02599	131.427	112.441	0.7496
280.00	1.03431	131.955	112.815	0.7515
282.00	1.04262	132.483	113.189	0.7533
284.00	1.05091	133.010	113.563	0.7552
286.00	1.05920	133.536	113.936	0.7570
288.00	1.06747	134.062	114.308	0.7589
290.00	1.07572	134.587	114.681	0.7607
292.00	1.08397	135.112	115.053	0.7625
294.00	1.09221	135.636	115.424	0.7643
296.00	1.10043	136.159	115.796	0.7661
298.00	1.10864	136.682	116.167	0.7678
300.00	1.11685	137.205	116.537	0.7696

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	1.12504	137.727	116.908	0.7713	422.00	1.60486	168.465	138.766	0.8571
304.00	1.13322	138.248	117.278	0.7730	424.00	1.61273	168.971	139.127	0.8583
306.00	1.14140	138.769	117.647	0.7747	426.00	1.62060	169.477	139.487	0.8595
308.00	1.14956	139.290	118.017	0.7764	428.00	1.62847	169.983	139.848	0.8606
310.00	1.15771	139.810	118.386	0.7781	430.00	1.63634	170.489	140.208	0.8618
312.00	1.16586	140.330	118.755	0.7798	432.00	1.64420	170.994	140.568	0.8630
314.00	1.17400	140.849	119.124	0.7814	434.00	1.65206	171.500	140.928	0.8642
316.00	1.18213	141.368	119.492	0.7831	436.00	1.65991	172.005	141.288	0.8653
318.00	1.19025	141.886	119.860	0.7847	438.00	1.66777	172.511	141.648	0.8665
320.00	1.19836	142.404	120.228	0.7863	440.00	1.67562	173.016	142.008	0.8676
322.00	1.20647	142.922	120.596	0.7880	442.00	1.68347	173.521	142.368	0.8688
324.00	1.21457	143.439	120.963	0.7896	444.00	1.69132	174.026	142.728	0.8699
326.00	1.22266	143.956	121.330	0.7912	446.00	1.69917	174.531	143.087	0.8711
328.00	1.23074	144.472	121.697	0.7927	448.00	1.70701	175.035	143.447	0.8722
330.00	1.23882	144.989	122.064	0.7943	450.00	1.71485	175.540	143.806	0.8733
332.00	1.24688	145.505	122.431	0.7959	452.00	1.72269	176.045	144.166	0.8744
334.00	1.25495	146.020	122.797	0.7974	454.00	1.73053	176.549	144.525	0.8755
336.00	1.26300	146.535	123.163	0.7989	456.00	1.73836	177.054	144.885	0.8766
338.00	1.27105	147.050	123.529	0.8005	458.00	1.74620	177.558	145.244	0.8778
340.00	1.27910	147.565	123.895	0.8020	460.00	1.75403	178.062	145.603	0.8789
342.00	1.28713	148.079	124.260	0.8035	462.00	1.76186	178.566	145.963	0.8799
344.00	1.29517	148.593	124.626	0.8050	464.00	1.76969	179.070	146.322	0.8810
346.00	1.30319	149.107	124.991	0.8065	466.00	1.77751	179.574	146.681	0.8821
348.00	1.31121	149.620	125.356	0.8080	468.00	1.78534	180.078	147.040	0.8832
350.00	1.31923	150.133	125.721	0.8094	470.00	1.79316	180.582	147.399	0.8843
352.00	1.32723	150.646	126.085	0.8109	472.00	1.80098	181.085	147.758	0.8853
354.00	1.33524	151.159	126.450	0.8123	474.00	1.80880	181.589	148.117	0.8864
356.00	1.34324	151.671	126.814	0.8138	476.00	1.81662	182.092	148.476	0.8875
358.00	1.35123	152.183	127.178	0.8152	478.00	1.82443	182.596	148.834	0.8885
360.00	1.35922	152.695	127.542	0.8167	480.00	1.83224	183.099	149.193	0.8896
362.00	1.36720	153.207	127.906	0.8181	482.00	1.84006	183.603	149.552	0.8906
364.00	1.37518	153.718	128.270	0.8195	484.00	1.84787	184.106	149.910	0.8917
366.00	1.38315	154.229	128.634	0.8209	486.00	1.85568	184.609	150.269	0.8927
368.00	1.39112	154.740	128.997	0.8223	488.00	1.86348	185.112	150.628	0.8937
370.00	1.39909	155.251	129.360	0.8237	490.00	1.87129	185.615	150.986	0.8948
372.00	1.40705	155.761	129.724	0.8250	492.00	1.87909	186.118	151.345	0.8958
374.00	1.41500	156.272	130.087	0.8264	494.00	1.88690	186.621	151.703	0.8968
376.00	1.42296	156.782	130.450	0.8278	496.00	1.89470	187.123	152.062	0.8978
378.00	1.43090	157.292	130.812	0.8291	498.00	1.90250	187.626	152.420	0.8988
380.00	1.43885	157.801	131.175	0.8305	500.00	1.91030	188.129	152.778	0.8998
382.00	1.44679	158.311	131.538	0.8318	502.00	1.91809	188.631	153.137	0.9008
384.00	1.45472	158.820	131.900	0.8331	504.00	1.92589	189.134	153.495	0.9018
386.00	1.46266	159.329	132.262	0.8344	506.00	1.93368	189.636	153.853	0.9028
388.00	1.47058	159.838	132.624	0.8358	508.00	1.94148	190.139	154.211	0.9038
390.00	1.47851	160.347	132.987	0.8371	510.00	1.94927	190.641	154.569	0.9048
392.00	1.48643	160.855	133.349	0.8384	512.00	1.95706	191.143	154.928	0.9058
394.00	1.49435	161.364	133.710	0.8397	514.00	1.96485	191.646	155.286	0.9068
396.00	1.50226	161.872	134.072	0.8409	516.00	1.97263	192.148	155.644	0.9077
398.00	1.51017	162.380	134.434	0.8422	518.00	1.98042	192.650	156.002	0.9087
400.00	1.51808	162.888	134.795	0.8435	520.00	1.98821	193.152	156.360	0.9097
402.00	1.52599	163.396	135.157	0.8448	522.00	1.99599	193.654	156.718	0.9106
404.00	1.53389	163.903	135.518	0.8460	524.00	2.00377	194.156	157.076	0.9116
406.00	1.54178	164.411	135.879	0.8473	526.00	2.01155	194.658	157.434	0.9126
408.00	1.54968	164.918	136.241	0.8485	528.00	2.01933	195.160	157.792	0.9135
410.00	1.55757	165.425	136.602	0.8498	530.00	2.02711	195.662	158.149	0.9145
412.00	1.56546	165.932	136.963	0.8510	532.00	2.03489	196.163	158.507	0.9154
414.00	1.57335	166.439	137.324	0.8522	534.00	2.04267	196.665	158.865	0.9164
416.00	1.58123	166.945	137.684	0.8534	536.00	2.05044	197.167	159.223	0.9173
418.00	1.58911	167.452	138.045	0.8547	538.00	2.05822	197.668	159.581	0.9182
420.00	1.59699	167.958	138.406	0.8559	540.00	2.06599	198.170	159.938	0.9192

125.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018723	3.3995	2.9664	0.0255
122.00	0.018824	4.3830	3.9476	0.0336
124.00	0.018928	5.3674	4.9296	0.0416
126.00	0.019033	6.3522	5.9119	0.0495
128.00	0.019142	7.3370	6.8942	0.0572
130.00	0.019252	8.3214	7.8760	0.0649
132.00	0.019365	9.3051	8.8571	0.0724
134.00	0.019480	10.2879	9.8373	0.0798
136.00	0.019599	11.2697	10.8163	0.0870
138.00	0.019719	12.2504	11.7943	0.0942
140.00	0.019843	13.2302	12.7712	0.1013
142.00	0.01997	14.2090	13.7471	0.1082
144.00	0.02010	15.1873	14.7224	0.1150
146.00	0.02023	16.1652	15.6972	0.1218
148.00	0.02037	17.1432	16.6721	0.1284
150.00	0.02051	18.1217	17.6474	0.1350
152.00	0.02065	19.1014	18.6237	0.1415
154.00	0.02080	20.0828	19.6017	0.1479
156.00	0.02095	21.0667	20.5822	0.1543
158.00	0.02110	22.0539	21.5657	0.1605
160.00	0.02126	23.0452	22.5533	0.1668
162.00	0.02143	24.0415	23.5458	0.1730
164.00	0.02160	25.0438	24.5442	0.1791
166.00	0.02177	26.0532	25.5495	0.1852
168.00	0.02196	27.0707	26.5628	0.1913
170.00	0.02215	28.0974	27.5852	0.1974
172.00	0.02234	29.1347	28.6179	0.2035
174.00	0.02254	30.1837	29.6622	0.2095
176.00	0.02276	31.2458	30.7194	0.2156
178.00	0.02298	32.3225	31.7910	0.2217
180.00	0.02321	33.4153	32.8784	0.2278
182.00	0.02345	34.5259	33.9833	0.2339
* 182.696	0.02354	34.9170	34.3725	0.2361
* 182.696	0.45237	102.915	92.4508	0.6083
184.00	0.45843	103.369	92.7649	0.6107
186.00	0.46759	104.057	93.2406	0.6144
188.00	0.47657	104.733	93.7092	0.6181
190.00	0.48541	105.400	94.1716	0.6216
192.00	0.49412	106.058	94.6284	0.6250
194.00	0.50270	106.708	95.0800	0.6284
196.00	0.51117	107.351	95.5269	0.6317
198.00	0.51953	107.987	95.9696	0.6349
200.00	0.52780	108.617	96.4083	0.6381
202.00	0.53598	109.241	96.8433	0.6412
204.00	0.54407	109.860	97.2749	0.6443
206.00	0.55209	110.474	97.7034	0.6472
208.00	0.56004	111.084	98.1290	0.6502
210.00	0.56792	111.689	98.5519	0.6531
212.00	0.57574	112.290	98.9722	0.6559
214.00	0.58350	112.887	99.3901	0.6587
216.00	0.59120	113.481	99.8058	0.6615
218.00	0.59885	114.072	100.219	0.6642
220.00	0.60645	114.659	100.631	0.6669
222.00	0.61400	115.243	101.040	0.6696
224.00	0.62150	115.825	101.448	0.6722
226.00	0.62897	116.403	101.854	0.6747
228.00	0.63639	116.980	102.259	0.6773
230.00	0.64377	117.553	102.662	0.6798
232.00	0.65112	118.125	103.064	0.6822
234.00	0.65843	118.694	103.464	0.6847
236.00	0.66571	119.261	103.863	0.6871
238.00	0.67296	119.827	104.260	0.6895
240.00	0.68018	120.390	104.656	0.6918
242.00	0.68736	120.951	105.052	0.6942
244.00	0.69452	121.511	105.446	0.6965
246.00	0.70166	122.069	105.839	0.6988
248.00	0.70876	122.625	106.231	0.7010
250.00	0.71584	123.180	106.622	0.7032
252.00	0.72290	123.734	107.012	0.7054
254.00	0.72993	124.286	107.401	0.7076
256.00	0.73695	124.836	107.789	0.7098
258.00	0.74394	125.385	108.177	0.7119
260.00	0.75091	125.933	108.563	0.7140
262.00	0.75786	126.480	108.949	0.7161
264.00	0.76479	127.025	109.335	0.7182
266.00	0.77171	127.570	109.719	0.7203
268.00	0.77860	128.113	110.103	0.7223
270.00	0.78548	128.655	110.486	0.7243
272.00	0.79234	129.196	110.868	0.7263
274.00	0.79919	129.736	111.250	0.7283
276.00	0.80602	130.276	111.631	0.7302
278.00	0.81283	130.814	112.012	0.7322
280.00	0.81963	131.351	112.392	0.7341
282.00	0.82642	131.888	112.771	0.7360
284.00	0.83319	132.423	113.150	0.7379
286.00	0.83995	132.958	113.528	0.7398
288.00	0.84670	133.492	113.906	0.7417
290.00	0.85344	134.025	114.284	0.7435
292.00	0.86016	134.558	114.661	0.7453
294.00	0.86687	135.089	115.037	0.7471
296.00	0.87357	135.620	115.413	0.7489
298.00	0.88026	136.151	115.789	0.7507
300.00	0.88693	136.680	116.164	0.7525

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.89360	137.209	116.539	0.7543	422.00	1.28161	168.203	138.558	0.8408
304.00	0.90026	137.738	116.913	0.7560	424.00	1.28795	168.712	138.920	0.8420
306.00	0.90691	138.265	117.287	0.7577	426.00	1.29429	169.221	139.282	0.8432
308.00	0.91354	138.793	117.661	0.7594	428.00	1.30062	169.729	139.644	0.8444
310.00	0.92017	139.319	118.034	0.7612	430.00	1.30696	170.237	140.006	0.8455
312.00	0.92679	139.845	118.407	0.7628	432.00	1.31329	170.746	140.367	0.8467
314.00	0.93340	140.371	118.780	0.7645	434.00	1.31961	171.254	140.729	0.8479
316.00	0.94000	140.896	119.152	0.7662	436.00	1.32594	171.761	141.090	0.8491
318.00	0.94660	141.420	119.524	0.7678	438.00	1.33226	172.269	141.452	0.8502
320.00	0.95318	141.944	119.895	0.7695	440.00	1.33858	172.777	141.813	0.8514
322.00	0.95976	142.467	120.267	0.7711	442.00	1.34490	173.284	142.174	0.8525
324.00	0.96633	142.990	120.638	0.7727	444.00	1.35122	173.791	142.536	0.8537
326.00	0.97289	143.513	121.008	0.7743	446.00	1.35753	174.298	142.897	0.8548
328.00	0.97944	144.035	121.379	0.7759	448.00	1.36384	174.805	143.258	0.8559
330.00	0.98599	144.556	121.749	0.7775	450.00	1.37015	175.312	143.619	0.8571
332.00	0.99253	145.077	122.119	0.7791	452.00	1.37646	175.819	143.979	0.8582
334.00	0.99906	145.598	122.488	0.7807	454.00	1.38276	176.326	144.340	0.8593
336.00	1.00559	146.118	122.857	0.7822	456.00	1.38907	176.832	144.701	0.8604
338.00	1.01211	146.638	123.227	0.7838	458.00	1.39537	177.338	145.061	0.8615
340.00	1.01863	147.158	123.595	0.7853	460.00	1.40167	177.845	145.422	0.8626
342.00	1.02513	147.677	123.964	0.7868	462.00	1.40797	178.351	145.782	0.8637
344.00	1.03163	148.196	124.332	0.7883	464.00	1.41426	178.857	146.143	0.8648
346.00	1.03813	148.714	124.700	0.7898	466.00	1.42055	179.363	146.503	0.8659
348.00	1.04462	149.232	125.068	0.7913	468.00	1.42685	179.869	146.863	0.8670
350.00	1.05110	149.749	125.436	0.7928	470.00	1.43314	180.374	147.224	0.8681
352.00	1.05758	150.267	125.803	0.7943	472.00	1.43942	180.880	147.584	0.8692
354.00	1.06406	150.784	126.170	0.7957	474.00	1.44571	181.385	147.944	0.8702
356.00	1.07052	151.300	126.537	0.7972	476.00	1.45200	181.891	148.304	0.8713
358.00	1.07699	151.817	126.904	0.7986	478.00	1.45828	182.396	148.664	0.8723
360.00	1.08344	152.333	127.271	0.8001	480.00	1.46456	182.901	149.024	0.8734
362.00	1.08990	152.848	127.637	0.8015	482.00	1.47084	183.406	149.383	0.8745
364.00	1.09634	153.364	128.004	0.8029	484.00	1.47712	183.911	149.743	0.8755
366.00	1.10279	153.879	128.370	0.8043	486.00	1.48339	184.416	150.103	0.8765
368.00	1.10923	154.394	128.735	0.8057	488.00	1.48967	184.921	150.463	0.8776
370.00	1.11566	154.908	129.101	0.8071	490.00	1.49594	185.426	150.822	0.8786
372.00	1.12209	155.422	129.467	0.8085	492.00	1.50221	185.930	151.182	0.8796
374.00	1.12851	155.936	129.832	0.8099	494.00	1.50849	186.435	151.541	0.8807
376.00	1.13493	156.450	130.197	0.8113	496.00	1.51475	186.939	151.901	0.8817
378.00	1.14135	156.963	130.562	0.8126	498.00	1.52102	187.444	152.260	0.8827
380.00	1.14776	157.477	130.927	0.8140	500.00	1.52729	187.948	152.619	0.8837
382.00	1.15417	157.990	131.292	0.8153	502.00	1.53355	188.452	152.979	0.8847
384.00	1.16058	158.502	131.656	0.8167	504.00	1.53982	188.956	153.338	0.8857
386.00	1.16698	159.015	132.021	0.8180	506.00	1.54608	189.460	153.697	0.8867
388.00	1.17337	159.527	132.385	0.8193	508.00	1.55234	189.964	154.056	0.8877
390.00	1.17977	160.039	132.749	0.8206	510.00	1.55860	190.468	154.416	0.8887
392.00	1.18616	160.551	133.113	0.8220	512.00	1.56485	190.972	154.775	0.8897
394.00	1.19254	161.062	133.477	0.8233	514.00	1.57111	191.476	155.134	0.8907
396.00	1.19893	161.574	133.841	0.8245	516.00	1.57737	191.980	155.493	0.8916
398.00	1.20530	162.085	134.204	0.8258	518.00	1.58362	192.483	155.852	0.8926
400.00	1.21168	162.596	134.568	0.8271	520.00	1.58987	192.987	156.210	0.8936
402.00	1.21805	163.106	134.931	0.8284	522.00	1.59612	193.490	156.569	0.8945
404.00	1.22442	163.617	135.294	0.8297	524.00	1.60237	193.994	156.928	0.8955
406.00	1.23079	164.127	135.657	0.8309	526.00	1.60862	194.497	157.287	0.8965
408.00	1.23715	164.638	136.020	0.8322	528.00	1.61487	195.000	157.646	0.8974
410.00	1.24351	165.147	136.383	0.8334	530.00	1.62112	195.503	158.004	0.8984
412.00	1.24987	165.657	136.746	0.8347	532.00	1.62736	196.007	158.363	0.8993
414.00	1.25622	166.167	137.108	0.8359	534.00	1.63361	196.510	158.722	0.9003
416.00	1.26257	166.676	137.471	0.8371	536.00	1.63985	197.013	159.080	0.9012
418.00	1.26892	167.185	137.833	0.8383	538.00	1.64610	197.516	159.439	0.9021
420.00	1.27527	167.695	138.196	0.8396	540.00	1.65234	198.019	159.798	0.9031

150.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.018717	3.4584	2.9389	0.0252
122.00	0.018818	4.4413	3.9189	0.0334
124.00	0.018921	5.4250	4.8998	0.0414
126.00	0.019026	6.4091	5.8810	0.0492
128.00	0.019134	7.3932	6.8621	0.0570
130.00	0.019244	8.3769	7.8427	0.0646
132.00	0.019357	9.3598	8.8225	0.0721
134.00	0.019472	10.3418	9.8013	0.0795
136.00	0.019590	11.3228	10.7791	0.0868
138.00	0.019710	12.3027	11.7556	0.0939
140.00	0.019833	13.2815	12.7310	0.1010
142.00	0.01996	14.2595	13.7054	0.1079
144.00	0.02009	15.2367	14.6791	0.1147
146.00	0.02022	16.2135	15.6523	0.1215
148.00	0.02036	17.1904	16.6254	0.1281
150.00	0.02049	18.1677	17.5988	0.1347
152.00	0.02064	19.1461	18.5732	0.1412
154.00	0.02078	20.1261	19.5492	0.1476
156.00	0.02093	21.1085	20.5274	0.1539
158.00	0.02109	22.0940	21.5087	0.1602
160.00	0.02125	23.0836	22.4938	0.1664
162.00	0.02141	24.0780	23.4837	0.1726
164.00	0.02158	25.0783	24.4793	0.1787
166.00	0.02175	26.0854	25.4816	0.1848
168.00	0.02193	27.1005	26.4917	0.1909
170.00	0.02212	28.1246	27.5106	0.1970
172.00	0.02232	29.1589	28.5395	0.2030
174.00	0.02252	30.2047	29.5797	0.2090
176.00	0.02273	31.2632	30.6324	0.2151
178.00	0.02295	32.3359	31.6990	0.2212
180.00	0.02318	33.4242	32.7809	0.2272
182.00	0.02342	34.5297	33.8797	0.2333
184.00	0.02367	35.6543	34.9973	0.2395
186.00	0.02394	36.8000	36.1355	0.2457
* 187.682	0.02417	37.7818	37.1107	0.2509
* 187.682	0.37453	102.835	92.4382	0.5975
188.00	0.37587	102.954	92.5205	0.5982
190.00	0.38414	103.695	93.0321	0.6021
192.00	0.39222	104.420	93.5334	0.6059
194.00	0.40012	105.132	94.0256	0.6096
196.00	0.40787	105.831	94.5097	0.6132
198.00	0.41549	106.520	94.9866	0.6167
200.00	0.42298	107.198	95.4570	0.6201
202.00	0.43035	107.867	95.9215	0.6234
204.00	0.43762	108.528	96.3806	0.6267
206.00	0.44480	109.181	96.8348	0.6299
208.00	0.45188	109.828	97.2845	0.6330
210.00	0.45888	110.468	97.7300	0.6360
212.00	0.46581	111.102	98.1716	0.6390
214.00	0.47266	111.730	98.6097	0.6420
216.00	0.47945	112.353	99.0444	0.6449
218.00	0.48618	112.971	99.4760	0.6477
220.00	0.49285	113.585	99.9048	0.6505
222.00	0.49946	114.195	100.331	0.6533
224.00	0.50603	114.800	100.754	0.6560
226.00	0.51254	115.402	101.175	0.6587
228.00	0.51901	116.001	101.594	0.6613
230.00	0.52543	116.596	102.011	0.6639
232.00	0.53182	117.187	102.425	0.6665
234.00	0.53816	117.776	102.838	0.6690
236.00	0.54447	118.362	103.249	0.6715
238.00	0.55074	118.945	103.658	0.6740
240.00	0.55697	119.526	104.066	0.6764
242.00	0.56318	120.104	104.472	0.6788
244.00	0.56935	120.680	104.876	0.6812
246.00	0.57550	121.254	105.279	0.6835
248.00	0.58162	121.825	105.681	0.6858
250.00	0.58771	122.394	106.081	0.6881
252.00	0.59377	122.962	106.480	0.6904
254.00	0.59981	123.528	106.878	0.6926
256.00	0.60583	124.091	107.275	0.6948
258.00	0.61182	124.653	107.671	0.6970
260.00	0.61779	125.214	108.065	0.6992
262.00	0.62374	125.772	108.459	0.7013
264.00	0.62967	126.330	108.851	0.7034
266.00	0.63558	126.885	109.243	0.7055
268.00	0.64147	127.440	109.634	0.7076
270.00	0.64735	127.993	110.024	0.7097
272.00	0.65320	128.544	110.413	0.7117
274.00	0.65904	129.095	110.801	0.7137
276.00	0.66486	129.644	111.189	0.7157
278.00	0.67067	130.192	111.575	0.7177
280.00	0.67646	130.739	111.962	0.7196
282.00	0.68224	131.284	112.347	0.7216
284.00	0.68800	131.829	112.731	0.7235
286.00	0.69375	132.372	113.115	0.7254
288.00	0.69948	132.915	113.499	0.7273
290.00	0.70521	133.457	113.882	0.7292
292.00	0.71092	133.997	114.264	0.7310
294.00	0.71661	134.537	114.645	0.7329
296.00	0.72230	135.076	115.026	0.7347
298.00	0.72797	135.614	115.407	0.7365
300.00	0.73364	136.151	115.787	0.7383

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.73929	136.687	116.166	0.7401	422.00	1.06613	167.942	138.349	0.8273
304.00	0.74493	137.223	116.545	0.7419	424.00	1.07145	168.454	138.712	0.8286
306.00	0.75056	137.757	116.923	0.7436	426.00	1.07676	168.965	139.076	0.8298
308.00	0.75618	138.291	117.301	0.7454	428.00	1.08208	169.476	139.440	0.8310
310.00	0.76180	138.825	117.679	0.7471	430.00	1.08739	169.986	139.803	0.8321
312.00	0.76740	139.357	118.056	0.7488	432.00	1.09270	170.497	140.166	0.8333
314.00	0.77299	139.889	118.432	0.7505	434.00	1.09800	171.007	140.529	0.8345
316.00	0.77858	140.420	118.809	0.7522	436.00	1.10331	171.518	140.892	0.8357
318.00	0.78415	140.951	119.184	0.7539	438.00	1.10861	172.028	141.255	0.8369
320.00	0.78972	141.481	119.560	0.7555	440.00	1.11391	172.538	141.618	0.8380
322.00	0.79528	142.010	119.935	0.7572	442.00	1.11921	173.047	141.981	0.8392
324.00	0.80083	142.539	120.309	0.7588	444.00	1.12450	173.557	142.343	0.8403
326.00	0.80638	143.067	120.684	0.7604	446.00	1.12979	174.066	142.706	0.8415
328.00	0.81191	143.595	121.057	0.7620	448.00	1.13508	174.575	143.068	0.8426
330.00	0.81744	144.122	121.431	0.7636	450.00	1.14037	175.085	143.430	0.8437
332.00	0.82296	144.648	121.804	0.7652	452.00	1.14566	175.593	143.792	0.8449
334.00	0.82848	145.174	122.177	0.7668	454.00	1.15094	176.102	144.155	0.8460
336.00	0.83399	145.699	122.550	0.7684	456.00	1.15622	176.611	144.517	0.8471
338.00	0.83949	146.224	122.922	0.7699	458.00	1.16150	177.119	144.879	0.8482
340.00	0.84498	146.749	123.294	0.7715	460.00	1.16678	177.628	145.240	0.8493
342.00	0.85047	147.273	123.666	0.7730	462.00	1.17206	178.136	145.602	0.8504
344.00	0.85595	147.796	124.037	0.7745	464.00	1.17733	178.644	145.964	0.8515
346.00	0.86143	148.319	124.408	0.7761	466.00	1.18260	179.152	146.325	0.8526
348.00	0.86690	148.842	124.779	0.7776	468.00	1.18787	179.660	146.687	0.8537
350.00	0.87237	149.364	125.149	0.7791	470.00	1.19314	180.167	147.048	0.8548
352.00	0.87782	149.886	125.519	0.7805	472.00	1.19841	180.675	147.410	0.8559
354.00	0.88328	150.407	125.889	0.7820	474.00	1.20367	181.182	147.771	0.8569
356.00	0.88873	150.928	126.259	0.7835	476.00	1.20893	181.689	148.132	0.8580
358.00	0.89417	151.449	126.629	0.7850	478.00	1.21420	182.197	148.493	0.8591
360.00	0.89961	151.969	126.998	0.7864	480.00	1.21946	182.704	148.854	0.8601
362.00	0.90504	152.489	127.367	0.7878	482.00	1.22471	183.210	149.215	0.8612
364.00	0.91047	153.008	127.736	0.7893	484.00	1.22997	183.717	149.576	0.8622
366.00	0.91589	153.527	128.104	0.7907	486.00	1.23523	184.224	149.937	0.8633
368.00	0.92131	154.046	128.473	0.7921	488.00	1.24048	184.730	150.297	0.8643
370.00	0.92672	154.564	128.841	0.7935	490.00	1.24573	185.237	150.658	0.8654
372.00	0.93213	155.083	129.209	0.7949	492.00	1.25098	185.743	151.019	0.8664
374.00	0.93753	155.600	129.576	0.7963	494.00	1.25623	186.250	151.379	0.8674
376.00	0.94293	156.118	129.944	0.7977	496.00	1.26148	186.756	151.740	0.8684
378.00	0.94833	156.635	130.311	0.7990	498.00	1.26672	187.262	152.100	0.8694
380.00	0.95372	157.151	130.678	0.8004	500.00	1.27197	187.768	152.461	0.8705
382.00	0.95911	157.668	131.045	0.8018	502.00	1.27721	188.273	152.821	0.8715
384.00	0.96449	158.184	131.412	0.8031	504.00	1.28245	188.779	153.181	0.8725
386.00	0.96987	158.700	131.778	0.8045	506.00	1.28769	189.285	153.541	0.8735
388.00	0.97525	159.216	132.145	0.8058	508.00	1.29293	189.790	153.901	0.8745
390.00	0.98062	159.731	132.511	0.8071	510.00	1.29817	190.296	154.261	0.8755
392.00	0.98599	160.246	132.877	0.8084	512.00	1.30340	190.801	154.622	0.8765
394.00	0.99136	160.761	133.243	0.8097	514.00	1.30864	191.307	154.981	0.8774
396.00	0.99672	161.275	133.608	0.8110	516.00	1.31387	191.812	155.341	0.8784
398.00	1.00208	161.789	133.974	0.8123	518.00	1.31911	192.317	155.701	0.8794
400.00	1.00743	162.303	134.339	0.8136	520.00	1.32434	192.822	156.061	0.8804
402.00	1.01278	162.817	134.705	0.8149	522.00	1.32957	193.327	156.421	0.8813
404.00	1.01813	163.331	135.070	0.8162	524.00	1.33479	193.832	156.781	0.8823
406.00	1.02348	163.844	135.434	0.8174	526.00	1.34002	194.336	157.140	0.8833
408.00	1.02882	164.357	135.799	0.8187	528.00	1.34525	194.841	157.500	0.8842
410.00	1.03416	164.870	136.164	0.8200	530.00	1.35047	195.346	157.859	0.8852
412.00	1.03949	165.382	136.528	0.8212	532.00	1.35570	195.850	158.219	0.8861
414.00	1.04483	165.895	136.893	0.8224	534.00	1.36092	196.355	158.579	0.8871
416.00	1.05016	166.407	137.257	0.8237	536.00	1.36614	196.859	158.938	0.8880
418.00	1.05548	166.919	137.621	0.8249	538.00	1.37136	197.364	159.297	0.8890
420.00	1.06081	167.431	137.985	0.8261	540.00	1.37658	197.868	159.657	0.8899

200.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.01871	3.5765	2.8842	0.0248
122.00	0.01881	4.5580	3.8620	0.0329
124.00	0.01891	5.5404	4.8406	0.0409
126.00	0.01901	6.5232	5.8196	0.0487
128.00	0.01912	7.5059	6.7983	0.0565
130.00	0.01923	8.4881	7.7764	0.0641
132.00	0.01934	9.4696	8.7538	0.0716
134.00	0.01946	10.4500	9.7300	0.0790
136.00	0.01957	11.4294	10.7050	0.0862
138.00	0.01969	12.4076	11.6788	0.0934
140.00	0.01981	13.3846	12.6513	0.1004
142.00	0.01994	14.3607	13.6227	0.1073
144.00	0.02007	15.3359	14.5933	0.1141
146.00	0.02020	16.3106	15.5631	0.1209
148.00	0.02033	17.2853	16.5328	0.1275
150.00	0.02047	18.2602	17.5026	0.1340
152.00	0.02061	19.2360	18.4732	0.1405
154.00	0.02075	20.2133	19.4452	0.1469
156.00	0.02090	21.1928	20.4192	0.1532
158.00	0.02106	22.1752	21.3959	0.1595
160.00	0.02121	23.1614	22.3763	0.1657
162.00	0.02137	24.1521	23.3611	0.1718
164.00	0.02154	25.1484	24.3512	0.1779
166.00	0.02171	26.1513	25.3477	0.1840
168.00	0.02189	27.1616	26.3514	0.1901
170.00	0.02207	28.1806	27.3636	0.1961
172.00	0.02227	29.2092	28.3852	0.2021
174.00	0.02246	30.2488	29.4174	0.2081
176.00	0.02267	31.3004	30.4614	0.2141
178.00	0.02288	32.3654	31.5185	0.2201
180.00	0.02311	33.4451	32.5899	0.2262
182.00	0.02334	34.5410	33.6771	0.2322
184.00	0.02359	35.6547	34.7817	0.2383
186.00	0.02385	36.7880	35.9054	0.2444
188.00	0.02412	37.9429	37.0502	0.2506
190.00	0.02441	39.1219	38.2183	0.2568
192.00	0.02472	40.3066	39.3915	0.2630
194.00	0.02506	41.5212	40.5939	0.2693
196.00	0.02542	42.7684	41.8278	0.2757
* 196.094	0.02543	42.8268	41.8856	0.2760
* 196.094	0.27452	102.257	92.0965	0.5791
198.00	0.28142	103.078	92.6621	0.5833
200.00	0.28841	103.911	93.2363	0.5875
202.00	0.29518	104.719	93.7937	0.5915
204.00	0.30176	105.505	94.3367	0.5954
206.00	0.30817	106.273	94.8671	0.5991
208.00	0.31442	107.024	95.3865	0.6027
210.00	0.32055	107.760	95.8961	0.6062
212.00	0.32656	108.483	96.3970	0.6097
214.00	0.33245	109.194	96.8900	0.6130
216.00	0.33825	109.895	97.3758	0.6163
218.00	0.34396	110.585	97.8551	0.6195
220.00	0.34958	111.267	98.3286	0.6226
222.00	0.35513	111.940	98.7966	0.6256
224.00	0.36061	112.606	99.2596	0.6286
226.00	0.36602	113.265	99.7180	0.6315
228.00	0.37138	113.917	100.172	0.6344
230.00	0.37667	114.563	100.622	0.6372
232.00	0.38191	115.204	101.069	0.6400
234.00	0.38710	115.839	101.512	0.6427
236.00	0.39225	116.469	101.952	0.6454
238.00	0.39735	117.094	102.388	0.6480
240.00	0.40241	117.715	102.822	0.6506
242.00	0.40743	118.332	103.253	0.6532
244.00	0.41241	118.945	103.682	0.6557
246.00	0.41735	119.554	104.108	0.6582
248.00	0.42227	120.160	104.532	0.6607
250.00	0.42715	120.763	104.954	0.6631
252.00	0.43200	121.362	105.373	0.6655
254.00	0.43682	121.958	105.791	0.6678
256.00	0.44161	122.551	106.207	0.6702
258.00	0.44638	123.142	106.621	0.6724
260.00	0.45112	123.730	107.034	0.6747
262.00	0.45584	124.315	107.444	0.6770
264.00	0.46054	124.898	107.854	0.6792
266.00	0.46521	125.479	108.262	0.6814
268.00	0.46986	126.058	108.668	0.6835
270.00	0.47449	126.634	109.073	0.6857
272.00	0.47910	127.209	109.477	0.6878
274.00	0.48370	127.781	109.879	0.6899
276.00	0.48827	128.352	110.281	0.6920
278.00	0.49283	128.921	110.681	0.6940
280.00	0.49737	129.488	111.080	0.6961
282.00	0.50189	130.053	111.478	0.6981
284.00	0.50640	130.617	111.875	0.7001
286.00	0.51089	131.179	112.271	0.7020
288.00	0.51537	131.740	112.666	0.7040
290.00	0.51984	132.299	113.060	0.7059
292.00	0.52429	132.857	113.453	0.7078
294.00	0.52873	133.414	113.846	0.7097
296.00	0.53315	133.969	114.237	0.7116
298.00	0.53756	134.523	114.628	0.7135
300.00	0.54197	135.076	115.018	0.7153

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.54635	135.628	115.407	0.7172	422.00	0.79682	167.420	137.929	0.8060
304.00	0.55073	136.178	115.795	0.7190	424.00	0.80086	167.937	138.296	0.8072
306.00	0.55510	136.728	116.183	0.7208	426.00	0.80490	168.453	138.663	0.8084
308.00	0.55946	137.276	116.570	0.7226	428.00	0.80894	168.969	139.030	0.8096
310.00	0.56380	137.823	116.957	0.7243	430.00	0.81297	169.485	139.396	0.8108
312.00	0.56814	138.369	117.342	0.7261	432.00	0.81701	170.000	139.763	0.8120
314.00	0.57247	138.915	117.727	0.7278	434.00	0.82104	170.516	140.129	0.8132
316.00	0.57678	139.459	118.112	0.7296	436.00	0.82506	171.031	140.495	0.8144
318.00	0.58109	140.002	118.496	0.7313	438.00	0.82909	171.546	140.861	0.8156
320.00	0.58539	140.545	118.879	0.7330	440.00	0.83311	172.060	141.226	0.8167
322.00	0.58968	141.087	119.262	0.7347	442.00	0.83713	172.575	141.592	0.8179
324.00	0.59396	141.627	119.644	0.7364	444.00	0.84115	173.089	141.958	0.8191
326.00	0.59824	142.167	120.026	0.7380	446.00	0.84516	173.603	142.323	0.8202
328.00	0.60250	142.706	120.407	0.7397	448.00	0.84918	174.116	142.688	0.8214
330.00	0.60676	143.245	120.788	0.7413	450.00	0.85319	174.630	143.053	0.8225
332.00	0.61101	143.782	121.168	0.7429	452.00	0.85720	175.143	143.418	0.8237
334.00	0.61526	144.319	121.548	0.7445	454.00	0.86120	175.656	143.783	0.8248
336.00	0.61949	144.855	121.927	0.7461	456.00	0.86521	176.169	144.147	0.8259
338.00	0.62372	145.391	122.306	0.7477	458.00	0.86921	176.682	144.512	0.8270
340.00	0.62795	145.925	122.685	0.7493	460.00	0.87321	177.194	144.876	0.8281
342.00	0.63216	146.460	123.063	0.7509	462.00	0.87721	177.707	145.241	0.8293
344.00	0.63637	146.993	123.440	0.7524	464.00	0.88121	178.219	145.605	0.8304
346.00	0.64058	147.526	123.818	0.7540	466.00	0.88520	178.731	145.969	0.8315
348.00	0.64477	148.058	124.194	0.7555	468.00	0.88920	179.242	146.333	0.8326
350.00	0.64897	148.589	124.571	0.7570	470.00	0.89319	179.754	146.697	0.8337
352.00	0.65315	149.120	124.947	0.7585	472.00	0.89718	180.265	147.060	0.8347
354.00	0.65733	149.651	125.323	0.7600	474.00	0.90117	180.777	147.424	0.8358
356.00	0.66151	150.181	125.698	0.7615	476.00	0.90515	181.288	147.788	0.8369
358.00	0.66568	150.710	126.073	0.7630	478.00	0.90914	181.799	148.151	0.8380
360.00	0.66984	151.239	126.448	0.7645	480.00	0.91312	182.309	148.514	0.8390
362.00	0.67400	151.767	126.822	0.7659	482.00	0.91710	182.820	148.878	0.8401
364.00	0.67815	152.295	127.196	0.7674	484.00	0.92108	183.330	149.241	0.8412
366.00	0.68230	152.822	127.570	0.7688	486.00	0.92506	183.840	149.604	0.8422
368.00	0.68644	153.349	127.943	0.7703	488.00	0.92903	184.351	149.967	0.8433
370.00	0.69058	153.875	128.316	0.7717	490.00	0.93301	184.861	150.329	0.8443
372.00	0.69472	154.401	128.689	0.7731	492.00	0.93698	185.370	150.692	0.8453
374.00	0.69885	154.926	129.061	0.7745	494.00	0.94095	185.880	151.055	0.8464
376.00	0.70297	155.451	129.434	0.7759	496.00	0.94492	186.389	151.417	0.8474
378.00	0.70709	155.975	129.806	0.7773	498.00	0.94889	186.899	151.780	0.8484
380.00	0.71121	156.499	130.177	0.7787	500.00	0.95286	187.408	152.142	0.8494
382.00	0.71532	157.023	130.549	0.7801	502.00	0.95682	187.917	152.505	0.8505
384.00	0.71943	157.546	130.920	0.7814	504.00	0.96079	188.426	152.867	0.8515
386.00	0.72353	158.069	131.291	0.7828	506.00	0.96475	188.935	153.229	0.8525
388.00	0.72764	158.592	131.661	0.7842	508.00	0.96871	189.444	153.591	0.8535
390.00	0.73173	159.114	132.032	0.7855	510.00	0.97267	189.952	153.953	0.8545
392.00	0.73583	159.635	132.402	0.7868	512.00	0.97663	190.461	154.315	0.8555
394.00	0.73991	160.157	132.772	0.7882	514.00	0.98059	190.969	154.677	0.8565
396.00	0.74400	160.677	133.142	0.7895	516.00	0.98455	191.477	155.039	0.8575
398.00	0.74808	161.198	133.511	0.7908	518.00	0.98850	191.985	155.400	0.8584
400.00	0.75216	161.718	133.880	0.7921	520.00	0.99246	192.493	155.762	0.8594
402.00	0.75624	162.238	134.249	0.7934	522.00	0.99641	193.001	156.124	0.8604
404.00	0.76031	162.758	134.618	0.7947	524.00	1.00036	193.509	156.485	0.8614
406.00	0.76438	163.277	134.987	0.7960	526.00	1.00431	194.017	156.847	0.8623
408.00	0.76844	163.796	135.355	0.7972	528.00	1.00826	194.524	157.208	0.8633
410.00	0.77251	164.315	135.724	0.7985	530.00	1.01221	195.032	157.569	0.8642
412.00	0.77657	164.833	136.092	0.7998	532.00	1.01615	195.539	157.931	0.8652
414.00	0.78062	165.351	136.460	0.8010	534.00	1.02010	196.046	158.292	0.8662
416.00	0.78468	165.869	136.827	0.8023	536.00	1.02404	196.553	158.653	0.8671
418.00	0.78873	166.386	137.195	0.8035	538.00	1.02799	197.060	159.014	0.8680
420.00	0.79278	166.903	137.562	0.8047	540.00	1.03193	197.567	159.375	0.8690

300.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.01868	3.8130	2.7760	0.0239
122.00	0.01878	4.7921	3.7495	0.0320
124.00	0.01888	5.7719	4.7237	0.0399
126.00	0.01899	6.7521	5.6981	0.0478
128.00	0.01909	7.7321	6.6722	0.0555
130.00	0.01920	8.7115	7.6457	0.0631
132.00	0.01931	9.6900	8.6181	0.0706
134.00	0.01942	10.6675	9.5893	0.0779
136.00	0.01954	11.6437	10.5591	0.0851
138.00	0.01966	12.6186	11.5274	0.0923
140.00	0.01978	13.5922	12.4944	0.0993
142.00	0.01990	14.5646	13.4599	0.1062
144.00	0.02002	15.5360	14.4244	0.1129
146.00	0.02015	16.5067	15.3879	0.1196
148.00	0.02028	17.4770	16.3509	0.1262
150.00	0.02042	18.4473	17.3138	0.1328
152.00	0.02056	19.4182	18.2770	0.1392
154.00	0.02070	20.3903	19.2413	0.1455
156.00	0.02084	21.3642	20.2071	0.1518
158.00	0.02099	22.3407	21.1752	0.1580
160.00	0.02115	23.3204	22.1465	0.1642
162.00	0.02130	24.3042	23.1215	0.1703
164.00	0.02147	25.2930	24.1013	0.1764
166.00	0.02163	26.2877	25.0868	0.1824
168.00	0.02181	27.2893	26.0787	0.1884
170.00	0.02198	28.2986	27.0782	0.1944
172.00	0.02217	29.3167	28.0861	0.2003
174.00	0.02236	30.3447	29.1035	0.2063
176.00	0.02256	31.3836	30.1314	0.2122
178.00	0.02276	32.4346	31.1709	0.2181
180.00	0.02298	33.4987	32.2231	0.2241
182.00	0.02320	34.5772	33.2892	0.2301
184.00	0.02343	35.6713	34.3704	0.2360
186.00	0.02368	36.7825	35.4680	0.2420
188.00	0.02394	37.9124	36.5835	0.2481
190.00	0.02421	39.0625	37.7185	0.2542
192.00	0.02450	40.2139	38.8539	0.2602
194.00	0.02480	41.3897	40.0127	0.2663
196.00	0.02513	42.5907	41.1956	0.2724
198.00	0.02548	43.8148	42.4001	0.2787
200.00	0.02586	45.0723	43.6365	0.2850
202.00	0.02628	46.3635	44.9046	0.2914
204.00	0.02674	47.7006	46.2162	0.2980
206.00	0.02725	49.0976	47.5848	0.3048
208.00	0.02783	50.5658	49.0207	0.3120
* 209.179	0.02822	51.4741	49.9075	0.3163
* 209.179	0.16912	99.7835	90.3947	0.5473
210.00	0.17200	100.305	90.7565	0.5498
212.00	0.17860	101.499	91.5839	0.5554
214.00	0.18473	102.606	92.3509	0.5606
216.00	0.19051	103.648	93.0719	0.5655
218.00	0.19599	104.637	93.7564	0.5700
220.00	0.20124	105.583	94.4110	0.5743
222.00	0.20628	106.493	95.0409	0.5784
224.00	0.21116	107.372	95.6497	0.5824
226.00	0.21589	108.225	96.2404	0.5862
228.00	0.22048	109.056	96.8153	0.5898
230.00	0.22496	109.865	97.3765	0.5934
232.00	0.22934	110.657	97.9254	0.5968
234.00	0.23362	111.433	98.4633	0.6001
236.00	0.23782	112.194	98.9915	0.6034
238.00	0.24195	112.943	99.5107	0.6065
240.00	0.24600	113.679	100.022	0.6096
242.00	0.24999	114.404	100.526	0.6126
244.00	0.25392	115.119	101.023	0.6156
246.00	0.25780	115.825	101.514	0.6184
248.00	0.26162	116.523	101.999	0.6213
250.00	0.26540	117.212	102.478	0.6240
252.00	0.26913	117.894	102.953	0.6268
254.00	0.27282	118.569	103.423	0.6294
256.00	0.27647	119.238	103.889	0.6320
258.00	0.28009	119.901	104.351	0.6346
260.00	0.28367	120.557	104.809	0.6372
262.00	0.28722	121.209	105.264	0.6397
264.00	0.29074	121.855	105.715	0.6421
266.00	0.29422	122.497	106.163	0.6445
268.00	0.29769	123.134	106.608	0.6469
270.00	0.30112	123.767	107.050	0.6493
272.00	0.30453	124.396	107.490	0.6516
274.00	0.30792	125.021	107.927	0.6539
276.00	0.31128	125.642	108.361	0.6561
278.00	0.31462	126.260	108.794	0.6584
280.00	0.31794	126.874	109.224	0.6606
282.00	0.32124	127.485	109.652	0.6628
284.00	0.32452	128.094	110.077	0.6649
286.00	0.32779	128.699	110.501	0.6670
288.00	0.33103	129.301	110.924	0.6691
290.00	0.33426	129.901	111.344	0.6712
292.00	0.33747	130.498	111.763	0.6733
294.00	0.34067	131.093	112.180	0.6753
296.00	0.34385	131.685	112.596	0.6773
298.00	0.34702	132.275	113.010	0.6793
300.00	0.35018	132.863	113.422	0.6812

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.35332	133.448	113.834	0.6832	422.00	0.52764	166.377	137.085	0.7753
304.00	0.35645	134.032	114.244	0.6851	424.00	0.53040	166.904	137.459	0.7765
306.00	0.35956	134.614	114.652	0.6870	426.00	0.53317	167.431	137.832	0.7777
308.00	0.36266	135.194	115.060	0.6889	428.00	0.53593	167.958	138.205	0.7790
310.00	0.36576	135.771	115.466	0.6908	430.00	0.53869	168.484	138.578	0.7802
312.00	0.36884	136.348	115.871	0.6926	432.00	0.54144	169.010	138.951	0.7814
314.00	0.37191	136.922	116.275	0.6945	434.00	0.54419	169.535	139.324	0.7826
316.00	0.37497	137.495	116.678	0.6963	436.00	0.54694	170.060	139.696	0.7838
318.00	0.37802	138.066	117.080	0.6981	438.00	0.54969	170.584	140.068	0.7850
320.00	0.38106	138.636	117.481	0.6999	440.00	0.55244	171.109	140.440	0.7862
322.00	0.38409	139.204	117.881	0.7016	442.00	0.55518	171.632	140.811	0.7874
324.00	0.38711	139.771	118.280	0.7034	444.00	0.55792	172.156	141.183	0.7886
326.00	0.39012	140.336	118.678	0.7051	446.00	0.56066	172.679	141.554	0.7898
328.00	0.39312	140.900	119.075	0.7069	448.00	0.56340	173.202	141.925	0.7909
330.00	0.39612	141.463	119.472	0.7086	450.00	0.56613	173.724	142.295	0.7921
332.00	0.39910	142.024	119.867	0.7103	452.00	0.56886	174.247	142.666	0.7933
334.00	0.40208	142.584	120.262	0.7120	454.00	0.57159	174.768	143.036	0.7944
336.00	0.40505	143.143	120.656	0.7136	456.00	0.57432	175.290	143.406	0.7956
338.00	0.40802	143.701	121.049	0.7153	458.00	0.57705	175.811	143.776	0.7967
340.00	0.41097	144.257	121.442	0.7169	460.00	0.57977	176.332	144.146	0.7978
342.00	0.41392	144.813	121.834	0.7185	462.00	0.58249	176.853	144.515	0.7990
344.00	0.41686	145.367	122.225	0.7202	464.00	0.58521	177.373	144.885	0.8001
346.00	0.41980	145.920	122.615	0.7218	466.00	0.58793	177.893	145.254	0.8012
348.00	0.42273	146.473	123.005	0.7234	468.00	0.59064	178.413	145.623	0.8023
350.00	0.42565	147.024	123.394	0.7249	470.00	0.59336	178.932	145.992	0.8034
352.00	0.42856	147.574	123.782	0.7265	472.00	0.59607	179.451	146.360	0.8045
354.00	0.43147	148.124	124.170	0.7281	474.00	0.59878	179.970	146.729	0.8056
356.00	0.43438	148.672	124.557	0.7296	476.00	0.60149	180.489	147.097	0.8067
358.00	0.43727	149.220	124.944	0.7311	478.00	0.60420	181.007	147.465	0.8078
360.00	0.44017	149.766	125.330	0.7327	480.00	0.60690	181.526	147.833	0.8089
362.00	0.44305	150.312	125.716	0.7342	482.00	0.60960	182.044	148.201	0.8100
364.00	0.44593	150.857	126.101	0.7357	484.00	0.61231	182.561	148.569	0.8110
366.00	0.44881	151.401	126.485	0.7372	486.00	0.61501	183.079	148.936	0.8121
368.00	0.45168	151.945	126.869	0.7386	488.00	0.61771	183.596	149.304	0.8132
370.00	0.45455	152.488	127.253	0.7401	490.00	0.62040	184.113	149.671	0.8142
372.00	0.45741	153.029	127.636	0.7416	492.00	0.62310	184.630	150.038	0.8153
374.00	0.46027	153.571	128.019	0.7430	494.00	0.62579	185.146	150.405	0.8163
376.00	0.46312	154.111	128.401	0.7445	496.00	0.62849	185.662	150.772	0.8174
378.00	0.46597	154.651	128.782	0.7459	498.00	0.63118	186.179	151.138	0.8184
380.00	0.46881	155.190	129.164	0.7473	500.00	0.63387	186.694	151.505	0.8194
382.00	0.47165	155.728	129.545	0.7487	502.00	0.63655	187.210	151.871	0.8205
384.00	0.47448	156.266	129.925	0.7501	504.00	0.63924	187.725	152.238	0.8215
386.00	0.47731	156.803	130.305	0.7515	506.00	0.64193	188.241	152.604	0.8225
388.00	0.48014	157.340	130.685	0.7529	508.00	0.64461	188.756	152.970	0.8235
390.00	0.48296	157.876	131.064	0.7543	510.00	0.64729	189.271	153.336	0.8245
392.00	0.48578	158.411	131.443	0.7557	512.00	0.64997	189.785	153.702	0.8256
394.00	0.48859	158.946	131.821	0.7570	514.00	0.65265	190.300	154.067	0.8266
396.00	0.49140	159.480	132.199	0.7584	516.00	0.65533	190.814	154.433	0.8276
398.00	0.49421	160.013	132.577	0.7597	518.00	0.65801	191.328	154.798	0.8285
400.00	0.49701	160.546	132.954	0.7611	520.00	0.66069	191.842	155.164	0.8295
402.00	0.49981	161.079	133.331	0.7624	522.00	0.66336	192.356	155.529	0.8305
404.00	0.50261	161.611	133.708	0.7637	524.00	0.66604	192.869	155.894	0.8315
406.00	0.50540	162.142	134.085	0.7650	526.00	0.66871	193.383	156.259	0.8325
408.00	0.50819	162.673	134.461	0.7663	528.00	0.67138	193.896	156.624	0.8335
410.00	0.51098	163.204	134.836	0.7676	530.00	0.67405	194.409	156.989	0.8344
412.00	0.51376	163.734	135.212	0.7689	532.00	0.67672	194.922	157.353	0.8354
414.00	0.51655	164.263	135.587	0.7702	534.00	0.67939	195.435	157.718	0.8364
416.00	0.51932	164.793	135.962	0.7715	536.00	0.68205	195.947	158.083	0.8373
418.00	0.52210	165.321	136.337	0.7727	538.00	0.68472	196.460	158.447	0.8383
420.00	0.52487	165.849	136.711	0.7740	540.00	0.68738	196.972	158.811	0.8392

400.00 PSIA ISOBAR

TEMPER-ATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
120.00	0.01866	4.0504	2.6693	0.0230
122.00	0.01876	5.0269	3.6387	0.0310
124.00	0.01886	6.0043	4.6086	0.0390
126.00	0.01896	6.9819	5.5786	0.0468
128.00	0.01906	7.9592	6.5482	0.0545
130.00	0.01917	8.9359	7.5171	0.0621
132.00	0.01928	9.9117	8.4848	0.0695
134.00	0.01939	10.8863	9.4511	0.0769
136.00	0.01950	11.8594	10.4158	0.0841
138.00	0.01962	12.8312	11.3790	0.0912
140.00	0.01974	13.8014	12.3405	0.0981
142.00	0.01986	14.7704	13.3005	0.1050
144.00	0.01998	15.7381	14.2590	0.1118
146.00	0.02011	16.7049	15.2165	0.1184
148.00	0.02024	17.6711	16.1731	0.1250
150.00	0.02037	18.6371	17.1293	0.1315
152.00	0.02051	19.6035	18.0856	0.1379
154.00	0.02064	20.5706	19.0425	0.1442
156.00	0.02079	21.5393	20.0007	0.1505
158.00	0.02093	22.5101	20.9607	0.1567
160.00	0.02108	23.4838	21.9233	0.1628
162.00	0.02124	24.4612	22.8893	0.1689
164.00	0.02139	25.4430	23.8594	0.1749
166.00	0.02156	26.4302	24.8346	0.1809
168.00	0.02172	27.4236	25.8156	0.1868
170.00	0.02190	28.4241	26.8033	0.1927
172.00	0.02208	29.4327	27.7986	0.1986
174.00	0.02226	30.4502	28.8025	0.2045
176.00	0.02245	31.4777	29.8158	0.2104
178.00	0.02265	32.5160	30.8395	0.2162
180.00	0.02285	33.5662	31.8745	0.2221
182.00	0.02307	34.6293	32.9218	0.2280
184.00	0.02329	35.7064	33.9824	0.2339
186.00	0.02352	36.7985	35.0573	0.2398
188.00	0.02377	37.9068	36.1476	0.2457
190.00	0.02402	39.0327	37.2545	0.2517
192.00	0.02429	40.1565	38.3583	C.2575
194.00	0.02458	41.3005	39.4812	0.2635
196.00	0.02488	42.4647	40.6231	0.2694
198.00	0.02520	43.6457	41.7803	0.2754
200.00	0.02555	44.8520	42.9612	0.2815
202.00	0.02592	46.0815	44.1632	0.2876
204.00	0.02632	47.3429	45.3948	0.2939
206.00	0.02676	48.6446	46.6640	0.3002
208.00	0.02724	49.9893	47.9727	0.3067
210.00	0.02779	51.3829	49.3260	0.3134
212.00	0.02841	52.8433	50.7405	0.3204
214.00	0.02913	54.3960	52.2397	0.3277
216.00	0.03001	56.0833	53.8623	0.3355
218.00	0.03112	58.0499	55.7464	0.3446
* 219.384	0.03213	59.7072	57.3286	0.3522
* 219.384	0.11074	95.2872	87.0900	0.5144
220.00	0.11358	96.0251	87.6174	0.5178
222.00	0.12144	98.0351	89.0456	0.5269
224.00	0.12804	99.6951	90.2175	0.5343
226.00	0.13387	101.148	91.2391	0.5408
228.00	0.13918	102.462	92.1600	0.5466
230.00	0.14411	103.675	93.0079	0.5519
232.00	0.14874	104.810	93.8001	0.5568
234.00	0.15313	105.883	94.5482	0.5614
236.00	0.15732	106.905	95.2605	0.5657
238.00	0.16134	107.886	95.9429	0.5699
240.00	0.16523	108.830	96.6001	0.5738
242.00	0.16898	109.744	97.2357	0.5776
244.00	0.17263	110.631	97.8524	0.5813
246.00	0.17619	111.494	98.4526	0.5848
248.00	0.17965	112.336	99.0382	0.5882
250.00	0.18304	113.160	99.6107	0.5915
252.00	0.18636	113.966	100.172	0.5947
254.00	0.18962	114.757	100.722	0.5979
256.00	0.19281	115.535	101.262	0.6009
258.00	0.19596	116.299	101.794	0.6039
260.00	0.19905	117.052	102.318	0.6068
262.00	0.20210	117.794	102.835	0.6096
264.00	0.20510	118.526	103.344	0.6124
266.00	0.20807	119.249	103.848	0.6151
268.00	0.21099	119.963	104.345	0.6178
270.00	0.21389	120.669	104.837	0.6204
272.00	0.21675	121.368	105.324	0.6230
274.00	0.21958	122.059	105.806	0.6255
276.00	0.22238	122.744	106.284	0.6280
278.00	0.22515	123.423	106.757	0.6305
280.00	0.22790	124.096	107.227	0.6329
282.00	0.23062	124.763	107.692	0.6353
284.00	0.23332	125.425	108.155	0.6376
286.00	0.23600	126.082	108.613	0.6399
288.00	0.23865	126.734	109.069	0.6422
290.00	0.24129	127.382	109.522	0.6444
292.00	0.24390	128.026	109.972	0.6466
294.00	0.24650	128.665	110.419	0.6488
296.00	0.24908	129.301	110.863	0.6510
298.00	0.25165	129.932	111.305	0.6531
300.00	0.25419	130.561	111.745	0.6552

* PHASE CHANGE

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.25673	131.186	112.182	0.6573	422.00	0.39318	165.337	136.234	0.7529
304.00	0.25925	131.807	112.618	0.6593	424.00	0.39531	165.876	136.615	0.7542
306.00	0.26175	132.426	113.051	0.6614	426.00	0.39744	166.413	136.995	0.7554
308.00	0.26424	133.041	113.482	0.6634	428.00	0.39956	166.951	137.375	0.7567
310.00	0.26672	133.654	113.911	0.6654	430.00	0.40168	167.487	137.755	0.7579
312.00	0.26918	134.264	114.339	0.6673	432.00	0.40379	168.023	138.134	0.7592
314.00	0.27163	134.871	114.765	0.6693	434.00	0.40591	168.559	138.513	0.7604
316.00	0.27407	135.476	115.189	0.6712	436.00	0.40802	169.094	138.892	0.7616
318.00	0.27650	136.078	115.611	0.6731	438.00	0.41013	169.628	139.270	0.7629
320.00	0.27892	136.678	116.032	0.6750	440.00	0.41224	170.162	139.648	0.7641
322.00	0.28133	137.275	116.451	0.6768	442.00	0.41434	170.696	140.026	0.7653
324.00	0.28372	137.871	116.869	0.6787	444.00	0.41644	171.229	140.403	0.7665
326.00	0.28611	138.464	117.286	0.6805	446.00	0.41854	171.761	140.780	0.7677
328.00	0.28849	139.055	117.701	0.6823	448.00	0.42064	172.293	141.157	0.7689
330.00	0.29086	139.644	118.114	0.6841	450.00	0.42273	172.825	141.534	0.7701
332.00	0.29322	140.231	118.527	0.6859	452.00	0.42483	173.356	141.910	0.7712
334.00	0.29557	140.817	118.938	0.6876	454.00	0.42692	173.887	142.286	0.7724
336.00	0.29791	141.400	119.349	0.6894	456.00	0.42901	174.417	142.662	0.7736
338.00	0.30024	141.982	119.758	0.6911	458.00	0.43109	174.947	143.037	0.7747
340.00	0.30257	142.562	120.165	0.6928	460.00	0.43318	175.476	143.412	0.7759
342.00	0.30489	143.141	120.572	0.6945	462.00	0.43526	176.005	143.787	0.7770
344.00	0.30720	143.717	120.978	0.6962	464.00	0.43734	176.534	144.162	0.7782
346.00	0.30951	144.293	121.383	0.6978	466.00	0.43942	177.062	144.536	0.7793
348.00	0.31180	144.867	121.787	0.6995	468.00	0.44150	177.590	144.910	0.7804
350.00	0.31409	145.439	122.190	0.7011	470.00	0.44357	178.118	145.284	0.7816
352.00	0.31638	146.010	122.591	0.7028	472.00	0.44564	178.645	145.658	0.7827
354.00	0.31865	146.580	122.993	0.7044	474.00	0.44771	179.171	146.031	0.7838
356.00	0.32092	147.148	123.393	0.7060	476.00	0.44978	179.698	146.404	0.7849
358.00	0.32319	147.715	123.792	0.7076	478.00	0.45185	180.224	146.777	0.7860
360.00	0.32545	148.280	124.191	0.7091	480.00	0.45392	180.749	147.150	0.7871
362.00	0.32770	148.845	124.588	0.7107	482.00	0.45598	181.275	147.523	0.7882
364.00	0.32995	149.408	124.985	0.7123	484.00	0.45805	181.800	147.895	0.7893
366.00	0.33219	149.970	125.381	0.7138	486.00	0.46011	182.324	148.267	0.7904
368.00	0.33443	150.531	125.777	0.7153	488.00	0.46217	182.849	148.639	0.7914
370.00	0.33666	151.091	126.172	0.7168	490.00	0.46422	183.373	149.011	0.7925
372.00	0.33888	151.650	126.566	0.7183	492.00	0.46628	183.897	149.382	0.7936
374.00	0.34110	152.208	126.959	0.7198	494.00	0.46833	184.420	149.753	0.7946
376.00	0.34332	152.765	127.352	0.7213	496.00	0.47039	184.943	150.125	0.7957
378.00	0.34553	153.320	127.744	0.7228	498.00	0.47244	185.466	150.496	0.7968
380.00	0.34774	153.875	128.135	0.7243	500.00	0.47449	185.989	150.866	0.7978
382.00	0.34994	154.429	128.526	0.7257	502.00	0.47654	186.511	151.237	0.7988
384.00	0.35214	154.982	128.916	0.7272	504.00	0.47859	187.033	151.607	0.7999
386.00	0.35433	155.534	129.306	0.7286	506.00	0.48063	187.554	151.978	0.8009
388.00	0.35652	156.085	129.695	0.7300	508.00	0.48268	188.076	152.348	0.8019
390.00	0.35871	156.635	130.083	0.7314	510.00	0.48472	188.597	152.718	0.8030
392.00	0.36089	157.185	130.471	0.7328	512.00	0.48676	189.118	153.087	0.8040
394.00	0.36307	157.733	130.859	0.7342	514.00	0.48880	189.639	153.457	0.8050
396.00	0.36524	158.281	131.246	0.7356	516.00	0.49084	190.159	153.826	0.8060
398.00	0.36741	158.828	131.632	0.7370	518.00	0.49288	190.679	154.196	0.8070
400.00	0.36958	159.374	132.018	0.7384	520.00	0.49492	191.199	154.565	0.8080
402.00	0.37174	159.920	132.404	0.7397	522.00	0.49695	191.719	154.934	0.8090
404.00	0.37390	160.465	132.789	0.7411	524.00	0.49899	192.238	155.302	0.8100
406.00	0.37605	161.009	133.173	0.7424	526.00	0.50102	192.757	155.671	0.8110
408.00	0.37821	161.552	133.557	0.7438	528.00	0.50305	193.276	156.040	0.8120
410.00	0.38035	162.095	133.941	0.7451	530.00	0.50508	193.795	156.408	0.8130
412.00	0.38250	162.637	134.324	0.7464	532.00	0.50711	194.313	156.776	0.8139
414.00	0.38464	163.178	134.707	0.7477	534.00	0.50914	194.832	157.144	0.8149
416.00	0.38678	163.719	135.089	0.7490	536.00	0.51117	195.350	157.512	0.8159
418.00	0.38892	164.259	135.471	0.7503	538.00	0.51320	195.867	157.880	0.8168
420.00	0.39105	164.799	135.853	0.7516	540.00	0.51522	196.385	158.248	0.8178

500.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
116.00	0.01845	2.3448	0.6380	0.0056
118.00	0.01854	3.3156	1.6003	0.0139
120.00	0.01863	4.2884	2.5643	0.0221
122.00	0.01873	5.2626	3.5295	0.0301
124.00	0.01883	6.2375	4.4953	0.0381
126.00	0.01893	7.2126	5.4610	0.0459
128.00	0.01903	8.1874	6.4263	0.0535
130.00	0.01914	9.1615	7.3906	0.0611
132.00	0.01925	10.1345	8.3537	0.0685
134.00	0.01936	11.1063	9.3153	0.0758
136.00	0.01947	12.0766	10.2752	0.0830
138.00	0.01958	13.0453	11.2333	0.0901
140.00	0.01970	14.0124	12.1896	0.0970
142.00	0.01982	14.9780	13.1442	0.1039
144.00	0.01994	15.9422	14.0971	0.1106
146.00	0.02007	16.9053	15.0487	0.1173
148.00	0.02019	17.8676	15.9993	0.1238
150.00	0.02032	18.8295	16.9492	0.1303
152.00	0.02046	19.7915	17.8988	0.1366
154.00	0.02059	20.7540	18.8488	0.1429
156.00	0.02073	21.7177	19.7996	0.1492
158.00	0.02087	22.6833	20.7519	0.1553
160.00	0.02102	23.6513	21.7064	0.1614
162.00	0.02117	24.6227	22.6639	0.1674
164.00	0.02132	25.5980	23.6250	0.1734
166.00	0.02148	26.5783	24.5905	0.1794
168.00	0.02165	27.5641	25.5613	0.1853
170.00	0.02181	28.5565	26.5382	0.1911
172.00	0.02199	29.5563	27.5219	0.1970
174.00	0.02217	30.5643	28.5134	0.2028
176.00	0.02235	31.5813	29.5134	0.2086
178.00	0.02254	32.6083	30.5227	0.2144
180.00	0.02274	33.6461	31.5422	0.2202
182.00	0.02294	34.6955	32.5726	0.2260
184.00	0.02316	35.7575	33.6149	0.2318
186.00	0.02338	36.8329	34.6697	0.2376
188.00	0.02361	37.9226	35.7380	0.2435
190.00	0.02385	39.0276	36.8207	0.2493
192.00	0.02411	40.1280	37.8975	0.2551
194.00	0.02437	41.2455	38.9904	0.2609
196.00	0.02465	42.3795	40.0984	0.2667
198.00	0.02495	43.5258	41.2172	0.2725
200.00	0.02527	44.6919	42.3541	0.2784
202.00	0.02560	45.8742	43.5053	0.2842
204.00	0.02596	47.0796	44.6773	0.2902
206.00	0.02635	48.3139	45.8756	0.2962
208.00	0.02678	49.5758	47.0984	0.3023
210.00	0.02724	50.8655	48.3454	0.3085
212.00	0.02775	52.1916	49.6242	0.3148
214.00	0.02832	53.5640	50.9436	0.3213
216.00	0.02897	54.9955	52.3149	0.3280
218.00	0.02973	56.5685	53.8178	0.3353
220.00	0.03064	58.3739	55.5391	0.3436
222.00	0.03178	60.4154	57.4752	0.3528
224.00	0.03332	62.8279	59.7449	0.3637
226.00	0.03578	66.0260	62.7158	0.3779
228.00	0.06752	86.3179	80.0704	0.4671
230.00	0.08345	92.5078	84.7866	0.4942
232.00	0.09186	95.4605	86.9615	0.5070
234.00	0.09837	97.6594	88.5573	0.5164
236.00	0.10392	99.4837	89.8688	0.5242
238.00	0.10884	101.078	91.0071	0.5309
240.00	0.11334	102.514	92.0275	0.5369
242.00	0.11750	103.834	92.9618	0.5424
244.00	0.12142	105.065	93.8303	0.5474
246.00	0.12513	106.224	94.6464	0.5522
248.00	0.12867	107.325	95.4201	0.5566
250.00	0.13206	108.378	96.1584	0.5608
252.00	0.13533	109.389	96.8667	0.5649
254.00	0.13850	110.364	97.5495	0.5687
256.00	0.14156	111.308	98.2100	0.5724
258.00	0.14455	112.226	98.8510	0.5760
260.00	0.14746	113.119	99.4748	0.5795
262.00	0.15030	113.990	100.083	0.5828
264.00	0.15308	114.842	100.678	0.5860
266.00	0.15580	115.676	101.260	0.5892
268.00	0.15848	116.494	101.831	0.5922
270.00	0.16110	117.298	102.392	0.5952
272.00	0.16368	118.088	102.943	0.5981
274.00	0.16623	118.866	103.485	0.6010
276.00	0.16873	119.632	104.020	0.6038
278.00	0.17120	120.388	104.547	0.6065
280.00	0.17364	121.134	105.068	0.6092
282.00	0.17604	121.870	105.582	0.6118
284.00	0.17842	122.598	106.090	0.6144
286.00	0.18077	123.318	106.592	0.6169
288.00	0.18310	124.031	107.089	0.6194
290.00	0.18540	124.736	107.582	0.6218
292.00	0.18768	125.434	108.070	0.6242
294.00	0.18993	126.127	108.553	0.6266
296.00	0.19217	126.813	109.032	0.6289
298.00	0.19438	127.493	109.508	0.6312
300.00	0.19658	128.168	109.980	0.6335

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.19876	128.838	110.448	0.6357	422.00	0.31263	164.303	135.377	0.7351
304.00	0.20092	129.503	110.913	0.6379	424.00	0.31437	164.853	135.765	0.7364
306.00	0.20307	130.164	111.375	0.6401	426.00	0.31612	165.401	136.152	0.7377
308.00	0.20520	130.820	111.833	0.6422	428.00	0.31785	165.949	136.540	0.7390
310.00	0.20732	131.472	112.289	0.6443	430.00	0.31959	166.497	136.926	0.7402
312.00	0.20942	132.119	112.743	0.6464	432.00	0.32132	167.043	137.312	0.7415
314.00	0.21151	132.763	113.193	0.6484	434.00	0.32305	167.589	137.698	0.7428
316.00	0.21358	133.403	113.641	0.6505	436.00	0.32478	168.134	138.083	0.7440
318.00	0.21565	134.040	114.087	0.6525	438.00	0.32651	168.679	138.468	0.7453
320.00	0.21770	134.673	114.530	0.6545	440.00	0.32823	169.223	138.853	0.7465
322.00	0.21974	135.303	114.972	0.6564	442.00	0.32995	169.766	139.237	0.7477
324.00	0.22177	135.930	115.411	0.6584	444.00	0.33167	170.308	139.620	0.7490
326.00	0.22378	136.553	115.848	0.6603	446.00	0.33338	170.850	140.004	0.7502
328.00	0.22579	137.174	116.283	0.6622	448.00	0.33510	171.392	140.387	0.7514
330.00	0.22779	137.792	116.716	0.6641	450.00	0.33681	171.933	140.769	0.7526
332.00	0.22977	138.408	117.148	0.6659	452.00	0.33852	172.473	141.151	0.7538
334.00	0.23175	139.020	117.577	0.6678	454.00	0.34023	173.013	141.533	0.7550
336.00	0.23372	139.630	118.005	0.6696	456.00	0.34193	173.552	141.914	0.7562
338.00	0.23568	140.238	118.432	0.6714	458.00	0.34363	174.090	142.295	0.7573
340.00	0.23763	140.844	118.857	0.6732	460.00	0.34533	174.628	142.676	0.7585
342.00	0.23957	141.447	119.280	0.6749	462.00	0.34703	175.166	143.056	0.7597
344.00	0.24151	142.048	119.702	0.6767	464.00	0.34873	175.703	143.436	0.7608
346.00	0.24344	142.647	120.122	0.6784	466.00	0.35042	176.239	143.816	0.7620
348.00	0.24536	143.243	120.541	0.6801	468.00	0.35212	176.776	144.196	0.7631
350.00	0.24727	143.838	120.959	0.6819	470.00	0.35381	177.311	144.575	0.7643
352.00	0.24918	144.431	121.376	0.6835	472.00	0.35550	177.846	144.953	0.7654
354.00	0.25108	145.022	121.791	0.6852	474.00	0.35718	178.381	145.332	0.7666
356.00	0.25297	145.611	122.205	0.6869	476.00	0.35887	178.915	145.710	0.7677
358.00	0.25485	146.199	122.618	0.6885	478.00	0.36055	179.449	146.088	0.7688
360.00	0.25673	146.784	123.030	0.6902	480.00	0.36223	179.982	146.466	0.7699
362.00	0.25861	147.368	123.441	0.6918	482.00	0.36391	180.515	146.843	0.7710
364.00	0.26047	147.951	123.850	0.6934	484.00	0.36559	181.047	147.220	0.7721
366.00	0.26234	148.532	124.259	0.6950	486.00	0.36727	181.579	147.597	0.7732
368.00	0.26419	149.111	124.666	0.6965	488.00	0.36895	182.110	147.973	0.7743
370.00	0.26604	149.689	125.073	0.6981	490.00	0.37062	182.642	148.350	0.7754
372.00	0.26789	150.266	125.479	0.6997	492.00	0.37229	183.172	148.726	0.7765
374.00	0.26973	150.841	125.884	0.7012	494.00	0.37396	183.703	149.101	0.7776
376.00	0.27156	151.414	126.288	0.7027	496.00	0.37563	184.233	149.477	0.7786
378.00	0.27340	151.987	126.691	0.7043	498.00	0.37730	184.762	149.852	0.7797
380.00	0.27522	152.558	127.093	0.7058	500.00	0.37897	185.292	150.227	0.7807
382.00	0.27704	153.128	127.494	0.7073	502.00	0.38063	185.820	150.602	0.7818
384.00	0.27886	153.696	127.895	0.7087	504.00	0.38229	186.349	150.977	0.7829
386.00	0.28067	154.264	128.294	0.7102	506.00	0.38396	186.877	151.351	0.7839
388.00	0.28248	154.830	128.694	0.7117	508.00	0.38562	187.405	151.725	0.7849
390.00	0.28428	155.395	129.092	0.7131	510.00	0.38728	187.932	152.099	0.7860
392.00	0.28608	155.959	129.489	0.7146	512.00	0.38893	188.459	152.473	0.7870
394.00	0.28788	156.522	129.886	0.7160	514.00	0.39059	188.986	152.846	0.7880
396.00	0.28967	157.084	130.282	0.7174	516.00	0.39225	189.513	153.220	0.7891
398.00	0.29145	157.645	130.678	0.7188	518.00	0.39390	190.039	153.593	0.7901
400.00	0.29324	158.205	131.073	0.7202	520.00	0.39555	190.565	153.966	0.7911
402.00	0.29502	158.764	131.467	0.7216	522.00	0.39720	191.090	154.338	0.7921
404.00	0.29679	159.322	131.860	0.7230	524.00	0.39885	191.615	154.711	0.7931
406.00	0.29857	159.879	132.253	0.7244	526.00	0.40050	192.140	155.083	0.7941
408.00	0.30034	160.435	132.646	0.7258	528.00	0.40215	192.665	155.455	0.7951
410.00	0.30210	160.990	133.038	0.7271	530.00	0.40380	193.189	155.827	0.7961
412.00	0.30386	161.544	133.429	0.7285	532.00	0.40544	193.713	156.199	0.7971
414.00	0.30562	162.098	133.819	0.7298	534.00	0.40709	194.237	156.571	0.7981
416.00	0.30738	162.650	134.210	0.7311	536.00	0.40873	194.761	156.942	0.7990
418.00	0.30913	163.202	134.599	0.7325	538.00	0.41037	195.284	157.314	0.8000
420.00	0.31088	163.753	134.988	0.7338	540.00	0.41202	195.807	157.685	0.8010

600.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02283	34.7741	32.2397	0.2241
					184.00	0.02303	35.8226	33.2655	0.2298
					186.00	0.02324	36.8832	34.3025	0.2356
					188.00	0.02346	37.9566	35.3514	0.2413
					190.00	0.02369	39.0435	36.4128	0.2471
					192.00	0.02393	40.1238	37.4663	0.2527
					194.00	0.02419	41.2187	38.5334	0.2584
					196.00	0.02445	42.3274	39.6128	0.2641
					198.00	0.02473	43.4450	40.6996	0.2698
					200.00	0.02502	44.5785	41.8006	0.2755
					202.00	0.02533	45.7233	42.9111	0.2812
					204.00	0.02566	46.8853	44.0365	0.2869
					206.00	0.02601	48.0687	45.1810	0.2927
					208.00	0.02638	49.2704	46.3410	0.2985
					210.00	0.02679	50.4878	47.5133	0.3043
					212.00	0.02723	51.7256	48.7022	0.3102
					214.00	0.02771	52.9878	49.9109	0.3162
					216.00	0.02824	54.2783	51.1423	0.3222
					218.00	0.02884	55.6647	52.4627	0.3286
					220.00	0.02951	57.2118	53.9350	0.3357
					222.00	0.03029	58.8721	55.5090	0.3433
					224.00	0.03121	60.6622	57.1969	0.3514
					226.00	0.03234	62.6259	59.0355	0.3601
					228.00	0.03378	64.8488	61.0977	0.3700
					230.00	0.03580	67.6592	63.6847	0.3822
					232.00	0.03899	71.3418	67.0123	0.3982
					234.00	0.04532	76.9666	71.9347	0.4223
116.00	0.01843	2.5881	0.5424	0.0048	236.00	0.05641	84.2853	78.0221	0.4534
118.00	0.01852	3.5566	1.5007	0.0130	238.00	0.06602	89.3741	82.0443	0.4749
120.00	0.01861	4.5271	2.4608	0.0212	240.00	0.07322	92.7768	84.6466	0.4892
122.00	0.01871	5.4990	3.4220	0.0292	242.00	0.07908	95.3669	86.5870	0.4999
124.00	0.01880	6.4715	4.3837	0.0371	244.00	0.08410	97.5011	88.1633	0.5087
126.00	0.01890	7.4442	5.3453	0.0449	246.00	0.08857	99.3450	89.5109	0.5162
128.00	0.01901	8.4165	6.3063	0.0526	248.00	0.09264	100.988	90.7021	0.5229
130.00	0.01911	9.3881	7.2662	0.0601	250.00	0.09640	102.483	91.7792	0.5289
132.00	0.01922	10.3585	8.2249	0.0675	252.00	0.09992	103.864	92.7696	0.5344
134.00	0.01933	11.3276	9.1819	0.0748	254.00	0.10325	105.156	93.6917	0.5395
136.00	0.01944	12.2950	10.1371	0.0820	256.00	0.10642	106.374	94.5586	0.5443
138.00	0.01955	13.2608	11.0903	0.0890	258.00	0.10945	107.532	95.3799	0.5488
140.00	0.01966	14.2248	12.0416	0.0960	260.00	0.11236	108.638	96.1629	0.5530
142.00	0.01978	15.1872	12.9909	0.1028	262.00	0.11516	109.700	96.9132	0.5571
144.00	0.01990	16.1481	13.9385	0.1095	264.00	0.11788	110.724	97.6354	0.5610
146.00	0.02002	17.1077	14.8845	0.1161	266.00	0.12052	111.715	98.3331	0.5647
148.00	0.02015	18.0663	15.8292	0.1226	268.00	0.12309	112.676	99.0091	0.5683
150.00	0.02028	19.0243	16.7730	0.1291	270.00	0.12559	113.611	99.6660	0.5718
152.00	0.02041	19.9821	17.7164	0.1354	272.00	0.12804	114.522	100.306	0.5752
154.00	0.02054	20.9403	18.6597	0.1417	274.00	0.13043	115.412	100.930	0.5784
156.00	0.02068	21.8993	19.6036	0.1479	276.00	0.13278	116.283	101.541	0.5816
158.00	0.02082	22.8599	20.5486	0.1540	278.00	0.13508	117.136	102.139	0.5847
160.00	0.02096	23.8227	21.4955	0.1600	280.00	0.13734	117.974	102.725	0.5877
162.00	0.02111	24.7884	22.4449	0.1660	282.00	0.13956	118.796	103.301	0.5906
164.00	0.02126	25.7577	23.3975	0.1720	284.00	0.14174	119.605	103.867	0.5935
166.00	0.02141	26.7314	24.3540	0.1779	286.00	0.14390	120.401	104.424	0.5963
168.00	0.02157	27.7103	25.3153	0.1837	288.00	0.14602	121.186	104.973	0.5990
170.00	0.02173	28.6952	26.2821	0.1896	290.00	0.14811	121.960	105.515	0.6017
172.00	0.02190	29.6869	27.2551	0.1954	292.00	0.15018	122.723	106.049	0.6043
174.00	0.02208	30.6861	28.2351	0.2011	294.00	0.15222	123.477	106.576	0.6069
176.00	0.02225	31.6937	29.2228	0.2069	296.00	0.15424	124.222	107.097	0.6094
178.00	0.02244	32.7104	30.2190	0.2126	298.00	0.15623	124.959	107.613	0.6119
180.00	0.02263	33.7369	31.2244	0.2184	300.00	0.15821	125.688	108.122	0.6143

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.16016	126.410	108.627	0.6167	422.00	0.25904	163.276	134.515	0.7202
304.00	0.16209	127.124	109.127	0.6191	424.00	0.26052	163.837	134.911	0.7215
306.00	0.16401	127.832	109.622	0.6214	426.00	0.26201	164.397	135.306	0.7228
308.00	0.16591	128.533	110.113	0.6237	428.00	0.26349	164.956	135.700	0.7241
310.00	0.16779	129.229	110.599	0.6259	430.00	0.26497	165.514	136.094	0.7254
312.00	0.16966	129.919	111.082	0.6282	432.00	0.26645	166.071	136.487	0.7267
314.00	0.17151	130.603	111.561	0.6303	434.00	0.26792	166.628	136.880	0.7280
316.00	0.17334	131.283	112.036	0.6325	436.00	0.26939	167.183	137.272	0.7293
318.00	0.17517	131.957	112.508	0.6346	438.00	0.27086	167.738	137.663	0.7306
320.00	0.17698	132.627	112.977	0.6367	440.00	0.27233	168.292	138.054	0.7318
322.00	0.17877	133.292	113.443	0.6388	442.00	0.27379	168.845	138.445	0.7331
324.00	0.18056	133.953	113.906	0.6408	444.00	0.27526	169.397	138.835	0.7343
326.00	0.18233	134.610	114.366	0.6429	446.00	0.27672	169.949	139.225	0.7356
328.00	0.18409	135.263	114.823	0.6449	448.00	0.27817	170.499	139.614	0.7368
330.00	0.18585	135.912	115.278	0.6468	450.00	0.27963	171.050	140.002	0.7380
332.00	0.18759	136.558	115.730	0.6488	452.00	0.28108	171.599	140.390	0.7392
334.00	0.18932	137.200	116.180	0.6507	454.00	0.28253	172.148	140.778	0.7405
336.00	0.19104	137.839	116.628	0.6526	456.00	0.28398	172.696	141.165	0.7417
338.00	0.19275	138.474	117.073	0.6545	458.00	0.28542	173.243	141.552	0.7429
340.00	0.19445	139.107	117.517	0.6564	460.00	0.28687	173.790	141.938	0.7441
342.00	0.19615	139.736	117.958	0.6582	462.00	0.28831	174.336	142.324	0.7452
344.00	0.19783	140.363	118.397	0.6600	464.00	0.28975	174.881	142.710	0.7464
346.00	0.19951	140.986	118.835	0.6619	466.00	0.29119	175.426	143.095	0.7476
348.00	0.20118	141.607	119.270	0.6636	468.00	0.29263	175.970	143.480	0.7488
350.00	0.20284	142.226	119.704	0.6654	470.00	0.29406	176.514	143.864	0.7499
352.00	0.20449	142.842	120.137	0.6672	472.00	0.29549	177.057	144.248	0.7511
354.00	0.20614	143.455	120.567	0.6689	474.00	0.29692	177.600	144.632	0.7522
356.00	0.20778	144.067	120.996	0.6706	476.00	0.29835	178.142	145.015	0.7534
358.00	0.20942	144.675	121.424	0.6723	478.00	0.29978	178.683	145.398	0.7545
360.00	0.21104	145.282	121.850	0.6740	480.00	0.30120	179.224	145.781	0.7556
362.00	0.21266	145.887	122.274	0.6757	482.00	0.30263	179.764	146.163	0.7567
364.00	0.21428	146.489	122.697	0.6774	484.00	0.30405	180.304	146.545	0.7579
366.00	0.21589	147.090	123.119	0.6790	486.00	0.30547	180.843	146.926	0.7590
368.00	0.21749	147.688	123.540	0.6806	488.00	0.30689	181.382	147.307	0.7601
370.00	0.21909	148.285	123.959	0.6823	490.00	0.30831	181.920	147.688	0.7612
372.00	0.22068	148.880	124.377	0.6839	492.00	0.30972	182.458	148.069	0.7623
374.00	0.22227	149.473	124.794	0.6854	494.00	0.31114	182.995	148.449	0.7634
376.00	0.22385	150.064	125.210	0.6870	496.00	0.31255	183.532	148.829	0.7644
378.00	0.22542	150.653	125.624	0.6886	498.00	0.31396	184.068	149.209	0.7655
380.00	0.22699	151.241	126.038	0.6901	500.00	0.31537	184.604	149.588	0.7666
382.00	0.22856	151.828	126.450	0.6917	502.00	0.31678	185.140	149.967	0.7677
384.00	0.23012	152.413	126.862	0.6932	504.00	0.31818	185.675	150.346	0.7687
386.00	0.23168	152.996	127.272	0.6947	506.00	0.31959	186.209	150.725	0.7698
388.00	0.23323	153.578	127.682	0.6962	508.00	0.32099	186.743	151.103	0.7708
390.00	0.23478	154.158	128.090	0.6977	510.00	0.32240	187.277	151.481	0.7719
392.00	0.23632	154.737	128.498	0.6992	512.00	0.32380	187.811	151.859	0.7729
394.00	0.23786	155.315	128.905	0.7007	514.00	0.32520	188.344	152.236	0.7740
396.00	0.23940	155.891	129.310	0.7021	516.00	0.32660	188.876	152.614	0.7750
398.00	0.24093	156.466	129.715	0.7036	518.00	0.32799	189.408	152.991	0.7760
400.00	0.24246	157.040	130.119	0.7050	520.00	0.32939	189.940	153.367	0.7771
402.00	0.24398	157.612	130.523	0.7064	522.00	0.33079	190.471	153.744	0.7781
404.00	0.24550	158.184	130.925	0.7079	524.00	0.33218	191.002	154.120	0.7791
406.00	0.24702	158.754	131.327	0.7093	526.00	0.33357	191.533	154.496	0.7801
408.00	0.24853	159.323	131.728	0.7107	528.00	0.33496	192.063	154.872	0.7811
410.00	0.25004	159.891	132.128	0.7121	530.00	0.33635	192.593	155.248	0.7821
412.00	0.25155	160.458	132.528	0.7134	532.00	0.33774	193.123	155.623	0.7831
414.00	0.25305	161.024	132.927	0.7148	534.00	0.33913	193.652	155.998	0.7841
416.00	0.25455	161.588	133.325	0.7162	536.00	0.34052	194.181	156.373	0.7851
418.00	0.25605	162.152	133.722	0.7175	538.00	0.34190	194.710	156.748	0.7861
420.00	0.25755	162.715	134.119	0.7189	540.00	0.34329	195.238	157.122	0.7871

700.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
116.00	0.01840	2.8320	0.4481	0.0039
118.00	0.01849	3.7983	1.4026	0.0122
120.00	0.01859	4.7665	2.3588	0.0203
122.00	0.01868	5.7361	3.3161	0.0283
124.00	0.01878	6.7063	4.2738	0.0362
126.00	0.01888	7.6766	5.2313	0.0440
128.00	0.01898	8.6466	6.1881	0.0516
130.00	0.01908	9.6157	7.1439	0.0591
132.00	0.01919	10.5836	8.0982	0.0665
134.00	0.01929	11.5500	9.0507	0.0738
136.00	0.01940	12.5147	10.0014	0.0809
138.00	0.01951	13.4777	10.9499	0.0880
140.00	0.01963	14.4388	11.8963	0.0949
142.00	0.01974	15.3982	12.8407	0.1017
144.00	0.01986	16.3558	13.7830	0.1084
146.00	0.01998	17.3121	14.7237	0.1150
148.00	0.02011	18.2671	15.6628	0.1215
150.00	0.02023	19.2214	16.6008	0.1279
152.00	0.02036	20.1753	17.5380	0.1342
154.00	0.02049	21.1293	18.4750	0.1404
156.00	0.02062	22.0839	19.4123	0.1466
158.00	0.02076	23.0398	20.3505	0.1527
160.00	0.02090	23.9976	21.2901	0.1587
162.00	0.02105	24.9580	22.2319	0.1647
164.00	0.02119	25.9217	23.1765	0.1706
166.00	0.02134	26.8893	24.1246	0.1765
168.00	0.02150	27.8618	25.0769	0.1823
170.00	0.02166	28.8397	26.0343	0.1881
172.00	0.02182	29.8239	26.9973	0.1938
174.00	0.02199	30.8151	27.9667	0.1995
176.00	0.02216	31.8139	28.9431	0.2053
178.00	0.02234	32.8212	29.9273	0.2109
180.00	0.02253	33.8376	30.9198	0.2166
182.00	0.02272	34.8637	31.9213	0.2223
184.00	0.02291	35.9001	32.9323	0.2280
186.00	0.02312	36.9475	33.9533	0.2336
188.00	0.02333	38.0065	34.9848	0.2393
190.00	0.02355	39.0776	36.0275	0.2449
192.00	0.02377	40.1402	37.0606	0.2505
194.00	0.02401	41.2158	38.1053	0.2561
196.00	0.02426	42.3029	39.1601	0.2617
198.00	0.02452	43.3963	40.2198	0.2672
200.00	0.02480	44.5026	41.2907	0.2728
202.00	0.02508	45.6167	42.3676	0.2783
204.00	0.02539	46.7437	43.4554	0.2839
206.00	0.02571	47.8872	44.5572	0.2895
208.00	0.02605	49.0427	45.6685	0.2951
210.00	0.02641	50.2062	46.7849	0.3007
212.00	0.02680	51.3805	47.9085	0.3063
214.00	0.02722	52.5668	49.0404	0.3118
216.00	0.02768	53.7655	50.1800	0.3175
218.00	0.02818	55.0386	51.3886	0.3234
220.00	0.02873	56.4429	52.7220	0.3298
222.00	0.02934	57.9186	54.1187	0.3365
224.00	0.03002	59.4618	55.5730	0.3435
226.00	0.03081	61.0806	57.0902	0.3507
228.00	0.03172	62.7922	58.6838	0.3583
230.00	0.03280	64.7778	60.5290	0.3670
232.00	0.03413	66.9510	62.5303	0.3764
234.00	0.03581	69.3858	64.7470	0.3868
236.00	0.03804	72.1875	67.2601	0.3987
238.00	0.04109	75.4749	70.1522	0.4126
240.00	0.04523	79.2582	73.3990	0.4284
242.00	0.05032	83.2246	76.7062	0.4449
244.00	0.05570	86.8932	79.6779	0.4600
246.00	0.06083	90.0489	82.1699	0.4729
248.00	0.06552	92.7306	84.2440	0.4837
250.00	0.06979	95.0426	86.0028	0.4930
252.00	0.07370	97.0762	87.5295	0.5011
254.00	0.07732	98.8986	88.8832	0.5083
256.00	0.08069	100.558	90.1047	0.5148
258.00	0.08387	102.087	91.2229	0.5208
260.00	0.08688	103.512	92.2585	0.5263
262.00	0.08974	104.851	93.2266	0.5314
264.00	0.09248	106.118	94.1389	0.5362
266.00	0.09511	107.325	95.0041	0.5408
268.00	0.09765	108.478	95.8292	0.5451
270.00	0.10011	109.587	96.6197	0.5492
272.00	0.10249	110.656	97.3801	0.5532
274.00	0.10480	111.690	98.1140	0.5570
276.00	0.10706	112.692	98.8245	0.5606
278.00	0.10926	113.667	99.5142	0.5641
280.00	0.11141	114.616	100.185	0.5675
282.00	0.11351	115.543	100.839	0.5708
284.00	0.11557	116.449	101.478	0.5740
286.00	0.11760	117.336	102.103	0.5771
288.00	0.11959	118.206	102.716	0.5802
290.00	0.12154	119.060	103.316	0.5831
292.00	0.12347	119.899	103.906	0.5860
294.00	0.12536	120.725	104.486	0.5888
296.00	0.12723	121.538	105.057	0.5916
298.00	0.12907	122.339	105.619	0.5943
300.00	0.13089	123.128	106.173	0.5969

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.13269	123.908	106.720	0.5995	422.00	0.22086	162.259	133.650	0.7073
304.00	0.13446	124.678	107.260	0.6021	424.00	0.22216	162.831	134.053	0.7087
306.00	0.13622	125.439	107.794	0.6045	426.00	0.22346	163.402	134.456	0.7100
308.00	0.13795	126.191	108.321	0.6070	428.00	0.22476	163.972	134.858	0.7113
310.00	0.13967	126.935	108.843	0.6094	430.00	0.22606	164.541	135.259	0.7127
312.00	0.14137	127.671	109.359	0.6118	432.00	0.22735	165.109	135.659	0.7140
314.00	0.14305	128.400	109.870	0.6141	434.00	0.22864	165.676	136.059	0.7153
316.00	0.14472	129.122	110.376	0.6164	436.00	0.22993	166.242	136.458	0.7166
318.00	0.14637	129.838	110.877	0.6187	438.00	0.23121	166.807	136.856	0.7179
320.00	0.14801	130.548	111.375	0.6209	440.00	0.23250	167.371	137.254	0.7192
322.00	0.14964	131.251	111.868	0.6231	442.00	0.23378	167.934	137.651	0.7204
324.00	0.15125	131.949	112.357	0.6252	444.00	0.23506	168.496	138.048	0.7217
326.00	0.15285	132.642	112.842	0.6274	446.00	0.23633	169.057	138.444	0.7230
328.00	0.15444	133.329	113.324	0.6295	448.00	0.23760	169.618	138.839	0.7242
330.00	0.15601	134.012	113.802	0.6315	450.00	0.23887	170.177	139.234	0.7255
332.00	0.15758	134.689	114.277	0.6336	452.00	0.24014	170.736	139.628	0.7267
334.00	0.15913	135.363	114.749	0.6356	454.00	0.24141	171.293	140.022	0.7279
336.00	0.16068	136.032	115.218	0.6376	456.00	0.24267	171.850	140.415	0.7292
338.00	0.16221	136.697	115.685	0.6396	458.00	0.24394	172.407	140.808	0.7304
340.00	0.16373	137.358	116.148	0.6415	460.00	0.24520	172.962	141.200	0.7316
342.00	0.16525	138.015	116.609	0.6435	462.00	0.24646	173.517	141.592	0.7328
344.00	0.16676	138.668	117.067	0.6454	464.00	0.24771	174.071	141.983	0.7340
346.00	0.16826	139.318	117.523	0.6472	466.00	0.24897	174.624	142.373	0.7352
348.00	0.16975	139.964	117.976	0.6491	468.00	0.25022	175.176	142.764	0.7364
350.00	0.17123	140.608	118.427	0.6509	470.00	0.25147	175.728	143.153	0.7375
352.00	0.17270	141.248	118.876	0.6528	472.00	0.25272	176.279	143.543	0.7387
354.00	0.17417	141.885	119.323	0.6546	474.00	0.25396	176.829	143.932	0.7399
356.00	0.17563	142.519	119.768	0.6564	476.00	0.25521	177.379	144.320	0.7410
358.00	0.17708	143.150	120.211	0.6581	478.00	0.25645	177.928	144.708	0.7422
360.00	0.17853	143.778	120.652	0.6599	480.00	0.25769	178.476	145.096	0.7433
362.00	0.17997	144.404	121.092	0.6616	482.00	0.25893	179.024	145.483	0.7445
364.00	0.18140	145.027	121.529	0.6633	484.00	0.26017	179.571	145.869	0.7456
366.00	0.18283	145.648	121.965	0.6650	486.00	0.26141	180.118	146.256	0.7467
368.00	0.18425	146.266	122.399	0.6667	488.00	0.26264	180.664	146.642	0.7478
370.00	0.18567	146.882	122.832	0.6684	490.00	0.26388	181.209	147.027	0.7490
372.00	0.18708	147.496	123.263	0.6700	492.00	0.26511	181.754	147.413	0.7501
374.00	0.18848	148.108	123.692	0.6717	494.00	0.26634	182.298	147.797	0.7512
376.00	0.18988	148.717	124.121	0.6733	496.00	0.26757	182.842	148.182	0.7523
378.00	0.19127	149.324	124.547	0.6749	498.00	0.26880	183.385	148.566	0.7534
380.00	0.19266	149.929	124.973	0.6765	500.00	0.27002	183.927	148.950	0.7545
382.00	0.19405	150.533	125.397	0.6781	502.00	0.27125	184.469	149.333	0.7555
384.00	0.19542	151.134	125.820	0.6797	504.00	0.27247	185.011	149.716	0.7566
386.00	0.19680	151.734	126.241	0.6812	506.00	0.27369	185.552	150.099	0.7577
388.00	0.19817	152.331	126.661	0.6828	508.00	0.27491	186.093	150.482	0.7588
390.00	0.19953	152.927	127.080	0.6843	510.00	0.27613	186.633	150.864	0.7598
392.00	0.20089	153.522	127.498	0.6858	512.00	0.27735	187.172	151.246	0.7609
394.00	0.20225	154.114	127.915	0.6873	514.00	0.27856	187.711	151.627	0.7619
396.00	0.20360	154.705	128.331	0.6888	516.00	0.27978	188.250	152.008	0.7630
398.00	0.20495	155.295	128.746	0.6903	518.00	0.28099	188.788	152.389	0.7640
400.00	0.20630	155.883	129.160	0.6918	520.00	0.28221	189.326	152.770	0.7650
402.00	0.20764	156.469	129.572	0.6932	522.00	0.28342	189.863	153.150	0.7661
404.00	0.20898	157.054	129.984	0.6947	524.00	0.28463	190.400	153.530	0.7671
406.00	0.21031	157.638	130.395	0.6961	526.00	0.28584	190.936	153.910	0.7681
408.00	0.21164	158.220	130.805	0.6976	528.00	0.28704	191.472	154.290	0.7691
410.00	0.21297	158.801	131.214	0.6990	530.00	0.28825	192.008	154.669	0.7701
412.00	0.21429	159.380	131.622	0.7004	532.00	0.28946	192.543	155.048	0.7712
414.00	0.21561	159.958	132.029	0.7018	534.00	0.29066	193.078	155.426	0.7722
416.00	0.21693	160.535	132.436	0.7032	536.00	0.29186	193.612	155.805	0.7732
418.00	0.21824	161.111	132.841	0.7046	538.00	0.29307	194.146	156.183	0.7742
420.00	0.21955	161.686	133.246	0.7059	540.00	0.29427	194.680	156.561	0.7751

800.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02261	34.9632	31.6161	0.2205
					184.00	0.02280	35.9887	32.6136	0.2261
					186.00	0.02300	37.0243	33.6201	0.2317
					188.00	0.02320	38.0703	34.6362	0.2373
					190.00	0.02341	39.1273	35.6620	0.2429
					192.00	0.02363	40.1745	36.6770	0.2484
					194.00	0.02385	41.2331	37.7020	0.2539
					196.00	0.02409	42.3015	38.7355	0.2594
					198.00	0.02433	43.3742	39.7717	0.2648
					200.00	0.02459	44.4575	40.8170	0.2703
					202.00	0.02486	45.5460	41.8656	0.2757
					204.00	0.02514	46.6442	42.9220	0.2811
					206.00	0.02544	47.7551	43.9890	0.2865
					208.00	0.02575	48.8738	45.0612	0.2920
					210.00	0.02609	49.9953	46.1335	0.2973
					212.00	0.02644	51.1211	47.2072	0.3027
					214.00	0.02681	52.2514	48.2818	0.3080
					216.00	0.02722	53.3844	49.3552	0.3133
					218.00	0.02765	54.5798	50.4865	0.3189
					220.00	0.02812	55.8912	51.7285	0.3249
					222.00	0.02863	57.2539	53.0158	0.3311
					224.00	0.02919	58.6578	54.3370	0.3374
					226.00	0.02980	60.1013	55.6891	0.3439
					228.00	0.03049	61.5879	57.0737	0.3505
					230.00	0.03127	63.2768	58.6477	0.3579
					232.00	0.03216	65.0479	60.2877	0.3655
					234.00	0.03318	66.9215	62.0094	0.3736
					236.00	0.03439	68.9223	63.8318	0.3821
118.00	0.01847	4.0405	1.3058	0.0113	238.00	0.03583	71.0791	65.7756	0.3912
120.00	0.01856	5.0066	2.2582	0.0195	240.00	0.03757	73.4202	67.8590	0.4010
122.00	0.01866	5.9739	3.2117	0.0275	242.00	0.03968	75.9622	70.0878	0.4115
124.00	0.01875	6.9419	4.1655	0.0353	244.00	0.04223	78.6885	72.4374	0.4227
126.00	0.01885	7.9099	5.1190	0.0431	246.00	0.04519	81.5291	74.8393	0.4343
128.00	0.01895	8.8775	6.0719	0.0507	248.00	0.04847	84.3693	77.1933	0.4458
130.00	0.01905	9.8442	7.0235	0.0582	250.00	0.05192	87.0958	79.4091	0.4568
132.00	0.01916	10.8097	7.9736	0.0656	252.00	0.05539	89.6378	81.4374	0.4669
134.00	0.01926	11.7736	8.9218	0.0728	254.00	0.05878	91.9724	83.2698	0.4761
136.00	0.01937	12.7357	9.8680	0.0799	256.00	0.06205	94.1076	84.9218	0.4845
138.00	0.01948	13.6959	10.8120	0.0869	258.00	0.06517	96.0648	86.4172	0.4921
140.00	0.01959	14.6542	11.7537	0.0938	260.00	0.06814	97.8685	87.7806	0.4991
142.00	0.01971	15.6106	12.6932	0.1006	262.00	0.07098	99.5416	89.0337	0.5055
144.00	0.01982	16.5653	13.6306	0.1073	264.00	0.07369	101.104	90.1945	0.5115
146.00	0.01994	17.5183	14.5660	0.1139	266.00	0.07629	102.572	91.2778	0.5170
148.00	0.02006	18.4700	15.4998	0.1203	268.00	0.07879	103.959	92.2955	0.5222
150.00	0.02019	19.4207	16.4322	0.1267	270.00	0.08119	105.277	93.2571	0.5271
152.00	0.02031	20.3708	17.3637	0.1330	272.00	0.08352	106.535	94.1705	0.5317
154.00	0.02044	21.3208	18.2947	0.1392	274.00	0.08577	107.739	95.0421	0.5361
156.00	0.02057	22.2713	19.2257	0.1454	276.00	0.08795	108.897	95.8772	0.5404
158.00	0.02071	23.2228	20.1572	0.1514	278.00	0.09007	110.014	96.6801	0.5444
160.00	0.02085	24.1759	21.0900	0.1574	280.00	0.09214	111.095	97.4546	0.5483
162.00	0.02099	25.1313	22.0245	0.1633	282.00	0.09415	112.142	98.2036	0.5520
164.00	0.02113	26.0896	22.9616	0.1692	284.00	0.09612	113.160	98.9300	0.5556
166.00	0.02128	27.0517	23.9018	0.1751	286.00	0.09805	114.151	99.6359	0.5591
168.00	0.02143	28.0180	24.8458	0.1808	288.00	0.09993	115.118	100.323	0.5624
170.00	0.02158	28.9895	25.7943	0.1866	290.00	0.10178	116.062	100.994	0.5657
172.00	0.02174	29.9668	26.7480	0.1923	292.00	0.10360	116.986	101.649	0.5689
174.00	0.02191	30.9505	27.7075	0.1980	294.00	0.10538	117.891	102.290	0.5720
176.00	0.02207	31.9414	28.6735	0.2037	296.00	0.10714	118.779	102.918	0.5750
178.00	0.02225	32.9401	29.6466	0.2093	298.00	0.10887	119.651	103.534	0.5779
180.00	0.02243	33.9471	30.6273	0.2149	300.00	0.11057	120.508	104.140	0.5808

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.11224	121.351	104.735	0.5836	422.00	0.19232	161.253	132.783	0.6959
304.00	0.11390	122.182	105.320	0.5863	424.00	0.19348	161.837	133.194	0.6973
306.00	0.11553	123.000	105.897	0.5890	426.00	0.19465	162.420	133.604	0.6986
308.00	0.11714	123.807	106.465	0.5916	428.00	0.19581	163.001	134.013	0.7000
310.00	0.11873	124.603	107.026	0.5942	430.00	0.19696	163.581	134.422	0.7014
312.00	0.12031	125.390	107.579	0.5967	432.00	0.19812	164.159	134.830	0.7027
314.00	0.12186	126.167	108.126	0.5992	434.00	0.19927	164.737	135.237	0.7040
316.00	0.12340	126.935	108.666	0.6017	436.00	0.20042	165.313	135.643	0.7054
318.00	0.12493	127.695	109.200	0.6040	438.00	0.20157	165.888	136.048	0.7067
320.00	0.12644	128.446	109.728	0.6064	440.00	0.20271	166.462	136.453	0.7080
322.00	0.12793	129.191	110.251	0.6087	442.00	0.20385	167.035	136.857	0.7093
324.00	0.12941	129.928	110.769	0.6110	444.00	0.20499	167.607	137.260	0.7106
326.00	0.13088	130.658	111.282	0.6133	446.00	0.20613	168.178	137.662	0.7118
328.00	0.13234	131.382	111.790	0.6155	448.00	0.20726	168.748	138.064	0.7131
330.00	0.13378	132.099	112.294	0.6176	450.00	0.20839	169.316	138.465	0.7144
332.00	0.13521	132.811	112.794	0.6198	452.00	0.20952	169.884	138.866	0.7157
334.00	0.13663	133.517	113.290	0.6219	454.00	0.21065	170.451	139.266	0.7169
336.00	0.13804	134.218	113.782	0.6240	456.00	0.21178	171.017	139.665	0.7181
338.00	0.13944	134.913	114.270	0.6261	458.00	0.21290	171.582	140.064	0.7194
340.00	0.14083	135.604	114.755	0.6281	460.00	0.21402	172.146	140.462	0.7206
342.00	0.14222	136.290	115.236	0.6301	462.00	0.21514	172.709	140.859	0.7218
344.00	0.14359	136.971	115.715	0.6321	464.00	0.21626	173.272	141.256	0.7230
346.00	0.14495	137.648	116.190	0.6341	466.00	0.21738	173.833	141.652	0.7243
348.00	0.14630	138.321	116.662	0.6360	468.00	0.21849	174.394	142.048	0.7255
350.00	0.14765	138.990	117.132	0.6379	470.00	0.21960	174.953	142.443	0.7266
352.00	0.14899	139.655	117.598	0.6398	472.00	0.22071	175.512	142.838	0.7278
354.00	0.15032	140.316	118.063	0.6417	474.00	0.22182	176.071	143.232	0.7290
356.00	0.15164	140.974	118.524	0.6435	476.00	0.22293	176.628	143.625	0.7302
358.00	0.15296	141.628	118.984	0.6454	478.00	0.22403	177.185	144.019	0.7314
360.00	0.15427	142.279	119.441	0.6472	480.00	0.22514	177.741	144.411	0.7325
362.00	0.15557	142.927	119.895	0.6490	482.00	0.22624	178.296	144.803	0.7337
364.00	0.15687	143.571	120.348	0.6508	484.00	0.22734	178.850	145.195	0.7348
366.00	0.15816	144.212	120.798	0.6525	486.00	0.22844	179.404	145.586	0.7360
368.00	0.15944	144.851	121.247	0.6543	488.00	0.22953	179.957	145.977	0.7371
370.00	0.16072	145.487	121.693	0.6560	490.00	0.23063	180.510	146.367	0.7382
372.00	0.16199	146.120	122.138	0.6577	492.00	0.23172	181.062	146.757	0.7393
374.00	0.16326	146.750	122.581	0.6594	494.00	0.23281	181.613	147.147	0.7405
376.00	0.16452	147.378	123.022	0.6611	496.00	0.23390	182.163	147.536	0.7416
378.00	0.16578	148.003	123.461	0.6627	498.00	0.23499	182.713	147.924	0.7427
380.00	0.16703	148.626	123.899	0.6644	500.00	0.23608	183.262	148.312	0.7438
382.00	0.16827	149.246	124.335	0.6660	502.00	0.23717	183.811	148.700	0.7449
384.00	0.16951	149.865	124.770	0.6676	504.00	0.23825	184.359	149.088	0.7460
386.00	0.17075	150.481	125.203	0.6692	506.00	0.23933	184.906	149.475	0.7471
388.00	0.17198	151.095	125.634	0.6708	508.00	0.24042	185.453	149.861	0.7481
390.00	0.17321	151.706	126.064	0.6724	510.00	0.24150	185.999	150.248	0.7492
392.00	0.17443	152.316	126.493	0.6739	512.00	0.24258	186.545	150.633	0.7503
394.00	0.17565	152.924	126.921	0.6755	514.00	0.24365	187.090	151.019	0.7513
396.00	0.17686	153.530	127.347	0.6770	516.00	0.24473	187.635	151.404	0.7524
398.00	0.17807	154.134	127.772	0.6785	518.00	0.24581	188.179	151.789	0.7534
400.00	0.17928	154.736	128.195	0.6800	520.00	0.24688	188.722	152.174	0.7545
402.00	0.18048	155.337	128.618	0.6815	522.00	0.24795	189.265	152.558	0.7555
404.00	0.18168	155.935	129.039	0.6830	524.00	0.24903	189.808	152.942	0.7566
406.00	0.18288	156.532	129.459	0.6845	526.00	0.25010	190.350	153.325	0.7576
408.00	0.18407	157.128	129.878	0.6859	528.00	0.25117	190.892	153.708	0.7586
410.00	0.18526	157.722	130.296	0.6874	530.00	0.25224	191.433	154.091	0.7597
412.00	0.18644	158.314	130.713	0.6888	532.00	0.25330	191.973	154.474	0.7607
414.00	0.18762	158.905	131.129	0.6903	534.00	0.25437	192.514	154.856	0.7617
416.00	0.18880	159.494	131.544	0.6917	536.00	0.25543	193.053	155.238	0.7627
418.00	0.18998	160.082	131.958	0.6931	538.00	0.25650	193.593	155.620	0.7637
420.00	0.19115	160.668	132.371	0.6945	540.00	0.25756	194.131	156.002	0.7647

900.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02251	35.0716	31.3229	0.2188
					184.00	0.02269	36.0873	32.3081	0.2244
					186.00	0.02288	37.1121	33.3015	0.2299
					188.00	0.02308	38.1466	34.3034	0.2355
					190.00	0.02328	39.1909	35.3142	0.2410
					192.00	0.02349	40.2245	36.3129	0.2464
					194.00	0.02370	41.2681	37.3205	0.2518
					196.00	0.02393	42.3201	38.3351	0.2572
					198.00	0.02416	43.3748	39.3509	0.2626
					200.00	0.02440	44.4383	40.3739	0.2679
					202.00	0.02466	45.5048	41.3982	0.2732
					204.00	0.02492	46.5788	42.4281	0.2785
					206.00	0.02520	47.6628	43.4658	0.2838
					208.00	0.02549	48.7512	44.5058	0.2891
					210.00	0.02580	49.8387	45.5423	0.2943
					212.00	0.02612	50.9263	46.5760	0.2995
					214.00	0.02646	52.0130	47.6059	0.3046
					216.00	0.02682	53.0961	48.6287	0.3097
					218.00	0.02721	54.2343	49.7025	0.3150
					220.00	0.02762	55.4792	50.8788	0.3207
					222.00	0.02807	56.7643	52.0901	0.3265
					224.00	0.02854	58.0764	53.3228	0.3325
					226.00	0.02906	59.4107	54.5710	0.3384
					228.00	0.02962	60.7655	55.8320	0.3444
					230.00	0.03024	62.2940	57.2576	0.3511
					232.00	0.03092	63.8672	58.7172	0.3579
					234.00	0.03168	65.4940	60.2176	0.3649
					236.00	0.03253	67.1843	61.7663	0.3721
118.00	0.01845	4.2833	1.2104	0.0105	238.00	0.03349	68.9491	63.3710	0.3795
120.00	0.01854	5.2472	2.1591	0.0186	240.00	0.03459	70.7994	65.0392	0.3873
122.00	0.01864	6.2124	3.1088	0.0266	242.00	0.03584	72.7452	66.7766	0.3954
124.00	0.01873	7.1782	4.0588	0.0344	244.00	0.03728	74.7928	68.5847	0.4038
126.00	0.01883	8.1440	5.0085	0.0422	246.00	0.03892	76.9405	70.4579	0.4126
128.00	0.01893	9.1093	5.9574	0.0498	248.00	0.04079	79.1741	72.3799	0.4216
130.00	0.01903	10.0737	6.9050	0.0572	250.00	0.04288	81.4648	74.3226	0.4308
132.00	0.01913	11.0368	7.8510	0.0646	252.00	0.04517	83.7716	76.2496	0.4400
134.00	0.01923	11.9982	8.7950	0.0718	254.00	0.04759	86.0498	78.1240	0.4490
136.00	0.01934	12.9578	9.7369	0.0789	256.00	0.05010	88.2608	79.9163	0.4577
138.00	0.01945	13.9154	10.6765	0.0859	258.00	0.05265	90.3778	81.6086	0.4659
140.00	0.01956	14.8710	11.6137	0.0928	260.00	0.05520	92.3873	83.1940	0.4737
142.00	0.01967	15.8246	12.5485	0.0996	262.00	0.05771	94.2858	84.6742	0.4809
144.00	0.01979	16.7763	13.4811	0.1062	264.00	0.06017	96.0768	86.0554	0.4877
146.00	0.01990	17.7262	14.4115	0.1128	266.00	0.06257	97.7672	87.3466	0.4941
148.00	0.02002	18.6747	15.3401	0.1192	268.00	0.06490	99.3660	88.5572	0.5001
150.00	0.02014	19.6220	16.2672	0.1256	270.00	0.06716	100.882	89.6963	0.5057
152.00	0.02027	20.5686	17.1931	0.1318	272.00	0.06936	102.324	90.7723	0.5111
154.00	0.02039	21.5149	18.1183	0.1380	274.00	0.07149	103.700	91.7926	0.5161
156.00	0.02052	22.4614	19.0433	0.1441	276.00	0.07357	105.016	92.7638	0.5209
158.00	0.02066	23.4087	19.9686	0.1502	278.00	0.07558	106.280	93.6914	0.5255
160.00	0.02079	24.3573	20.8948	0.1561	280.00	0.07755	107.496	94.5803	0.5298
162.00	0.02093	25.3080	21.8226	0.1620	282.00	0.07947	108.670	95.4347	0.5340
164.00	0.02107	26.2614	22.7525	0.1679	284.00	0.08134	109.805	96.2582	0.5380
166.00	0.02121	27.2181	23.6851	0.1737	286.00	0.08317	110.905	97.0540	0.5419
168.00	0.02136	28.1788	24.6213	0.1794	288.00	0.08495	111.974	97.8248	0.5456
170.00	0.02151	29.1443	25.5615	0.1852	290.00	0.08671	113.014	98.5728	0.5492
172.00	0.02167	30.1151	26.5065	0.1908	292.00	0.08843	114.027	99.3003	0.5527
174.00	0.02183	31.0919	27.4569	0.1965	294.00	0.09011	115.017	100.009	0.5560
176.00	0.02199	32.0755	28.4131	0.2021	296.00	0.09177	115.984	100.700	0.5593
178.00	0.02216	33.0662	29.3759	0.2077	298.00	0.09339	116.931	101.376	0.5625
180.00	0.02233	34.0647	30.3457	0.2133	300.00	0.09500	117.858	102.037	0.5656

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.09657	118.769	102.685	0.5686	422.00	0.17021	160.262	131.914	0.6856
304.00	0.09812	119.663	103.320	0.5716	424.00	0.17126	160.857	132.333	0.6870
306.00	0.09965	120.541	103.944	0.5745	426.00	0.17232	161.451	132.751	0.6884
308.00	0.10116	121.406	104.557	0.5773	428.00	0.17337	162.043	133.169	0.6898
310.00	0.10265	122.257	105.160	0.5800	430.00	0.17442	162.634	133.585	0.6912
312.00	0.10412	123.095	105.754	0.5827	432.00	0.17546	163.223	134.000	0.6925
314.00	0.10558	123.922	106.339	0.5854	434.00	0.17651	163.811	134.414	0.6939
316.00	0.10701	124.738	106.916	0.5880	436.00	0.17755	164.398	134.828	0.6953
318.00	0.10843	125.544	107.485	0.5905	438.00	0.17859	164.983	135.240	0.6966
320.00	0.10984	126.339	108.047	0.5930	440.00	0.17962	165.567	135.652	0.6979
322.00	0.11123	127.126	108.601	0.5955	442.00	0.18066	166.150	136.062	0.6992
324.00	0.11260	127.903	109.150	0.5979	444.00	0.18169	166.732	136.472	0.7006
326.00	0.11396	128.673	109.692	0.6002	446.00	0.18272	167.312	136.881	0.7019
328.00	0.11531	129.434	110.229	0.6026	448.00	0.18374	167.891	137.290	0.7032
330.00	0.11665	130.188	110.760	0.6049	450.00	0.18477	168.469	137.697	0.7044
332.00	0.11798	130.934	111.286	0.6071	452.00	0.18579	169.046	138.104	0.7057
334.00	0.11929	131.674	111.807	0.6093	454.00	0.18681	169.622	138.510	0.7070
336.00	0.12059	132.408	112.323	0.6115	456.00	0.18782	170.197	138.915	0.7083
338.00	0.12189	133.135	112.835	0.6137	458.00	0.18884	170.771	139.320	0.7095
340.00	0.12317	133.856	113.342	0.6158	460.00	0.18985	171.343	139.724	0.7108
342.00	0.12444	134.571	113.846	0.6179	462.00	0.19086	171.915	140.127	0.7120
344.00	0.12571	135.281	114.345	0.6200	464.00	0.19187	172.486	140.530	0.7132
346.00	0.12696	135.986	114.841	0.6220	466.00	0.19288	173.056	140.932	0.7145
348.00	0.12821	136.686	115.333	0.6240	468.00	0.19389	173.624	141.333	0.7157
350.00	0.12945	137.381	115.822	0.6260	470.00	0.19489	174.192	141.734	0.7169
352.00	0.13068	138.071	116.307	0.6280	472.00	0.19589	174.759	142.134	0.7181
354.00	0.13190	138.757	116.789	0.6299	474.00	0.19689	175.325	142.533	0.7193
356.00	0.13312	139.439	117.268	0.6319	476.00	0.19789	175.890	142.932	0.7205
358.00	0.13433	140.116	117.745	0.6338	478.00	0.19889	176.455	143.330	0.7217
360.00	0.13553	140.790	118.218	0.6356	480.00	0.19988	177.018	143.728	0.7228
362.00	0.13672	141.460	118.689	0.6375	482.00	0.20088	177.581	144.125	0.7240
364.00	0.13791	142.126	119.157	0.6393	484.00	0.20187	178.142	144.522	0.7252
366.00	0.13909	142.788	119.623	0.6411	486.00	0.20286	178.703	144.918	0.7263
368.00	0.14027	143.447	120.086	0.6429	488.00	0.20385	179.264	145.314	0.7275
370.00	0.14144	144.103	120.547	0.6447	490.00	0.20483	179.823	145.709	0.7286
372.00	0.14260	144.755	121.006	0.6465	492.00	0.20582	180.382	146.103	0.7298
374.00	0.14376	145.405	121.462	0.6482	494.00	0.20680	180.940	146.497	0.7309
376.00	0.14491	146.051	121.917	0.6499	496.00	0.20778	181.497	146.891	0.7320
378.00	0.14606	146.694	122.369	0.6516	498.00	0.20877	182.053	147.284	0.7331
380.00	0.14720	147.335	122.819	0.6533	500.00	0.20974	182.609	147.677	0.7342
382.00	0.14834	147.973	123.268	0.6550	502.00	0.21072	183.164	148.069	0.7354
384.00	0.14947	148.608	123.715	0.6567	504.00	0.21170	183.718	148.461	0.7365
386.00	0.15060	149.241	124.159	0.6583	506.00	0.21267	184.272	148.852	0.7376
388.00	0.15172	149.871	124.603	0.6599	508.00	0.21365	184.825	149.243	0.7386
390.00	0.15284	150.499	125.044	0.6615	510.00	0.21462	185.378	149.633	0.7397
392.00	0.15395	151.124	125.484	0.6631	512.00	0.21559	185.930	150.023	0.7408
394.00	0.15506	151.747	125.922	0.6647	514.00	0.21656	186.481	150.413	0.7419
396.00	0.15617	152.368	126.359	0.6663	516.00	0.21753	187.031	150.802	0.7430
398.00	0.15727	152.987	126.794	0.6679	518.00	0.21850	187.581	151.191	0.7440
400.00	0.15837	153.603	127.228	0.6694	520.00	0.21947	188.131	151.579	0.7451
402.00	0.15946	154.218	127.660	0.6709	522.00	0.22043	188.680	151.967	0.7461
404.00	0.16055	154.830	128.091	0.6725	524.00	0.22140	189.228	152.355	0.7472
406.00	0.16164	155.441	128.521	0.6740	526.00	0.22236	189.775	152.742	0.7482
408.00	0.16272	156.050	128.949	0.6755	528.00	0.22332	190.323	153.129	0.7493
410.00	0.16380	156.657	129.376	0.6769	530.00	0.22428	190.869	153.516	0.7503
412.00	0.16488	157.262	129.802	0.6784	532.00	0.22524	191.415	153.902	0.7513
414.00	0.16595	157.865	130.227	0.6799	534.00	0.22620	191.961	154.288	0.7523
416.00	0.16702	158.467	130.650	0.6813	536.00	0.22716	192.506	154.674	0.7534
418.00	0.16808	159.067	131.073	0.6828	538.00	0.22811	193.050	155.059	0.7544
420.00	0.16915	159.665	131.494	0.6842	540.00	0.22907	193.594	155.444	0.7554

1000.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02241	35.1881	31.0408	0.2172
					184.00	0.02259	36.1948	32.0146	0.2227
					186.00	0.02277	37.2099	32.9959	0.2282
					188.00	0.02296	38.2338	33.9850	0.2337
					190.00	0.02315	39.2669	34.9821	0.2391
					192.00	0.02336	40.2881	35.9662	0.2445
					194.00	0.02356	41.3184	36.9581	0.2498
					196.00	0.02378	42.3559	37.9559	0.2551
					198.00	0.02400	43.3948	38.9537	0.2604
					200.00	0.02423	44.4411	39.9572	0.2657
					202.00	0.02447	45.4887	40.9604	0.2709
					204.00	0.02472	46.5419	41.9673	0.2761
					206.00	0.02498	47.6030	42.9801	0.2813
					208.00	0.02525	48.6661	43.9929	0.2864
					210.00	0.02554	49.7255	44.9995	0.2915
					212.00	0.02584	50.7817	46.0004	0.2965
					214.00	0.02615	51.8334	46.9939	0.3015
					216.00	0.02648	52.8773	47.9765	0.3064
					218.00	0.02683	53.9710	49.0055	0.3115
					220.00	0.02720	55.1655	50.1315	0.3170
					222.00	0.02760	56.3932	51.2862	0.3225
					224.00	0.02802	57.6395	52.4549	0.3282
					226.00	0.02847	58.8978	53.6301	0.3338
					228.00	0.02895	60.1644	54.8075	0.3394
					230.00	0.02947	61.5900	56.1369	0.3457
					232.00	0.03003	63.0422	57.4849	0.3519
					234.00	0.03064	64.5260	58.8555	0.3583
					236.00	0.03131	66.0467	60.2525	0.3648
118.00	0.01843	4.5267	1.1163	0.0097	238.00	0.03205	67.6098	61.6798	0.3714
120.00	0.01852	5.4885	2.0614	0.0178	240.00	0.03285	69.2209	63.1411	0.3781
122.00	0.01861	6.4515	3.0074	0.0257	242.00	0.03375	70.8852	64.6396	0.3850
124.00	0.01871	7.4151	3.9536	0.0336	244.00	0.03475	72.6069	66.1772	0.3921
126.00	0.01880	8.3788	4.8996	0.0413	246.00	0.03585	74.3887	67.7543	0.3994
128.00	0.01890	9.3419	5.8446	0.0488	248.00	0.03708	76.2300	69.3681	0.4068
130.00	0.01900	10.3040	6.7883	0.0563	250.00	0.03844	78.1260	71.0124	0.4145
132.00	0.01910	11.2648	7.7304	0.0636	252.00	0.03994	80.0669	72.6766	0.4222
134.00	0.01920	12.2239	8.6703	0.0709	254.00	0.04156	82.0374	74.3462	0.4300
136.00	0.01931	13.1811	9.6080	0.0779	256.00	0.04331	84.0181	76.0040	0.4377
138.00	0.01942	14.1362	10.5433	0.0849	258.00	0.04515	85.9882	77.6327	0.4454
140.00	0.01952	15.0891	11.4761	0.0918	260.00	0.04707	87.9278	79.2169	0.4529
142.00	0.01964	16.0400	12.4064	0.0985	262.00	0.04905	89.8205	80.7445	0.4601
144.00	0.01975	16.9888	13.3343	0.1051	264.00	0.05105	91.6547	82.2082	0.4671
146.00	0.01986	17.9358	14.2600	0.1117	266.00	0.05306	93.4230	83.6045	0.4738
148.00	0.01998	18.8812	15.1836	0.1181	268.00	0.05506	95.1224	84.9330	0.4802
150.00	0.02010	19.8253	16.1056	0.1244	270.00	0.05705	96.7526	86.1957	0.4862
152.00	0.02022	20.7685	17.0262	0.1307	272.00	0.05901	98.3157	87.3962	0.4920
154.00	0.02035	21.7112	17.9459	0.1369	274.00	0.06094	99.8149	88.5388	0.4975
156.00	0.02047	22.6539	18.8651	0.1429	276.00	0.06283	101.254	89.6278	0.5027
158.00	0.02060	23.5972	19.7844	0.1489	278.00	0.06468	102.638	90.6679	0.5077
160.00	0.02074	24.5417	20.7044	0.1549	280.00	0.06650	103.969	91.6635	0.5125
162.00	0.02087	25.4880	21.6257	0.1608	282.00	0.06828	105.254	92.6185	0.5171
164.00	0.02101	26.4366	22.5488	0.1666	284.00	0.07003	106.495	93.5367	0.5214
166.00	0.02115	27.3884	23.4744	0.1724	286.00	0.07173	107.696	94.4214	0.5257
168.00	0.02130	28.3438	24.4031	0.1781	288.00	0.07341	108.860	95.2756	0.5297
170.00	0.02144	29.3036	25.3356	0.1838	290.00	0.07505	109.991	96.1020	0.5336
172.00	0.02159	30.2684	26.2724	0.1894	292.00	0.07667	111.090	96.9031	0.5374
174.00	0.02175	31.2389	27.2141	0.1950	294.00	0.07825	112.161	97.6811	0.5411
176.00	0.02191	32.2155	28.1613	0.2006	296.00	0.07981	113.206	98.4377	0.5446
178.00	0.02207	33.1990	29.1146	0.2061	298.00	0.08134	114.226	99.1748	0.5480
180.00	0.02224	34.1897	30.0742	0.2117	300.00	0.08284	115.224	99.8939	0.5514

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.08432	116.200	100.596	0.5546	422.00	0.15260	159.286	131.046	0.6762
304.00	0.08578	117.157	101.284	0.5578	424.00	0.15357	159.893	131.474	0.6777
306.00	0.08722	118.096	101.956	0.5608	426.00	0.15454	160.498	131.900	0.6791
308.00	0.08863	119.018	102.616	0.5638	428.00	0.15550	161.101	132.325	0.6805
310.00	0.09003	119.924	103.263	0.5668	430.00	0.15646	161.703	132.749	0.6819
312.00	0.09141	120.815	103.899	0.5696	432.00	0.15742	162.303	133.171	0.6833
314.00	0.09277	121.692	104.524	0.5724	434.00	0.15838	162.901	133.593	0.6847
316.00	0.09412	122.555	105.139	0.5752	436.00	0.15933	163.498	134.014	0.6861
318.00	0.09544	123.407	105.745	0.5779	438.00	0.16028	164.094	134.433	0.6874
320.00	0.09676	124.247	106.341	0.5805	440.00	0.16123	164.688	134.852	0.6888
322.00	0.09806	125.075	106.930	0.5831	442.00	0.16218	165.280	135.269	0.6901
324.00	0.09934	125.894	107.510	0.5856	444.00	0.16312	165.872	135.686	0.6914
326.00	0.10062	126.702	108.083	0.5881	446.00	0.16406	166.462	136.102	0.6928
328.00	0.10188	127.501	108.649	0.5906	448.00	0.16500	167.050	136.517	0.6941
330.00	0.10312	128.292	109.209	0.5930	450.00	0.16594	167.637	136.931	0.6954
332.00	0.10436	129.074	109.762	0.5953	452.00	0.16687	168.223	137.344	0.6967
334.00	0.10558	129.847	110.309	0.5976	454.00	0.16780	168.808	137.756	0.6980
336.00	0.10680	130.613	110.850	0.5999	456.00	0.16873	169.392	138.168	0.6993
338.00	0.10800	131.372	111.386	0.6022	458.00	0.16966	169.974	138.578	0.7005
340.00	0.10920	132.124	111.917	0.6044	460.00	0.17059	170.555	138.988	0.7018
342.00	0.11038	132.869	112.443	0.6066	462.00	0.17151	171.136	139.397	0.7031
344.00	0.11155	133.608	112.964	0.6087	464.00	0.17243	171.715	139.806	0.7043
346.00	0.11272	134.341	113.481	0.6109	466.00	0.17335	172.292	140.213	0.7056
348.00	0.11388	135.067	113.994	0.6130	468.00	0.17427	172.869	140.620	0.7068
350.00	0.11503	135.789	114.502	0.6150	470.00	0.17519	173.445	141.026	0.7080
352.00	0.11617	136.504	115.007	0.6171	472.00	0.17610	174.020	141.432	0.7092
354.00	0.11730	137.215	115.508	0.6191	474.00	0.17701	174.594	141.837	0.7105
356.00	0.11843	137.921	116.005	0.6211	476.00	0.17793	175.166	142.241	0.7117
358.00	0.11955	138.622	116.499	0.6230	478.00	0.17884	175.738	142.644	0.7129
360.00	0.12066	139.318	116.989	0.6250	480.00	0.17974	176.309	143.047	0.7141
362.00	0.12177	140.010	117.477	0.6269	482.00	0.18065	176.879	143.449	0.7152
364.00	0.12287	140.697	117.961	0.6288	484.00	0.18155	177.448	143.851	0.7164
366.00	0.12396	141.381	118.442	0.6307	486.00	0.18246	178.016	144.252	0.7176
368.00	0.12505	142.061	118.921	0.6325	488.00	0.18336	178.583	144.652	0.7188
370.00	0.12613	142.736	119.396	0.6343	490.00	0.18426	179.149	145.052	0.7199
372.00	0.12720	143.408	119.869	0.6361	492.00	0.18516	179.715	145.452	0.7211
374.00	0.12827	144.077	120.340	0.6379	494.00	0.18605	180.280	145.850	0.7222
376.00	0.12933	144.742	120.808	0.6397	496.00	0.18695	180.844	146.248	0.7233
378.00	0.13039	145.403	121.274	0.6415	498.00	0.18784	181.407	146.646	0.7245
380.00	0.13145	146.062	121.737	0.6432	500.00	0.18873	181.969	147.043	0.7256
382.00	0.13250	146.717	122.198	0.6449	502.00	0.18963	182.530	147.440	0.7267
384.00	0.13354	147.369	122.657	0.6466	504.00	0.19052	183.091	147.836	0.7278
386.00	0.13458	148.018	123.114	0.6483	506.00	0.19140	183.651	148.231	0.7290
388.00	0.13561	148.665	123.569	0.6500	508.00	0.19229	184.210	148.626	0.7301
390.00	0.13664	149.308	124.022	0.6516	510.00	0.19318	184.769	149.021	0.7312
392.00	0.13767	149.949	124.473	0.6533	512.00	0.19406	185.327	149.415	0.7322
394.00	0.13869	150.587	124.922	0.6549	514.00	0.19494	185.884	149.809	0.7333
396.00	0.13971	151.223	125.370	0.6565	516.00	0.19583	186.440	150.202	0.7344
398.00	0.14072	151.856	125.816	0.6581	518.00	0.19671	186.996	150.595	0.7355
400.00	0.14173	152.487	126.260	0.6597	520.00	0.19759	187.551	150.987	0.7366
402.00	0.14274	153.116	126.702	0.6613	522.00	0.19847	188.106	151.379	0.7376
404.00	0.14374	153.742	127.143	0.6628	524.00	0.19934	188.660	151.771	0.7387
406.00	0.14474	154.366	127.582	0.6643	526.00	0.20022	189.213	152.162	0.7397
408.00	0.14573	154.988	128.020	0.6659	528.00	0.20109	189.765	152.553	0.7408
410.00	0.14672	155.608	128.457	0.6674	530.00	0.20197	190.317	152.943	0.7418
412.00	0.14771	156.226	128.891	0.6689	532.00	0.20284	190.869	153.333	0.7429
414.00	0.14870	156.842	129.325	0.6704	534.00	0.20371	191.420	153.722	0.7439
416.00	0.14968	157.456	129.757	0.6719	536.00	0.20458	191.970	154.111	0.7449
418.00	0.15066	158.068	130.188	0.6733	538.00	0.20545	192.520	154.500	0.7460
420.00	0.15163	158.678	130.618	0.6748	540.00	0.20632	193.069	154.888	0.7470

1200.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02223	35.4427	30.5060	0.2141
					184.00	0.02240	36.4334	31.4596	0.2195
					186.00	0.02257	37.4315	32.4196	0.2249
					188.00	0.02275	38.4372	33.3862	0.2302
					190.00	0.02293	39.4506	34.3594	0.2356
					192.00	0.02311	40.4507	35.3181	0.2408
					194.00	0.02331	41.4582	36.2830	0.2461
					196.00	0.02350	42.4712	37.2521	0.2513
					198.00	0.02371	43.4836	38.2192	0.2564
					200.00	0.02392	44.5011	39.1899	0.2615
					202.00	0.02414	45.5177	40.1580	0.2666
					204.00	0.02436	46.5370	41.1272	0.2716
					206.00	0.02460	47.5611	42.0994	0.2766
					208.00	0.02484	48.5840	43.0683	0.2816
					210.00	0.02509	49.5993	44.0277	0.2865
					212.00	0.02535	50.6071	44.9773	0.2913
					214.00	0.02563	51.6056	45.9150	0.2960
					216.00	0.02591	52.5907	46.8368	0.3006
					218.00	0.02621	53.6194	47.7994	0.3054
					220.00	0.02652	54.7418	48.8526	0.3105
					222.00	0.02685	55.8892	49.9273	0.3157
					224.00	0.02719	57.0457	51.0076	0.3210
					226.00	0.02755	58.2035	52.0851	0.3261
					228.00	0.02793	59.3572	53.1541	0.3313
					230.00	0.02834	60.6554	54.3628	0.3369
					232.00	0.02876	61.9635	55.5762	0.3426
					234.00	0.02922	63.2840	56.7961	0.3483
					236.00	0.02970	64.6192	58.0244	0.3540
118.00	0.01839	5.0151	0.9320	0.0080	238.00	0.03021	65.9715	59.2628	0.3597
120.00	0.01848	5.9728	1.8700	0.0161	240.00	0.03076	67.3431	60.5127	0.3654
122.00	0.01857	6.9317	2.8088	0.0240	242.00	0.03135	68.7362	61.7756	0.3712
124.00	0.01866	7.8912	3.7479	0.0318	244.00	0.03197	70.1526	63.0525	0.3770
126.00	0.01875	8.8506	4.6865	0.0395	246.00	0.03265	71.5940	64.3441	0.3829
128.00	0.01885	9.8095	5.6242	0.0470	248.00	0.03337	73.0614	65.6507	0.3888
130.00	0.01895	10.7673	6.5604	0.0545	250.00	0.03415	74.5554	66.9719	0.3948
132.00	0.01904	11.7237	7.4947	0.0618	252.00	0.03499	76.0756	68.3067	0.4009
134.00	0.01915	12.6782	8.4269	0.0689	254.00	0.03588	77.6207	69.6529	0.4070
136.00	0.01925	13.6308	9.3566	0.0760	256.00	0.03684	79.1881	71.0076	0.4131
138.00	0.01935	14.5811	10.2837	0.0829	258.00	0.03786	80.7742	72.3670	0.4193
140.00	0.01946	15.5291	11.2082	0.0898	260.00	0.03894	82.3740	73.7264	0.4255
142.00	0.01957	16.4748	12.1299	0.0965	262.00	0.04008	83.9816	75.0804	0.4317
144.00	0.01968	17.4183	13.0489	0.1031	264.00	0.04128	85.5905	76.4234	0.4378
146.00	0.01979	18.3598	13.9655	0.1096	266.00	0.04253	87.1939	77.7497	0.4438
148.00	0.01990	19.2993	14.8797	0.1159	268.00	0.04382	88.7851	79.0542	0.4498
150.00	0.02002	20.2374	15.7920	0.1222	270.00	0.04515	90.3580	80.3324	0.4556
152.00	0.02014	21.1742	16.7025	0.1284	272.00	0.04650	91.9074	81.5808	0.4613
154.00	0.02026	22.1103	17.6118	0.1346	274.00	0.04788	93.4291	82.7966	0.4669
156.00	0.02038	23.0460	18.5203	0.1406	276.00	0.04927	94.9197	83.9781	0.4723
158.00	0.02051	23.9820	19.4285	0.1466	278.00	0.05067	96.3772	85.1245	0.4776
160.00	0.02063	24.9187	20.3369	0.1525	280.00	0.05208	97.8001	86.2357	0.4827
162.00	0.02076	25.8568	21.2461	0.1583	282.00	0.05348	99.1880	87.3121	0.4876
164.00	0.02090	26.7968	22.1567	0.1641	284.00	0.05488	100.541	88.3545	0.4924
166.00	0.02103	27.7394	23.0692	0.1698	286.00	0.05627	101.859	89.3642	0.4971
168.00	0.02117	28.6852	23.9842	0.1754	288.00	0.05765	103.144	90.3425	0.5015
170.00	0.02131	29.6348	24.9024	0.1810	290.00	0.05902	104.397	91.2911	0.5059
172.00	0.02146	30.5888	25.8242	0.1866	292.00	0.06037	105.618	92.2115	0.5101
174.00	0.02160	31.5477	26.7503	0.1922	294.00	0.06171	106.809	93.1053	0.5141
176.00	0.02176	32.5121	27.6811	0.1977	296.00	0.06304	107.972	93.9740	0.5181
178.00	0.02191	33.4824	28.6171	0.2032	298.00	0.06435	109.109	94.8192	0.5219
180.00	0.02207	34.4592	29.5586	0.2086	300.00	0.06564	110.219	95.6424	0.5256

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.06692	111.306	96.4449	0.5292	422.00	0.12642	157.392	129.319	0.6596
304.00	0.06819	112.370	97.2281	0.5327	424.00	0.12726	158.071	129.762	0.6611
306.00	0.06944	113.412	97.9931	0.5361	426.00	0.12809	158.648	130.204	0.6625
308.00	0.07067	114.434	98.7411	0.5395	428.00	0.12892	159.273	130.645	0.6640
310.00	0.07189	115.437	99.4731	0.5427	430.00	0.12974	159.895	131.084	0.6655
312.00	0.07309	116.422	100.190	0.5459	432.00	0.13057	160.516	131.522	0.6669
314.00	0.07429	117.389	100.893	0.5490	434.00	0.13139	161.135	131.959	0.6683
316.00	0.07546	118.341	101.583	0.5520	436.00	0.13221	161.752	132.394	0.6697
318.00	0.07663	119.277	102.260	0.5550	438.00	0.13303	162.368	132.828	0.6712
320.00	0.07778	120.198	102.926	0.5578	440.00	0.13384	162.981	133.260	0.6726
322.00	0.07892	121.106	103.580	0.5607	442.00	0.13465	163.593	133.692	0.6739
324.00	0.08005	122.000	104.224	0.5634	444.00	0.13546	164.203	134.122	0.6753
326.00	0.08117	122.882	104.858	0.5662	446.00	0.13627	164.812	134.551	0.6767
328.00	0.08227	123.753	105.483	0.5688	448.00	0.13708	165.419	134.979	0.6780
330.00	0.08337	124.612	106.099	0.5714	450.00	0.13788	166.024	135.406	0.6794
332.00	0.08445	125.461	106.707	0.5740	452.00	0.13868	166.628	135.832	0.6807
334.00	0.08553	126.299	107.306	0.5765	454.00	0.13948	167.230	136.257	0.6821
336.00	0.08659	127.128	107.899	0.5790	456.00	0.14028	167.831	136.681	0.6834
338.00	0.08765	127.947	108.484	0.5814	458.00	0.14107	168.430	137.104	0.6847
340.00	0.08870	128.758	109.062	0.5838	460.00	0.14186	169.028	137.526	0.6860
342.00	0.08973	129.560	109.634	0.5862	462.00	0.14266	169.625	137.946	0.6873
344.00	0.09076	130.354	110.199	0.5885	464.00	0.14344	170.220	138.366	0.6886
346.00	0.09178	131.141	110.759	0.5908	466.00	0.14423	170.814	138.785	0.6899
348.00	0.09280	131.920	111.313	0.5930	468.00	0.14502	171.406	139.203	0.6911
350.00	0.09380	132.692	111.861	0.5952	470.00	0.14580	171.998	139.621	0.6924
352.00	0.09480	133.457	112.405	0.5974	472.00	0.14658	172.588	140.037	0.6936
354.00	0.09579	134.216	112.943	0.5995	474.00	0.14736	173.177	140.453	0.6949
356.00	0.09678	134.968	113.477	0.6017	476.00	0.14814	173.764	140.867	0.6961
358.00	0.09776	135.714	114.006	0.6037	478.00	0.14892	174.351	141.281	0.6973
360.00	0.09873	136.455	114.531	0.6058	480.00	0.14970	174.936	141.694	0.6986
362.00	0.09969	137.190	115.052	0.6078	482.00	0.15047	175.520	142.107	0.6998
364.00	0.10065	137.920	115.569	0.6099	484.00	0.15124	176.103	142.518	0.7010
366.00	0.10160	138.644	116.082	0.6118	486.00	0.15201	176.685	142.929	0.7022
368.00	0.10255	139.364	116.591	0.6138	488.00	0.15278	177.266	143.339	0.7034
370.00	0.10349	140.078	117.097	0.6157	490.00	0.15355	177.846	143.748	0.7046
372.00	0.10443	140.788	117.599	0.6177	492.00	0.15432	178.425	144.157	0.7057
374.00	0.10536	141.494	118.098	0.6195	494.00	0.15508	179.003	144.565	0.7069
376.00	0.10628	142.195	118.593	0.6214	496.00	0.15584	179.580	144.972	0.7081
378.00	0.10721	142.892	119.086	0.6233	498.00	0.15661	180.156	145.379	0.7092
380.00	0.10812	143.585	119.576	0.6251	500.00	0.15737	180.730	145.785	0.7104
382.00	0.10903	144.274	120.062	0.6269	502.00	0.15813	181.305	146.190	0.7115
384.00	0.10994	144.960	120.547	0.6287	504.00	0.15889	181.878	146.595	0.7127
386.00	0.11084	145.641	121.028	0.6305	506.00	0.15964	182.450	146.999	0.7138
388.00	0.11174	146.319	121.507	0.6322	508.00	0.16040	183.021	147.403	0.7149
390.00	0.11263	146.994	121.983	0.6339	510.00	0.16115	183.592	147.806	0.7161
392.00	0.11352	147.665	122.457	0.6357	512.00	0.16191	184.161	148.208	0.7172
394.00	0.11440	148.333	122.928	0.6374	514.00	0.16266	184.730	148.610	0.7183
396.00	0.11529	148.998	123.398	0.6390	516.00	0.16341	185.298	149.011	0.7194
398.00	0.11616	149.660	123.865	0.6407	518.00	0.16416	185.865	149.412	0.7205
400.00	0.11704	150.319	124.329	0.6424	520.00	0.16491	186.431	149.812	0.7216
402.00	0.11791	150.975	124.792	0.6440	522.00	0.16565	186.997	150.212	0.7227
404.00	0.11877	151.628	125.253	0.6456	524.00	0.16640	187.562	150.611	0.7237
406.00	0.11963	152.278	125.712	0.6472	526.00	0.16714	188.126	151.009	0.7248
408.00	0.12049	152.926	126.169	0.6488	528.00	0.16789	188.689	151.407	0.7259
410.00	0.12135	153.571	126.624	0.6504	530.00	0.16863	189.252	151.805	0.7269
412.00	0.12220	154.214	127.077	0.6520	532.00	0.16937	189.814	152.202	0.7280
414.00	0.12305	154.854	127.529	0.6535	534.00	0.17011	190.375	152.599	0.7291
416.00	0.12390	155.492	127.979	0.6550	536.00	0.17085	190.935	152.995	0.7301
418.00	0.12474	156.128	128.427	0.6566	538.00	0.17159	191.495	153.391	0.7311
420.00	0.12558	156.761	128.874	0.6581	540.00	0.17233	192.054	153.786	0.7322

1400.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02206	35.7222	30.0059	0.2111
					184.00	0.02222	36.6993	30.9420	0.2164
					186.00	0.02238	37.6829	31.8837	0.2217
					188.00	0.02255	38.6731	32.8310	0.2270
					190.00	0.02272	39.6701	33.7839	0.2323
					192.00	0.02290	40.6527	34.7213	0.2375
					194.00	0.02307	41.6415	35.6637	0.2426
					196.00	0.02326	42.6344	36.6089	0.2477
					198.00	0.02345	43.6254	37.5508	0.2527
					200.00	0.02364	44.6199	38.4949	0.2577
					202.00	0.02384	45.6117	39.4347	0.2627
					204.00	0.02405	46.6045	40.3739	0.2676
					206.00	0.02426	47.6000	41.3142	0.2724
					208.00	0.02448	48.5920	42.2492	0.2772
					210.00	0.02471	49.5741	43.1723	0.2819
					212.00	0.02495	50.5459	44.0832	0.2866
					214.00	0.02519	51.5054	44.9796	0.2911
					216.00	0.02544	52.4483	45.8571	0.2955
					218.00	0.02570	53.4312	46.7721	0.3001
					220.00	0.02598	54.5037	47.7742	0.3050
					222.00	0.02626	55.5967	48.7939	0.3100
					224.00	0.02655	56.6940	49.8150	0.3150
					226.00	0.02686	57.7871	50.8285	0.3198
					228.00	0.02718	58.8700	51.8285	0.3247
					230.00	0.02751	60.0906	52.9624	0.3300
					232.00	0.02786	61.3137	54.0948	0.3353
					234.00	0.02823	62.5409	55.2272	0.3406
					236.00	0.02862	63.7738	56.3605	0.3458
					238.00	0.02902	65.0138	57.4960	0.3510
120.00	0.01843	6.4592	1.6837	0.0145	240.00	0.02944	66.2623	58.6347	0.3563
122.00	0.01852	7.4142	2.6158	0.0223	242.00	0.02989	67.5206	59.7775	0.3615
124.00	0.01861	8.3697	3.5479	0.0301	244.00	0.03036	68.7898	60.9250	0.3667
126.00	0.01870	9.3252	4.4796	0.0378	246.00	0.03085	70.0709	62.0780	0.3719
128.00	0.01880	10.2801	5.4102	0.0453	248.00	0.03137	71.3649	63.2367	0.3772
130.00	0.01889	11.2338	6.3392	0.0527	250.00	0.03193	72.6722	64.4014	0.3824
132.00	0.01899	12.1860	7.2663	0.0599	252.00	0.03251	73.9934	65.5721	0.3877
134.00	0.01909	13.1363	8.1911	0.0671	254.00	0.03312	75.3284	66.7483	0.3930
136.00	0.01919	14.0845	9.1132	0.0741	256.00	0.03376	76.6770	67.9296	0.3983
138.00	0.01929	15.0303	10.0327	0.0810	258.00	0.03445	78.0386	69.1149	0.4036
140.00	0.01939	15.9737	10.9492	0.0878	260.00	0.03516	79.4121	70.3029	0.4089
142.00	0.01950	16.9147	11.8628	0.0945	262.00	0.03591	80.7960	71.4921	0.4142
144.00	0.01961	17.8532	12.7736	0.1010	264.00	0.03670	82.1883	72.6805	0.4195
146.00	0.01972	18.7895	13.6816	0.1075	266.00	0.03752	83.5869	73.8659	0.4247
148.00	0.01983	19.7238	14.5871	0.1138	268.00	0.03838	84.9891	75.0461	0.4300
150.00	0.01994	20.6562	15.4904	0.1201	270.00	0.03927	86.3921	76.2185	0.4352
152.00	0.02006	21.5873	16.3917	0.1263	272.00	0.04019	87.7928	77.3808	0.4404
154.00	0.02017	22.5173	17.2914	0.1324	274.00	0.04114	89.1883	78.5305	0.4455
156.00	0.02029	23.4467	18.1900	0.1383	276.00	0.04211	90.5757	79.6654	0.4505
158.00	0.02041	24.3760	19.0879	0.1443	278.00	0.04311	91.9521	80.7836	0.4555
160.00	0.02054	25.3057	19.9857	0.1501	280.00	0.04413	93.3153	81.8834	0.4604
162.00	0.02066	26.2365	20.8839	0.1559	282.00	0.04516	94.6629	82.9634	0.4652
164.00	0.02079	27.1688	21.7831	0.1616	284.00	0.04621	95.9932	84.0226	0.4699
166.00	0.02092	28.1032	22.6838	0.1673	286.00	0.04726	97.3047	85.0603	0.4745
168.00	0.02105	29.0404	23.5865	0.1729	288.00	0.04833	98.5962	86.0760	0.4790
170.00	0.02119	29.9809	24.4919	0.1785	290.00	0.04940	99.8670	87.0695	0.4834
172.00	0.02133	30.9253	25.4004	0.1840	292.00	0.05047	101.116	88.0409	0.4877
174.00	0.02147	31.8741	26.3125	0.1895	294.00	0.05154	102.344	88.9905	0.4919
176.00	0.02161	32.8277	27.2288	0.1949	296.00	0.05262	103.551	89.9186	0.4959
178.00	0.02176	33.7867	28.1495	0.2003	298.00	0.05369	104.736	90.8258	0.4999
180.00	0.02191	34.7514	29.0751	0.2057	300.00	0.05476	105.899	91.7127	0.5038

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.05582	107.042	92.5799	0.5076	422.00	0.10798	155.587	127.612	0.6451
304.00	0.05688	108.165	93.4282	0.5113	424.00	0.10872	156.238	128.071	0.6466
306.00	0.05793	109.267	94.2584	0.5149	426.00	0.10945	156.885	128.529	0.6481
308.00	0.05898	110.351	95.0711	0.5185	428.00	0.11018	157.531	128.985	0.6496
310.00	0.06002	111.416	95.8671	0.5219	430.00	0.11091	158.173	129.440	0.6511
312.00	0.06105	112.464	96.6473	0.5253	432.00	0.11164	158.814	129.893	0.6526
314.00	0.06207	113.494	97.4123	0.5286	434.00	0.11236	159.453	130.344	0.6541
316.00	0.06309	114.508	98.1628	0.5318	436.00	0.11308	160.089	130.793	0.6556
318.00	0.06410	115.505	98.8995	0.5350	438.00	0.11380	160.723	131.242	0.6570
320.00	0.06510	116.488	99.6231	0.5380	440.00	0.11451	161.355	131.688	0.6585
322.00	0.06609	117.456	100.334	0.5410	442.00	0.11523	161.985	132.133	0.6599
324.00	0.06707	118.410	101.033	0.5440	444.00	0.11594	162.614	132.577	0.6613
326.00	0.06805	119.351	101.721	0.5469	446.00	0.11665	163.240	133.020	0.6627
328.00	0.06902	120.278	102.398	0.5497	448.00	0.11735	163.864	133.461	0.6641
330.00	0.06998	121.194	103.065	0.5525	450.00	0.11806	164.487	133.901	0.6655
332.00	0.07093	122.098	103.722	0.5552	452.00	0.11876	165.107	134.339	0.6669
334.00	0.07187	122.990	104.370	0.5579	454.00	0.11947	165.726	134.776	0.6682
336.00	0.07281	123.871	105.009	0.5606	456.00	0.12016	166.344	135.212	0.6696
338.00	0.07374	124.743	105.639	0.5631	458.00	0.12086	166.959	135.647	0.6709
340.00	0.07466	125.604	106.261	0.5657	460.00	0.12156	167.573	136.081	0.6723
342.00	0.07558	126.455	106.876	0.5682	462.00	0.12225	168.185	136.513	0.6736
344.00	0.07648	127.298	107.483	0.5706	464.00	0.12294	168.796	136.944	0.6749
346.00	0.07739	128.131	108.083	0.5731	466.00	0.12363	169.405	137.375	0.6762
348.00	0.07828	128.957	108.676	0.5754	468.00	0.12432	170.013	137.804	0.6775
350.00	0.07917	129.774	109.263	0.5778	470.00	0.12501	170.619	138.232	0.6788
352.00	0.08005	130.583	109.843	0.5801	472.00	0.12570	171.224	138.659	0.6801
354.00	0.08093	131.384	110.418	0.5823	474.00	0.12638	171.827	139.085	0.6814
356.00	0.08180	132.179	110.987	0.5846	476.00	0.12706	172.429	139.510	0.6827
358.00	0.08266	132.966	111.550	0.5868	478.00	0.12774	173.029	139.935	0.6839
360.00	0.08352	133.747	112.108	0.5890	480.00	0.12842	173.628	140.358	0.6852
362.00	0.08438	134.521	112.661	0.5911	482.00	0.12910	174.226	140.780	0.6864
364.00	0.08523	135.289	113.209	0.5932	484.00	0.12978	174.823	141.201	0.6876
366.00	0.08607	136.051	113.753	0.5953	486.00	0.13045	175.418	141.622	0.6889
368.00	0.08691	136.807	114.292	0.5974	488.00	0.13112	176.012	142.042	0.6901
370.00	0.08774	137.558	114.827	0.5994	490.00	0.13180	176.605	142.460	0.6913
372.00	0.08857	138.303	115.358	0.6014	492.00	0.13247	177.197	142.878	0.6925
374.00	0.08939	139.043	115.884	0.6034	494.00	0.13314	177.787	143.296	0.6937
376.00	0.09021	139.778	116.407	0.6054	496.00	0.13380	178.377	143.712	0.6949
378.00	0.09102	140.507	116.926	0.6073	498.00	0.13447	178.965	144.128	0.6961
380.00	0.09183	141.233	117.441	0.6092	500.00	0.13513	179.552	144.542	0.6973
382.00	0.09264	141.953	117.953	0.6111	502.00	0.13580	180.138	144.956	0.6984
384.00	0.09344	142.669	118.462	0.6130	504.00	0.13646	180.723	145.370	0.6996
386.00	0.09424	143.381	118.967	0.6148	506.00	0.13712	181.307	145.782	0.7007
388.00	0.09503	144.089	119.470	0.6166	508.00	0.13778	181.890	146.194	0.7019
390.00	0.09582	144.793	119.969	0.6185	510.00	0.13844	182.472	146.605	0.7030
392.00	0.09660	145.492	120.465	0.6202	512.00	0.13910	183.053	147.016	0.7042
394.00	0.09739	146.188	120.958	0.6220	514.00	0.13976	183.633	147.426	0.7053
396.00	0.09816	146.881	121.449	0.6238	516.00	0.14041	184.212	147.835	0.7064
398.00	0.09894	147.569	121.937	0.6255	518.00	0.14107	184.790	148.243	0.7075
400.00	0.09971	148.254	122.422	0.6272	520.00	0.14172	185.367	148.651	0.7087
402.00	0.10048	148.936	122.905	0.6289	522.00	0.14237	185.943	149.058	0.7098
404.00	0.10124	149.615	123.386	0.6306	524.00	0.14302	186.518	149.465	0.7109
406.00	0.10200	150.290	123.864	0.6323	526.00	0.14367	187.093	149.871	0.7120
408.00	0.10276	150.962	124.340	0.6339	528.00	0.14432	187.666	150.277	0.7130
410.00	0.10352	151.631	124.813	0.6356	530.00	0.14497	188.239	150.681	0.7141
412.00	0.10427	152.298	125.285	0.6372	532.00	0.14562	188.811	151.086	0.7152
414.00	0.10502	152.961	125.754	0.6388	534.00	0.14626	189.382	151.489	0.7163
416.00	0.10576	153.622	126.221	0.6404	536.00	0.14691	189.952	151.893	0.7173
418.00	0.10651	154.279	126.687	0.6420	538.00	0.14755	190.522	152.295	0.7184
420.00	0.10725	154.935	127.150	0.6435	540.00	0.14819	191.091	152.697	0.7195

1600.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02191	36.0229	29.5358	0.2083
					184.00	0.02206	36.9882	30.4566	0.2135
					186.00	0.02221	37.9594	31.3823	0.2188
					188.00	0.02237	38.9364	32.3129	0.2240
					190.00	0.02253	39.9194	33.2483	0.2292
					192.00	0.02270	40.8871	34.1674	0.2343
					194.00	0.02286	41.8602	35.0906	0.2393
					196.00	0.02304	42.8364	36.0157	0.2443
					198.00	0.02321	43.8095	36.9364	0.2493
					200.00	0.02340	44.7851	37.8583	0.2542
					202.00	0.02358	45.7568	38.7747	0.2590
					204.00	0.02377	46.7280	39.6893	0.2638
					206.00	0.02397	47.7006	40.6037	0.2686
					208.00	0.02417	48.6682	41.5114	0.2733
					210.00	0.02438	49.6240	42.4056	0.2779
					212.00	0.02459	50.5679	43.2859	0.2824
					214.00	0.02482	51.4974	44.1500	0.2867
					216.00	0.02504	52.4082	44.9933	0.2910
					218.00	0.02528	53.3566	45.8721	0.2954
					220.00	0.02552	54.3922	46.8358	0.3002
					222.00	0.02577	55.4455	47.8148	0.3050
					224.00	0.02603	56.5002	48.7925	0.3097
					226.00	0.02630	57.5474	49.7601	0.3144
					228.00	0.02658	58.5810	50.7111	0.3190
					230.00	0.02687	59.7485	51.7930	0.3241
					232.00	0.02717	60.9144	52.8702	0.3292
					234.00	0.02748	62.0801	53.9436	0.3342
					236.00	0.02780	63.2467	55.0144	0.3392
					238.00	0.02814	64.4155	56.0834	0.3441
120.00	0.01839	6.9478	1.5025	0.0128	240.00	0.02849	65.5873	57.1515	0.3490
122.00	0.01848	7.8990	2.4279	0.0207	242.00	0.02886	66.7632	58.2193	0.3539
124.00	0.01857	8.8507	3.3535	0.0284	244.00	0.02924	67.9442	59.2876	0.3587
126.00	0.01866	9.8024	4.2784	0.0361	246.00	0.02963	69.1308	60.3568	0.3636
128.00	0.01875	10.7534	5.2023	0.0435	248.00	0.03005	70.3239	61.4274	0.3684
130.00	0.01884	11.7033	6.1245	0.0509	250.00	0.03048	71.5240	62.4997	0.3732
132.00	0.01894	12.6515	7.0447	0.0581	252.00	0.03093	72.7315	63.5738	0.3780
134.00	0.01903	13.5978	7.9624	0.0653	254.00	0.03140	73.9468	64.6499	0.3828
136.00	0.01913	14.5419	8.8774	0.0723	256.00	0.03189	75.1700	65.7278	0.3876
138.00	0.01923	15.4835	9.7895	0.0791	258.00	0.03240	76.4011	66.8073	0.3924
140.00	0.01933	16.4226	10.6986	0.0859	260.00	0.03294	77.6398	67.8881	0.3972
142.00	0.01944	17.3591	11.6047	0.0925	262.00	0.03349	78.8859	68.9696	0.4020
144.00	0.01954	18.2931	12.5077	0.0991	264.00	0.03407	80.1387	70.0510	0.4067
146.00	0.01965	19.2246	13.4077	0.1055	266.00	0.03467	81.3975	71.1317	0.4115
148.00	0.01975	20.1540	14.3051	0.1118	268.00	0.03530	82.6613	72.2105	0.4162
150.00	0.01986	21.0813	15.1999	0.1180	270.00	0.03594	83.9290	73.2865	0.4209
152.00	0.01998	22.0070	16.0926	0.1242	272.00	0.03661	85.1993	74.3585	0.4256
154.00	0.02009	22.9314	16.9834	0.1302	274.00	0.03731	86.4708	75.4252	0.4303
156.00	0.02020	23.8550	17.8729	0.1362	276.00	0.03802	87.7420	76.4853	0.4349
158.00	0.02032	24.7783	18.7614	0.1420	278.00	0.03875	89.0114	77.5376	0.4395
160.00	0.02044	25.7017	19.6494	0.1479	280.00	0.03950	90.2772	78.5808	0.4440
162.00	0.02056	26.6258	20.5376	0.1536	282.00	0.04027	91.5381	79.6138	0.4485
164.00	0.02069	27.5511	21.4263	0.1593	284.00	0.04106	92.7924	80.6354	0.4529
166.00	0.02081	28.4782	22.3162	0.1649	286.00	0.04186	94.0388	81.6448	0.4573
168.00	0.02094	29.4078	23.2078	0.1705	288.00	0.04267	95.2758	82.6409	0.4616
170.00	0.02107	30.3402	24.1016	0.1760	290.00	0.04350	96.5024	83.6232	0.4659
172.00	0.02120	31.2761	24.9981	0.1814	292.00	0.04433	97.7176	84.5910	0.4701
174.00	0.02134	32.2159	25.8977	0.1869	294.00	0.04518	98.9202	85.5438	0.4742
176.00	0.02148	33.1601	26.8010	0.1923	296.00	0.04603	100.110	86.4814	0.4782
178.00	0.02162	34.1091	27.7082	0.1976	298.00	0.04689	101.286	87.4035	0.4821
180.00	0.02176	35.0633	28.6197	0.2030	300.00	0.04775	102.447	88.3101	0.4860

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.04861	103.594	89.2013	0.4898	422.00	0.09440	153.886	125.937	0.6322
304.00	0.04948	104.726	90.0770	0.4936	424.00	0.09505	154.556	126.412	0.6338
306.00	0.05035	105.844	90.9375	0.4972	426.00	0.09571	155.223	126.885	0.6353
308.00	0.05121	106.946	91.7830	0.5008	428.00	0.09636	155.887	127.357	0.6369
310.00	0.05208	108.034	92.6139	0.5044	430.00	0.09701	156.549	127.826	0.6384
312.00	0.05295	109.107	93.4305	0.5078	432.00	0.09766	157.208	128.293	0.6400
314.00	0.05381	110.165	94.2331	0.5112	434.00	0.09830	157.864	128.758	0.6415
316.00	0.05467	111.210	95.0221	0.5145	436.00	0.09895	158.518	129.222	0.6430
318.00	0.05553	112.240	95.7980	0.5178	438.00	0.09959	159.170	129.684	0.6445
320.00	0.05639	113.256	96.5612	0.5209	440.00	0.10023	159.820	130.144	0.6460
322.00	0.05724	114.259	97.3121	0.5241	442.00	0.10086	160.467	130.603	0.6474
324.00	0.05809	115.249	98.0511	0.5271	444.00	0.10150	161.112	131.060	0.6489
326.00	0.05893	116.227	98.7787	0.5301	446.00	0.10213	161.755	131.515	0.6503
328.00	0.05977	117.192	99.4953	0.5331	448.00	0.10276	162.395	131.969	0.6518
330.00	0.06060	118.145	100.201	0.5360	450.00	0.10339	163.034	132.421	0.6532
332.00	0.06143	119.087	100.897	0.5388	452.00	0.10402	163.670	132.871	0.6546
334.00	0.06226	120.017	101.583	0.5416	454.00	0.10465	164.305	133.321	0.6560
336.00	0.06308	120.936	102.260	0.5444	456.00	0.10527	164.938	133.769	0.6574
338.00	0.06390	121.845	102.927	0.5471	458.00	0.10589	165.568	134.215	0.6588
340.00	0.06471	122.744	103.586	0.5497	460.00	0.10651	166.197	134.660	0.6601
342.00	0.06551	123.633	104.236	0.5523	462.00	0.10713	166.824	135.104	0.6615
344.00	0.06631	124.513	104.878	0.5549	464.00	0.10775	167.450	135.546	0.6629
346.00	0.06711	125.383	105.513	0.5574	466.00	0.10837	168.073	135.988	0.6642
348.00	0.06790	126.245	106.140	0.5599	468.00	0.10898	168.695	136.428	0.6655
350.00	0.06869	127.098	106.760	0.5623	470.00	0.10959	169.315	136.866	0.6668
352.00	0.06947	127.942	107.373	0.5647	472.00	0.11020	169.934	137.304	0.6682
354.00	0.07025	128.779	107.979	0.5671	474.00	0.11081	170.550	137.740	0.6695
356.00	0.07102	129.608	108.580	0.5694	476.00	0.11142	171.166	138.176	0.6708
358.00	0.07179	130.429	109.173	0.5717	478.00	0.11203	171.780	138.610	0.6720
360.00	0.07255	131.243	109.761	0.5740	480.00	0.11263	172.392	139.043	0.6733
362.00	0.07331	132.051	110.344	0.5763	482.00	0.11324	173.003	139.475	0.6746
364.00	0.07407	132.851	110.921	0.5785	484.00	0.11384	173.612	139.906	0.6759
366.00	0.07482	133.645	111.492	0.5806	486.00	0.11444	174.220	140.336	0.6771
368.00	0.07557	134.432	112.059	0.5828	488.00	0.11504	174.826	140.765	0.6784
370.00	0.07631	135.214	112.620	0.5849	490.00	0.11564	175.432	141.193	0.6796
372.00	0.07705	135.989	113.177	0.5870	492.00	0.11623	176.035	141.620	0.6808
374.00	0.07778	136.759	113.730	0.5890	494.00	0.11683	176.638	142.046	0.6820
376.00	0.07851	137.523	114.277	0.5911	496.00	0.11742	177.239	142.471	0.6833
378.00	0.07924	138.282	114.821	0.5931	498.00	0.11802	177.839	142.896	0.6845
380.00	0.07996	139.035	115.360	0.5951	500.00	0.11861	178.438	143.319	0.6857
382.00	0.08068	139.784	115.896	0.5971	502.00	0.11920	179.035	143.742	0.6869
384.00	0.08140	140.527	116.428	0.5990	504.00	0.11979	179.631	144.163	0.6880
386.00	0.08211	141.266	116.956	0.6009	506.00	0.12038	180.226	144.584	0.6892
388.00	0.08282	142.000	117.480	0.6028	508.00	0.12097	180.820	145.004	0.6904
390.00	0.08352	142.730	118.001	0.6047	510.00	0.12155	181.413	145.424	0.6916
392.00	0.08422	143.455	118.518	0.6065	512.00	0.12214	182.005	145.842	0.6927
394.00	0.08492	144.176	119.032	0.6084	514.00	0.12272	182.595	146.260	0.6939
396.00	0.08562	144.893	119.543	0.6102	516.00	0.12330	183.185	146.677	0.6950
398.00	0.08631	145.606	120.051	0.6120	518.00	0.12389	183.773	147.093	0.6961
400.00	0.08700	146.315	120.556	0.6138	520.00	0.12447	184.360	147.508	0.6973
402.00	0.08769	147.020	121.058	0.6155	522.00	0.12505	184.947	147.923	0.6984
404.00	0.08837	147.722	121.557	0.6173	524.00	0.12562	185.532	148.337	0.6995
406.00	0.08905	148.420	122.054	0.6190	526.00	0.12620	186.116	148.750	0.7006
408.00	0.08973	149.114	122.548	0.6207	528.00	0.12678	186.700	149.163	0.7017
410.00	0.09040	149.806	123.039	0.6224	530.00	0.12735	187.282	149.575	0.7028
412.00	0.09107	150.493	123.528	0.6241	532.00	0.12793	187.864	149.986	0.7039
414.00	0.09174	151.178	124.014	0.6257	534.00	0.12850	188.444	150.397	0.7050
416.00	0.09241	151.859	124.498	0.6274	536.00	0.12908	189.024	150.807	0.7061
418.00	0.09307	152.538	124.980	0.6290	538.00	0.12965	189.603	151.216	0.7072
420.00	0.09374	153.213	125.460	0.6306	540.00	0.13022	190.181	151.625	0.7083

1800.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02177	36.3419	29.0921	0.2056
					184.00	0.02191	37.2969	29.9994	0.2108
					186.00	0.02206	38.2572	30.9109	0.2160
					188.00	0.02220	39.2228	31.8268	0.2212
					190.00	0.02236	40.1938	32.7470	0.2263
					192.00	0.02251	41.1488	33.6501	0.2313
					194.00	0.02267	42.1084	34.5567	0.2363
					196.00	0.02283	43.0704	35.4644	0.2412
					198.00	0.02300	44.0285	36.3671	0.2461
					200.00	0.02317	44.9882	37.2700	0.2509
					202.00	0.02335	45.9430	38.1667	0.2557
					204.00	0.02352	46.8964	39.0607	0.2604
					206.00	0.02371	47.8501	39.9534	0.2650
					208.00	0.02390	48.7976	40.8384	0.2696
					210.00	0.02409	49.7323	41.7089	0.2741
					212.00	0.02429	50.6536	42.5643	0.2785
					214.00	0.02449	51.5592	43.4023	0.2828
					216.00	0.02470	52.4446	44.2182	0.2869
					218.00	0.02491	53.3660	45.0682	0.2912
					220.00	0.02513	54.3730	46.0016	0.2958
					222.00	0.02536	55.3958	46.9488	0.3005
					224.00	0.02559	56.4180	47.8931	0.3051
					226.00	0.02583	57.4307	48.8255	0.3097
					228.00	0.02608	58.4276	49.7396	0.3141
					230.00	0.02634	59.5560	50.7827	0.3190
					232.00	0.02660	60.6804	51.8189	0.3239
					234.00	0.02688	61.8019	52.8494	0.3287
					236.00	0.02716	62.9215	53.8751	0.3335
					238.00	0.02745	64.0403	54.8967	0.3382
120.00	0.01835	7.4383	1.3260	0.0113	240.00	0.02775	65.1591	55.9150	0.3429
122.00	0.01844	8.3858	2.2451	0.0191	242.00	0.02806	66.2787	56.9307	0.3475
124.00	0.01852	9.3340	3.1642	0.0268	244.00	0.02839	67.4000	57.9444	0.3521
126.00	0.01861	10.2820	4.0828	0.0344	246.00	0.02872	68.5235	58.9566	0.3567
128.00	0.01870	11.2294	5.0002	0.0419	248.00	0.02907	69.6500	59.9676	0.3613
130.00	0.01879	12.1755	5.9159	0.0492	250.00	0.02943	70.7798	60.9780	0.3658
132.00	0.01889	13.1201	6.8295	0.0564	252.00	0.02980	71.9135	61.9879	0.3703
134.00	0.01898	14.0626	7.7405	0.0635	254.00	0.03018	73.0514	62.9976	0.3748
136.00	0.01908	15.0028	8.6488	0.0704	256.00	0.03058	74.1938	64.0071	0.3793
138.00	0.01917	15.9405	9.5540	0.0773	258.00	0.03100	75.3408	65.0165	0.3838
140.00	0.01927	16.8755	10.4560	0.0840	260.00	0.03142	76.4925	66.0257	0.3882
142.00	0.01937	17.8079	11.3549	0.0906	262.00	0.03187	77.6489	67.0345	0.3927
144.00	0.01948	18.7376	12.2506	0.0971	264.00	0.03232	78.8099	68.0428	0.3971
146.00	0.01958	19.6647	13.1432	0.1035	266.00	0.03280	79.9751	69.0501	0.4015
148.00	0.01968	20.5894	14.0328	0.1098	268.00	0.03329	81.1443	70.0561	0.4058
150.00	0.01979	21.5120	14.9198	0.1160	270.00	0.03379	82.3170	71.0603	0.4102
152.00	0.01990	22.4328	15.8044	0.1221	272.00	0.03432	83.4926	72.0621	0.4145
154.00	0.02001	23.3521	16.6870	0.1281	274.00	0.03485	84.6705	73.0610	0.4189
156.00	0.02012	24.2704	17.5680	0.1340	276.00	0.03541	85.8500	74.0561	0.4231
158.00	0.02024	25.1881	18.4478	0.1399	278.00	0.03598	87.0303	75.0469	0.4274
160.00	0.02035	26.1057	19.3268	0.1457	280.00	0.03656	88.2104	76.0327	0.4316
162.00	0.02047	27.0238	20.2057	0.1514	282.00	0.03716	89.3896	77.0125	0.4358
164.00	0.02059	27.9428	21.0849	0.1570	284.00	0.03777	90.5668	77.9859	0.4400
166.00	0.02071	28.8633	21.9649	0.1626	286.00	0.03840	91.7412	78.9519	0.4441
168.00	0.02083	29.7859	22.8463	0.1681	288.00	0.03903	92.9117	79.9099	0.4482
170.00	0.02096	30.7111	23.7295	0.1736	290.00	0.03968	94.0776	80.8594	0.4522
172.00	0.02109	31.6393	24.6151	0.1790	292.00	0.04034	95.2378	81.7996	0.4562
174.00	0.02122	32.5712	25.5035	0.1844	294.00	0.04101	96.3917	82.7300	0.4601
176.00	0.02135	33.5070	26.3951	0.1897	296.00	0.04169	97.5383	83.6503	0.4640
178.00	0.02149	34.4471	27.2902	0.1951	298.00	0.04238	98.6771	84.5598	0.4679
180.00	0.02162	35.3920	28.1891	0.2003	300.00	0.04308	99.8073	85.4584	0.4716

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.04378	100.928	86.3458	0.4754	422.00	0.08404	152.298	124.306	0.6206
304.00	0.04449	102.040	87.2217	0.4790	424.00	0.08463	152.986	124.795	0.6222
306.00	0.04520	103.142	88.0860	0.4827	426.00	0.08522	153.670	125.283	0.6239
308.00	0.04592	104.233	88.9387	0.4862	428.00	0.08581	154.351	125.768	0.6255
310.00	0.04664	105.314	89.7797	0.4897	430.00	0.08640	155.030	126.251	0.6270
312.00	0.04736	106.383	90.6090	0.4931	432.00	0.08698	155.706	126.732	0.6286
314.00	0.04808	107.442	91.4268	0.4965	434.00	0.08757	156.379	127.211	0.6302
316.00	0.04881	108.490	92.2331	0.4999	436.00	0.08815	157.049	127.688	0.6317
318.00	0.04953	109.527	93.0281	0.5031	438.00	0.08873	157.717	128.163	0.6332
320.00	0.05026	110.553	93.8119	0.5063	440.00	0.08930	158.382	128.636	0.6347
322.00	0.05099	111.568	94.5848	0.5095	442.00	0.08988	159.045	129.107	0.6362
324.00	0.05171	112.572	95.3470	0.5126	444.00	0.09045	159.705	129.577	0.6377
326.00	0.05244	113.565	96.0987	0.5157	446.00	0.09102	160.363	130.044	0.6392
328.00	0.05316	114.548	96.8401	0.5187	448.00	0.09159	161.019	130.510	0.6407
330.00	0.05388	115.520	97.5716	0.5216	450.00	0.09216	161.672	130.974	0.6421
332.00	0.05460	116.481	98.2934	0.5245	452.00	0.09273	162.323	131.436	0.6436
334.00	0.05532	117.433	99.0057	0.5274	454.00	0.09329	162.972	131.897	0.6450
336.00	0.05604	118.374	99.7089	0.5302	456.00	0.09386	163.619	132.356	0.6464
338.00	0.05675	119.306	100.403	0.5330	458.00	0.09442	164.264	132.814	0.6478
340.00	0.05746	120.229	101.089	0.5357	460.00	0.09498	164.907	133.270	0.6492
342.00	0.05817	121.142	101.766	0.5384	462.00	0.09554	165.547	133.725	0.6506
344.00	0.05887	122.046	102.435	0.5410	464.00	0.09609	166.186	134.178	0.6520
346.00	0.05958	122.941	103.097	0.5436	466.00	0.09665	166.823	134.630	0.6534
348.00	0.06028	123.828	103.750	0.5462	468.00	0.09720	167.458	135.080	0.6547
350.00	0.06097	124.706	104.397	0.5487	470.00	0.09776	168.091	135.529	0.6561
352.00	0.06167	125.576	105.036	0.5511	472.00	0.09831	168.722	135.977	0.6574
354.00	0.06236	126.438	105.668	0.5536	474.00	0.09886	169.352	136.423	0.6588
356.00	0.06304	127.293	106.294	0.5560	476.00	0.09941	169.980	136.868	0.6601
358.00	0.06373	128.140	106.913	0.5584	478.00	0.09995	170.606	137.312	0.6614
360.00	0.06441	128.979	107.526	0.5607	480.00	0.10050	171.230	137.755	0.6627
362.00	0.06508	129.812	108.133	0.5630	482.00	0.10104	171.853	138.196	0.6640
364.00	0.06576	130.637	108.734	0.5653	484.00	0.10159	172.474	138.636	0.6653
366.00	0.06643	131.456	109.330	0.5675	486.00	0.10213	173.094	139.076	0.6666
368.00	0.06709	132.269	109.920	0.5697	488.00	0.10267	173.712	139.514	0.6678
370.00	0.06776	133.075	110.505	0.5719	490.00	0.10321	174.329	139.950	0.6691
372.00	0.06842	133.875	111.085	0.5741	492.00	0.10375	174.944	140.386	0.6703
374.00	0.06908	134.669	111.659	0.5762	494.00	0.10428	175.557	140.821	0.6716
376.00	0.06973	135.457	112.229	0.5783	496.00	0.10482	176.170	141.255	0.6728
378.00	0.07039	136.240	112.795	0.5804	498.00	0.10536	176.781	141.688	0.6741
380.00	0.07103	137.017	113.356	0.5824	500.00	0.10589	177.390	142.119	0.6753
382.00	0.07168	137.788	113.912	0.5845	502.00	0.10642	177.998	142.550	0.6765
384.00	0.07232	138.555	114.465	0.5865	504.00	0.10695	178.605	142.980	0.6777
386.00	0.07296	139.316	115.013	0.5884	506.00	0.10748	179.210	143.409	0.6789
388.00	0.07360	140.073	115.557	0.5904	508.00	0.10801	179.815	143.837	0.6801
390.00	0.07424	140.825	116.098	0.5923	510.00	0.10854	180.418	144.264	0.6813
392.00	0.07487	141.572	116.634	0.5942	512.00	0.10907	181.019	144.690	0.6825
394.00	0.07550	142.315	117.167	0.5961	514.00	0.10959	181.620	145.115	0.6836
396.00	0.07612	143.053	117.697	0.5980	516.00	0.11012	182.219	145.539	0.6848
398.00	0.07675	143.787	118.223	0.5999	518.00	0.11064	182.817	145.963	0.6859
400.00	0.07737	144.517	118.746	0.6017	520.00	0.11117	183.414	146.386	0.6871
402.00	0.07799	145.242	119.266	0.6035	522.00	0.11169	184.010	146.808	0.6882
404.00	0.07860	145.964	119.783	0.6053	524.00	0.11221	184.605	147.229	0.6894
406.00	0.07922	146.682	120.296	0.6071	526.00	0.11273	185.199	147.649	0.6905
408.00	0.07983	147.396	120.807	0.6088	528.00	0.11325	185.791	148.069	0.6916
410.00	0.08043	148.107	121.315	0.6105	530.00	0.11377	186.383	148.488	0.6927
412.00	0.08104	148.814	121.820	0.6123	532.00	0.11429	186.973	148.906	0.6939
414.00	0.08165	149.517	122.322	0.6140	534.00	0.11480	187.563	149.323	0.6950
416.00	0.08225	150.217	122.822	0.6157	536.00	0.11532	188.151	149.740	0.6961
418.00	0.08285	150.914	123.319	0.6173	538.00	0.11583	188.739	150.156	0.6972
420.00	0.08344	151.608	123.813	0.6190	540.00	0.11635	189.325	150.571	0.6982

2000.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02163	36.6768	28.6718	0.2030
					184.00	0.02177	37.6228	29.5669	0.2082
					186.00	0.02191	38.5735	30.4659	0.2133
					188.00	0.02205	39.5291	31.3688	0.2184
					190.00	0.02219	40.4895	32.2754	0.2235
					192.00	0.02234	41.4335	33.1645	0.2284
					194.00	0.02249	42.3814	34.0565	0.2334
					196.00	0.02265	43.3312	34.9491	0.2382
					198.00	0.02281	44.2764	35.8361	0.2430
					200.00	0.02297	45.2225	36.7227	0.2478
					202.00	0.02313	46.1631	37.6024	0.2525
					204.00	0.02330	47.1015	38.4786	0.2571
					206.00	0.02347	48.0393	39.3529	0.2617
					208.00	0.02365	48.9701	40.2187	0.2662
					210.00	0.02383	49.8872	41.0692	0.2706
					212.00	0.02401	50.7899	41.9039	0.2749
					214.00	0.02420	51.6759	42.7201	0.2791
					216.00	0.02439	52.5406	43.5134	0.2832
					218.00	0.02459	53.4402	44.3397	0.2873
					220.00	0.02479	54.4241	45.2485	0.2919
					222.00	0.02500	55.4226	46.1700	0.2964
					224.00	0.02521	56.4192	47.0875	0.3009
					226.00	0.02543	57.4048	47.9920	0.3053
					228.00	0.02566	58.3731	48.8768	0.3097
					230.00	0.02589	59.4713	49.8894	0.3145
					232.00	0.02613	60.5639	50.8939	0.3192
					234.00	0.02637	61.6518	51.8913	0.3239
					236.00	0.02662	62.7360	52.8824	0.3285
					238.00	0.02688	63.8175	53.8681	0.3330
					240.00	0.02715	64.8970	54.8490	0.3375
122.00	0.01839	8.8747	2.0670	0.0175	242.00	0.02742	65.9754	55.8258	0.3420
124.00	0.01848	9.8193	2.9801	0.0252	244.00	0.02771	67.0532	56.7990	0.3465
126.00	0.01857	10.7639	3.8925	0.0328	246.00	0.02800	68.1312	57.7692	0.3509
128.00	0.01865	11.7078	4.8037	0.0402	248.00	0.02830	69.2099	58.7369	0.3552
130.00	0.01874	12.6504	5.7132	0.0475	250.00	0.02861	70.2898	59.7024	0.3596
132.00	0.01884	13.5914	6.6204	0.0547	252.00	0.02893	71.3713	60.6659	0.3639
134.00	0.01893	14.5303	7.5251	0.0617	254.00	0.02925	72.4547	61.6279	0.3682
136.00	0.01902	15.4669	8.4269	0.0687	256.00	0.02959	73.5405	62.5884	0.3724
138.00	0.01912	16.4009	9.3255	0.0755	258.00	0.02994	74.6288	63.5477	0.3766
140.00	0.01921	17.3321	10.2209	0.0822	260.00	0.03030	75.7199	64.5057	0.3809
142.00	0.01931	18.2606	11.1130	0.0888	262.00	0.03067	76.8137	65.4625	0.3850
144.00	0.01941	19.1863	12.0017	0.0953	264.00	0.03105	77.9104	66.4180	0.3892
146.00	0.01951	20.1093	12.8873	0.1016	266.00	0.03144	79.0099	67.3722	0.3934
148.00	0.01962	21.0297	13.7698	0.1079	268.00	0.03185	80.1121	68.3248	0.3975
150.00	0.01972	21.9480	14.6494	0.1140	270.00	0.03226	81.2169	69.2757	0.4016
152.00	0.01983	22.8642	15.5265	0.1201	272.00	0.03269	82.3240	70.2247	0.4057
154.00	0.01993	23.7788	16.4013	0.1261	274.00	0.03313	83.4332	71.1713	0.4098
156.00	0.02004	24.6922	17.2744	0.1320	276.00	0.03358	84.5440	72.1153	0.4138
158.00	0.02015	25.6048	18.1461	0.1378	278.00	0.03404	85.6561	73.0562	0.4178
160.00	0.02027	26.5171	19.0168	0.1435	280.00	0.03452	86.7690	73.9937	0.4218
162.00	0.02038	27.4296	19.8871	0.1492	282.00	0.03500	87.8822	74.9273	0.4258
164.00	0.02050	28.3429	20.7575	0.1548	284.00	0.03550	88.9952	75.8566	0.4297
166.00	0.02061	29.2574	21.6284	0.1603	286.00	0.03601	90.1073	76.7811	0.4336
168.00	0.02073	30.1737	22.5004	0.1658	288.00	0.03652	91.2181	77.7003	0.4375
170.00	0.02085	31.0924	23.3740	0.1713	290.00	0.03705	92.3269	78.6138	0.4413
172.00	0.02098	32.0138	24.2497	0.1767	292.00	0.03759	93.4331	79.5211	0.4451
174.00	0.02110	32.9384	25.1278	0.1820	294.00	0.03814	94.5361	80.4218	0.4489
176.00	0.02123	33.8667	26.0088	0.1873	296.00	0.03869	95.6353	81.3155	0.4526
178.00	0.02136	34.7990	26.8929	0.1926	298.00	0.03926	96.7301	82.2017	0.4563
180.00	0.02149	35.7356	27.7805	0.1978	300.00	0.03983	97.8200	83.0803	0.4599

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.04040	98.9044	83.9507	0.4635	422.00	0.07594	150.831	122.726	0.6101
304.00	0.04099	99.9830	84.8128	0.4671	424.00	0.07648	151.534	123.230	0.6118
306.00	0.04158	101.055	85.6664	0.4706	426.00	0.07701	152.234	123.730	0.6135
308.00	0.04218	102.121	86.5111	0.4741	428.00	0.07755	152.930	124.229	0.6151
310.00	0.04278	103.179	87.3469	0.4775	430.00	0.07808	153.624	124.725	0.6167
312.00	0.04338	104.230	88.1737	0.4809	432.00	0.07862	154.314	125.218	0.6183
314.00	0.04399	105.273	88.9912	0.4842	434.00	0.07915	155.002	125.710	0.6199
316.00	0.04460	106.308	89.7996	0.4875	436.00	0.07967	155.687	126.199	0.6215
318.00	0.04522	107.335	90.5988	0.4907	438.00	0.08020	156.369	126.686	0.6230
320.00	0.04584	108.353	91.3887	0.4939	440.00	0.08073	157.048	127.171	0.6246
322.00	0.04646	109.364	92.1694	0.4971	442.00	0.08125	157.725	127.654	0.6261
324.00	0.04708	110.365	92.9410	0.5002	444.00	0.08177	158.399	128.135	0.6276
326.00	0.04770	111.358	93.7036	0.5032	446.00	0.08229	159.070	128.614	0.6291
328.00	0.04833	112.343	94.4573	0.5062	448.00	0.08281	159.739	129.091	0.6306
330.00	0.04895	113.318	95.2021	0.5092	450.00	0.08333	160.406	129.566	0.6321
332.00	0.04957	114.285	95.9382	0.5121	452.00	0.08384	161.070	130.040	0.6336
334.00	0.05020	115.244	96.6658	0.5150	454.00	0.08436	161.732	130.511	0.6351
336.00	0.05082	116.194	97.3851	0.5178	456.00	0.08487	162.392	130.981	0.6365
338.00	0.05144	117.136	98.0961	0.5206	458.00	0.08538	163.049	131.449	0.6379
340.00	0.05207	118.069	98.7990	0.5234	460.00	0.08589	163.705	131.916	0.6394
342.00	0.05269	118.994	99.4941	0.5261	462.00	0.08640	164.358	132.381	0.6408
344.00	0.05331	119.911	100.182	0.5288	464.00	0.08691	165.009	132.844	0.6422
346.00	0.05393	120.820	100.861	0.5314	466.00	0.08741	165.658	133.306	0.6436
348.00	0.05454	121.721	101.534	0.5340	468.00	0.08792	166.305	133.766	0.6450
350.00	0.05516	122.614	102.199	0.5366	470.00	0.08842	166.950	134.225	0.6464
352.00	0.05577	123.500	102.858	0.5391	472.00	0.08892	167.593	134.682	0.6477
354.00	0.05639	124.379	103.510	0.5416	474.00	0.08942	168.234	135.138	0.6491
356.00	0.05700	125.250	104.155	0.5440	476.00	0.08992	168.873	135.592	0.6504
358.00	0.05761	126.114	104.794	0.5465	478.00	0.09042	169.511	136.045	0.6518
360.00	0.05821	126.971	105.426	0.5488	480.00	0.09092	170.146	136.497	0.6531
362.00	0.05882	127.821	106.053	0.5512	482.00	0.09142	170.780	136.947	0.6544
364.00	0.05942	128.664	106.673	0.5535	484.00	0.09191	171.412	137.396	0.6557
366.00	0.06002	129.501	107.288	0.5558	486.00	0.09240	172.043	137.844	0.6570
368.00	0.06062	130.332	107.897	0.5581	488.00	0.09290	172.672	138.291	0.6583
370.00	0.06121	131.156	108.501	0.5603	490.00	0.09339	173.299	138.736	0.6596
372.00	0.06181	131.975	109.100	0.5625	492.00	0.09388	173.924	139.180	0.6609
374.00	0.06240	132.787	109.693	0.5647	494.00	0.09437	174.548	139.623	0.6621
376.00	0.06299	133.594	110.282	0.5668	496.00	0.09485	175.171	140.065	0.6634
378.00	0.06357	134.394	110.865	0.5690	498.00	0.09534	175.792	140.506	0.6646
380.00	0.06416	135.190	111.445	0.5711	500.00	0.09583	176.411	140.946	0.6659
382.00	0.06474	135.980	112.019	0.5731	502.00	0.09631	177.029	141.384	0.6671
384.00	0.06532	136.765	112.589	0.5752	504.00	0.09680	177.646	141.822	0.6683
386.00	0.06590	137.544	113.155	0.5772	506.00	0.09728	178.261	142.258	0.6695
388.00	0.06648	138.319	113.717	0.5792	508.00	0.09776	178.875	142.694	0.6708
390.00	0.06705	139.089	114.274	0.5812	510.00	0.09824	179.487	143.128	0.6720
392.00	0.06762	139.854	114.828	0.5832	512.00	0.09872	180.099	143.562	0.6732
394.00	0.06819	140.614	115.378	0.5851	514.00	0.09920	180.708	143.994	0.6743
396.00	0.06876	141.370	115.924	0.5870	516.00	0.09968	181.317	144.426	0.6755
398.00	0.06932	142.122	116.466	0.5889	518.00	0.10015	181.924	144.857	0.6767
400.00	0.06988	142.869	117.005	0.5908	520.00	0.10063	182.530	145.286	0.6779
402.00	0.07044	143.612	117.541	0.5926	522.00	0.10111	183.135	145.715	0.6790
404.00	0.07100	144.351	118.073	0.5945	524.00	0.10158	183.738	146.143	0.6802
406.00	0.07156	145.086	118.602	0.5963	526.00	0.10205	184.341	146.570	0.6813
408.00	0.07211	145.817	119.128	0.5981	528.00	0.10253	184.942	146.997	0.6825
410.00	0.07267	146.544	119.650	0.5998	530.00	0.10300	185.542	147.422	0.6836
412.00	0.07322	147.267	120.170	0.6016	532.00	0.10347	186.141	147.847	0.6847
414.00	0.07376	147.987	120.687	0.6033	534.00	0.10394	186.739	148.271	0.6859
416.00	0.07431	148.703	121.201	0.6051	536.00	0.10441	187.336	148.694	0.6870
418.00	0.07485	149.416	121.712	0.6068	538.00	0.10488	187.932	149.116	0.6881
420.00	0.07540	150.125	122.220	0.6085	540.00	0.10534	188.526	149.538	0.6892

2500.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
122.00	0.01829	10.1046	1.6415	0.0137
124.00	0.01838	11.0411	2.5402	0.0213
126.00	0.01846	11.9776	3.4383	0.0288
128.00	0.01854	12.9134	4.3351	0.0362
130.00	0.01863	13.8480	5.2300	0.0434
132.00	0.01872	14.7809	6.1226	0.0505
134.00	0.01880	15.7116	7.0126	0.0575
136.00	0.01889	16.6399	7.8994	0.0644
138.00	0.01898	17.5654	8.7830	0.0712
140.00	0.01908	18.4881	9.6632	0.0778
142.00	0.01917	19.4078	10.5398	0.0843
144.00	0.01926	20.3245	11.4128	0.0907
146.00	0.01936	21.2383	12.2824	0.0970
148.00	0.01946	22.1494	13.1486	0.1032
150.00	0.01955	23.0579	14.0116	0.1093
152.00	0.01965	23.9641	14.8718	0.1153
154.00	0.01975	24.8684	15.7294	0.1212
156.00	0.01986	25.7711	16.5848	0.1271
158.00	0.01996	26.6726	17.4385	0.1328
160.00	0.02007	27.5735	18.2908	0.1385
162.00	0.02017	28.4741	19.1422	0.1441
164.00	0.02028	29.3750	19.9932	0.1496
166.00	0.02039	30.2767	20.8443	0.1551
168.00	0.02050	31.1797	21.6959	0.1605
170.00	0.02061	32.0844	22.5486	0.1658
172.00	0.02073	32.9913	23.4028	0.1711
174.00	0.02084	33.9008	24.2588	0.1764
176.00	0.02096	34.8134	25.1170	0.1816
178.00	0.02108	35.7293	25.9778	0.1868
180.00	0.02120	36.6488	26.8414	0.1919
182.00	0.02132	37.5721	27.7079	0.1970
184.00	0.02145	38.4994	28.5775	0.2021
186.00	0.02157	39.4306	29.4502	0.2071
188.00	0.02170	40.3658	30.3259	0.2121
190.00	0.02183	41.3050	31.2045	0.2171
192.00	0.02197	42.2266	32.0648	0.2219
194.00	0.02210	43.1513	32.9270	0.2267
196.00	0.02224	44.0767	33.7889	0.2314
198.00	0.02238	44.9965	34.6440	0.2361
200.00	0.02252	45.9160	35.4978	0.2407
202.00	0.02266	46.8287	36.3436	0.2453
204.00	0.02281	47.7379	37.1848	0.2498
206.00	0.02296	48.6453	38.0228	0.2542
208.00	0.02311	49.5441	38.8511	0.2586
210.00	0.02327	50.4277	39.6629	0.2628
212.00	0.02343	51.2955	40.4574	0.2670
214.00	0.02359	52.1449	41.2322	0.2710
216.00	0.02375	52.9712	41.9825	0.2748
218.00	0.02392	53.8308	42.7645	0.2788
220.00	0.02409	54.7727	43.6273	0.2832
222.00	0.02427	55.7272	44.5013	0.2875
224.00	0.02444	56.6778	45.3696	0.2918
226.00	0.02463	57.6153	46.2232	0.2960
228.00	0.02481	58.5333	47.0555	0.3001
230.00	0.02500	59.5789	48.0137	0.3047
232.00	0.02519	60.6165	48.9619	0.3092
234.00	0.02539	61.6470	49.9012	0.3136
236.00	0.02559	62.6712	50.8324	0.3180
238.00	0.02580	63.6901	51.7561	0.3223
240.00	0.02601	64.7043	52.6731	0.3265
242.00	0.02622	65.7146	53.5841	0.3307
244.00	0.02644	66.7215	54.4895	0.3348
246.00	0.02666	67.7257	55.3900	0.3389
248.00	0.02689	68.7277	56.2859	0.3430
250.00	0.02713	69.7280	57.1778	0.3470
252.00	0.02737	70.7269	58.0659	0.3510
254.00	0.02761	71.7249	58.9506	0.3549
256.00	0.02786	72.7223	59.8322	0.3589
258.00	0.02812	73.7194	60.7109	0.3627
260.00	0.02838	74.7165	61.5870	0.3666
262.00	0.02865	75.7137	62.4605	0.3704
264.00	0.02892	76.7113	63.3317	0.3742
266.00	0.02920	77.7093	64.2005	0.3780
268.00	0.02949	78.7080	65.0672	0.3817
270.00	0.02978	79.7073	65.9317	0.3854
272.00	0.03007	80.7074	66.7941	0.3891
274.00	0.03038	81.7082	67.6543	0.3928
276.00	0.03069	82.7096	68.5123	0.3964
278.00	0.03101	83.7118	69.3680	0.4000
280.00	0.03133	84.7145	70.2214	0.4036
282.00	0.03166	85.7177	71.0723	0.4072
284.00	0.03199	86.7212	71.9206	0.4107
286.00	0.03233	87.7249	72.7662	0.4143
288.00	0.03268	88.7286	73.6090	0.4178
290.00	0.03304	89.7321	74.4487	0.4212
292.00	0.03340	90.7353	75.2852	0.4247
294.00	0.03376	91.7378	76.1184	0.4281
296.00	0.03413	92.7395	76.9480	0.4315
298.00	0.03451	93.7401	77.7739	0.4349
300.00	0.03490	94.7394	78.5959	0.4382

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.03528	95.7371	79.4137	0.4415	422.00	0.06195	147.706	119.045	0.5878
304.00	0.03568	96.7329	80.2273	0.4448	424.00	0.06239	148.437	119.575	0.5895
306.00	0.03608	97.7266	81.0364	0.4481	426.00	0.06282	149.165	120.104	0.5912
308.00	0.03648	98.7180	81.8409	0.4513	428.00	0.06325	149.890	120.629	0.5929
310.00	0.03689	99.7067	82.6405	0.4545	430.00	0.06368	150.612	121.152	0.5946
312.00	0.03730	100.693	83.4353	0.4577	432.00	0.06411	151.331	121.672	0.5962
314.00	0.03772	101.675	84.2249	0.4608	434.00	0.06454	152.046	122.189	0.5979
316.00	0.03814	102.655	85.0093	0.4639	436.00	0.06496	152.759	122.705	0.5995
318.00	0.03857	103.630	85.7883	0.4670	438.00	0.06539	153.468	123.217	0.6012
320.00	0.03900	104.602	86.5619	0.4700	440.00	0.06581	154.175	123.728	0.6028
322.00	0.03943	105.570	87.3299	0.4731	442.00	0.06624	154.879	124.236	0.6044
324.00	0.03986	106.534	88.0923	0.4760	444.00	0.06666	155.580	124.741	0.6059
326.00	0.04030	107.494	88.8490	0.4790	446.00	0.06708	156.279	125.245	0.6075
328.00	0.04074	108.449	89.5999	0.4819	448.00	0.06750	156.975	125.746	0.6091
330.00	0.04119	109.399	90.3450	0.4848	450.00	0.06792	157.668	126.245	0.6106
332.00	0.04163	110.345	91.0842	0.4877	452.00	0.06834	158.359	126.742	0.6121
334.00	0.04208	111.285	91.8175	0.4905	454.00	0.06876	159.047	127.237	0.6137
336.00	0.04253	112.221	92.5450	0.4933	456.00	0.06917	159.732	127.730	0.6152
338.00	0.04298	113.151	93.2665	0.4960	458.00	0.06959	160.415	128.221	0.6167
340.00	0.04344	114.077	93.9822	0.4988	460.00	0.07000	161.096	128.710	0.6182
342.00	0.04389	114.997	94.6920	0.5015	462.00	0.07042	161.774	129.198	0.6196
344.00	0.04435	115.912	95.3960	0.5041	464.00	0.07083	162.451	129.683	0.6211
346.00	0.04480	116.821	96.0942	0.5068	466.00	0.07124	163.124	130.167	0.6225
348.00	0.04526	117.725	96.7866	0.5094	468.00	0.07165	163.796	130.648	0.6240
350.00	0.04572	118.624	97.4733	0.5120	470.00	0.07206	164.465	131.129	0.6254
352.00	0.04618	119.517	98.1543	0.5145	472.00	0.07247	165.133	131.607	0.6268
354.00	0.04664	120.405	98.8298	0.5170	474.00	0.07288	165.798	132.084	0.6282
356.00	0.04710	121.288	99.4997	0.5195	476.00	0.07328	166.461	132.559	0.6296
358.00	0.04756	122.165	100.164	0.5220	478.00	0.07369	167.122	133.032	0.6310
360.00	0.04802	123.037	100.823	0.5244	480.00	0.07409	167.781	133.504	0.6324
362.00	0.04848	123.903	101.477	0.5268	482.00	0.07450	168.438	133.974	0.6337
364.00	0.04894	124.765	102.126	0.5292	484.00	0.07490	169.093	134.443	0.6351
366.00	0.04940	125.621	102.769	0.5315	486.00	0.07530	169.747	134.910	0.6365
368.00	0.04985	126.471	103.407	0.5338	488.00	0.07570	170.398	135.376	0.6378
370.00	0.05031	127.317	104.041	0.5361	490.00	0.07610	171.048	135.841	0.6391
372.00	0.05077	128.158	104.669	0.5384	492.00	0.07650	171.695	136.304	0.6404
374.00	0.05123	128.993	105.293	0.5406	494.00	0.07690	172.341	136.765	0.6417
376.00	0.05169	129.824	105.912	0.5428	496.00	0.07730	172.986	137.225	0.6430
378.00	0.05214	130.649	106.526	0.5450	498.00	0.07769	173.628	137.684	0.6443
380.00	0.05260	131.470	107.136	0.5472	500.00	0.07809	174.269	138.142	0.6456
382.00	0.05305	132.286	107.741	0.5493	502.00	0.07849	174.908	138.598	0.6469
384.00	0.05351	133.097	108.342	0.5514	504.00	0.07888	175.546	139.054	0.6482
386.00	0.05396	133.903	108.939	0.5535	506.00	0.07927	176.182	139.507	0.6494
388.00	0.05441	134.705	109.532	0.5556	508.00	0.07967	176.816	139.960	0.6507
390.00	0.05487	135.503	110.120	0.5577	510.00	0.08006	177.449	140.412	0.6519
392.00	0.05532	136.296	110.705	0.5597	512.00	0.08045	178.081	140.862	0.6532
394.00	0.05577	137.084	111.285	0.5617	514.00	0.08084	178.711	141.311	0.6544
396.00	0.05622	137.869	111.862	0.5637	516.00	0.08123	179.339	141.759	0.6556
398.00	0.05666	138.649	112.435	0.5657	518.00	0.08162	179.966	142.206	0.6568
400.00	0.05711	139.425	113.004	0.5676	520.00	0.08201	180.591	142.652	0.6580
402.00	0.05756	140.197	113.570	0.5695	522.00	0.08240	181.216	143.097	0.6592
404.00	0.05800	140.964	114.132	0.5714	524.00	0.08278	181.838	143.541	0.6604
406.00	0.05844	141.728	114.690	0.5733	526.00	0.08317	182.460	143.983	0.6616
408.00	0.05889	142.488	115.246	0.5752	528.00	0.08355	183.080	144.425	0.6628
410.00	0.05933	143.245	115.798	0.5770	530.00	0.08394	183.699	144.866	0.6639
412.00	0.05977	143.997	116.347	0.5789	532.00	0.08432	184.316	145.305	0.6651
414.00	0.06021	144.746	116.892	0.5807	534.00	0.08471	184.932	145.744	0.6663
416.00	0.06065	145.491	117.435	0.5825	536.00	0.08509	185.547	146.182	0.6674
418.00	0.06108	146.233	117.974	0.5842	538.00	0.08547	186.161	146.619	0.6686
420.00	0.06152	146.971	118.511	0.5860	540.00	0.08585	186.773	147.055	0.6697

3000.00 PSIA ISOBAR

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
					182.00	0.02105	38.5333	26.8462	0.1915
					184.00	0.02117	39.4461	27.6953	0.1965
					186.00	0.02128	40.3623	28.5470	0.2015
					188.00	0.02140	41.2820	29.4013	0.2064
					190.00	0.02152	42.2048	30.2579	0.2113
					192.00	0.02164	43.1097	31.0955	0.2160
					194.00	0.02176	44.0169	31.9346	0.2207
					196.00	0.02189	44.9241	32.7727	0.2254
					198.00	0.02201	45.8250	33.6035	0.2299
					200.00	0.02214	46.7249	34.4322	0.2345
					202.00	0.02227	47.6171	35.2523	0.2389
					204.00	0.02240	48.5052	36.0672	0.2433
					206.00	0.02254	49.3905	36.8782	0.2476
					208.00	0.02267	50.2665	37.6788	0.2519
					210.00	0.02281	51.1264	38.4620	0.2560
					212.00	0.02295	51.9695	39.2273	0.2600
					214.00	0.02310	52.7933	39.9721	0.2639
					216.00	0.02324	53.5930	40.6916	0.2677
					218.00	0.02339	54.4249	41.4420	0.2715
					220.00	0.02354	55.3382	42.2724	0.2757
					222.00	0.02369	56.2630	43.1131	0.2800
					224.00	0.02384	57.1828	43.9473	0.2841
					226.00	0.02400	58.0883	44.7659	0.2882
					228.00	0.02416	58.9731	45.5623	0.2921
					230.00	0.02432	59.9844	46.4837	0.2965
					232.00	0.02448	60.9864	47.3944	0.3009
					234.00	0.02465	61.9800	48.2951	0.3051
					236.00	0.02482	62.9662	49.1867	0.3093
					238.00	0.02499	63.9456	50.0700	0.3135
					240.00	0.02517	64.9191	50.9457	0.3175
					242.00	0.02535	65.8872	51.8144	0.3216
124.00	0.01828	12.2736	2.1275	0.0176	244.00	0.02553	66.8507	52.6767	0.3255
126.00	0.01836	13.2028	3.0124	0.0250	246.00	0.02572	67.8101	53.5331	0.3294
128.00	0.01844	14.1313	3.8960	0.0323	248.00	0.02591	68.7658	54.3841	0.3333
130.00	0.01852	15.0586	4.7778	0.0395	250.00	0.02610	69.7185	55.2302	0.3371
132.00	0.01860	15.9842	5.6572	0.0466	252.00	0.02629	70.6684	56.0716	0.3409
134.00	0.01869	16.9077	6.5339	0.0535	254.00	0.02649	71.6160	56.9089	0.3447
136.00	0.01877	17.8287	7.4074	0.0603	256.00	0.02669	72.5616	57.7423	0.3484
138.00	0.01886	18.7469	8.2775	0.0670	258.00	0.02690	73.5055	58.5720	0.3521
140.00	0.01895	19.6621	9.1441	0.0736	260.00	0.02711	74.4481	59.3984	0.3557
142.00	0.01904	20.5742	10.0070	0.0801	262.00	0.02732	75.3896	60.2217	0.3593
144.00	0.01912	21.4832	10.8662	0.0864	264.00	0.02754	76.3302	61.0420	0.3629
146.00	0.01922	22.3892	11.7217	0.0927	266.00	0.02776	77.2700	61.8595	0.3664
148.00	0.01931	23.2922	12.5737	0.0988	268.00	0.02798	78.2093	62.6744	0.3699
150.00	0.01940	24.1925	13.4223	0.1049	270.00	0.02821	79.1482	63.4867	0.3734
152.00	0.01949	25.0903	14.2678	0.1108	272.00	0.02844	80.0868	64.2967	0.3769
154.00	0.01959	25.9859	15.1106	0.1167	274.00	0.02868	81.0253	65.1043	0.3803
156.00	0.01969	26.8797	15.9508	0.1224	276.00	0.02892	81.9636	65.9096	0.3837
158.00	0.01978	27.7721	16.7890	0.1281	278.00	0.02916	82.9018	66.7126	0.3871
160.00	0.01988	28.6634	17.6256	0.1337	280.00	0.02941	83.8400	67.5135	0.3905
162.00	0.01998	29.5543	18.4610	0.1393	282.00	0.02966	84.7782	68.3121	0.3938
164.00	0.02008	30.4451	19.2956	0.1447	284.00	0.02992	85.7164	69.1085	0.3971
166.00	0.02019	31.3363	20.1301	0.1501	286.00	0.03018	86.6545	69.9027	0.4004
168.00	0.02029	32.2285	20.9647	0.1555	288.00	0.03044	87.5925	70.6946	0.4037
170.00	0.02039	33.1220	21.8000	0.1608	290.00	0.03071	88.5304	71.4842	0.4070
172.00	0.02050	34.0173	22.6363	0.1660	292.00	0.03098	89.4682	72.2715	0.4102
174.00	0.02061	34.9148	23.4742	0.1712	294.00	0.03125	90.4056	73.0563	0.4134
176.00	0.02072	35.8149	24.3138	0.1763	296.00	0.03153	91.3428	73.8386	0.4166
178.00	0.02083	36.7178	25.1556	0.1814	298.00	0.03181	92.2794	74.6184	0.4197
180.00	0.02094	37.6239	25.9996	0.1865	300.00	0.03210	93.2156	75.3955	0.4228

TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)	TEMPERATURE (R)	SPECIFIC VOLUME (CU FT/LB)	ENTHALPY (BTU/LB)	INTERNAL ENERGY (BTU/LB)	ENTROPY (BTU/LB-R)
302.00	0.03239	94.1510	76.1699	0.4259	422.00	0.05322	145.322	115.774	0.5695
304.00	0.03268	95.0857	76.9415	0.4290	424.00	0.05358	146.069	116.324	0.5713
306.00	0.03298	96.0195	77.7102	0.4321	426.00	0.05394	146.814	116.870	0.5731
308.00	0.03328	96.9523	78.4759	0.4351	428.00	0.05429	147.555	117.415	0.5748
310.00	0.03359	97.8839	79.2386	0.4381	430.00	0.05465	148.294	117.956	0.5765
312.00	0.03389	98.8141	79.9980	0.4411	432.00	0.05500	149.029	118.495	0.5782
314.00	0.03420	99.7430	80.7542	0.4441	434.00	0.05535	149.762	119.031	0.5799
316.00	0.03452	100.670	81.5070	0.4470	436.00	0.05571	150.491	119.565	0.5816
318.00	0.03484	101.596	82.2564	0.4500	438.00	0.05606	151.218	120.096	0.5833
320.00	0.03516	102.519	83.0022	0.4529	440.00	0.05641	151.942	120.625	0.5849
322.00	0.03548	103.441	83.7445	0.4557	442.00	0.05676	152.663	121.151	0.5865
324.00	0.03581	104.361	84.4830	0.4586	444.00	0.05711	153.382	121.675	0.5882
326.00	0.03613	105.278	85.2178	0.4614	446.00	0.05746	154.098	122.197	0.5898
328.00	0.03647	106.193	85.9487	0.4642	448.00	0.05781	154.811	122.716	0.5914
330.00	0.03680	107.105	86.6758	0.4670	450.00	0.05816	155.522	123.234	0.5930
332.00	0.03714	108.015	87.3988	0.4697	452.00	0.05851	156.230	123.749	0.5945
334.00	0.03747	108.922	88.1179	0.4724	454.00	0.05886	156.936	124.261	0.5961
336.00	0.03781	109.826	88.8329	0.4751	456.00	0.05920	157.639	124.772	0.5976
338.00	0.03816	110.727	89.5438	0.4778	458.00	0.05955	158.339	125.281	0.5992
340.00	0.03850	111.625	90.2505	0.4805	460.00	0.05989	159.038	125.787	0.6007
342.00	0.03885	112.520	90.9531	0.4831	462.00	0.06024	159.734	126.292	0.6022
344.00	0.03920	113.411	91.6515	0.4857	464.00	0.06058	160.427	126.795	0.6037
346.00	0.03955	114.300	92.3456	0.4883	466.00	0.06093	161.118	127.295	0.6052
348.00	0.03990	115.185	93.0355	0.4908	468.00	0.06127	161.807	127.794	0.6067
350.00	0.04025	116.066	93.7211	0.4933	470.00	0.06161	162.494	128.291	0.6081
352.00	0.04060	116.944	94.4025	0.4958	472.00	0.06195	163.179	128.786	0.6096
354.00	0.04096	117.818	95.0796	0.4983	474.00	0.06229	163.861	129.280	0.6110
356.00	0.04131	118.688	95.7525	0.5008	476.00	0.06263	164.541	129.771	0.6124
358.00	0.04167	119.555	96.4211	0.5032	478.00	0.06297	165.220	130.261	0.6139
360.00	0.04203	120.419	97.0855	0.5056	480.00	0.06331	165.896	130.749	0.6153
362.00	0.04239	121.278	97.7456	0.5080	482.00	0.06365	166.570	131.235	0.6167
364.00	0.04275	122.134	98.4016	0.5103	484.00	0.06399	167.242	131.720	0.6181
366.00	0.04311	122.985	99.0534	0.5127	486.00	0.06432	167.912	132.203	0.6195
368.00	0.04347	123.833	99.7010	0.5150	488.00	0.06466	168.580	132.685	0.6208
370.00	0.04383	124.677	100.345	0.5173	490.00	0.06499	169.247	133.165	0.6222
372.00	0.04419	125.518	100.984	0.5195	492.00	0.06533	169.911	133.643	0.6235
374.00	0.04456	126.354	101.619	0.5218	494.00	0.06566	170.574	134.120	0.6249
376.00	0.04492	127.187	102.251	0.5240	496.00	0.06600	171.234	134.596	0.6262
378.00	0.04528	128.016	102.878	0.5262	498.00	0.06633	171.893	135.070	0.6275
380.00	0.04564	128.841	103.502	0.5284	500.00	0.06666	172.551	135.542	0.6289
382.00	0.04601	129.662	104.121	0.5305	502.00	0.06699	173.206	136.014	0.6302
384.00	0.04637	130.479	104.737	0.5327	504.00	0.06733	173.860	136.483	0.6315
386.00	0.04673	131.292	105.349	0.5348	506.00	0.06766	174.512	136.952	0.6328
388.00	0.04710	132.102	105.957	0.5369	508.00	0.06799	175.162	137.419	0.6340
390.00	0.04746	132.908	106.562	0.5389	510.00	0.06832	175.811	137.885	0.6353
392.00	0.04782	133.711	107.163	0.5410	512.00	0.06865	176.458	138.349	0.6366
394.00	0.04818	134.509	107.760	0.5430	514.00	0.06897	177.104	138.813	0.6378
396.00	0.04855	135.304	108.354	0.5450	516.00	0.06930	177.747	139.274	0.6391
398.00	0.04891	136.095	108.944	0.5470	518.00	0.06963	178.390	139.735	0.6403
400.00	0.04927	136.883	109.531	0.5490	520.00	0.06996	179.031	140.195	0.6416
402.00	0.04963	137.667	110.114	0.5510	522.00	0.07028	179.670	140.653	0.6428
404.00	0.04999	138.448	110.694	0.5529	524.00	0.07061	180.308	141.110	0.6440
406.00	0.05035	139.225	111.271	0.5548	526.00	0.07093	180.945	141.566	0.6452
408.00	0.05071	139.999	111.845	0.5567	528.00	0.07126	181.580	142.021	0.6464
410.00	0.05107	140.769	112.415	0.5586	530.00	0.07158	182.213	142.475	0.6476
412.00	0.05143	141.536	112.983	0.5605	532.00	0.07190	182.846	142.928	0.6488
414.00	0.05179	142.300	113.547	0.5623	534.00	0.07223	183.476	143.379	0.6500
416.00	0.05215	143.060	114.108	0.5641	536.00	0.07255	184.106	143.830	0.6512
418.00	0.05251	143.817	114.666	0.5660	538.00	0.07287	184.734	144.279	0.6524
420.00	0.05287	144.571	115.222	0.5678	540.00	0.07319	185.361	144.728	0.6535

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U. S. DEPARTMENT OF COMMERCE
Luther H. Hodges, *Secretary*

NATIONAL BUREAU OF STANDARDS
A. V. Astin, *Director*

THE NATIONAL BUREAU OF STANDARDS

The scope of activities of the National Bureau of Standards at its major laboratories in Washington, D.C., and Boulder, Colorado, is suggested in the following listing of the divisions and sections engaged in technical work. In general, each section carries out specialized research, development, and engineering in the field indicated by its title. A brief description of the activities, and of the resultant publications, appears on the inside of the front cover.

WASHINGTON, D. C.

Electricity. Resistance and Reactance. Electrochemistry. Electrical Instruments. Magnetic Measurements. Dielectrics. High Voltage.

Metrology. Photometry and Colorimetry. Refractometry. Photographic Research. Length. Engineering Metrology. Mass and Scale. Volumetry and Densimetry.

Heat. Temperature Physics. Heat Measurements. Cryogenic Physics. Equation of State. Statistical Physics.

Radiation Physics. X-ray. Radioactivity. Radiation Theory. High Energy Radiation. Radiological Equipment. Nucleonic Instrumentation. Neutron Physics.

Analytical and Inorganic Chemistry. Pure Substances. Spectrochemistry. Solution Chemistry. Standard Reference Materials. Applied Analytical Research. Crystal Chemistry.

Mechanics. Sound. Pressure and Vacuum. Fluid Mechanics. Engineering Mechanics. Rheology. Combustion Controls.

Polymers. Macromolecules: Synthesis and Structure. Polymer Chemistry. Polymer Physics. Polymer Characterization. Polymer Evaluation and Testing. Applied Polymer Standards and Research. Dental Research.

Metallurgy. Engineering Metallurgy. Microscopy and Diffraction. Metal Reactions. Metal Physics. Electrolysis and Metal Deposition.

Inorganic Solids. Engineering Ceramics. Glass. Solid State Chemistry. Crystal Growth. Physical Properties. Crystallography.

Building Research. Structural Engineering. Fire Research. Mechanical Systems. Organic Building Materials. Codes and Safety Standards. Heat Transfer. Inorganic Building Materials. Metallic Building Materials.

Applied Mathematics. Numerical Analysis. Computation. Statistical Engineering. Mathematical Physics. Operations Research.

Data Processing Systems. Components and Techniques. Computer Technology. Measurements Automation. Engineering Applications. Systems Analysis.

Atomic Physics. Spectroscopy. Infrared Spectroscopy. Far Ultraviolet Physics. Solid State Physics. Electron Physics. Atomic Physics. Plasma Spectroscopy.

Instrumentation. Engineering Electronics. Electron Devices. Electronic Instrumentation. Mechanical Instruments. Basic Instrumentation.

Physical Chemistry. Thermochemistry. Surface Chemistry. Organic Chemistry. Molecular Spectroscopy. Elementary Processes. Mass Spectrometry. Photochemistry and Radiation Chemistry.

Office of Weights and Measures.

BOULDER, COLO.

Cryogenic Engineering Laboratory. Cryogenic Equipment. Cryogenic Processes. Properties of Materials. Cryogenic Technical Services.

CENTRAL RADIO PROPAGATION LABORATORY

Ionosphere Research and Propagation. Low Frequency and Very Low Frequency Research. Ionosphere Research. Prediction Services. Sun-Earth Relationships. Field Engineering. Radio Warning Services. Vertical Soundings Research.

Radio Propagation Engineering. Data Reduction Instrumentation. Radio Noise. Tropospheric Measurements. Tropospheric Analysis. Propagation-Terrain Effects. Radio-Meteorology. Lower Atmosphere Physics.

Radio Systems. Applied Electromagnetic Theory. High Frequency and Very High Frequency Research. Frequency Utilization. Modulation Research. Antenna Research. Radiodetermination.

Upper Atmosphere and Space Physics. Upper Atmosphere and Plasma Physics. High Latitude Ionosphere Physics. Ionosphere and Exosphere Scatter. Airglow and Aurora. Ionospheric Radio Astronomy.

RADIO STANDARDS LABORATORY

Radio Physics. Radio Broadcast Service. Radio and Microwave Materials. Atomic Frequency and Time-Interval Standards. Radio Plasma. Millimeter-Wave Research.

Circuit Standards. High Frequency Electrical Standards. High Frequency Calibration Services. High Frequency Impedance Standards. Microwave Calibration Services. Microwave Circuit Standards. Low Frequency Calibration Services.


NBS