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EVALUATION AND PREDICTION OF HENRY'S LAW CONSTANTS AND AQUEOUS SOLUBILITIES FOR SOLVENTS AND HYDROCARBON FUEL COMPONENTS
VOL II: EXPERIMENTAL HENRY'S LAW DATA

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Volatile organics, solvents, fuels, Henry's law constants, aqueous solubilities, air-water distribution.

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

Laboratory measurements of Henry's law constants are reported for 51 chemicals spanning a wide range of chemical structures and volatilities. A static headspace method (Equilibrium Partitioning in Closed Systems, referred to as EPICS) was used to measure Henry's Law Constant, with the standard batch air-stripping method used as a check. An average precision of 5 percent was obtained for the EPICS runs, and the Henry's law constants agreed reasonably well (within 10 percent) with the batch air-stripping results and other reported experimental values. Measurements were conducted over a temperature range of 10-30°C, and the data were correlated with a temperature regression equation coupled with a temperature-dependent error term based on 95 percent confidence limits. The aqueous solubilities of the study compounds were also determined via the shake-flask method at temperatures of 10, 20, and 30 degrees Celsius. Finally, the results of this study were incorporated into a thermodynamic correlation (UNIFAC), based on chemical structure, which allows the prediction of Henry's law constants and aqueous solubilities for a wide variety of pure compounds and mixtures. (Cont'd)

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ITEM 19. ABSTRACT (Cont'd)

in dilute aqueous solutions. Volume II: Experimental Henry's Law Data (Volume II of III)

This report is presented in three volumes. Volume I contains the technical discussion and fabulated values of Henry's law constants and aqueous solubilities. Volume II contains the experimental Henry's law data. Volume III contains the experimental solubility data and the Fortran source code for the simplex UNIFAC parameter fitting and the interactive program for calculating Henry's law constants and aqueous solubilities.

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EXECUTIVE SUMMARY

The Installation Restoration program (IRP) underway at numerous Air Force bases has identified several sites with contaminated soil and groundwater. This subsurface contamination is the result of fuels, cleaning solvents, and degreasers entering the subsurface environment from accidental spills, leaking storage tanks, and past disposal practices. HQ AFESC/RDVW is conducting research aimed at developing treatment strategies for groundwater cleanup, and studying the fate and transport of contaminants in subsurface systems. Many of the contaminants of concern are volatile by nature, and a knowledge of their air-water distribution and aqueous solubility is needed to assess the compounds treatability and to support the basic laboratory studies.

The objectives of this research were to develop Henry's law constants and aqueous solubilities as a function of temperature, for a variety of organic compounds of Air Force concern (Table 1). Secondary objectives were to determine what effect mixed organics, in an aqueous solution, exhibit on individual Henry's law constants and evaluate various methods used to predict Henry's law constants.

This report documents experimentally determined values of Henry's law constants and aqueous solubility for 51 compounds of Air Force concern. The report is presented in three volumes. Volume I contains the technical discussion and tabulated values of Henry's law constants and aqueous solubilities. Volume II and III contain all the raw data and the fortran source code for an interactive program used to predict the chemical parameters.

Many of the contaminants of concern are volatile by nature, and a knowledge of their air-water distribution is required for the design of treatment processes and for providing insight into their environmental fate and transport. A static headspace method (Equilibrium Partitioning In Closed Systems, referred to as EPICS) was used to measure the Henry's law constants, with the standard batch air stripping method used as a check.

The Henry's constants were determined as a function of tempertaure from 10 to 30 ^{o}C (Table 11) and these values were then used to generate temperature regression equations (Table 8). Generally speaking the EPICS' results from this study agree well with other published results (Table 12). However, for many of the compounds reported here, confirmed values of Henry's constant do not exist in the literature, and if they do, values are rarely reported as a function of temperature with rigorous statistics.

Solubility data for organic compounds in water are important for environmental studies because they provide fundamental information necessary to predict transport in aqueous systems. This data may also be used to predict carbon sorption of contaminants, and the air-or steam-stripping behavior for a given compound. The aqueous solubility of the 51 study compounds were determined at 10, 20, and 30°C (Table 14). Three different methods were used, but the majority of the data were collected using a shake-flask technique. Although the solubilities were not a strong function of temperature over the range studied (i.e., 10-30 °C), several general trends were noted. First, the solubility of the halongenated hydrocarbons increased with temperature. Second, the solubility of the substituted aromatic hydrocarbons increased with temperature. Finally, maxima and minima are observed for a wide range of compounds without any general trend that can be demonstrated to be statistically significant.

Groundwater contamination is often characterized by the presence of several different contaminants rather than one single compound. For this reason, studies were conducted to determine whether the presence of other compounds would affect the Henry's law constant of a single compound. Deviations from ideal behavior were observed (pg 52), but confirming experiments were not performed. Although the results were not conclusive, the project team believes the observed interactions were real and reproducible.

It would not be feasible to experimentally determine Henry's law constants for all chemical compounds. There will be times when a Henry's law constant is needed but an experimentally determined value is not reported and the situation does not permit a laboratory study to determine the constant. For this reason, a technique to accurately estimate Henry's constant using a minimum of physiochemical properties would be useful. Three different thermodynamic techniques for correlating experimental Henry's law constants were examined (page 61). The techniques were examined to determine their applicability to environmental systems and their predictive capacity for unmeasured multicomponent systems. The UNIFAC method proved to be the most effective way of utilizing the data base developed during this project. At computer algorithim to fit the current data to a new environmental UNIFAC binary interaction data base was developed and a portion of the experimental data collected was incorporated into this new data base. The new data base creates improvement in the predictions generated by UNIFAC in the dilute concentration regime (Figures 13 through 16).

PREFACE

This report was prepared by the Research Triangle Institute, Research Triangle Park NC 22707, under Contract No. F08635-85-C-0054. The AFESC/RDVW Project Officer was Captain Richard A. Ashworth.

The report documents Henry's law constants and aqueous solubilities, as a function of temperature, for 51 compounds of Air Force concern. The study was performed between February 1985 and September 1986.

This report is presented in three volumes. Volume I contains the technical discussion and the tabulated values of Henry's law constants and aqueous solubilities. Volume II contains the experimental Henry's law data. Volume III contains the experimental solubility data and the Fortran source code for the simplex UNIFAC parameter fitting and the interactive program for calculating Henry's law constants and aqueous solubilities.

Mention of trademarks and trade names of material and equipment does not constitute endorsement or recommendation for use by the Air Force, nor can the report be used for advertising the product.

This report has been reviewed by the Public Affairs Office (PA) and is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nationals.

This technical report has been reviewed and is approved for publication.

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are included in this volume. Keywords: Water pollution Soil contamination

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APPENDIX A

SUMMARY OF LITERATURE SEARCH

This is a self-contained document with its own internal style which, varies from our format.

SUMMARY OF LITERATURE SEARCH FINDINGS

The literature search initiated for this project may be divided into three main areas: (1) methodologies for measuring or estimating Henry's Law constants; (2) techniques for determining aqueous solubilities of volatile organics; and (3) group contribution correlations for VLE prediction. A thorough computer keyword search was supplemented by a manual investigation of the literature. Data bases used in the computer phase of the search include NTIS, COMPENDEX, CHEMICAL ABSTRACTS, WATERNET, POLLUTION ABSTRACTS, ENVIROLINE, and BIOSIS PREVIEWS.

A number of articles were found concerning Henry's Law constants for volatile organic compounds. The major measurement techniques discussed in the literature to date are inert gas stripping (batch air stripping in a bubble-purge column) and headspace methods such as EPICS. Procedures also exist for estimating Henry's Law constant from theoretical considerations and/or component physical property data, with particularly widespread use currently being made of crude, often highly suspect values calculated from the ratio of the organic's vapor pressure to its aqueous solubility limit. Finally, articles were found covering headspace analysis of trace organics, headspace concentration methods such as the purge-and-trap technique, and continuous organic extraction of aqueous samples. The latter two subjects are of importance to this project since they can be used to overcome detection limit problems and allow GC injection of non-aqueous liquid samples, respectively. Experimental Henry's constant and solubility data obtained during this study will be compared to values given in the comprehensive listing of Mackay and Shiu (1981).

Methodologies for aqueous solubility measurement found in the literature fall into three categories: High Performance Liquid Chromatography (HPLC) generator column analysis, nephelometry (turbidity measurements), and the "shake-flask" technique which involves GC headspace analysis or UV liquid-phase detection. Shake-flask analysis, according to various authors, is accurate but time-consuming (several hours of liquid sample equilibration time are required), while the HPLC method, with a large bead surface area for organic-water contact, has a run time of only a few minutes. In this project, nephelometry will be used to check the experimental solubilities for selected chemicals arrived at by the shake-flask and HPLC methods.

The final major grouping of articles from the literature search centers around group contribution (chemical structure) correlations for trace organic physical properties. Procedures exist at present for calculating such quantities as activity coefficients in multicomponent aqueous solutions, pure component organic saturation pressures, and octanol-water partition coefficients. The type of correlation envisioned for this project would be similar in form and usage to the UNIFAC (UNIquac Functional-group Activity Coefficient) activity coefficient model described by Fredenslund, et al. (1975). Isolation of the individual functional group influences on partitioning behavior for various homologous series will be accomplished using the method for octanol-water partition coefficients given in the definitive paper by Leo, et al. (1971). If necessary, other correlation forms found in the literature, such as a nomograph or a correlation of Henry's constant against known physical properties, will be tried in an effort to satisfy Air Force prediction requirements.

The following literature listing summarizes the articles collected to date from the combined computer and manual literature search. Additional articles of interest to the Air Force have been ordered, and the list will be updated as they are received.

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APPENDIX B

SUMMARY OF EPICS RESULTS

SUMMARY OF EPICS RESULTS

Calculated statistical quantities in this Appendix include the coefficient of variation (relative standard deviation) for all replicate Henry's law constant observations; the temperature regression parameters (slope and y-intercept) and associated correlation coefficient for each component; and the Student's "T"-test confidence bands for both the raw data and the temperature regression predictions. Appropriate temperature regression and confidence interval plots have been generated to present the data graphically.

Divided according to component, the data analysis information for each chemical consists of the following:

- Two-page tabulation of the injection peak areas, Henry's law constant estimates, and Coefficient of Variation (COV) values for the component at five temperatures (10, 15, 20, 25 and 30°C)
- Temperature regression plot (ln H versus 1/T)
- Plot showing the 95 percent confidence band on the temperature regression predictions
- Plot illustrating the 95 percent confidence limits (lower and upper) on the averages of the estimates calculated at each temperature.

All of this information is presented in this Appendix for 48 of the original 51 compounds of interest. Notice, however, that the temperature regression plot and associated confidence band plot for component 102 (n-hexane) have been omitted from this compilation. This is because the negligible temperature dependence of the raw data rendered the regression analysis meaningless.

A brief discussion of the phenol results is also warranted here because the measured Henry's law constants are significantly higher than other published data. This observation is explained by recalling that phenol self-associates strongly in aqueous solution even at low environmental concentrations. Equilibrium air-water partitioning of phenol therefore consists of competing equilibria: equilibrium between the phenol monomer and phenol "chains" in the liquid phase, and air-water distribution of the monomer. The EPICS technique measures the air-water partitioning of the monomer only; calculated ratios of vapor pressure to aqueous solubility are based instead on the <u>bulk</u> liquid-phase phenol concentration. In other words, calculated Henry's law constants for highly nonideal chemicals such as phenol will be much lower than experimental values because the overall solubility limit is typically much higher than the true monomer solution concentration. A good model of equilibrium partitioning behavior in such systems should include a realistic representation of the multiple equilibria involved.

Serial Dilution Results with Example Curves

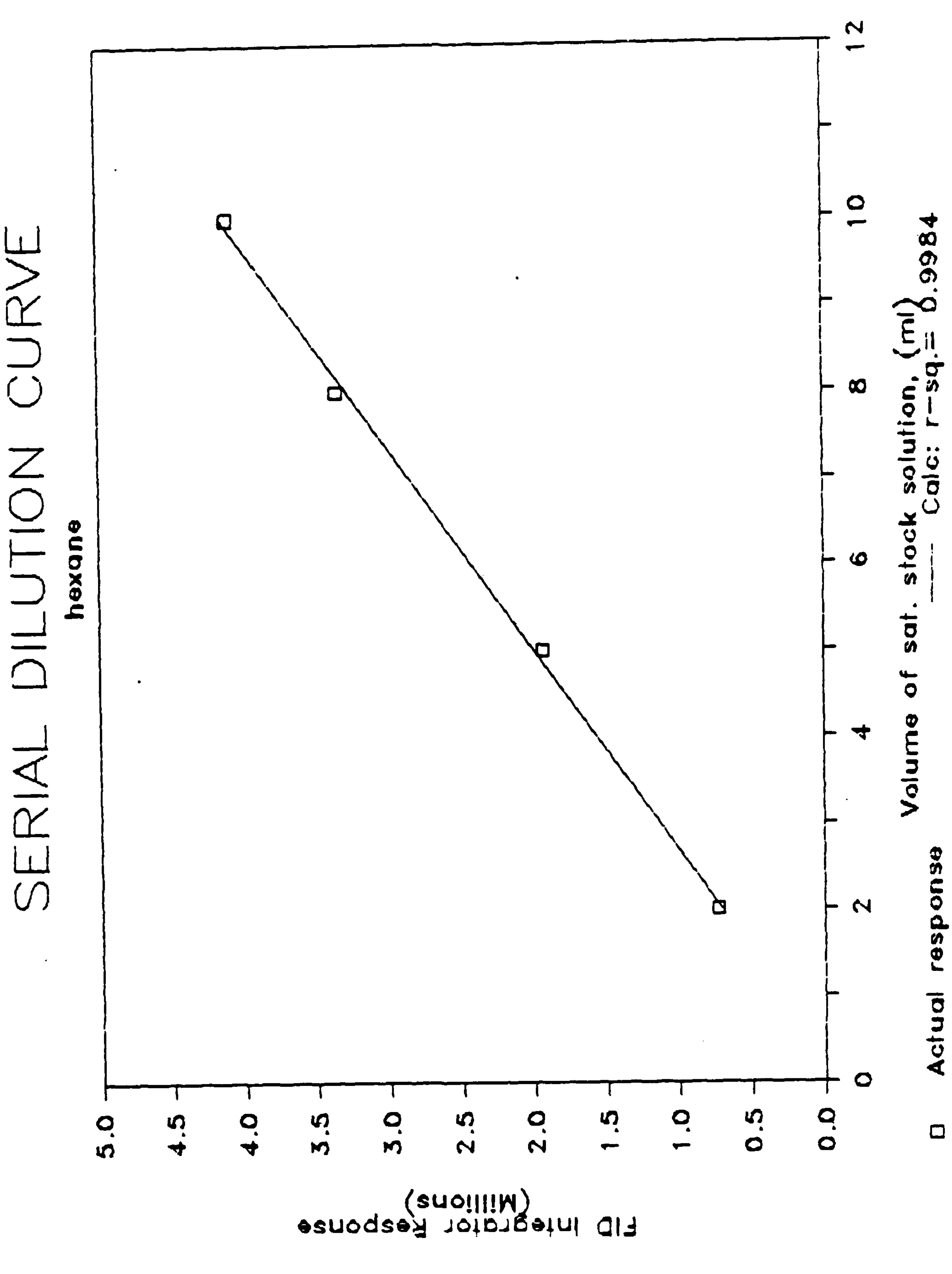
COMPONENT ID INDEX AND SERIAL DILUTION RESULTS

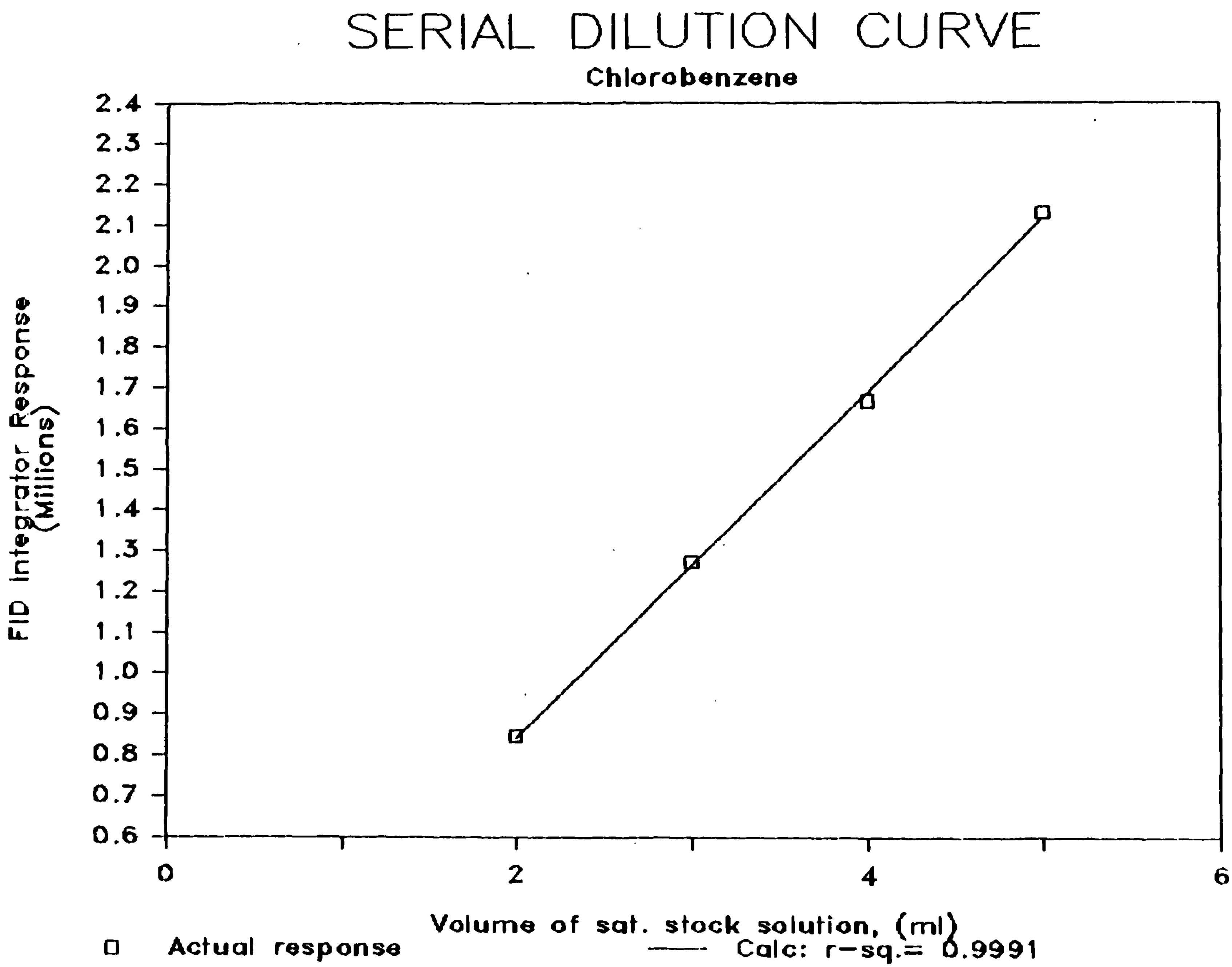
Component ID Number	Component Name	Serial Dilution Correlation Coefficient (r^2)
1	n-nonane	0.998
101	n-nonane	
2	n-hexane	0.998
102	n-hexane	
3	2-methylpentane	1.000
103	2-methylpentane	
4	cyclohexane	0.998
5	1,2-dichlorobenzene	1.000
105	1.2-dichlorobenzene	
6	chlorobenzene	0.999
7	1,3-dichlorobenzene	0.997
107	1,3-dichlorobenzene	
8	1,4-dichlorobenzene	0.997
108	1,4-dichlorobenzene	
9	o-xylene	0.998
10	p-xylene	0.998
11	m-xylene	0.997
12	propylbenzene	0.997
13	ethylbenzene	0.990
113	ethylbenzene	
14	toluene	1.000
15	benzene	0.982
16	phenol	0.864
17	methyl ethylbenzene	0.998
18	1,1-dichloroethane	1.000
19	1,2-dichloroethane	1.000
119	1,2-dichloroethane	0.9993
20	1,1,1-trichloroethane	0.999
21	1,1,2-trichloroethane	0.998
121	1,1,2-trichloroethane	
22	cis-dichloroethylene	0.996
23	trans-dichloroethylene	0.995
24	tetrachloroethylene	1.000
25	trichloroethylene	1.000
26	naphthalene	0.997
27	tetralin (1,2,3,4-tetrahydronaphthanele)	0.996
127	tetralin	
28	decalin	0.989
128	decalin	
29	anthracene	-----
30	vinyl chloride	1.000
130	vinyl chloride	
31	chloroethane	0.999
32	hexachloroethane	0.992
132	hexachloroethane	

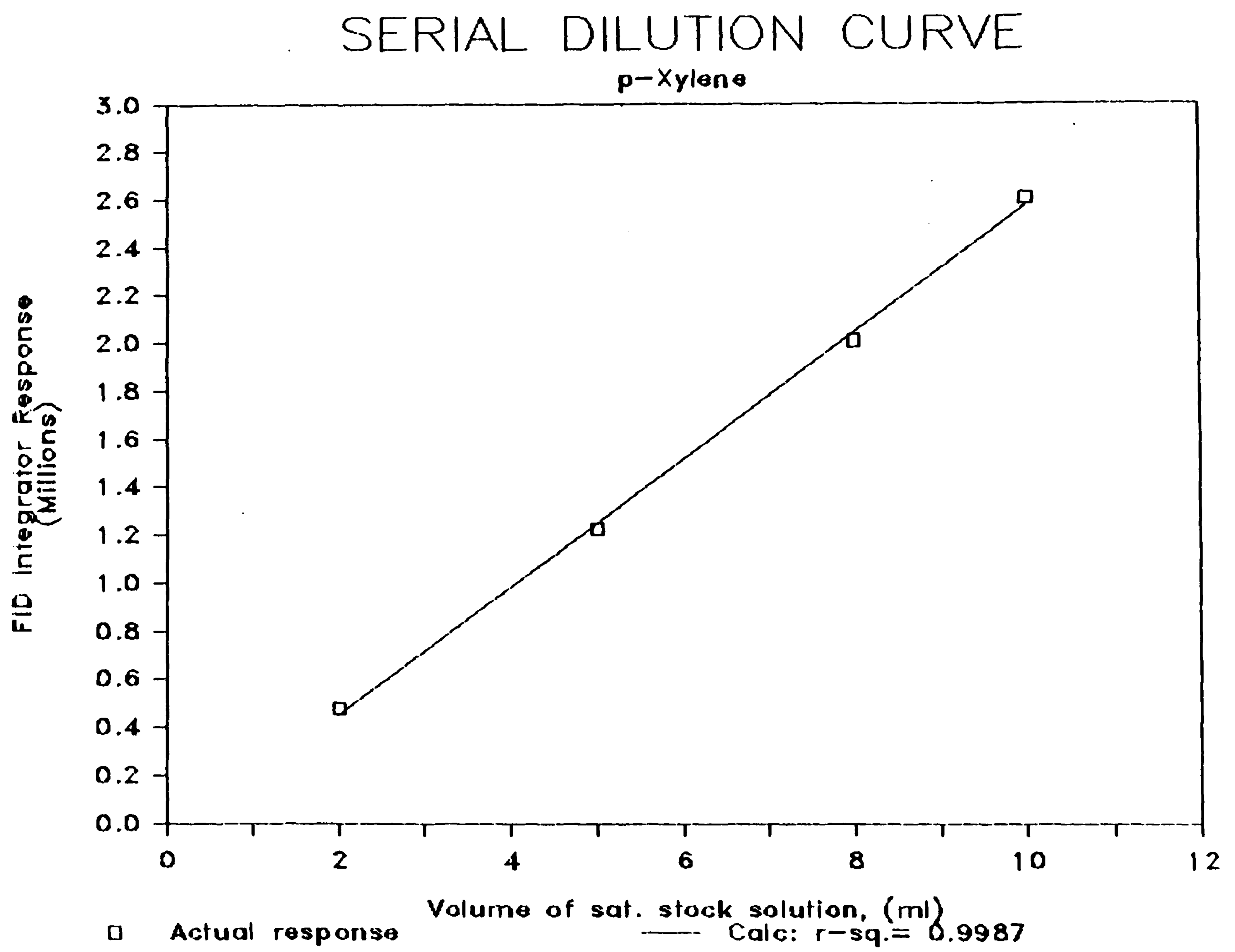
COMPONENT ID INDEX AND SERIAL DILUTION RESULTS

PAGE 2

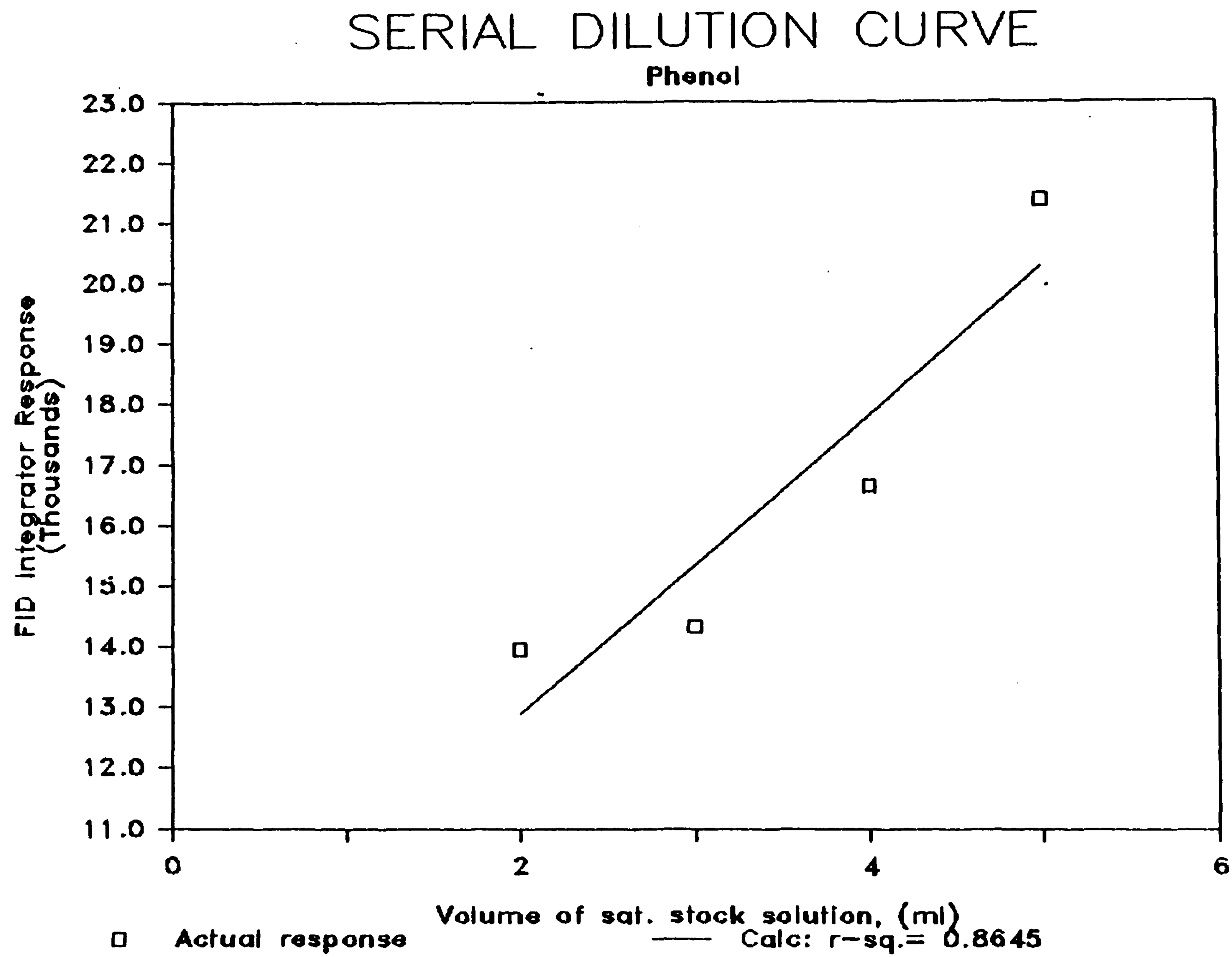
Component ID Number	Component Name	Serial Dilution Correlation Coefficient (r^2)
33	carbon tetrachloride	0.999
34	1,3, 5-trimethylbenzene (mesitylene)	0.997
35	bis (2-ethylhexyl)phthalate (dioctyl phthalate)	-----
36	ethylene dibromide	1.000
136		0.9996
37	1, 1-dichloroethylene (vinylidene chloride)	0.996
38	methylene chloride	0.9993
50	methylene chloride	0.9997
39	chloroform	0.9998
49	chloroform	0.9932
43	1,1,2,2-tetrachloroethane	0.9921
44	1,2-dichloropropane	0.9999
45	dibromochloromethane	0.9990
46	1,2,4-trichlorobenzene	0.9989
47	2,4-dimethylphenol	0.9316
51	1,1,2-trichlorotrifluoroethane	0.9953
52	methyl ethyl ketone (MEK)	0.9970
152	methyl ethyl ketone (MEK)	
53	methyl isobutyl ketone (MIBK)	0.9878
153	methyl isobutyl ketone (MIBK)	------
54	methyl cellosolve	------
55	bis (2-chloroethyl) ether	------
56	trichlorofluoromethane	------


SERIAL DILUTION CURVE
hexane
FID Integrator Response
(Millions)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
2
4
6
8
10
12
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9984

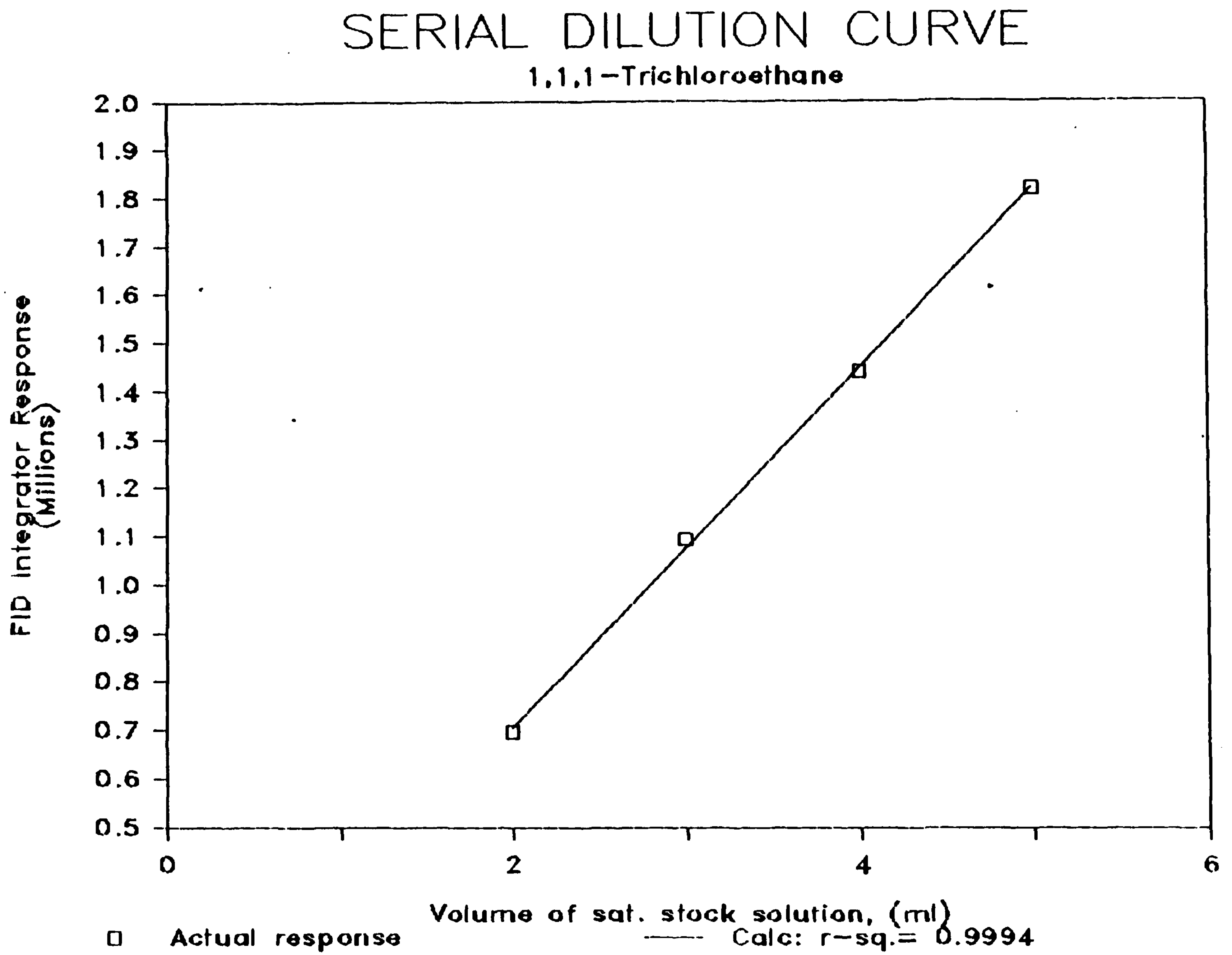

SERIAL DILUTION CURVE
Chlorobenzene
FID Integrator Response
(Millions)
2.4
2.3
2.2
2.1
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0
2
4
6
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9991

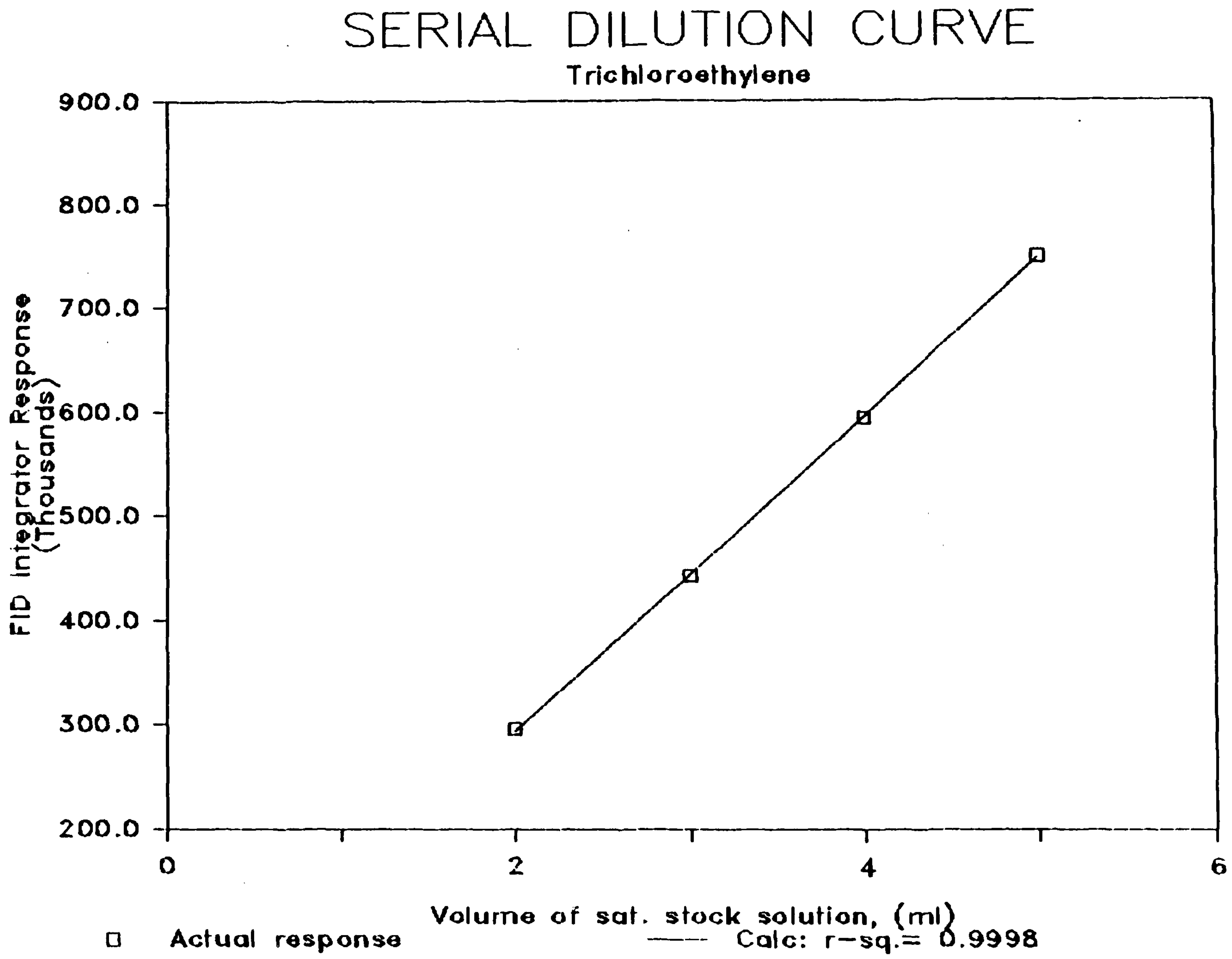


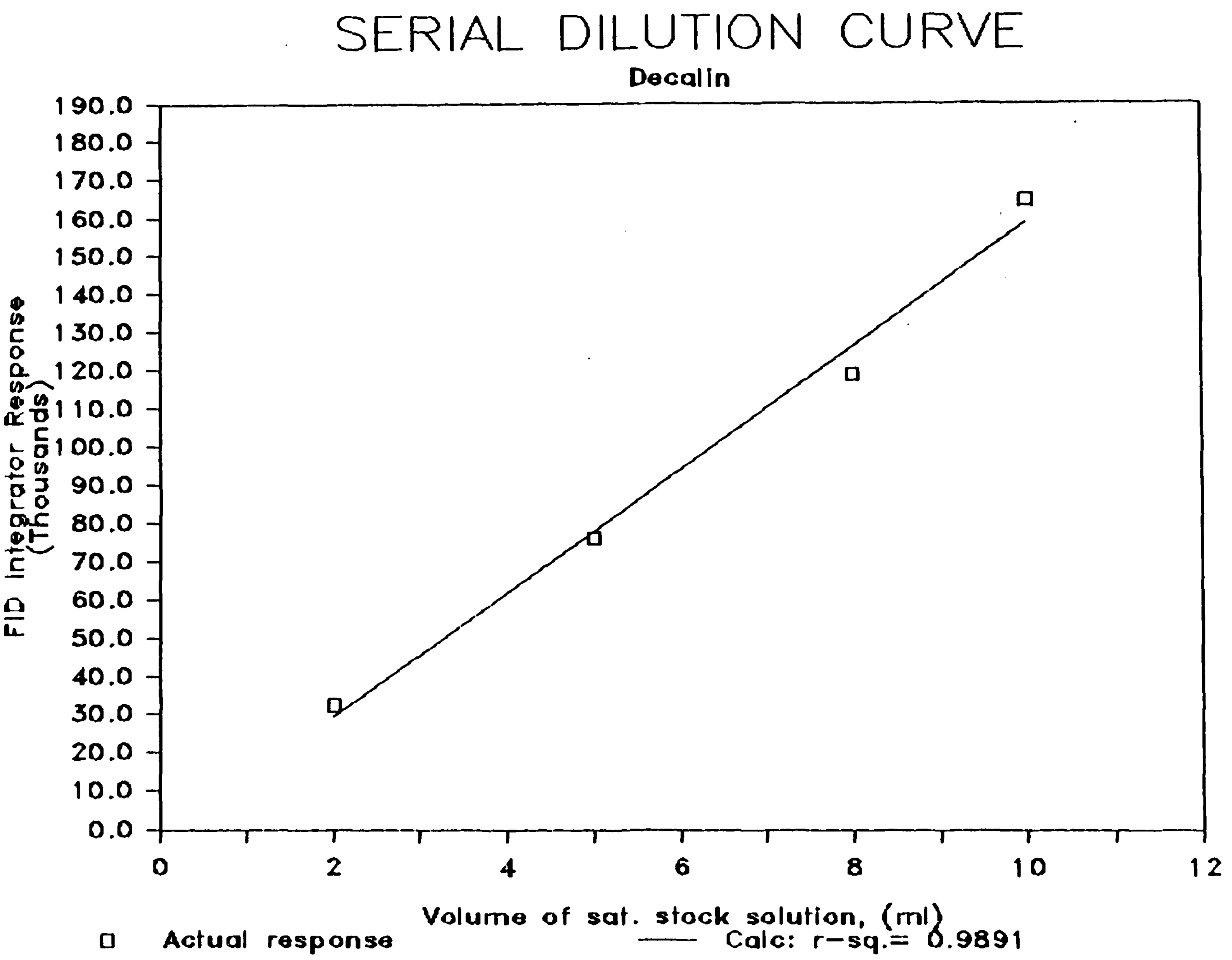
SERIAL DILUTION CURVE
p-Xylene
FID Integrator Response (Millions)
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
2
4
6
8
10
12
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9987

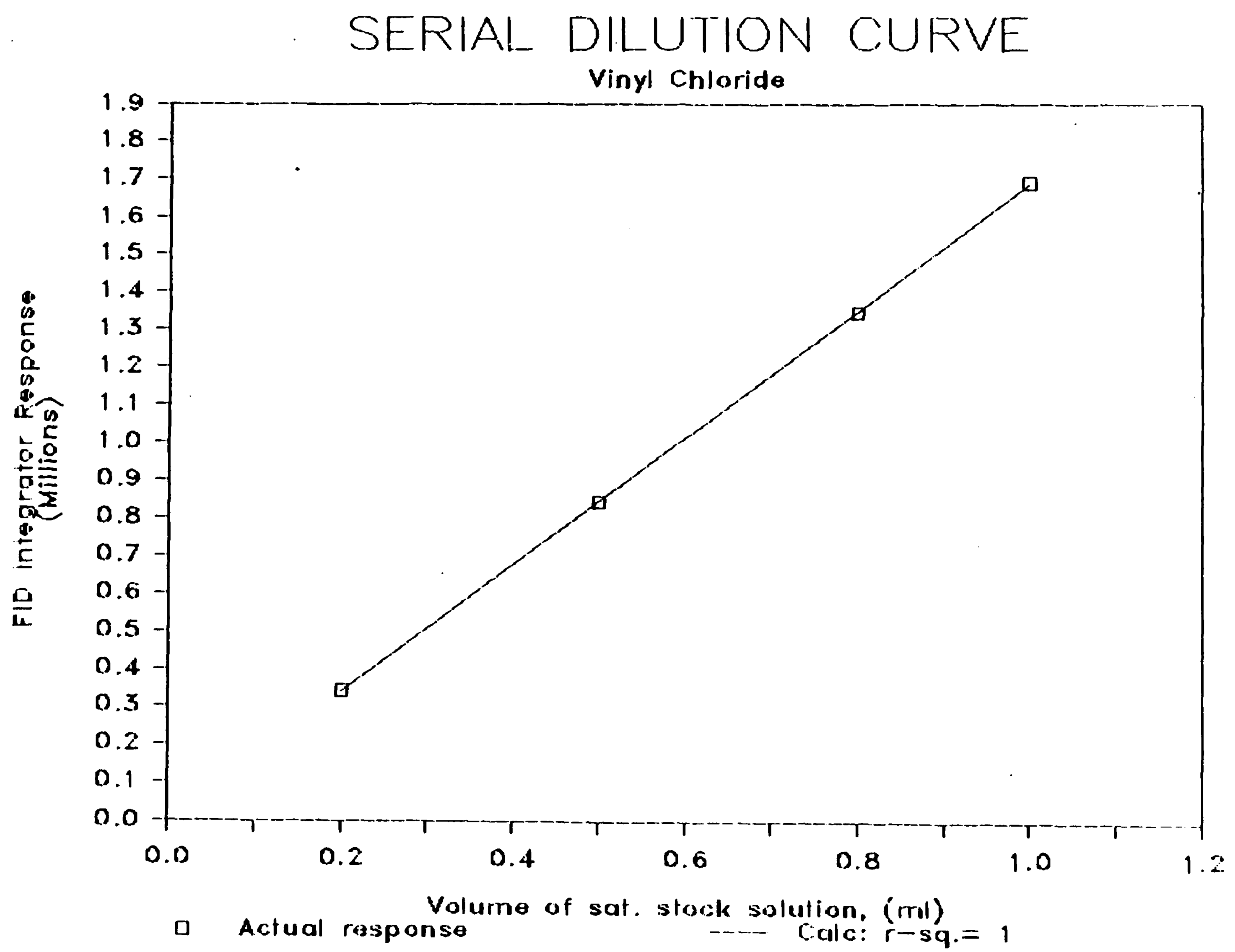


SERIAL DILUTION CURVE
Phenol
FID Integrator Response
(Thousands)
23.0
22.0
21.0
20.0
19.0
18.0
17.0
16.0
15.0
14.0
13.0
12.0
11.0
0
2
4
6
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.8645

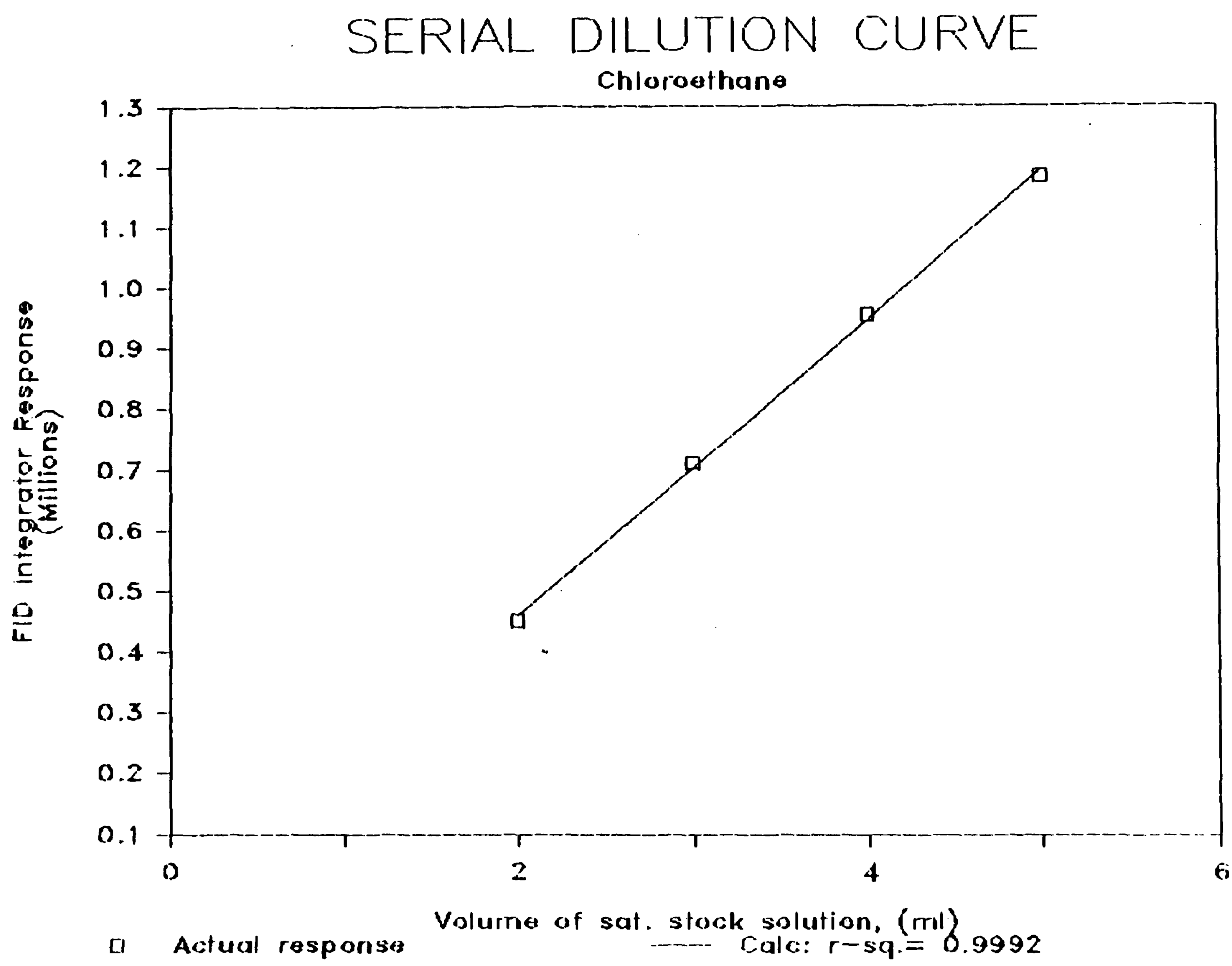

SERIAL DILUTION CURVE
1,1,1-Trichloroethane
FID Integrator Response
(Millions)
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0
2
4
6
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9994


SERIAL DILUTION CURVE
Trichloroethylene
FID Integrator Response
(Thousands)
900.0
800.0
700.0
600.0
500.0
400.0
300.0
200.0
0
2
4
6
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9998

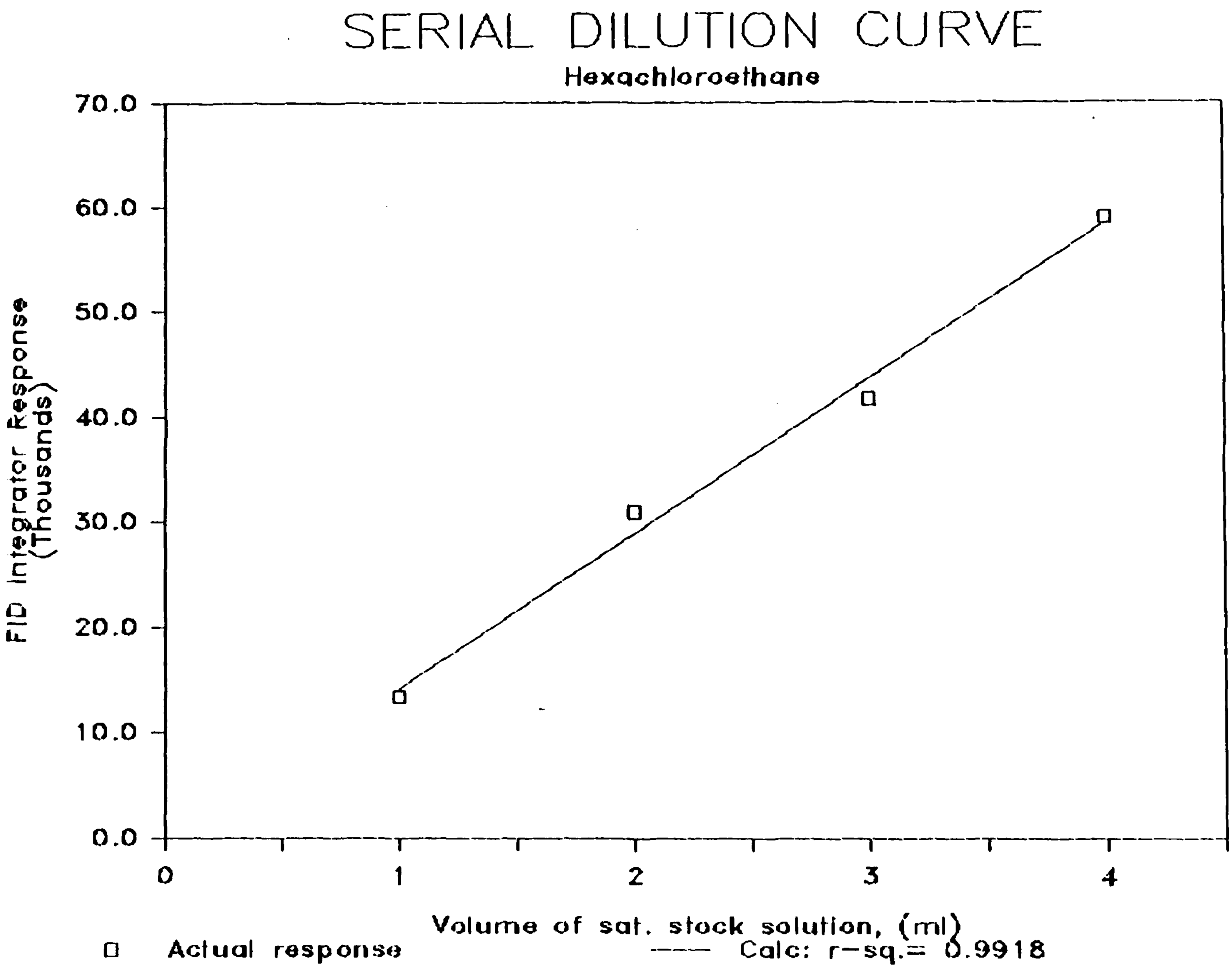

SERIAL DILUTION CURVE
Decalin
FID Integrator Response (Thousands)
190.0
180.0
170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0
2
4
6
8
10
12
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9891

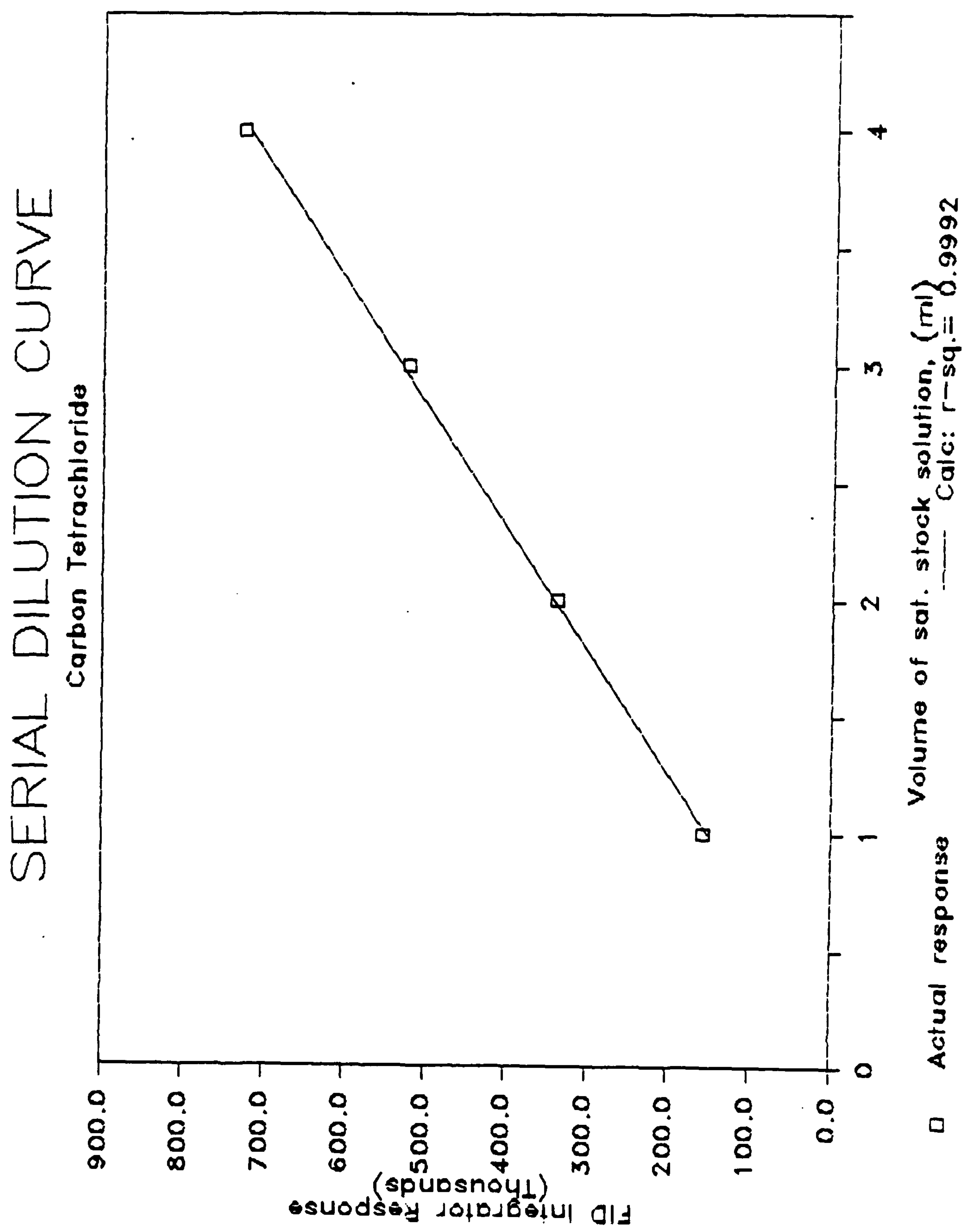


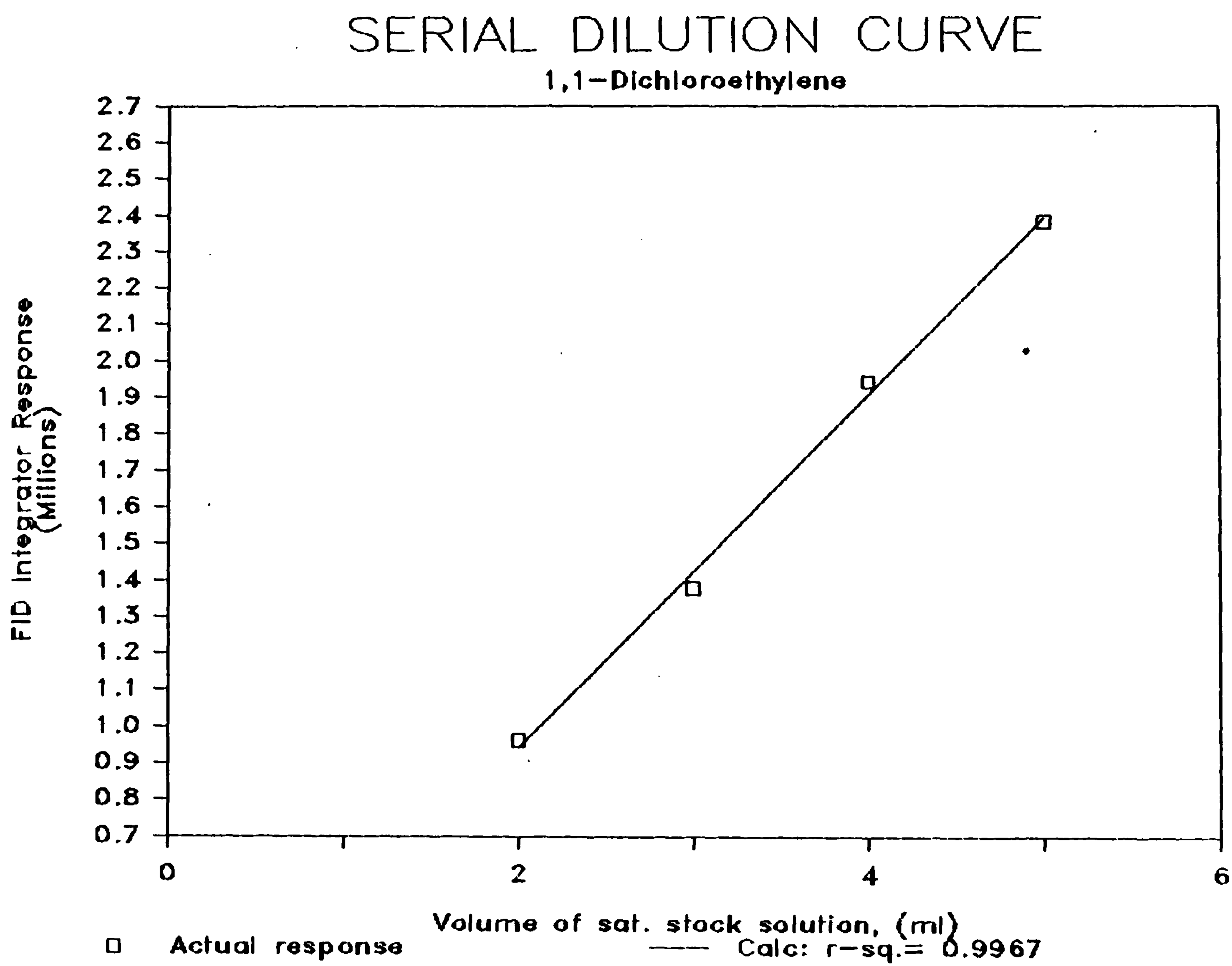
SERIAL DILUTION CURVE
Vinyl Chloride
FID Integrator Response
(Millions)
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.0
0.2
0.4
0.6
0.8
1.0
1.2
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 1

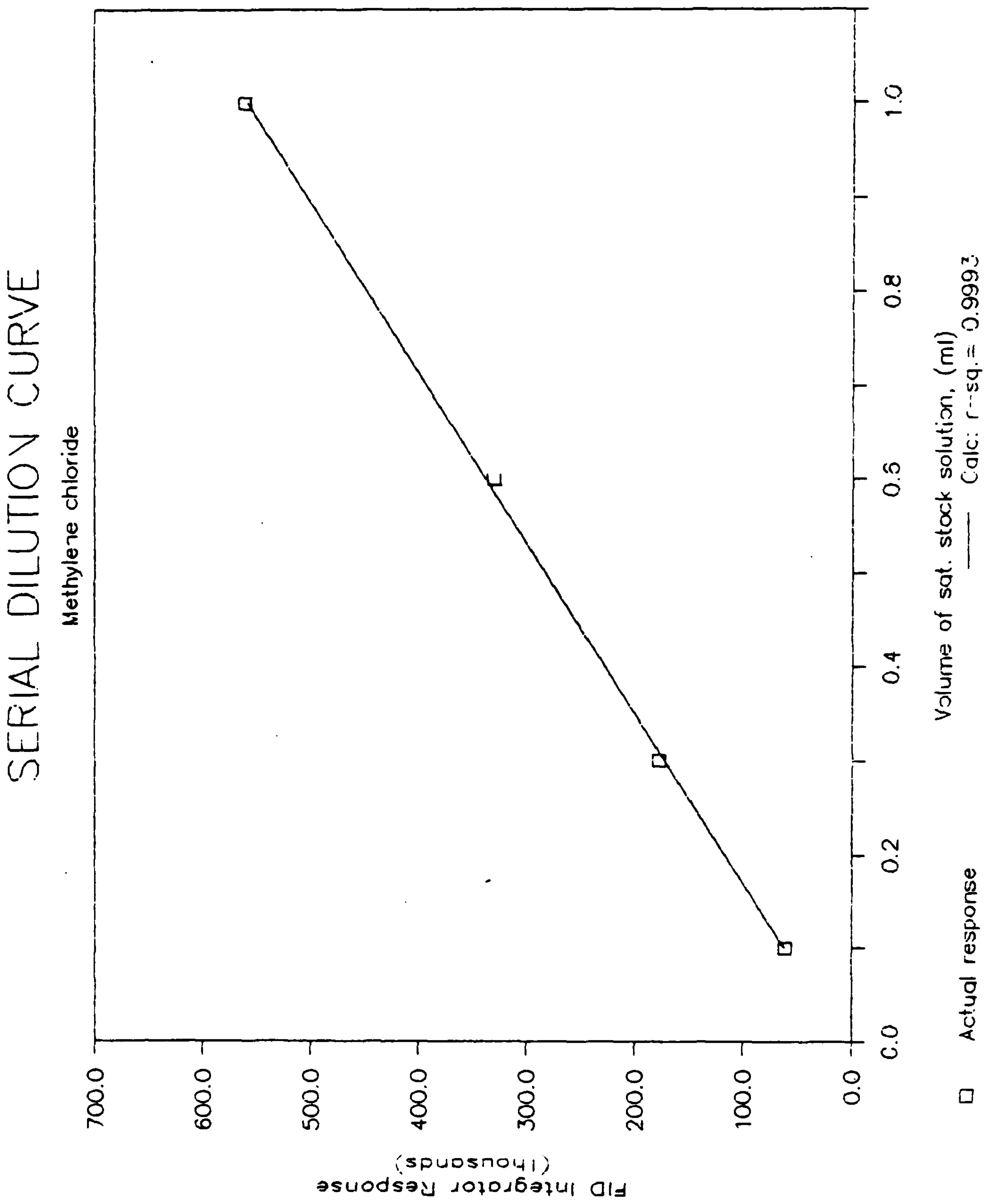


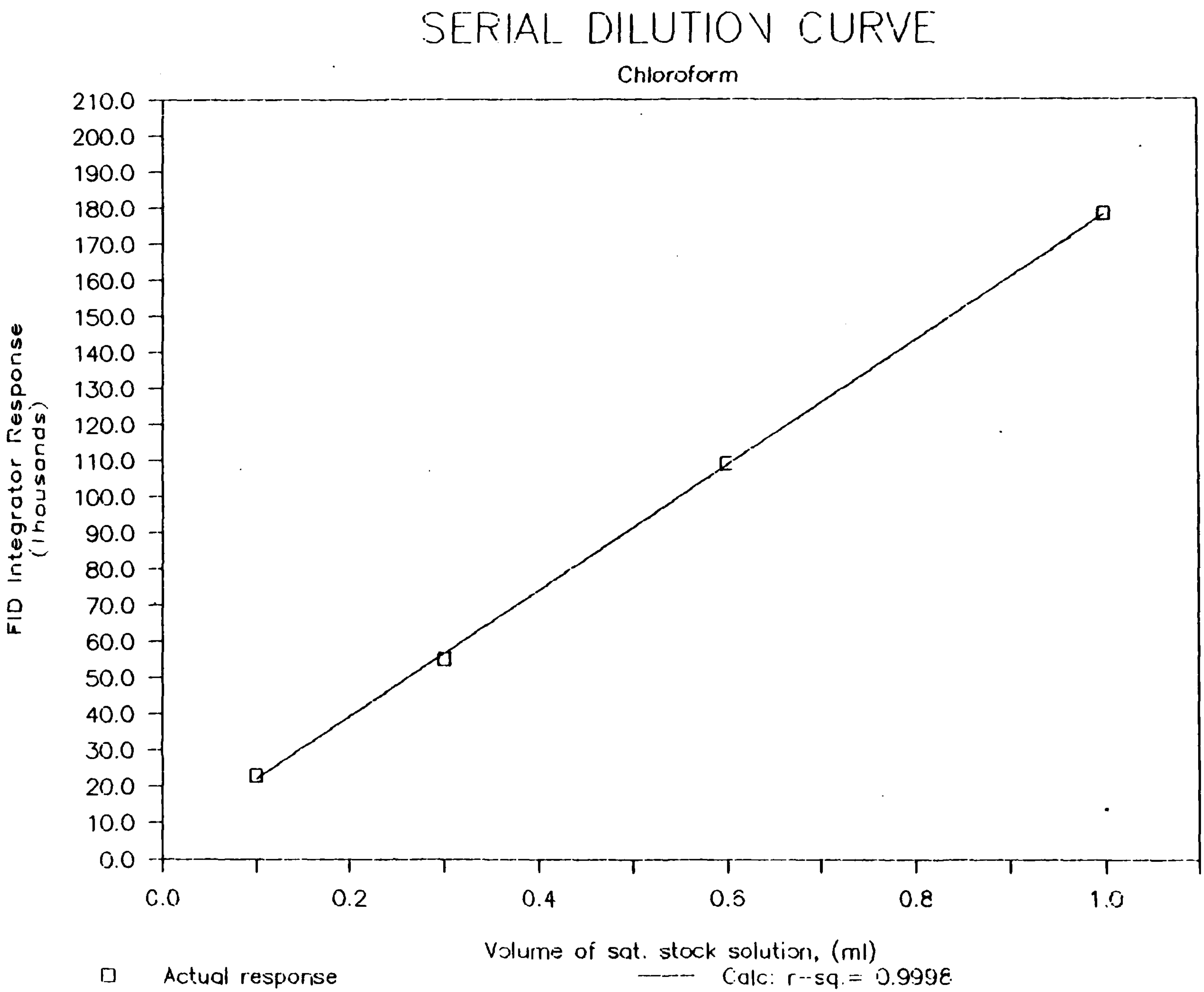
SERIAL DILUTION CURVE
Chloroethane
FID integrator Response (Millions)
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
2
4
6
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9992

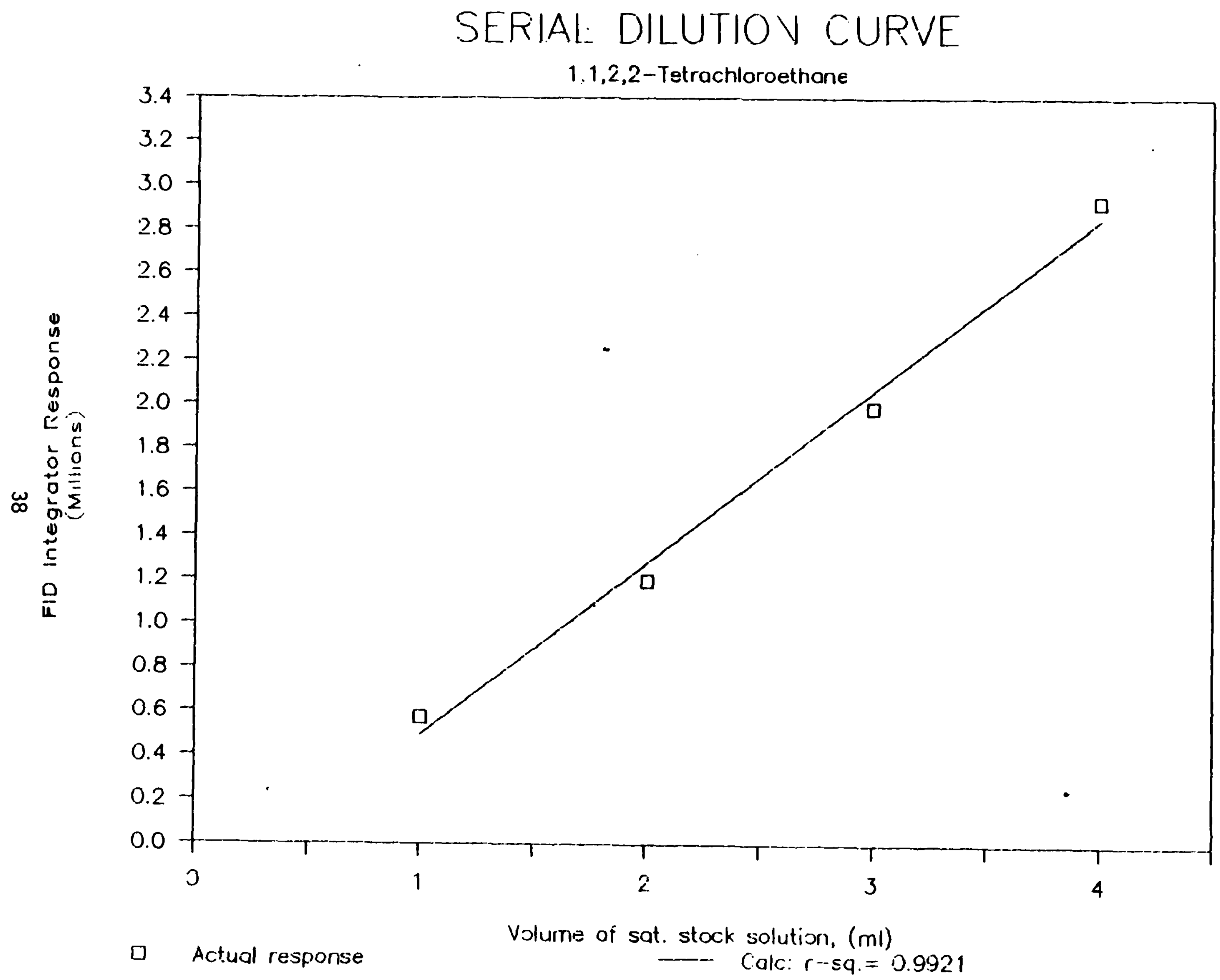

SERIAL DILUTION CURVE
Hexachloroethane
FID Integrator Response
(Thousands)
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0
1
2
3
4
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9918


SERIAL DILUTION CURVE
Carbon Tetrachloride
FID Integrator Response
(Thousands)
900.0
800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
0.0
0
1
2
3
4
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9992

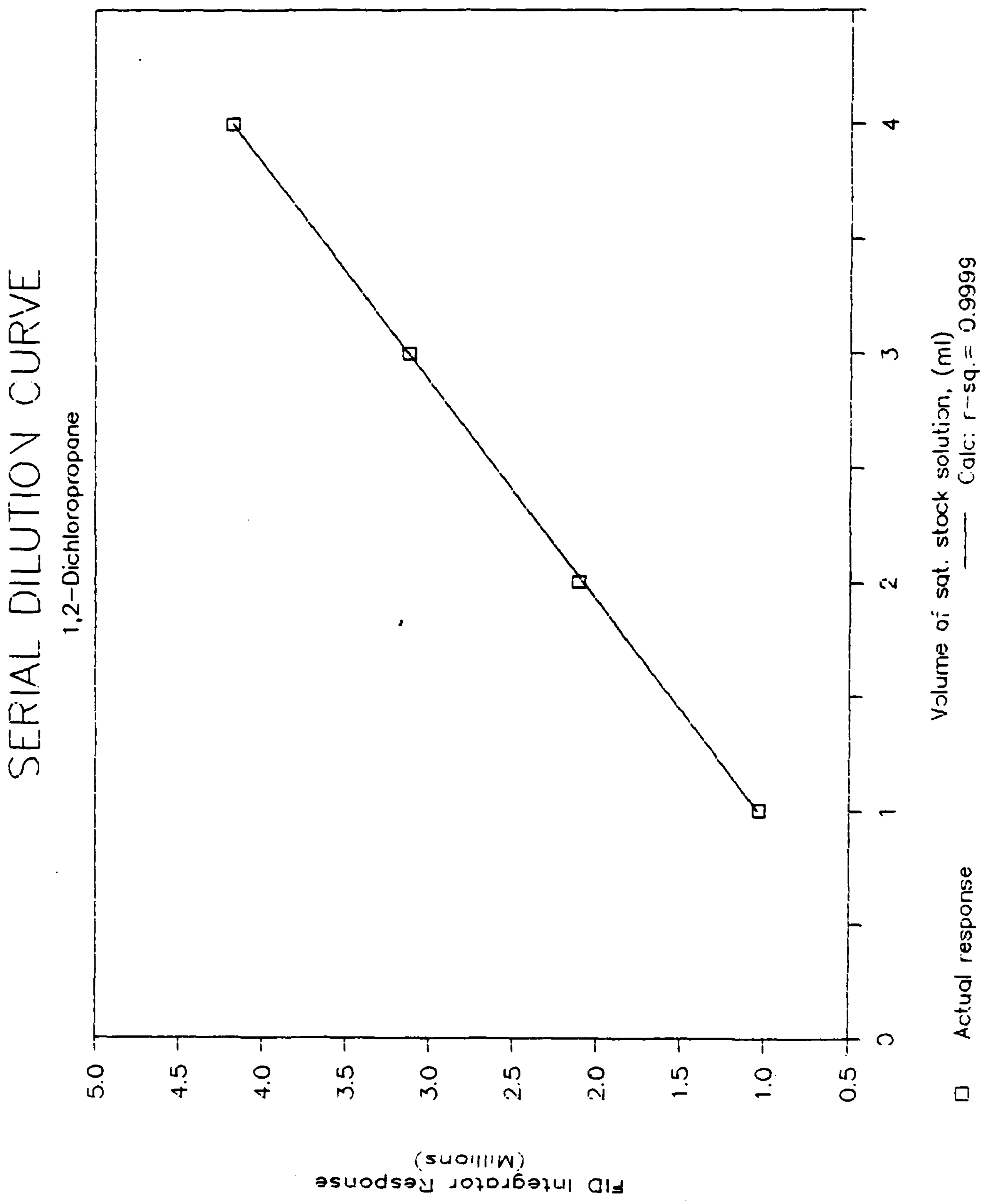

SERIAL DILUTION CURVE
1,1-Dichloroethylene
FID Integrator Response (Millions)
2.7
2.6
2.5
2.4
2.3
2.2
2.1
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0
2
4
6
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9967

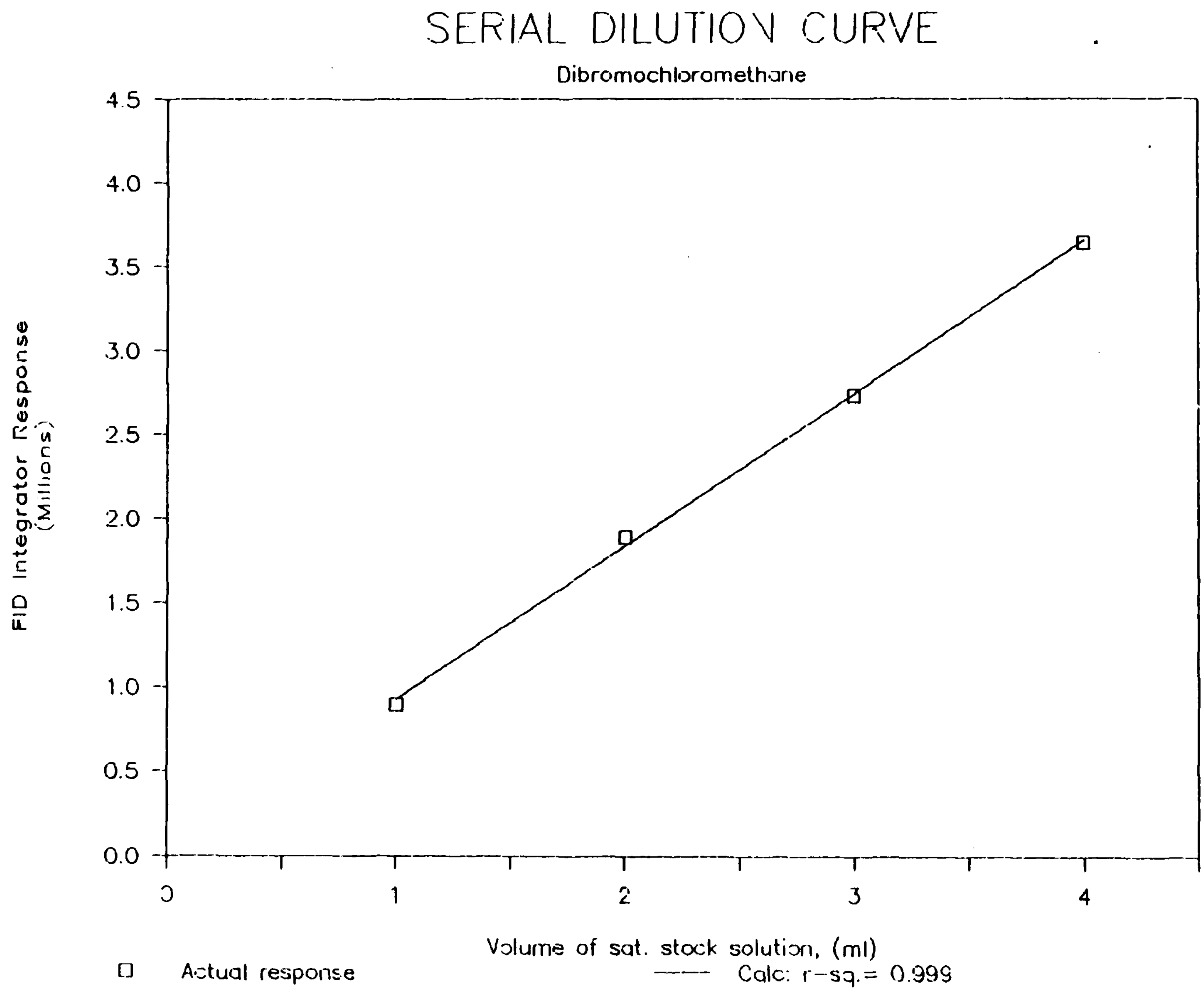

SERIAL DILUTION CURVE
Methylene chloride
FID Integrator Response
(Thousands)
700.0
600.0
500.0
400.0
300.0
200.0
100.0
0.0
0.0
0.2
0.4
0.6
0.8
1.0
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9993


SERIAL DILUTION CURVE
Chloroform
FID Integrator Response
(Thousands)
210.0
200.0
190.0
180.0
170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0.0
0.2
0.4
0.6
0.8
1.0
Volume of sat. stock solution, (ml)
Actual response
Calc: r--sq.= 0.9998



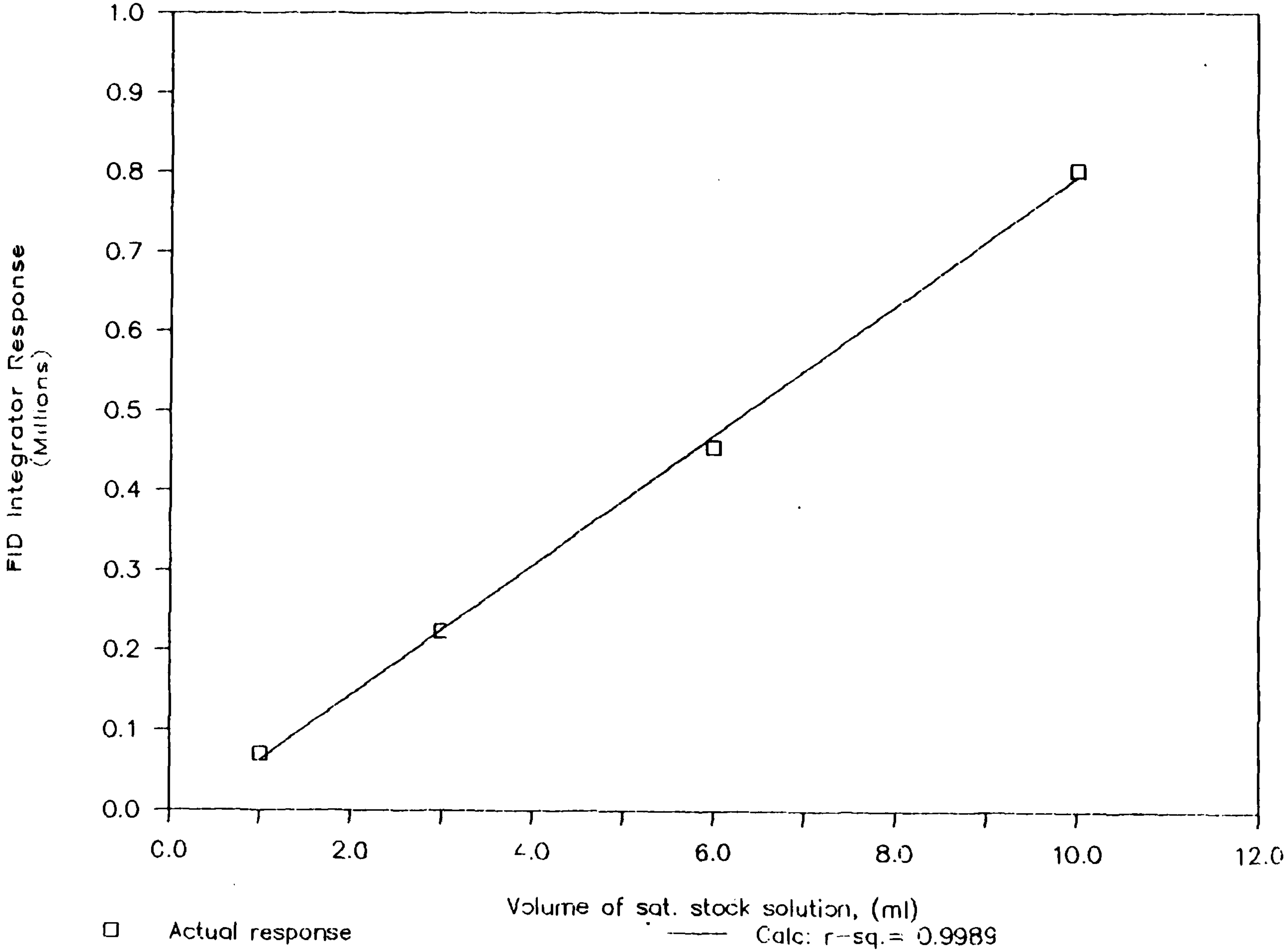
SERIAL DILUTION CURVE
1,1,2,2-Tetrachloroethane
FID Integrator Response
(Millions)
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
1
2
3
4
Volume of sat. stock solution, (ml)
Actual response
Calc: r--sq.= 0.9921

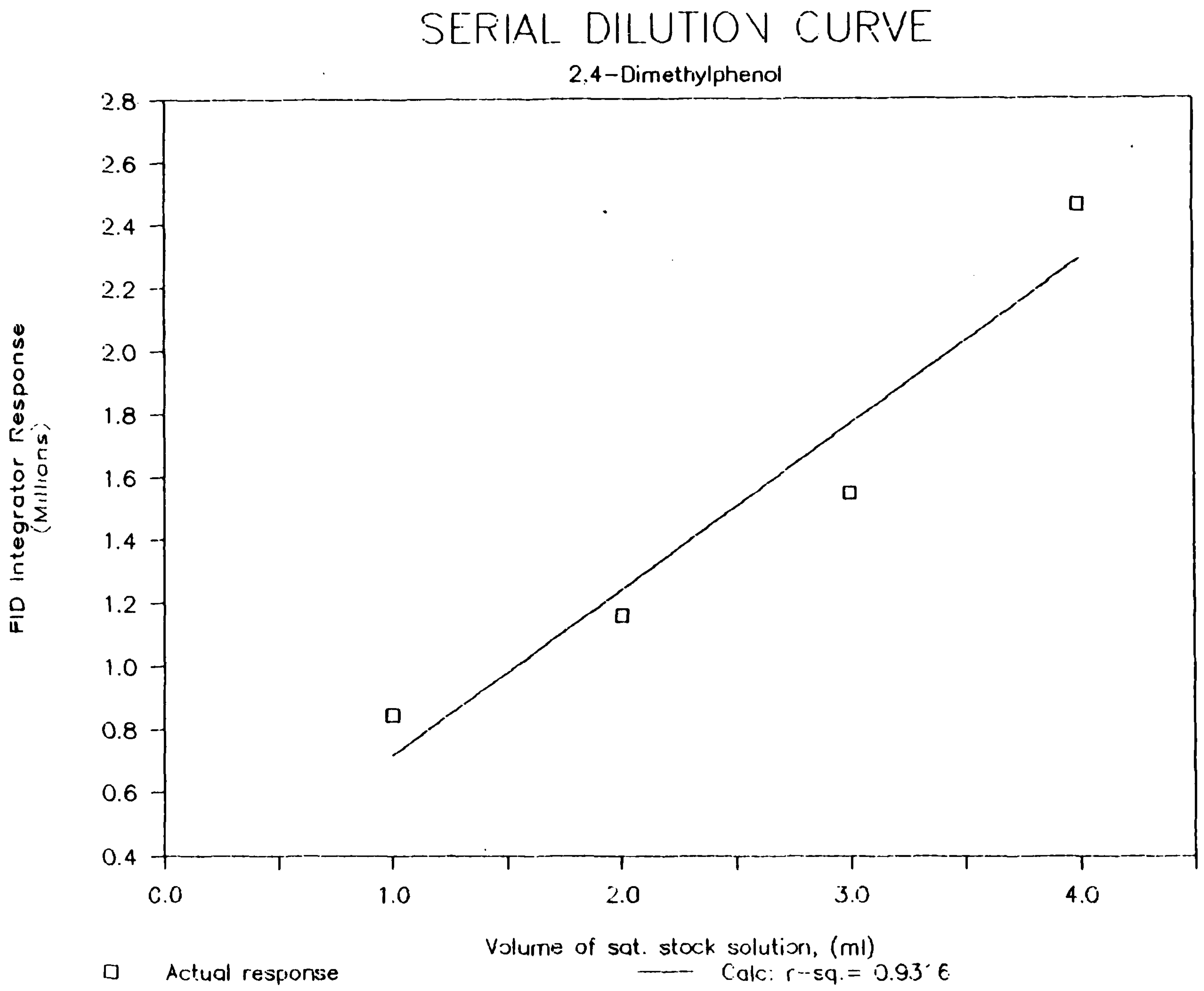

SERIAL DILUTION CURVE
1,2-Dichloropropane
FID Integrator Response
(Millions)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
1
2
3
4
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9999

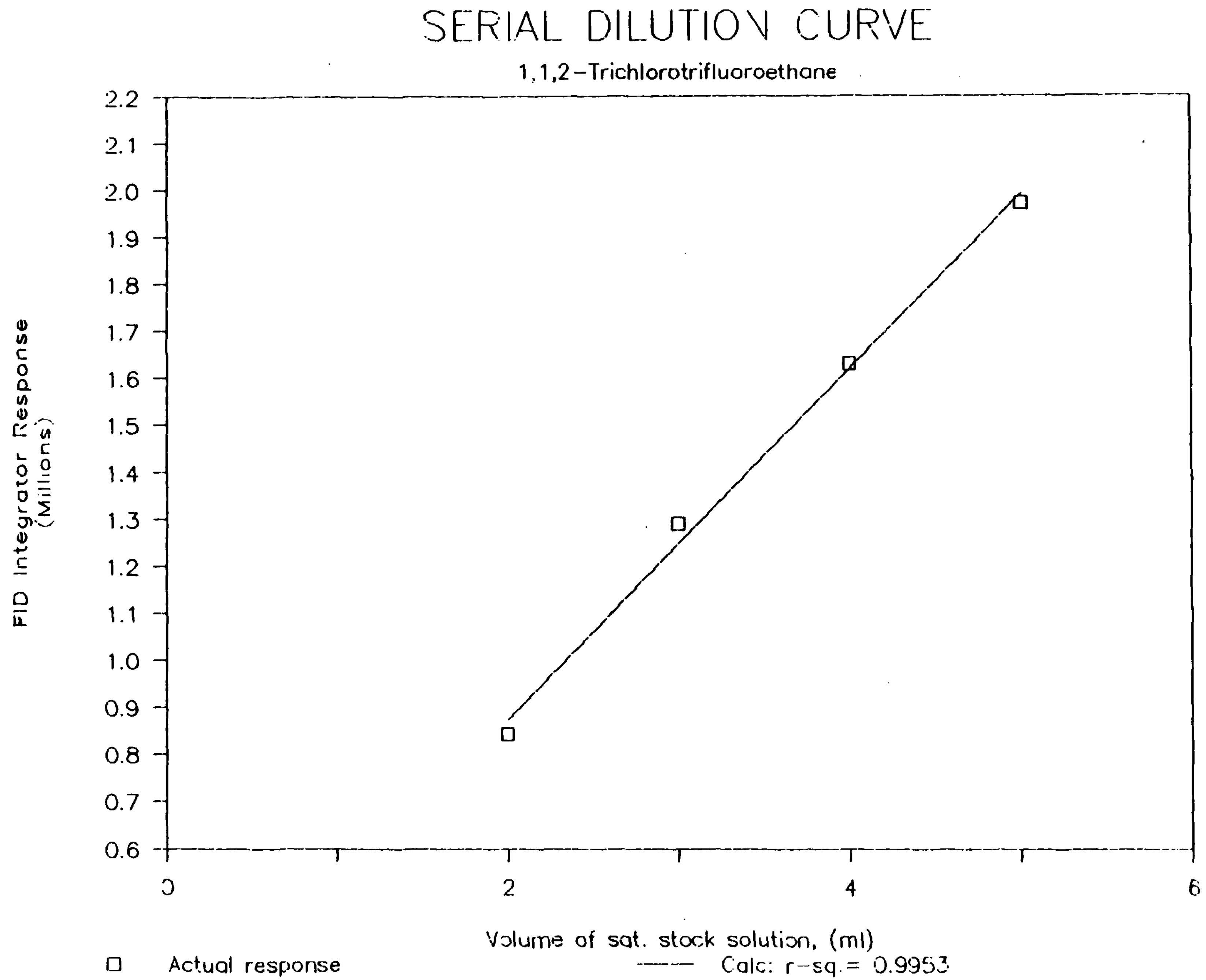

SERIAL DILUTION CURVE
Dibromochloromethane
FID Integrator Response
(Millions)
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
1
2
3
4
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.999

SERIAL DILUTION CURVE

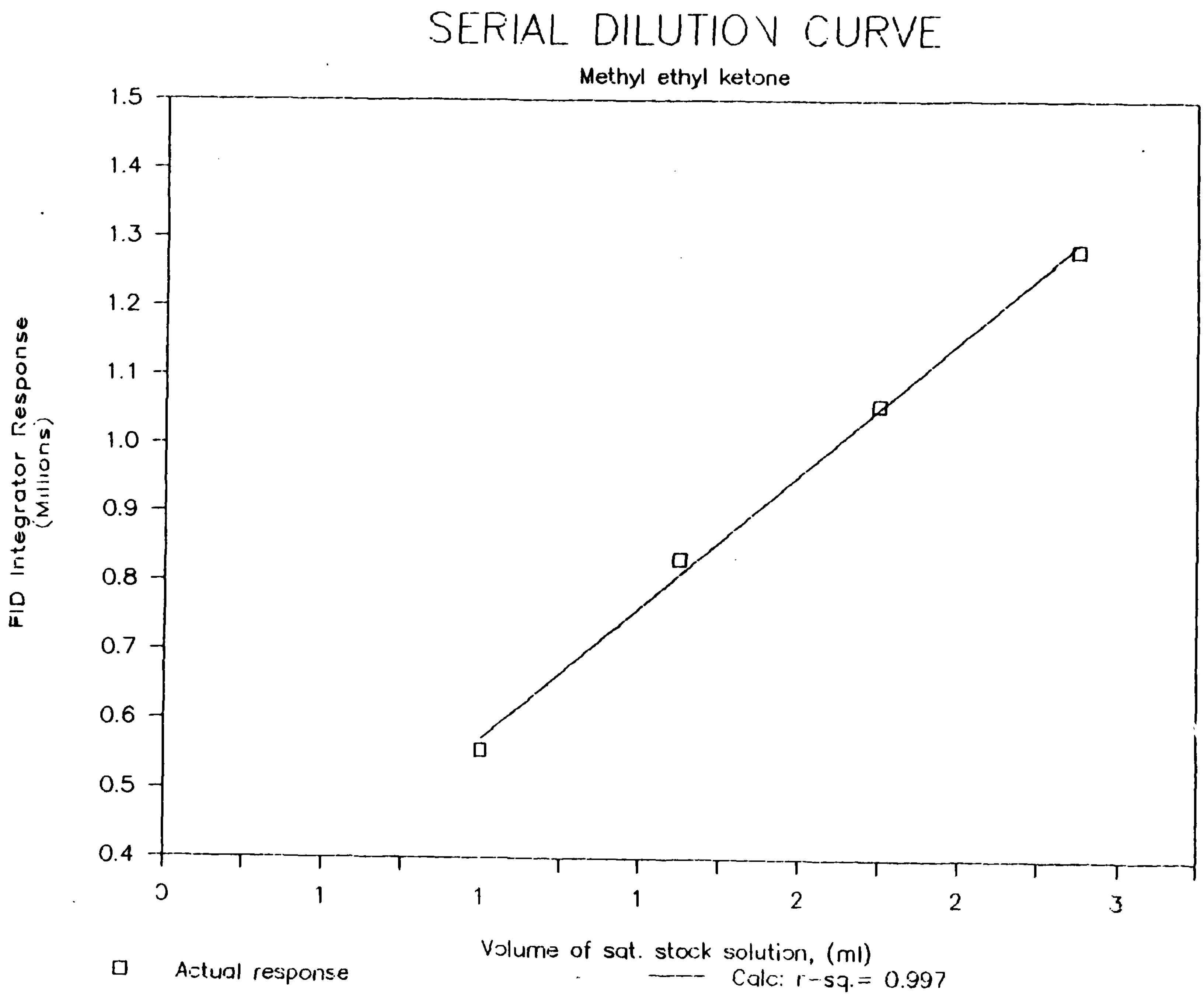
1,2,4-Trichlorobenzene

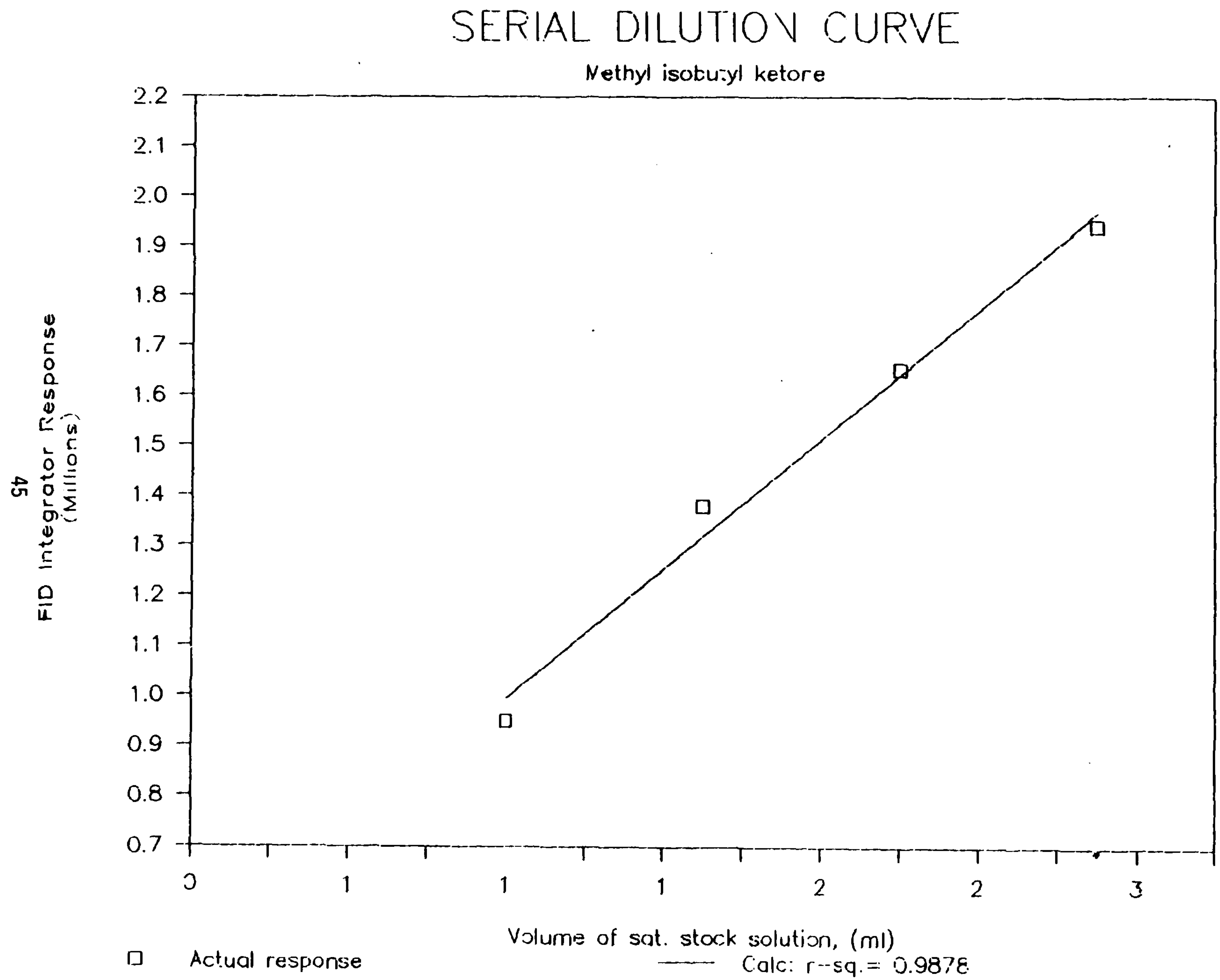



SERIAL DILUTION CURVE
2,4-Dimethylphenol
FID Integrator Response
(Millions)
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.0
1.0
2.0
3.0
4.0
Volume of sat. stock solution, (ml)
Actual response
Calc: r--sq.= 0.93'6



SERIAL DILUTION CURVE
1,1,2-Trichlorotrifluoroethane
FID Integrator Response
(Millions)
2.2
2.1
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0
2
4
6
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.9953


SERIAL DILUTION CURVE
Methyl ethyl ketone
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
FID Integrator Response
(Millions)
0
1
1
1
2
2
3
Volume of sat. stock solution, (ml)
Actual response
Calc: r-sq.= 0.997



SERIAL DILUTION CURVE
Methyl isobutyl ketore
FID Integrator Response
(Millions)
2.2
2.1
2.0
1.9
1.8
1.7
1.6
1.5
1.4
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0
1
1
1
2
2
3
Volume of sat. stock solution, (ml)
Actual response
Calc: r--sq.= 0.9878

Component Data

Results Summary for Component 1

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	2		2		3	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	1		1		1	
Component ID	1		1		1	
Temperature (C)	10		15		20	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	14.4460	1.0E-25	16.6177	1.0E-25	32.7919	1.0E-25
H, avg:atm-mol/mol	18631.0		21810.3		43785.5	
H, avg: atm-m3/mol	3.36E-01	1	3.93E-01	1	7.89E-01	1
H, avg: kPa-m3/mol	34.0104		39.8141		79.9291	
COV, r [std/mean]	15.59		19.64		62.96	
COV, both replic.	——		——		——	
Observation: (1)	13.8845		13.6479		37.1622	
[atm-m3/m3] (2)	17.3798		13.9520		60.1730	
(3)	11.9400		19.1580		15.1897	
(4)	14.5780		19.7121		18.6428	
Injection: (1)	161500		259600		306200	
[Peak Area] (2)	154840		281430		261140	
(3)	40073		64730		63322	
(4)	37936		64352		60409	

	Temperature 4		Temperature 5	
RUN Number ---)	3		3	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	1		1	
Component ID	1		1	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	19.7111	1.0E-25	33.6200	1.0E-25
H, avg: atm-mol/mol	26768.1		46422.5	
H, avg: atm-m3/mol	4.82E-01	1	8.36E-01	1
H, avg: kPa-m3/mol	48.8644		84.7429	
COV, r [std/mean]	22.13		61.56	
COV, both replic.	-----		-----	
Observations: (1)	22.2479		50.5776	
[atm-m3/m3] (2)	24.5110		52.4824	
(3)	15.4631		15.6022	
(4)	16.6222		15.8179	
Injection: (1)	180140		449010	
[Peak Area] (2)	166660		373070	
(3)	40235		89070	
(4)	39548		89572	

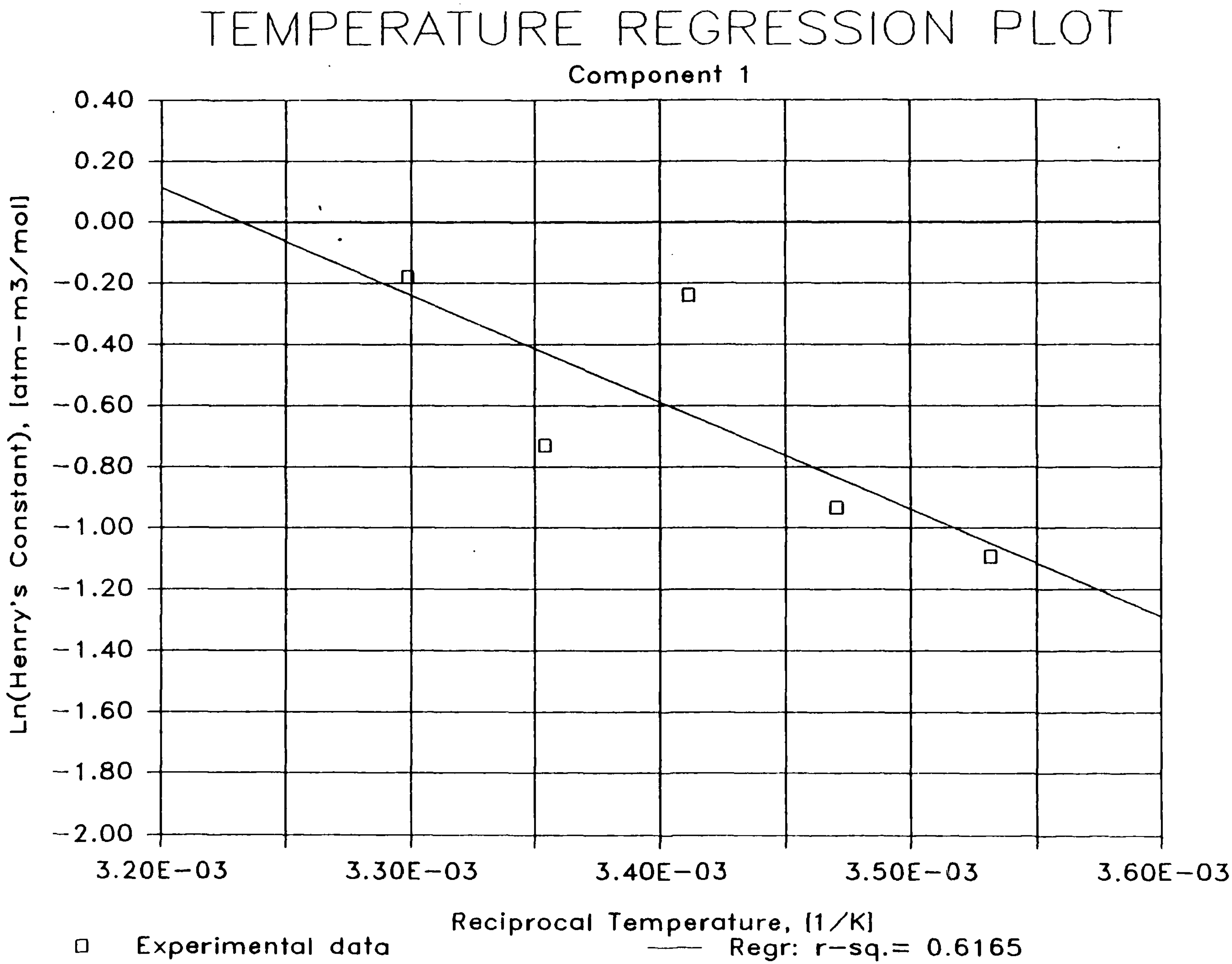
Temperature Regression Parameters:

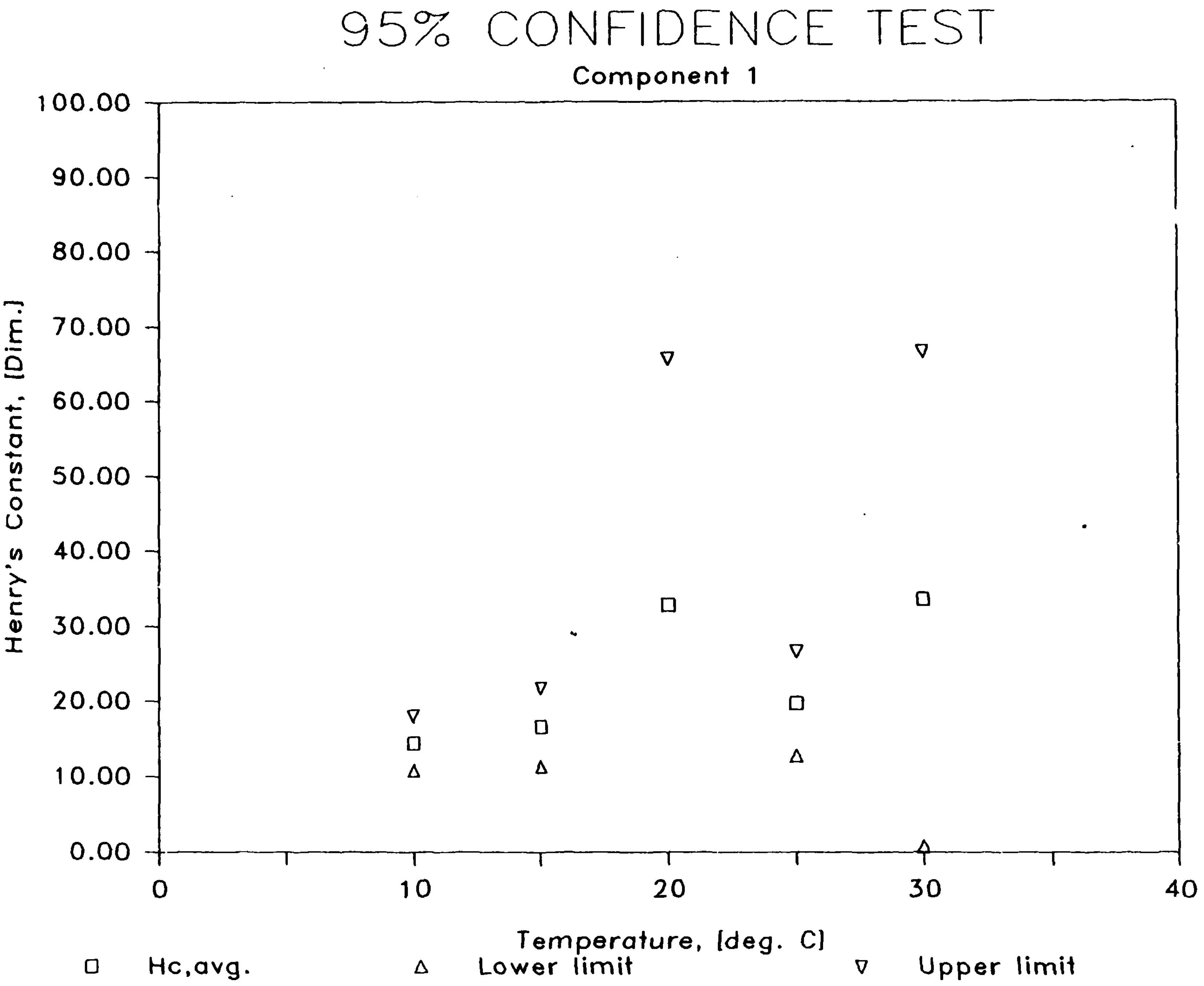
OF POINTS = 5

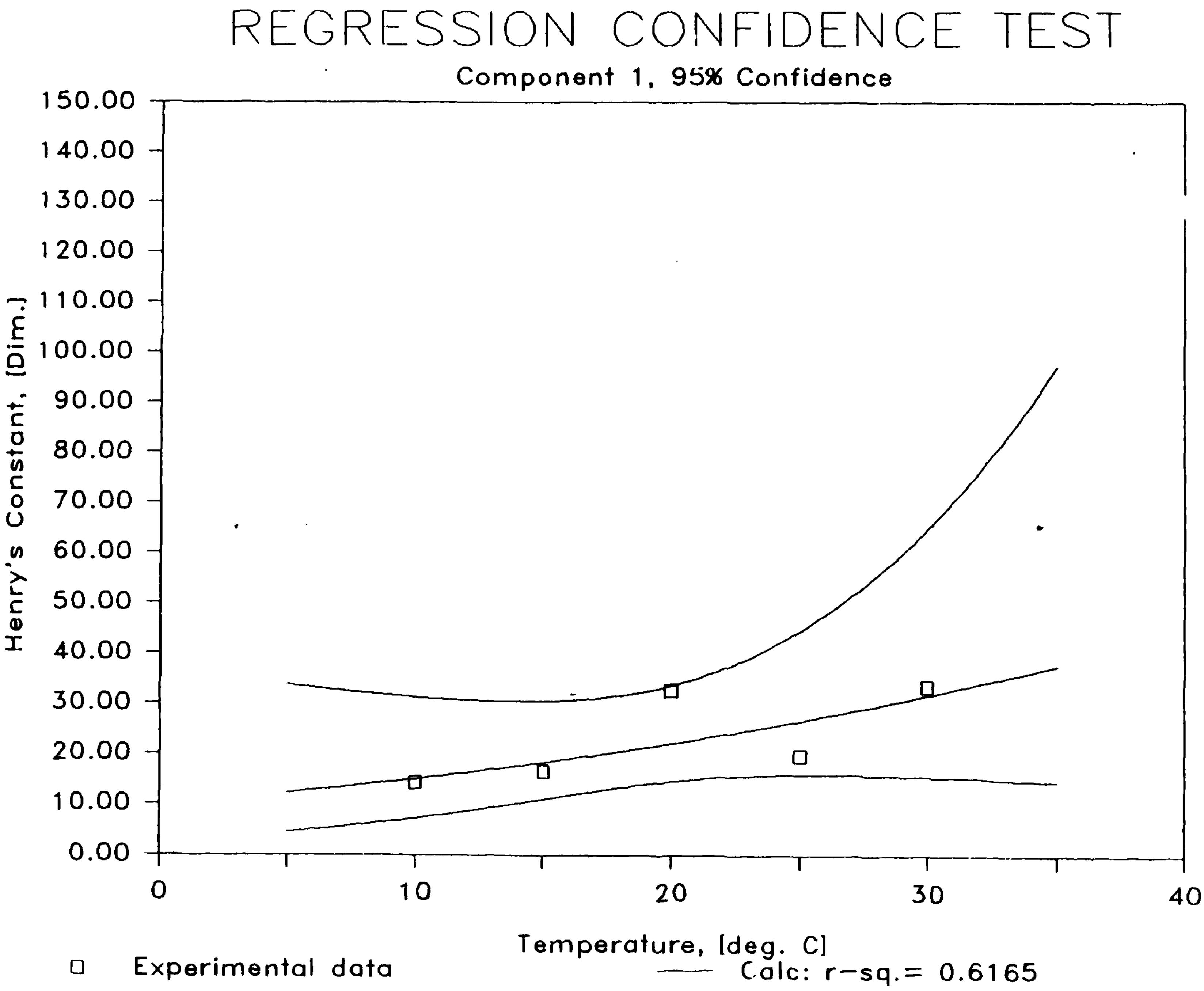
SLOPE = -3.5E+03

Y-INTERCEPT = 1.1E+01

R-SQUARED = 0.6165


TEMPERATURE REGRESSION PLOT
Component 1
Ln(Henry's Constant), [atm−m3/mol]
0.40
0.20
0.00
−0.20
−0.40
−0.60
−0.80
−1.00
−1.20
−1.40
−1.60
−1.80
−2.00
3.20E−03
3.30E−03
3.40E−03
3.50E−03
3.60E−03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r−sq.= 0.6165


95% CONFIDENCE TEST
Component 1
Henry's Constant, [Dim.]
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 1, 95% Confidence
150.00
140.00
130.00
120.00
110.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r–sq.= 0.6165

Results Summary for Component 101

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	10		24		34	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	13		13		13	
Component ID	101		101		101	
Temperature (C)	11.3		15.15		20	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	17.1448	1.0E-25	20.9724	1.0E-25	13.7837	1.0E-25
H, avg:atm-mol/mol	22213.2		27540.1		18404.8	
H, avg: atm-m3/mol	4.00E-01	1	4.96E-01	1	3.32E-01	1
H, avg: kPa-m3/mol	40.5496		50.2737		33.5974	
COV, r [std/mean]	3.99		14.85		18.03	
COV, both replic.	------		------		------	
Observation: (1)	16.6653		23.2082		11.0441	
[atm-m3/m3] (2)	17.8432		24.0825		13.5873	
(3)	16.4595		18.0233		13.4236	
(4)	17.6113		18.5757		17.0799	
Injection: (1)	159440		190570		164890	
[Peak Area] (2)	158980		181270		174500	
(3)	37812		42239		43692	
(4)	37234		41965		41151	

	Temperature 4		Temperature 5	
RUN Number ---)	25		11	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	13		13	
Component ID	101		101	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	16.9283	1.0E-25	18.6762	1.0E-25
H, avg:atm-mol/mol	22989.0		25788.1	
H, avg: atm-m3/mol	4.14E-01	1	4.65E-01	1
H, avg: kPa-m3/mol	41.9658		47.0755	
COV, r [std/mean]	26.69		29.63	
COV, both replic.	------		------	
Observation: (1)	12.3382		18.2460	
[atm-m3/m3] (2)	18.0733		26.2694	
(3)	14.5921		13.0505	
(4)	22.7094		17.1389	
Injection: (1)	178030		168660	
[Peak Area] (2)	186320		155340	
(3)	45638		39196	
(4)	41459		36604	

ANALYSIS COMPLETED ...

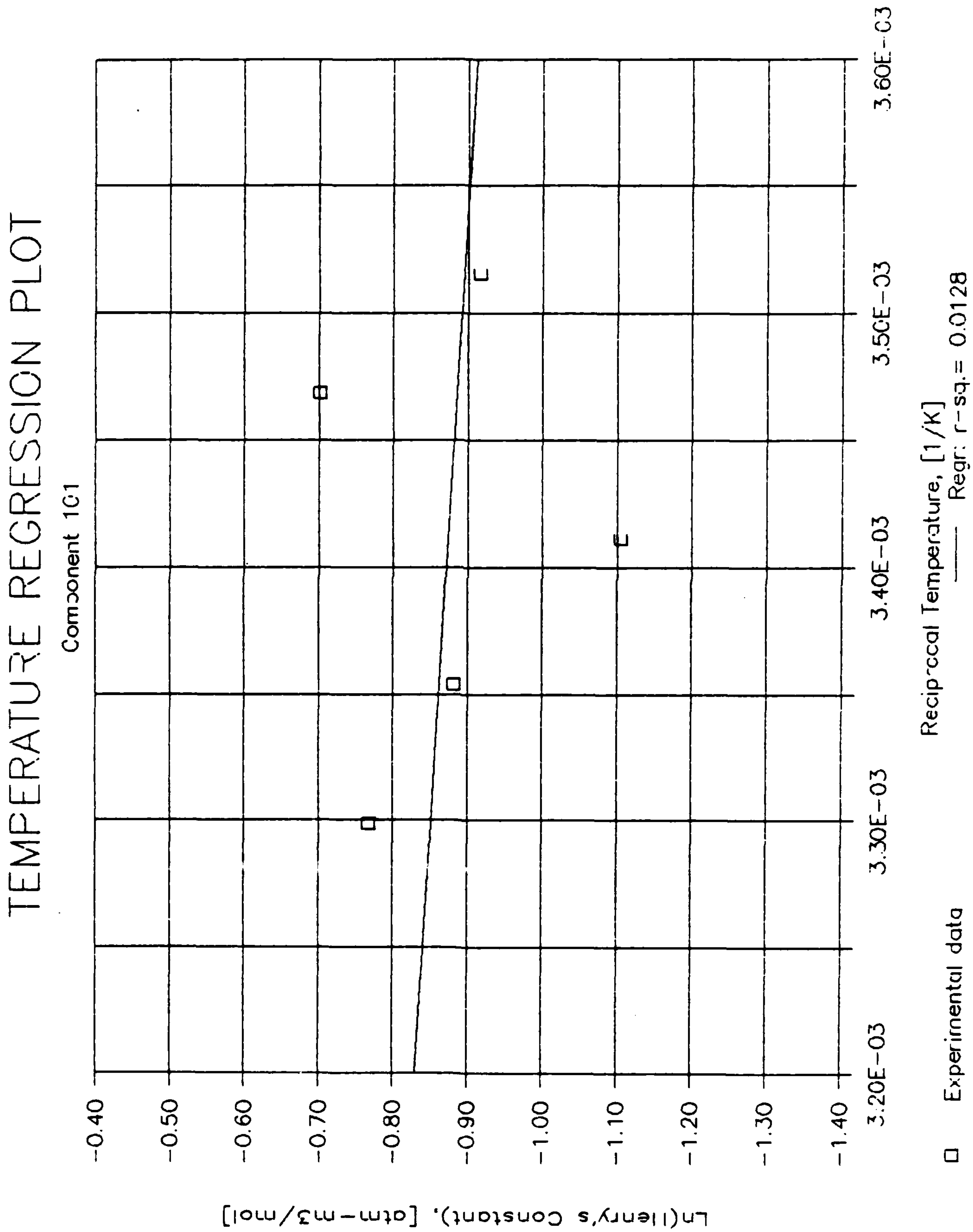
Temperature Regression Parameters:

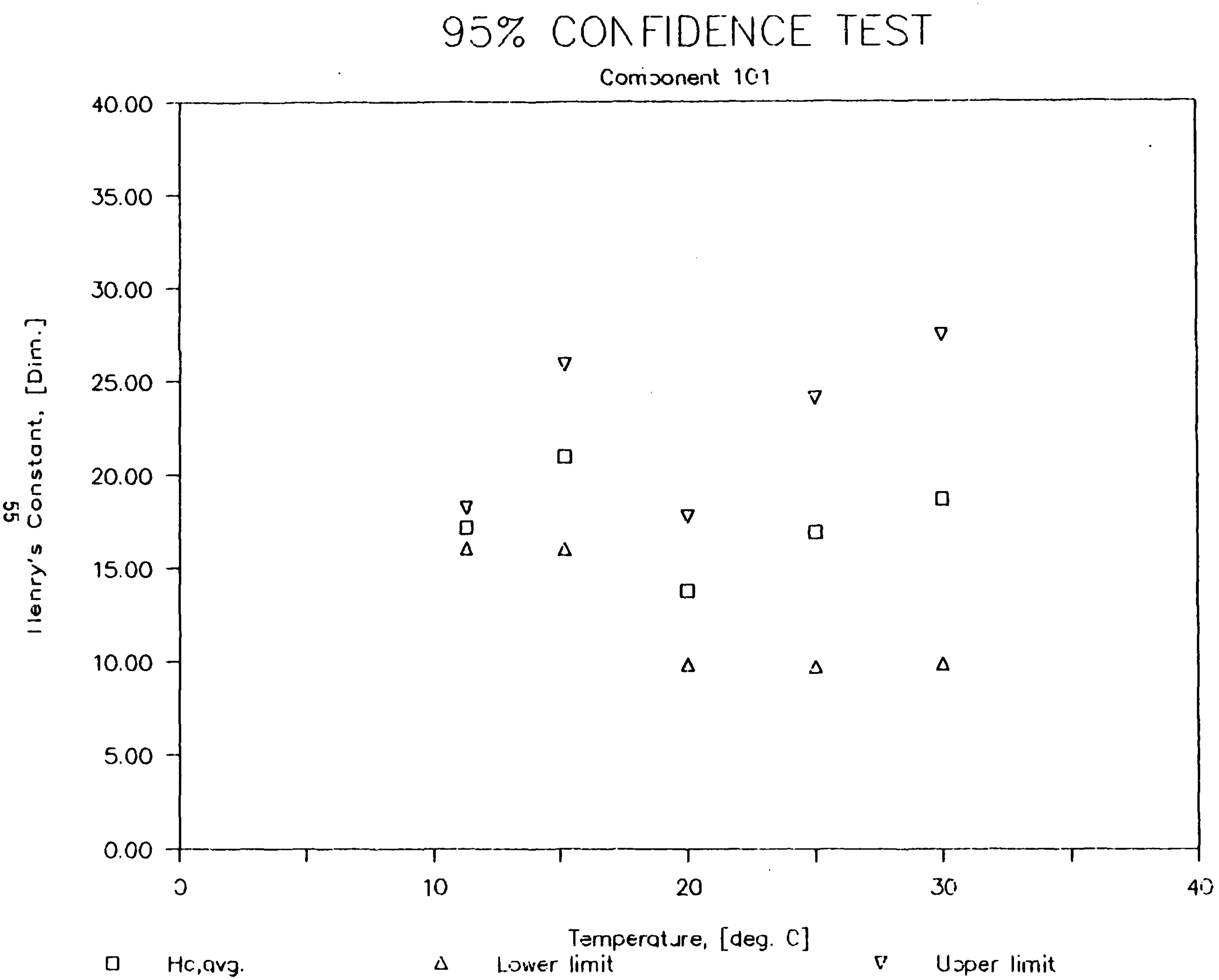
OF POINTS = 5

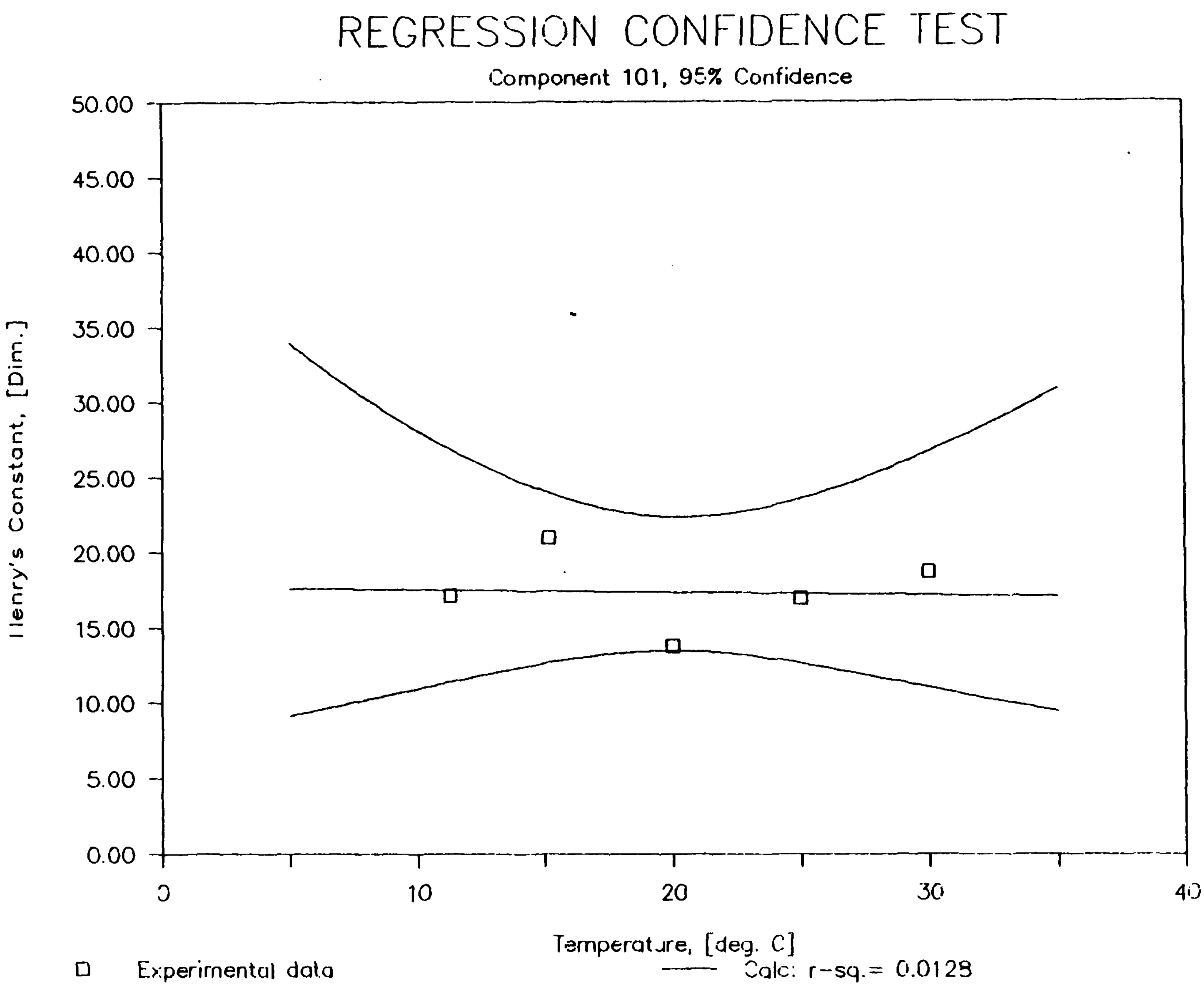
SLOPE = -2.0E+02

Y-INTERCEPT = -1.8E-01

R-SQUARED = 0.0128


TEMPERATURE REGRESSION PLOT
Component 101
Ln(Henry's Constant), [atm-m3/mol]
-0.40
-0.50
-0.60
-0.70
-0.80
-0.90
-1.00
-1.10
-1.20
-1.30
-1.40
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.0128


95% CONFIDENCE TEST
Component 101
Henry's Constant, [Dim.]
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 101, 95% Confidence
Henry's Constant, [Dim.]
50.00
45.00
40.00
35.00
30.00
25.00
20.00
15.00
10.00
5.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.0128

06-Nov-86 Results Summary for Component 2

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	6		6		7	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	1		1		1	
Component ID	2		2		2	
Temperature (C)	10		15		20	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	10.2642	1.0E-25	17.4885	1.0E-25	36.6895	1.0E-25
H,avg:atm-mol/mol	13237.8		22953.3		48989.7	
H,avg: atm-m3/mol	2.38E-01	1	4.14E-01	1	8.83E-01	1
H,avg: kPa-m3/mol	24.1652		41.9006		89.4293	
COV, r [std/mean]	40.01		15.07		19.19	
COV, both replic.	------		------		------	
Observations: (1)	6.7705		20.3232		41.3335	
[atm-m3/m3] (2)	6.6504		19.3988		44.0424	
(3)	14.0131		15.4020		29.9597	
(4)	13.6229		14.8301		31.4223	
Injection: (1)	4239000		8138200		8947400	
[Peak Area] (2)	5420000		7653500		8591000	
(3)	1341600		1849500		1827400	
(4)	1351700		1867000		1815100	

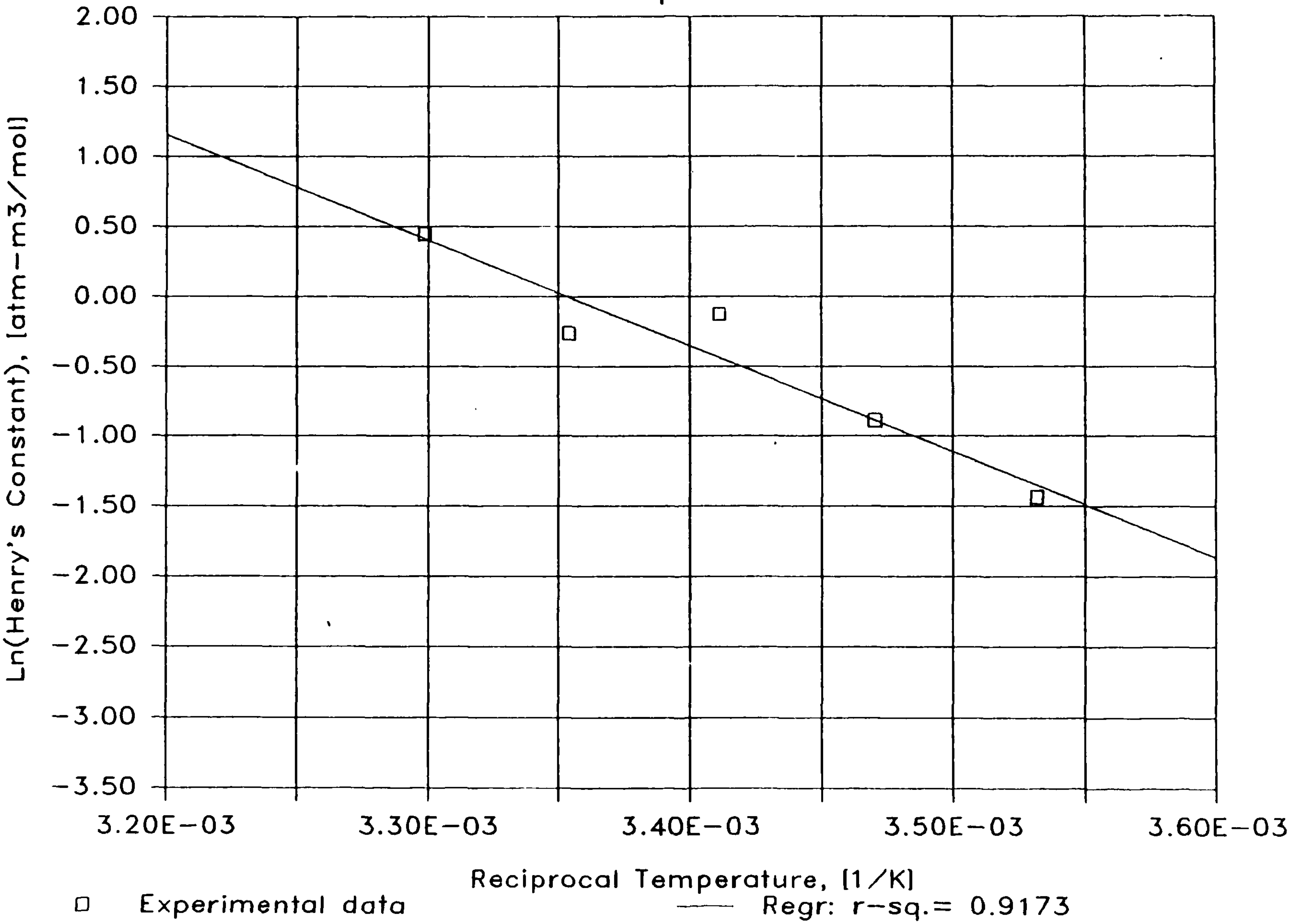
	Temperature 4		Temperature 5	
RUN Number --->	7		7	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	1		1	
Component ID	2		2	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	31.3702	1.0E-25	62.7900	1.0E-25
H, avg:atm-mol/mol	42601.5		86700.4	
H, avg: atm-m3/mol	7.68E-01	1	1.56E+00	1
H, avg: kPa-m3/mol	77.7678		158.2690	
COV, r [std/mean]	16.61		31.65	
COV, both replic.	———		———	
Observation: (1)	25.7607		81.1600	
[atm-m3/m3] (2)	29.1638		78.7974	
(3)	32.5781		46.0037	
(4)	37.9781		45.1988	
Injection: (1)	6283300		4352700	
[Peak Area] (2)	6506900		4164900	
(3)	1368000		841180	
(4)	1341800		842670	

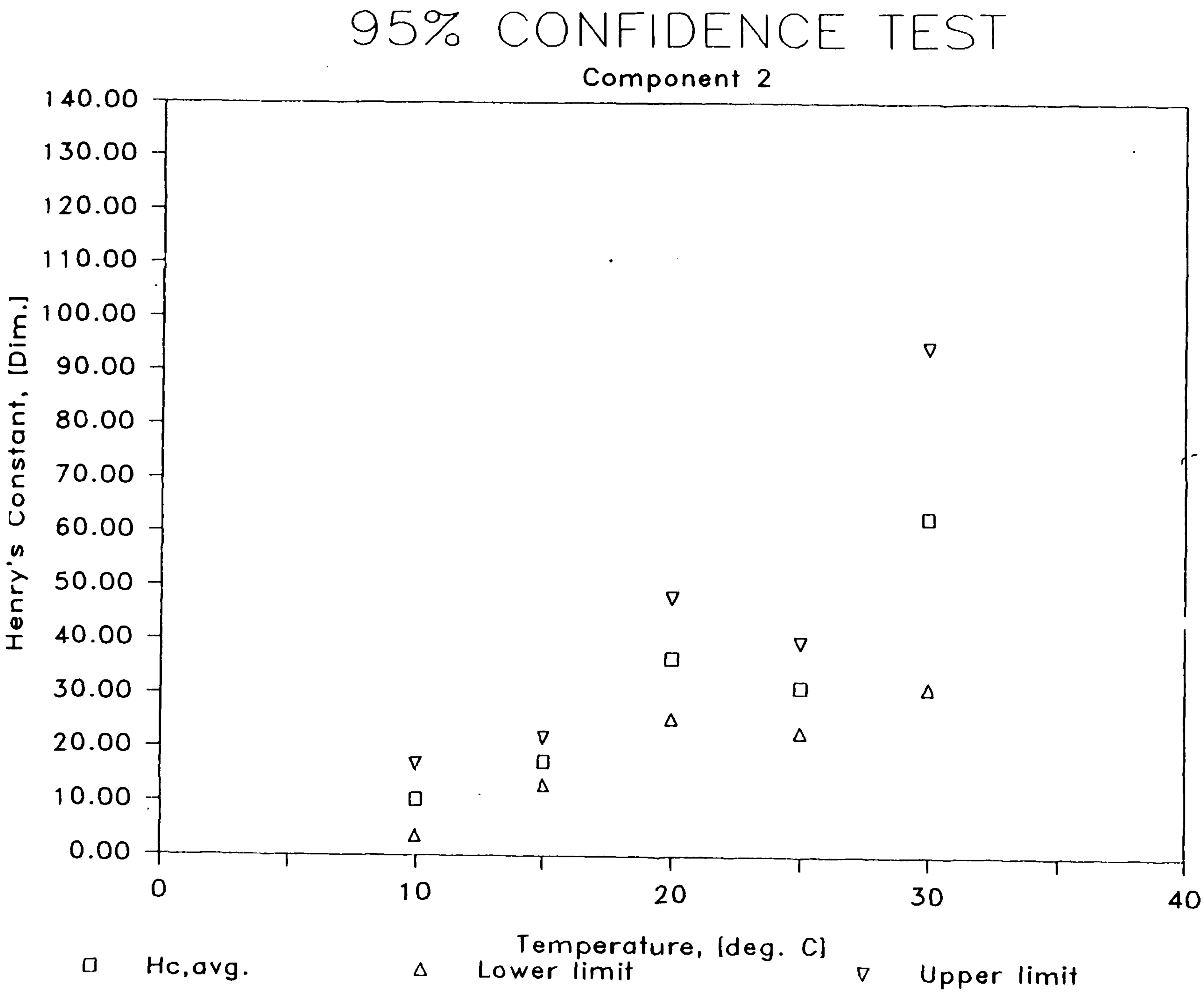
Temperature Regression Parameters:

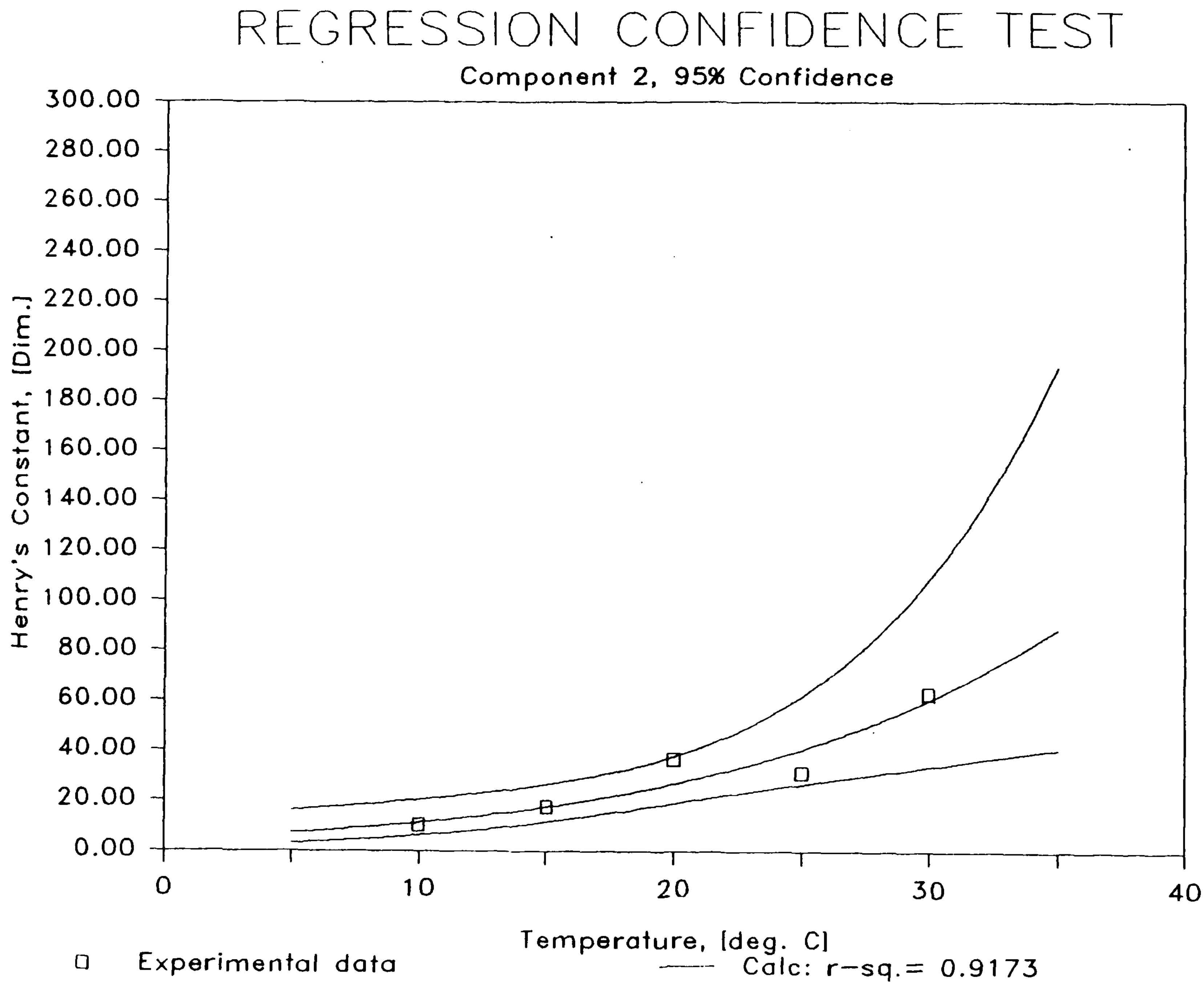
# OF POINTS	=	5
SLOPE	=	-7.5E+03
Y-INTERCEPT	=	2.5E+01
R-SQUARED	=	0.9173

TEMPERATURE REGRESSION PLOT

Component 2




95% CONFIDENCE TEST
Component 2
Henry's Constant, [Dim.]
140.00
130.00
120.00
110.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 2, 95% Confidence
Henry's Constant, [Dim.]
300.00
280.00
260.00
240.00
220.00
200.00
180.00
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9173

Results Summary for Component 102

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	6		20		31	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	13		13		13	
Component ID	102		102		102	
Temperature (C)	11.3		15.15		20	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	28.5907	1.0E-25	19.4816	1.0E-25	-23.7783	1.0E-25
H, avg:atm-mol/mol	37042.8		25582.4		-31750.0	
H, avg: atm-m3/mol	6.67E-01	1	4.61E-01	1	#########	1
H, avg: kPa-m3/mol	67.6206		46.6999		-57.9587	
COV, r [std/mean]	5.15		18.94		-191.62	
COV, both replic.	------		------		------	
Observation: (1)	28.7444		16.2663		-66.3679	
[atm-m3/m3] (2)	26.8502		16.3059		-59.9751	
(3)	30.4330		22.6413		15.3265	
(4)	28.3353		22.7126		15.9034	
Injection: (1)	1456000		124620		89349	
[Peak Area] (2)	1468200		133500		61960	
(3)	311600		29722		14991	
(4)	314890		29705		14857	

	Temperature 4		Temperature 5	
RUN Number ---)	21		7	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	13		13	
Component ID	102		102	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	44.4458	1.0E-25	424.0461	1.0E-25
H,avg:atm-mol/mol	60358.5		585522.8	
H,avg: atm-m3/mol	1.09E+00	1	1.05E+01	1
H,avg: kPa-m3/mol	110.1827		*********	
COV, r [std/mean]	56.91		189.03	
COV, both replic.	------		------	
Observation: (1)	36.7509		-28.8881	
[atm-m3/m3] (2)	81.1478		*********	
(3)	23.1345		-34.1606	
(4)	36.7500		138.8790	
Injection: (1)	150070		1704900	
[Peak Area] (2)	140090		1649600	
(3)	31068		254850	
(4)	29002		310960	

ANALYSIS COMPLETED ...

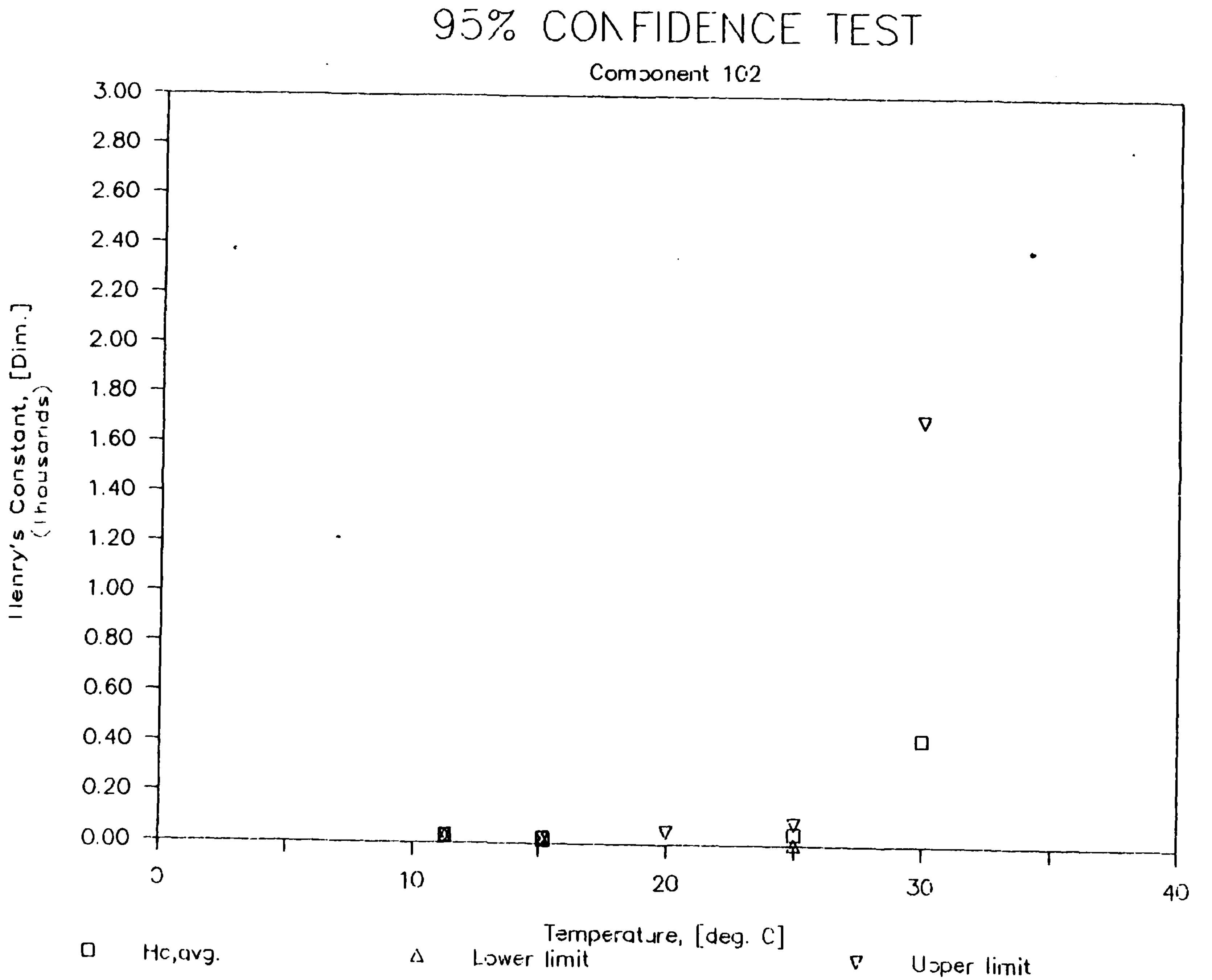
Temperature Regression Parameters:

OF POINTS = 5

SLOPE = ERR

Y-INTERCEPT = ERR

R-SQUARED = ERR



95% CONFIDENCE TEST
Component 102
Henry's Constant, [Dim.]
(Thousands)
3.00
2.80
2.60
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

06-Nov-86 Results Summary for Component 3

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	10		10		11	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	1		1		1	
Component ID	3		3		3	
Temperature (C)	10		15		20	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	30.0178	1.0E-25	29.3345	1.0E-25	26.2950	1.0E-25
H,avg:atm-mol/mol	38714.0		38500.9		35110.4	
H,avg: atm-m3/mol	6.97E-01	1	6.94E-01	1	6.33E-01	1
H,avg: kPa-m3/mol	70.6713		70.2823		64.0931	
COV, r [std/mean]	23.49		15.31		18.00	
COV, both replic.	——		——		——	
Observation: (1)	30.6247		27.2043		28.4660	
[atm-m3/m3] (2)	39.3879		24.5190		31.8405	
(3)	22.6544		34.8860		21.4523	
(4)	27.4040		30.7280		23.4212	
Injection: (1)	3302300		6615100		6471500	
[Peak Area] (2)	3145500		6851900		6167600	
(3)	700230		1427700		1387000	
(4)	678100		1452200		1364800	

	Temperature 4		Temperature 5	
RUN Number —)	11		11	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	1		1	
Component ID	3		3	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	33.7096	1.0E-25	34.1064	1.0E-25
H,avg:atm-mol/mol	45778.5		47094.0	
H,avg: atm-m3/mol	8.25E-01	1	8.48E-01	1
H,avg: kPa-m3/mol	83.5673		85.9688	
COV, r [std/mean]	16.31		79.75	
COV, both replic.	———		———	
Observation: (1)	27.6591		11.0221	
[atm-m3/m3] (2)	33.8584		12.1452	
(3)	32.3777		46.8858	
(4)	40.9432		66.3724	
Injection: (1)	3311500		738890	
[Peak Area] (2)	3387900		971820	
(3)	712860		195910	
(4)	692660		198280	

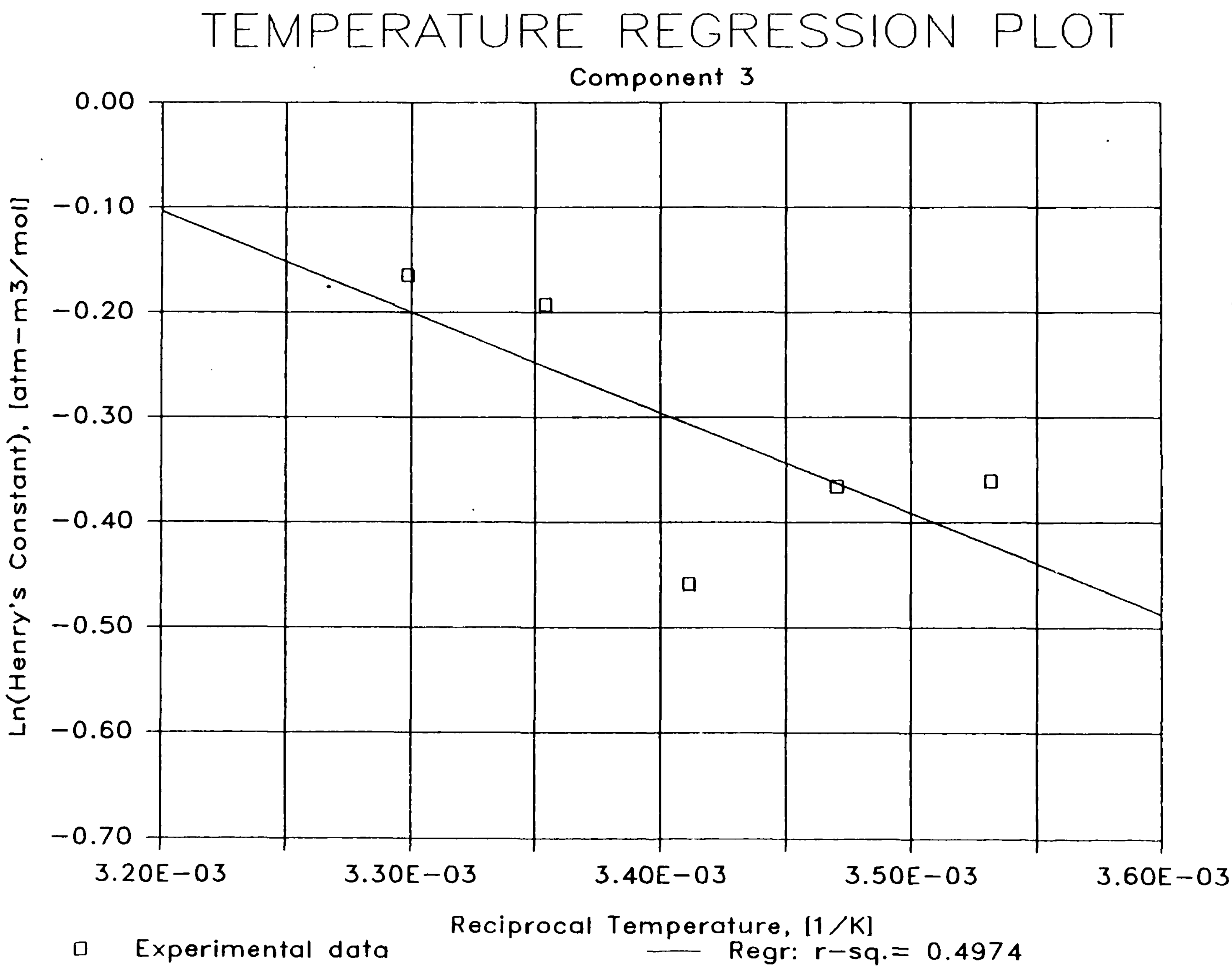
Temperature Regression Parameters:

OF POINTS = 5

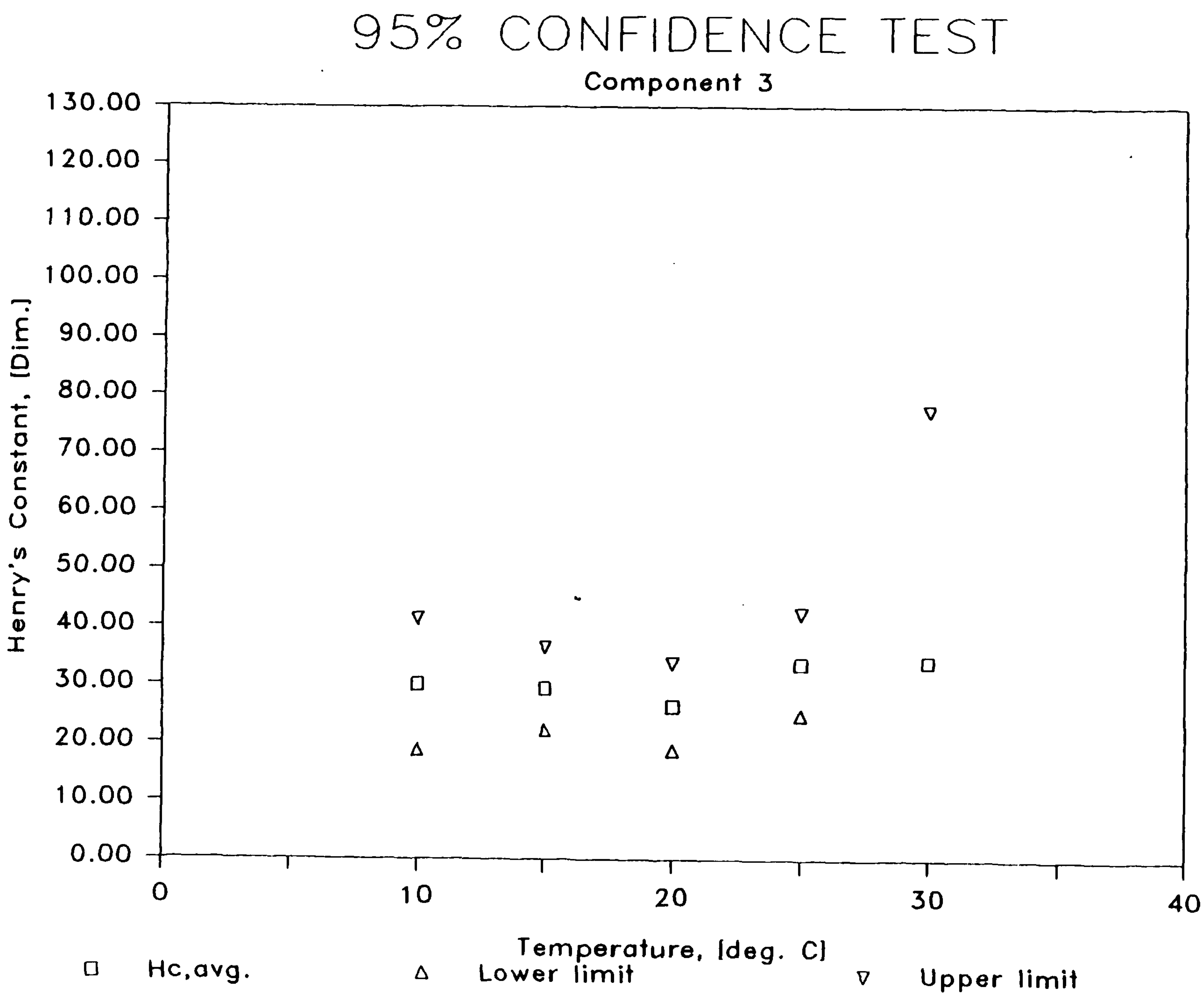
SLOPE = -9.6E+02

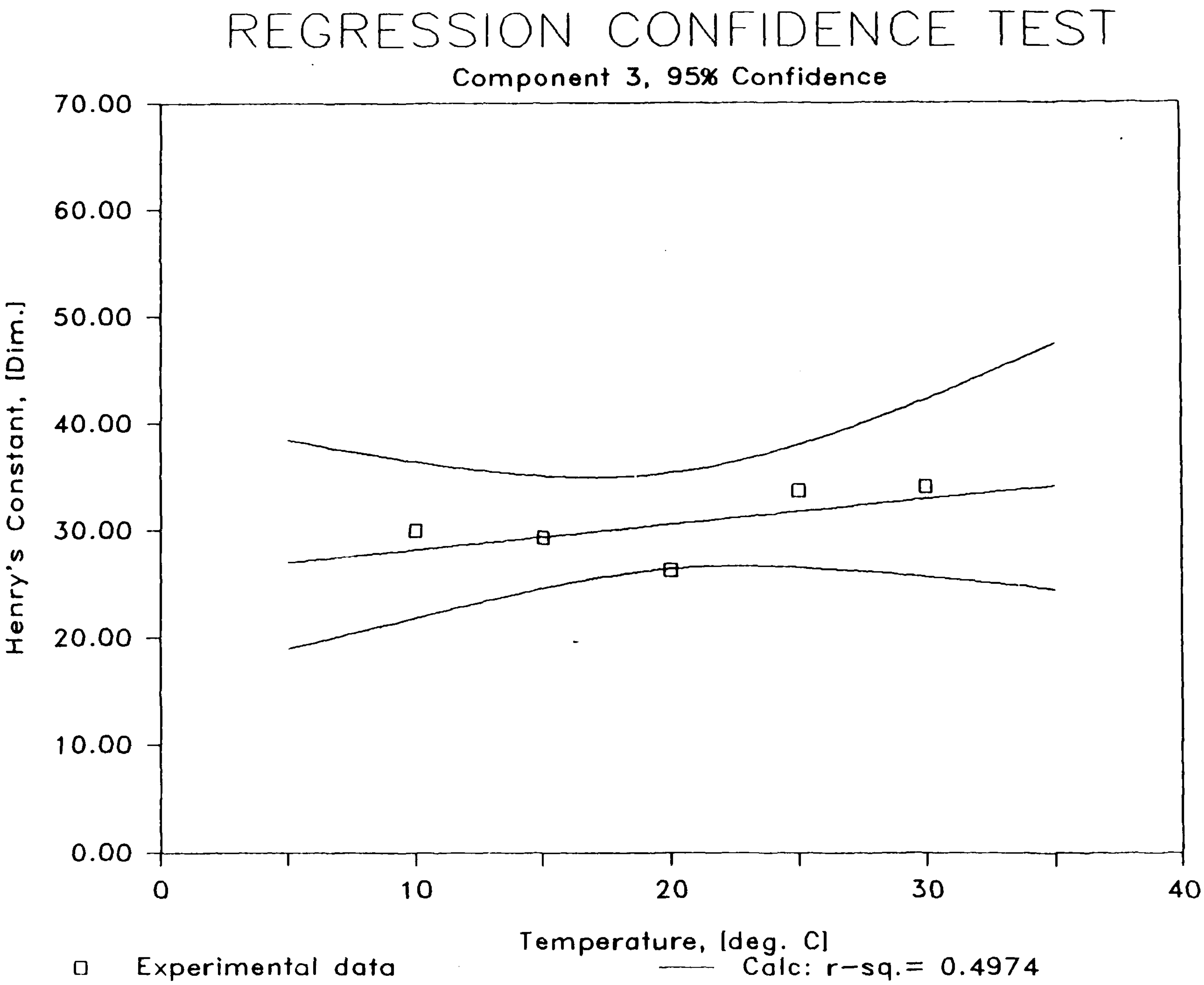
Y-INTERCEPT = 3.0E+00

R-SQUARED = 0.4974



TEMPERATURE REGRESSION PLOT
Component 3
0.00
-0.10
-0.20
-0.30
-0.40
-0.50
-0.60
-0.70
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.4974


95% CONFIDENCE TEST
Component 3
Henry's Constant, [Dim.]
130.00
120.00
110.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 3, 95% Confidence
Henry's Constant, [Dim.]
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r−sq.= 0.4974

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	2		16		28	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	13		13		13	
Component ID	103		103		103	
Temperature (C)	11.3		15.2		20	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	35.1714	1.0E-25	8.6027	1.0E-25	8.4262	1.0E-25
H,avg:atm-mol/mol	45569.0		11298.6		11251.1	
H,avg: atm-m3/mol	8.21E-01	1	2.04E-01	1	2.03E-01	1
H,avg: kPa-m3/mol	83.1849		20.6253		20.5385	
COV, r [std/mean]	18.99		19.10		69.26	
COV, both replic.	------		------		------	
Observation: (1)	30.1287		6.9932		3.3611	
[atm-m3/m3] (2)	28.8115		9.6229		13.3835	
(3)	42.0842		7.4320		3.3839	
(4)	39.6614		10.3624		13.5762	
Injection: (1)	431390		13660		7231	
[Peak Area] (2)	449800		13999		7259	
(3)	91687		4265		3237	
(4)	92290		3785		1812	

	Temperature 4		Temperature 5	
RUN Number ---)	17		3	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	13		13	
Component ID	103		103	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	28.5047	1.0E-25	126.9938	1.0E-25
H,avg:atm-mol/mol	38710.1		175353.1	
H,avg: atm-m3/mol	6.97E-01	1	3.16E+00	1
H,avg: kPa-m3/mol	70.6641		320.1020	
COV, r [std/mean]	88.64		66.41	
COV, both replic.	------		------	
Observation: (1)	8.0451		57.0423	
[atm-m3/m3] (2)	58.8220		69.2788	
(3)	7.3113		140.9994	
(4)	39.8402		240.6549	
Injection: (1)	15173		479350	
[Peak Area] (2)	14619		503960	
(3)	4483		94949	
(4)	2998		93575	

ANALYSIS COMPLETED ...

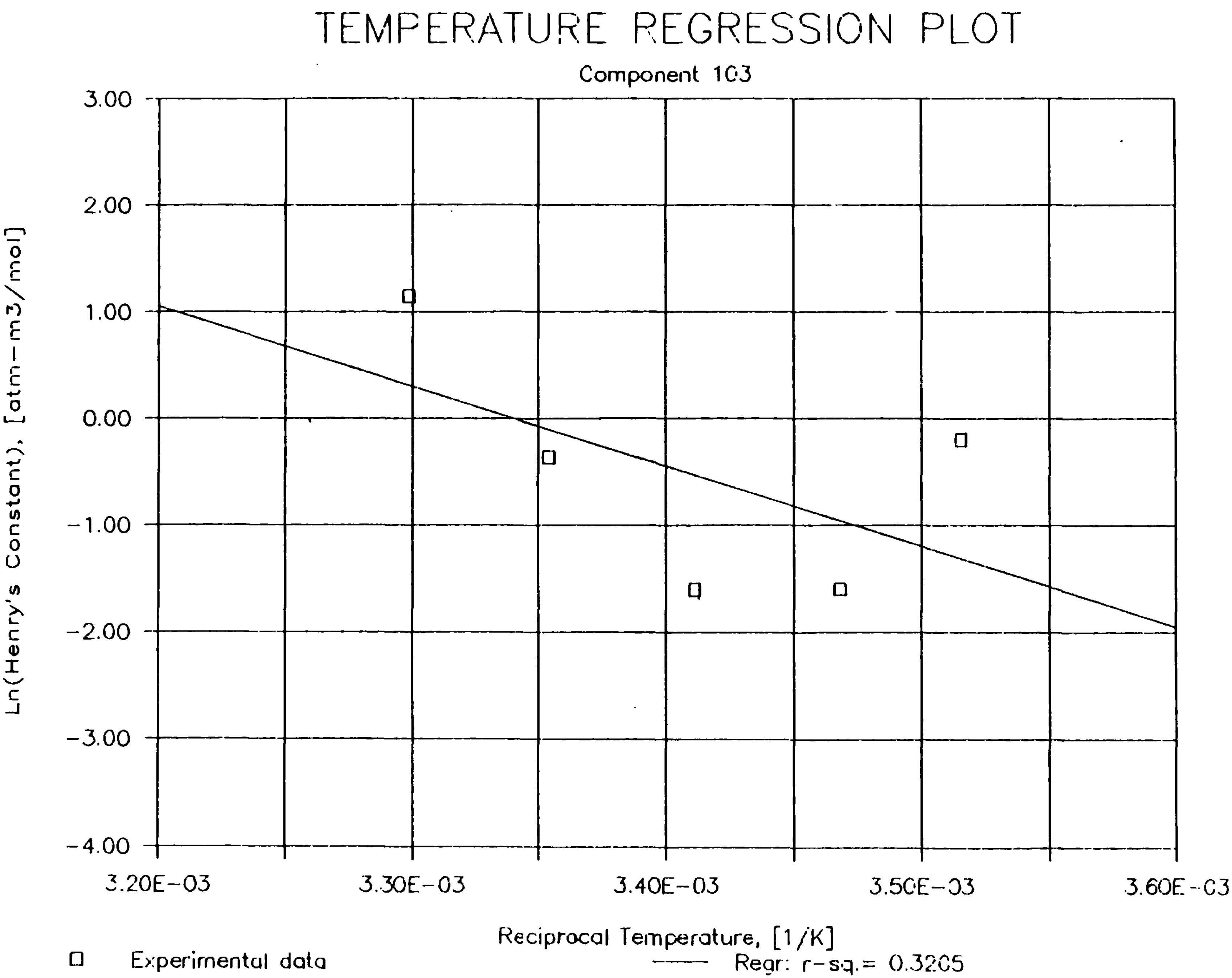
Temperature Regression Parameters:

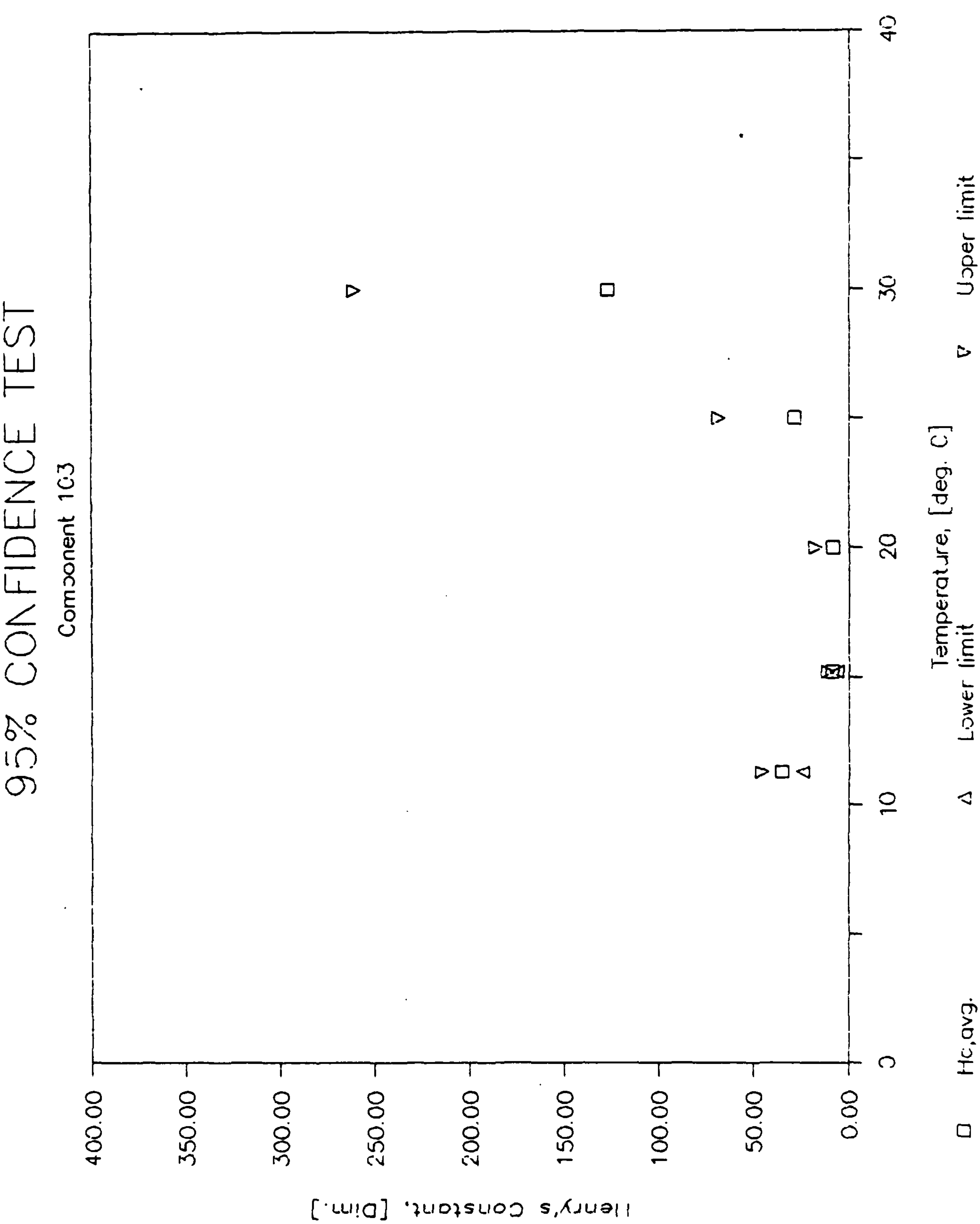
OF POINTS = 5

SLOPE = -7.5E+03

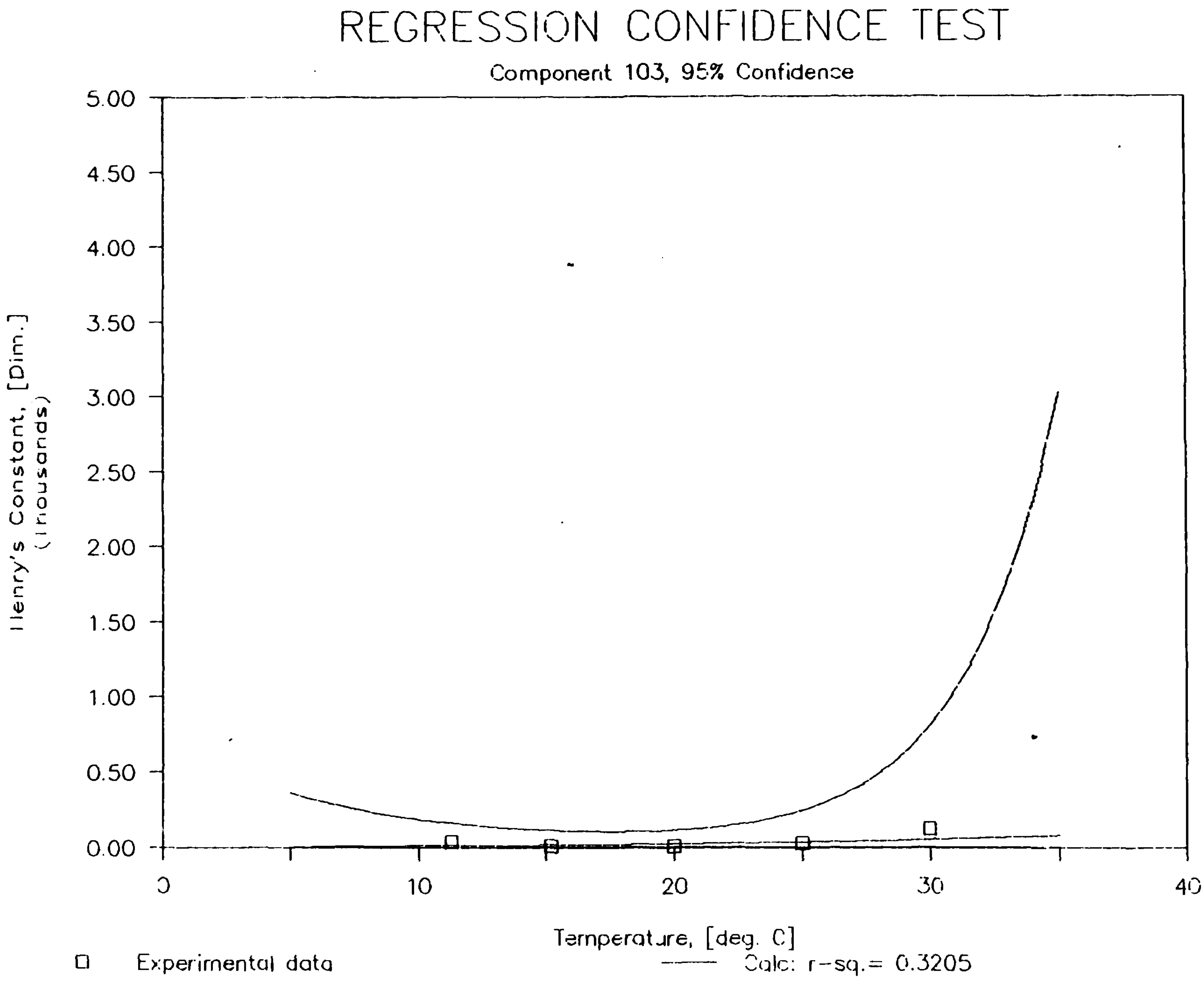
Y-INTERCEPT = 2.5E+01

R-SQUARED = 0.3205


TEMPERATURE REGRESSION PLOT
Component 103
3.00
2.00
1.00
0.00
-1.00
-2.00
-3.00
-4.00
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.3205



95% CONFIDENCE TEST
Component 103
Henry's Constant, [Dim.]
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 103, 95% Confidence
Henry's Constant, [Dim.]
(Thousands)
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.3205

06-Nov-86 Results Summary for Component 4

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	13		14		15	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	1		1		1	
Component ID	4		4		4	
Temperature (C)	10		15		20	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	4.4272	1.0E-25	5.3138	1.0E-25	5.8016	1.0E-25
H,avg:atm-mol/mol	5709.7		6974.2		7746.7	
H,avg: atm-m3/mol	1.03E-01	1	1.26E-01	1	1.40E-01	1
H,avg: kPa-m3/mol	10.4229		12.7312		14.1413	
COV, r [std/mean]	1.76		7.03		11.47	
COV, both replic.	------		------		------	
Observation: (1)	4.4321		5.1285		5.2134	
[atm-m3/m3] (2)	4.5233		5.7465		5.2374	
(3)	4.3324		4.9016		6.3617	
(4)	4.4207		5.4785		6.3941	
Injection: (1)	1614400		1607500		1620700	
[Peak Area] (2)	1595600		1572600		1773900	
(3)	622080		576150		576340	
(4)	615650		546330		575080	

	Temperature 4		Temperature 5	
RUN Number —)	15		15	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	1		1	
Component ID	4		4	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	7.2406	1.0E-25	8.9581	1.0E-25
H, avg: atm-mol/mol	9832.9		12369.3	
H, avg: atm-m3/mol	1.77E-01	1	2.23E-01	1
H, avg: kPa-m3/mol	17.9496		22.5798	
COV, r [std/mean]	4.39		2.61	
COV, both replic.	———		———	
Observation: (1)	7.4082		8.8352	
[atm-m3/m3] (2)	7.5942		9.2200	
(3)	6.8968		8.7008	
(4)	7.0630		9.0761	
Injection: (1)	2064200		945450	
[Peak Area] (2)	2005300		940260	
(3)	629690		269800	
(4)	623570		265850	

Temperature Regression Parameters:

OF POINTS = 5

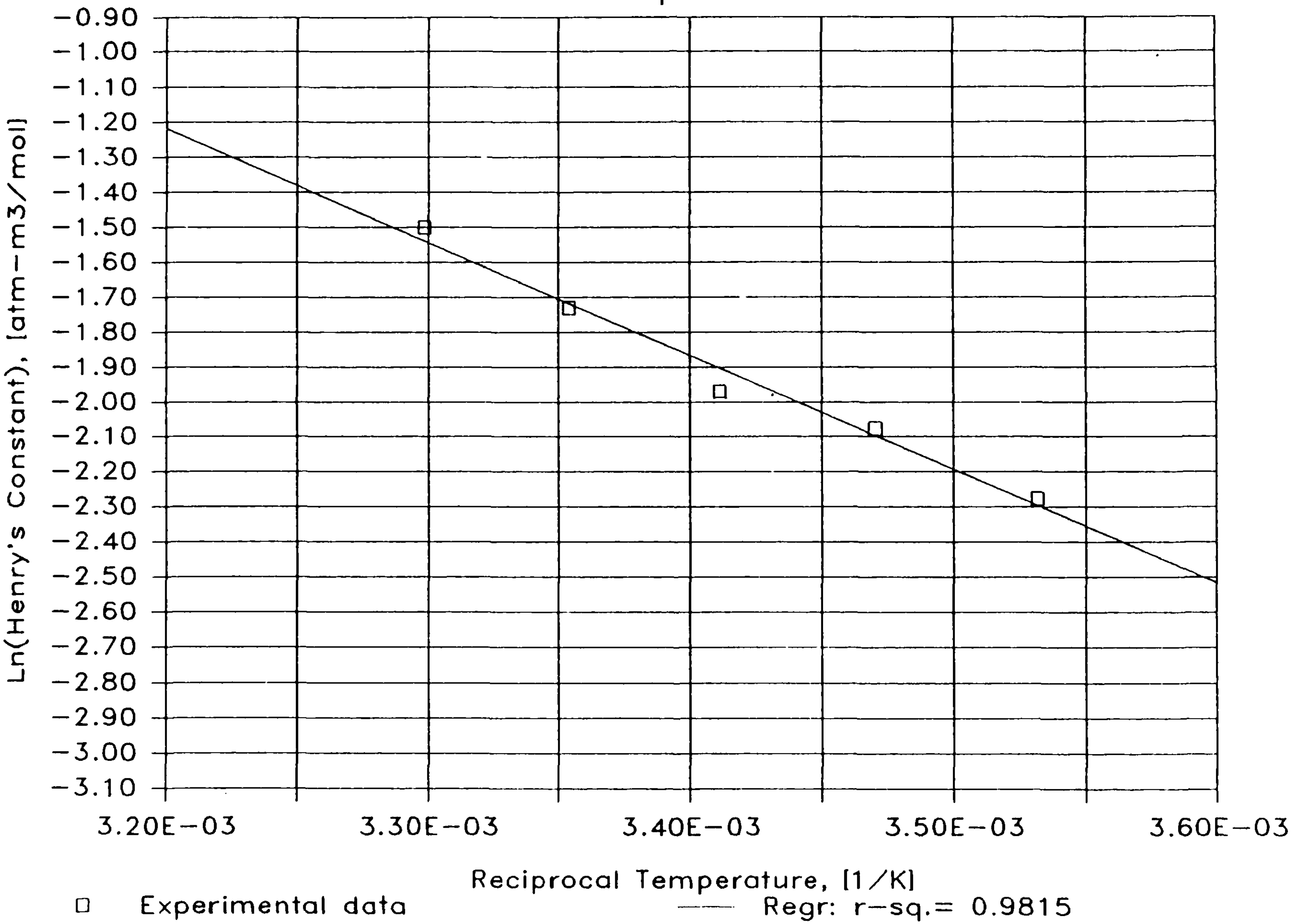
SLOPE = -3.2E+03

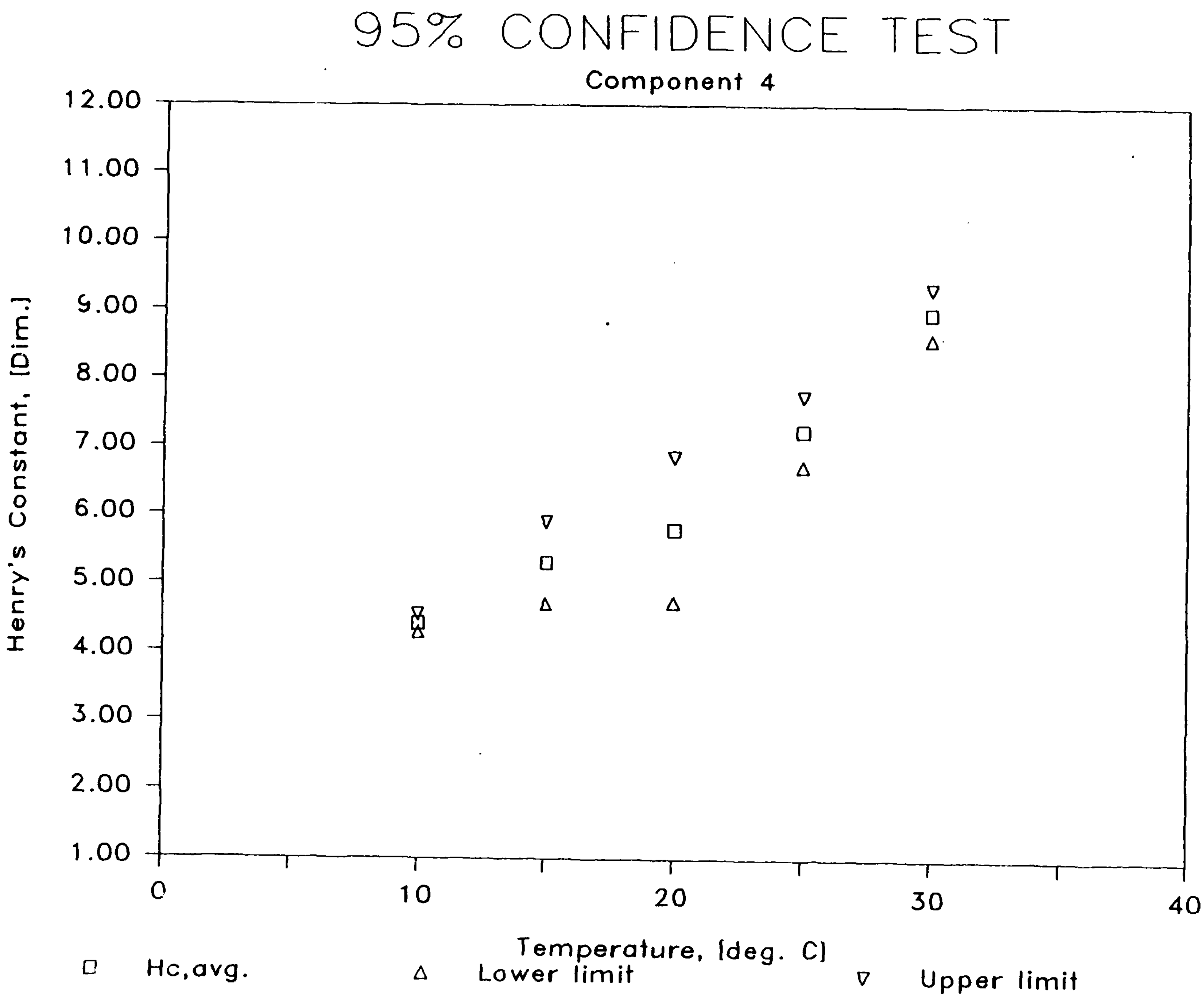
Y-INTERCEPT = 9.1E+00

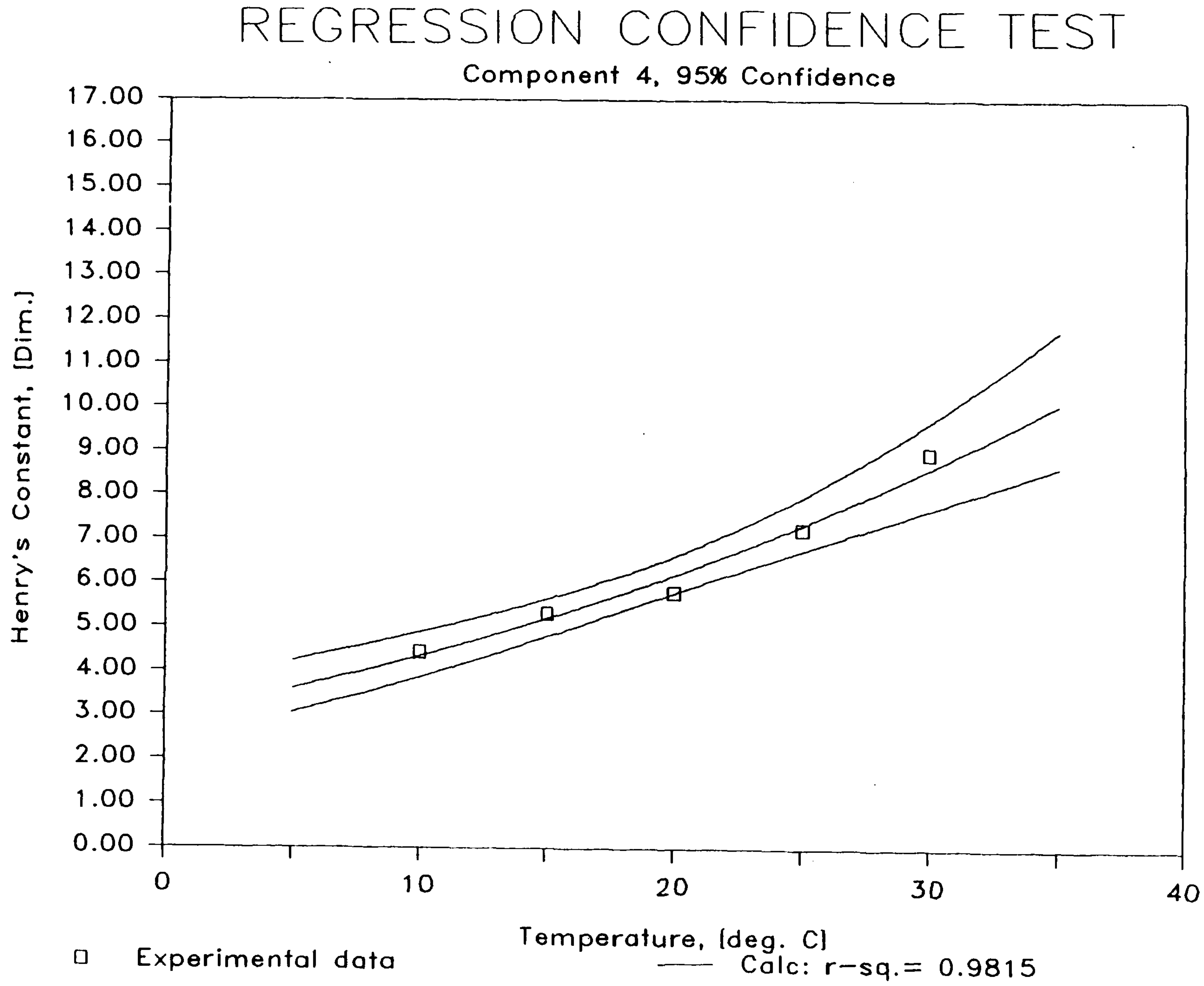
R-SQUARED = 0.9815

TEMPERATURE REGRESSION PLOT

Component 4




95% CONFIDENCE TEST
Component 4
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 4, 95% Confidence
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9815

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	2		3		4	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	2		2		2	
Component ID	5		5		5	
Temperature (C)	10		15		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0700	1.0E-25	0.0606	1.0E-25	0.0698	1.0E-25
H, avg: atm-mol/mol	90.3		79.6		93.3	
H, avg: atm-m3/mol	1.63E-03	1	1.43E-03	1	1.68E-03	1
H, avg: kPa-m3/mol	0.1648		0.1453		0.1703	
COV, r [std/mean]	12.19		7.63		4.29	
COV, both replic.	------		------		------	
Observation: (1)	0.0748		0.0659		0.0730	
[atm-m3/m3] (2)	0.0793		0.0585		0.0716	
(3)	0.0608		0.0628		0.0680	
(4)	0.0651		0.0554		0.0667	
Injection: (1)	392800		444360		534990	
[Peak Area] (2)	364460		436690		520980	
(3)	1956900		2319900		2689300	
(4)	1911800		2418000		2709200	

	Temperature 4		Temperature 5	
RUN Number ---)	3		1	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	2		2	
Component ID	5		5	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.0641	1.0E-25	0.0953	1.0E-25
H, avg:atm-mol/mol	87.1		131.6	
H, avg: atm-m3/mol	1.57E-03	1	2.37E-03	1
H, avg: kPa-m3/mol	0.1590		0.2402	
COV, r [std/mean]	8.56		10.56	
COV, both replic.	------		------	
Observation: (1)	0.0634		0.1028	
[atm-m3/m3] (2)	0.0575		0.0856	
(3)	0.0709		0.1051	
(4)	0.0647		0.0877	
Injection: (1)	600160		825300	
[Peak Area] (2)	633110		833670	
(3)	3218600		3594500	
(4)	3327500		3894300	

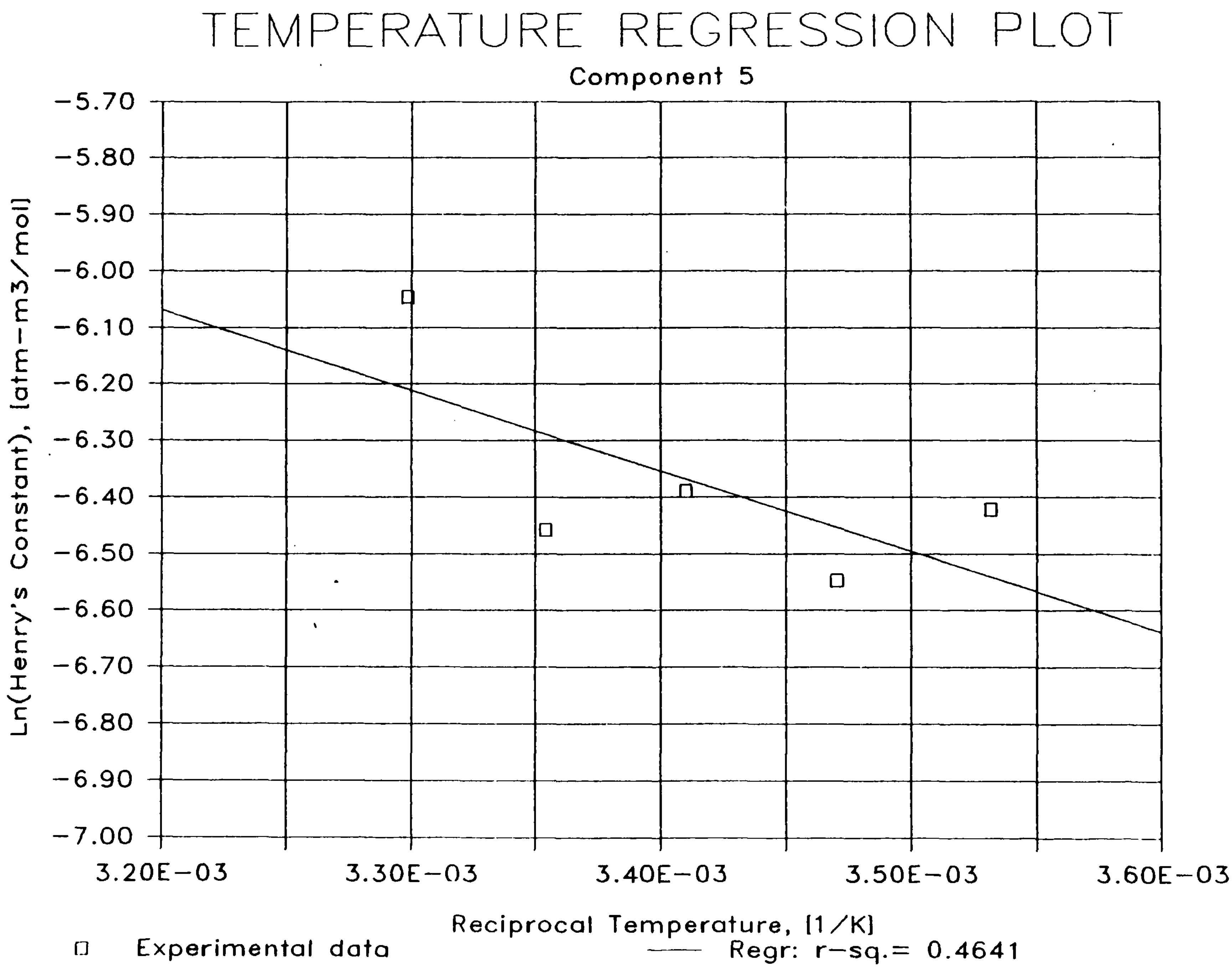
Temperature Regression Parameters:

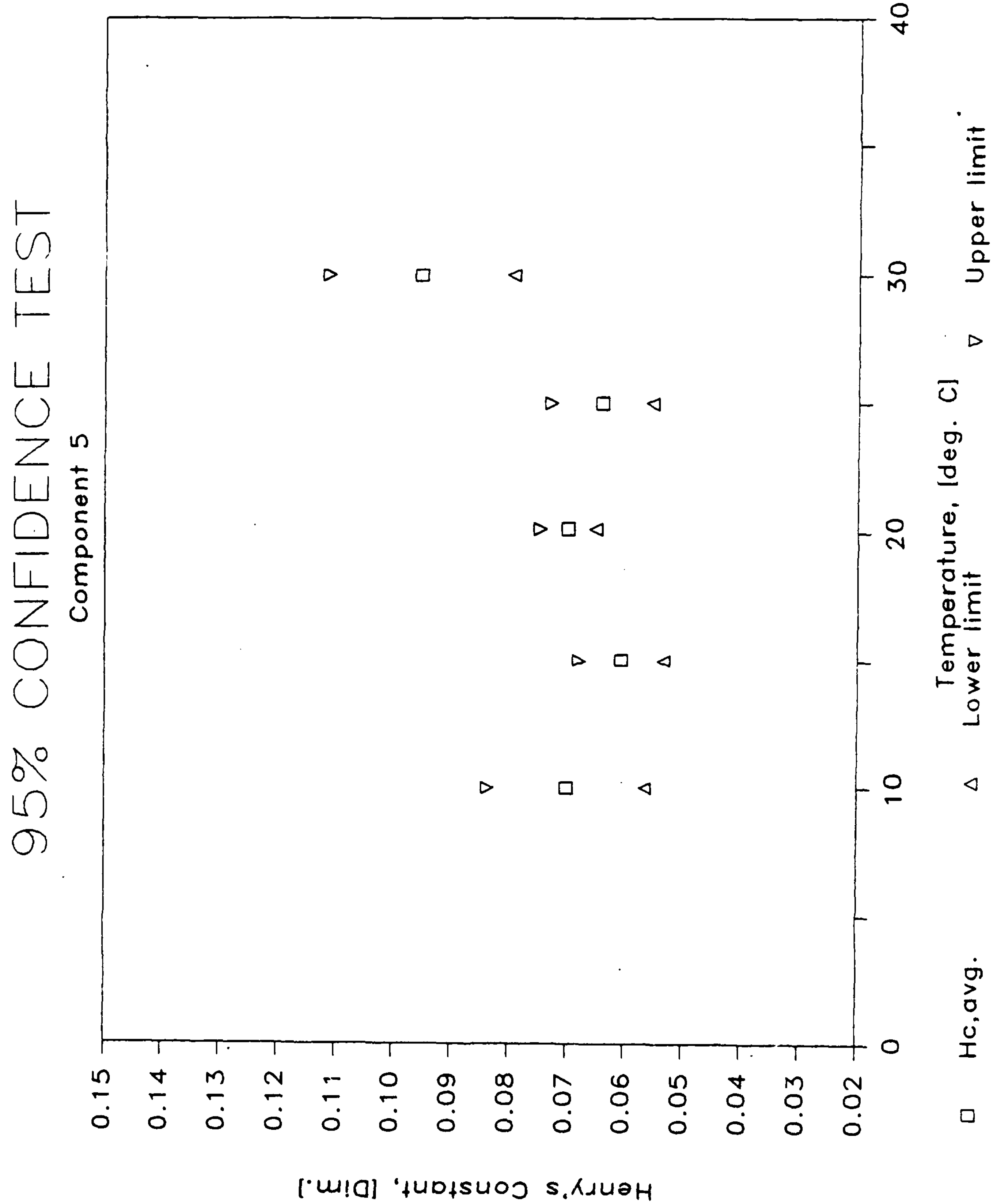
OF POINTS = 5

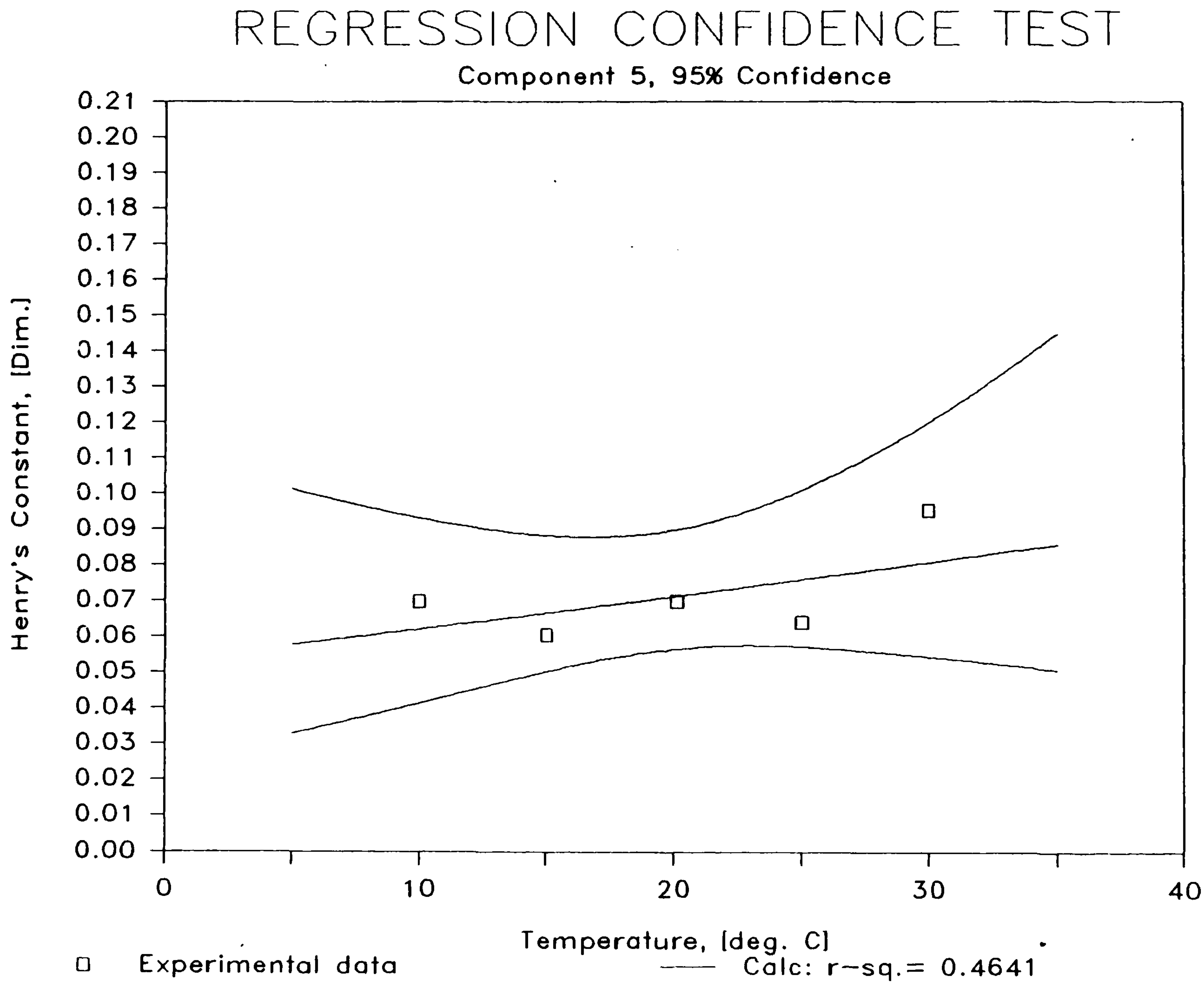
SLOPE = -1.4E+03

Y-INTERCEPT = -1.5E+00

R-SQUARED = 0.4641


TEMPERATURE REGRESSION PLOT
Component 5
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
-6.40
-6.50
-6.60
-6.70
-6.80
-6.90
-7.00
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.4641


95% CONFIDENCE TEST
Component 5
Henry's Constant, [Dim.]
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 5, 95% Confidence
Henry's Constant, [Dim.]
0.21
0.20
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r–sq.= 0.4641

Results Summary for Component 105

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	75		87		100	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	14		14		14	
Component ID	105		105		105	
Temperature (C)	10.5		15.3		19.5	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0522	1.0E-25	0.0463	1.0E-25	0.0848	1.0E-25
H, avg:atm-mol/mol	67.4		60.9		113.1	
H, avg: atm-m3/mol	1.21E-03	1	1.10E-03	1	2.04E-03	1
H, avg: kPa-m3/mol	0.1231		0.1111		0.2065	
COV, r [std/mean]	33.04		39.24		11.05	
COV, both replic.	-----		-----		-----	
Observation: (1)	0.0706		0.0631		0.0949	
[atm-m3/m3] (2)	0.0627		0.0610		0.0904	
(3)	0.0410		0.0314		0.0791	
(4)	0.0344		0.0298		0.0749	
Injection: (1)	284150		291240		327710	
[Peak Area] (2)	239340		240000		303580	
(3)	1446700		1544500		1479300	
(4)	1509700		1562100		1511100	

	Temperature 4		Temperature 5	
RUN Number --->	88		76	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	14		14	
Component ID	105		105	
Temperature (C)	25.2		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0756	1.0E-25	0.1075	1.0E-25
H,avg:atm-mol/mol	102.7		148.4	
H,avg: atm-m3/mol	1.85E-03	1	2.67E-03	1
H,avg: kPa-m3/mol	0.1875		0.2709	
COV, r [std/mean]	11.32		4.12	
COV, both replic.	------		------	
Observation: (1)	0.0817		0.1113	
[atm-m3/m3] (2)	0.0841		0.1037	
(3)	0.0672		0.1113	
(4)	0.0694		0.1036	
Injection: (1)	457630		673370	
[Peak Area] (2)	424430		673320	
(3)	2200900		2825700	
(4)	2175200		2921700	

ANALYSIS COMPLETED ...

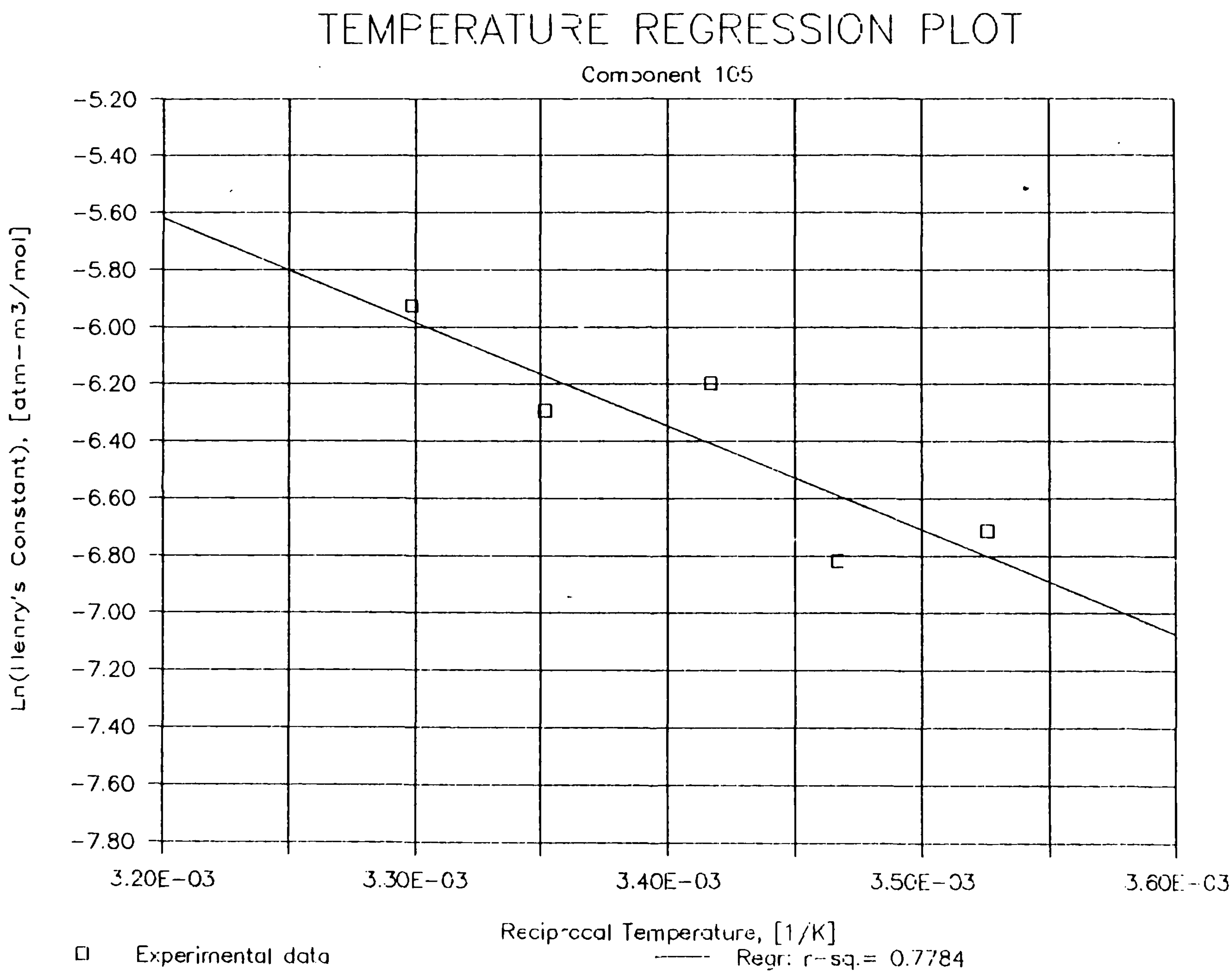
Temperature Regression Parameters:

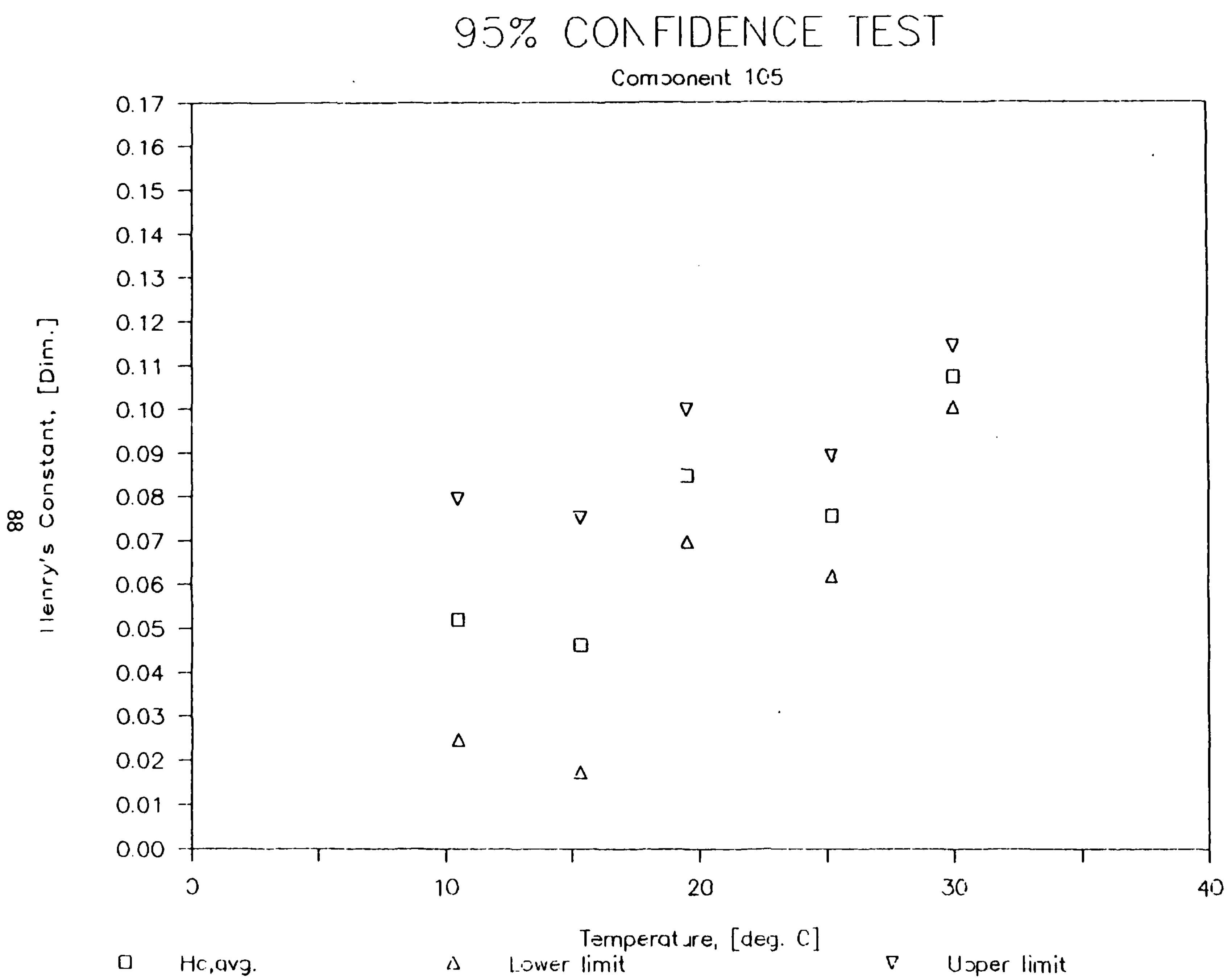
OF POINTS = 5

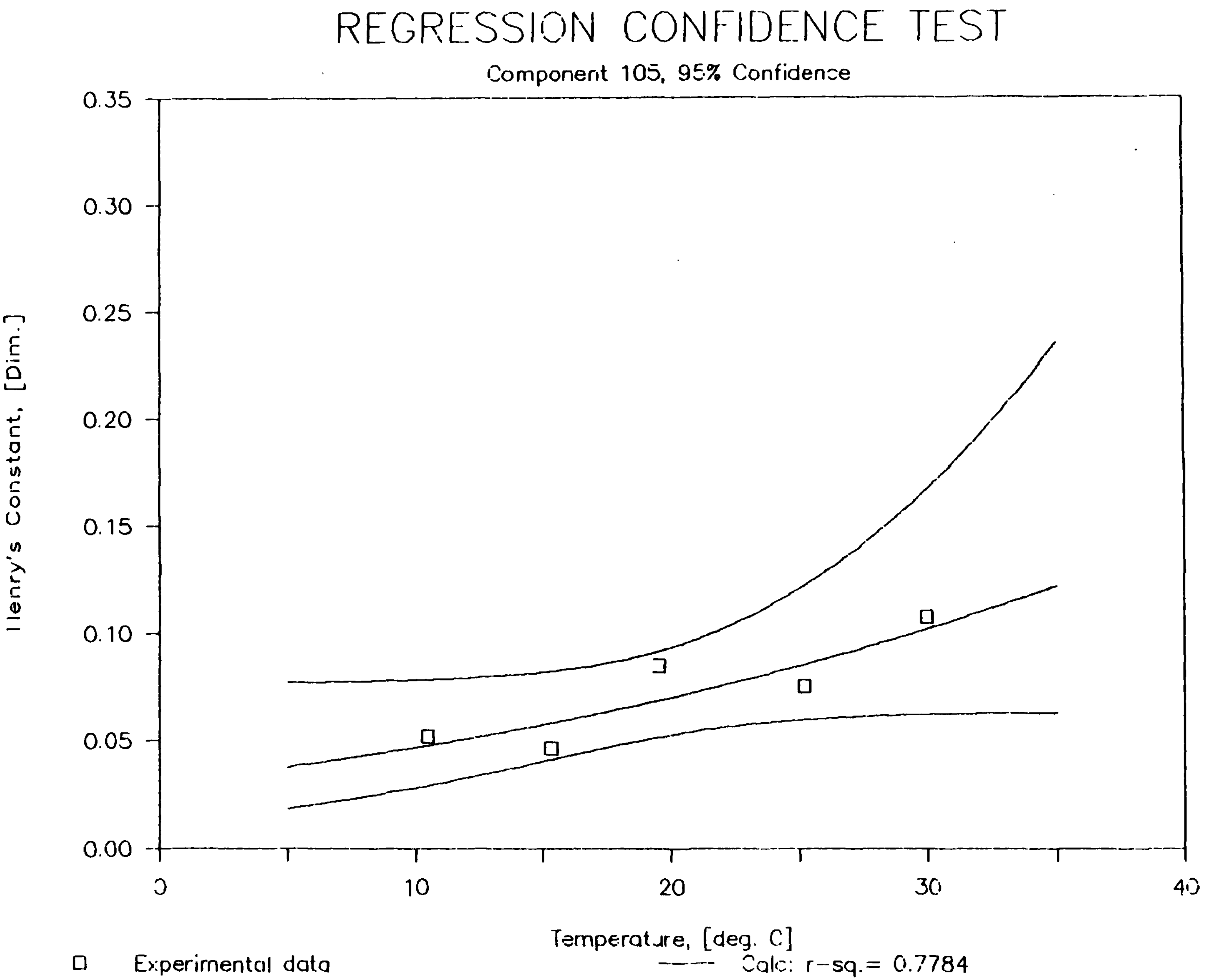
SLOPE = -3.6E+03

Y-INTERCEPT = 6.0E+00

R-SQUARED = 0.7784


TEMPERATURE REGRESSION PLOT
Component 105
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
-6.60
-6.80
-7.00
-7.20
-7.40
-7.60
-7.80
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.7784


95% CONFIDENCE TEST
Component 105
Henry's Constant, [Dim.]
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 105, 95% Confidence
Henry's Constant, [Dim.]
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r--sq.= 0.7784

Results Summary for Component 6

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	6		7		8	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	2		2		2	
Component ID	6		6		6	
Temperature (C)	10		15		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.1052	1.0E-25	0.1188	1.0E-25	0.1417	1.0E-25
H,avg:atm-mol/mol	135.7		155.9		189.2	
H,avg: atm-m3/mol	2.44E-03	1	2.81E-03	1	3.41E-03	1
H,avg: kPa-m3/mol	0.2477		0.2846		0.3455	
COV, r [std/mean]	7.23		1.00		1.60	
COV, both replic.	------		------		------	
Observation: (1)	0.1079		0.1181		0.1401	
[atm-m3/m3] (2)	0.1142		0.1200		0.1394	
(3)	0.0964		0.1175		0.1440	
(4)	0.1024		0.1195		0.1432	
Injection: (1)	332510		409510		486310	
[Peak Area] (2)	315850		408560		493360	
(3)	1416100		1670200		1817900	
(4)	1378400		1656600		1822900	

	Temperature 4		Temperature 5	
RUN Number —)	7		5	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	2		2	
Component ID	6		6	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.1470	1.0E-25	0.1902	1.0E-25
H, avg:atm-mol/mol	199.7		262.7	
H, avg: atm-m3/mol	3.60E-03	1	4.73E-03	1
H, avg: kPa-m3/mol	0.3645		0.4795	
COV, r [std/mean]	0.76		0.97	
COV, both replic.	———		———	
Observation: (1)	0.1476		0.1892	
[atm-m3/m3] (2)	0.1483		0.1922	
(3)	0.1458		0.1883	
(4)	0.1465		0.1913	
Injection: (1)	556060		727340	
[Peak Area] (2)	552440		725320	
(3)	2022100		2298600	
(4)	2016400		2276900	

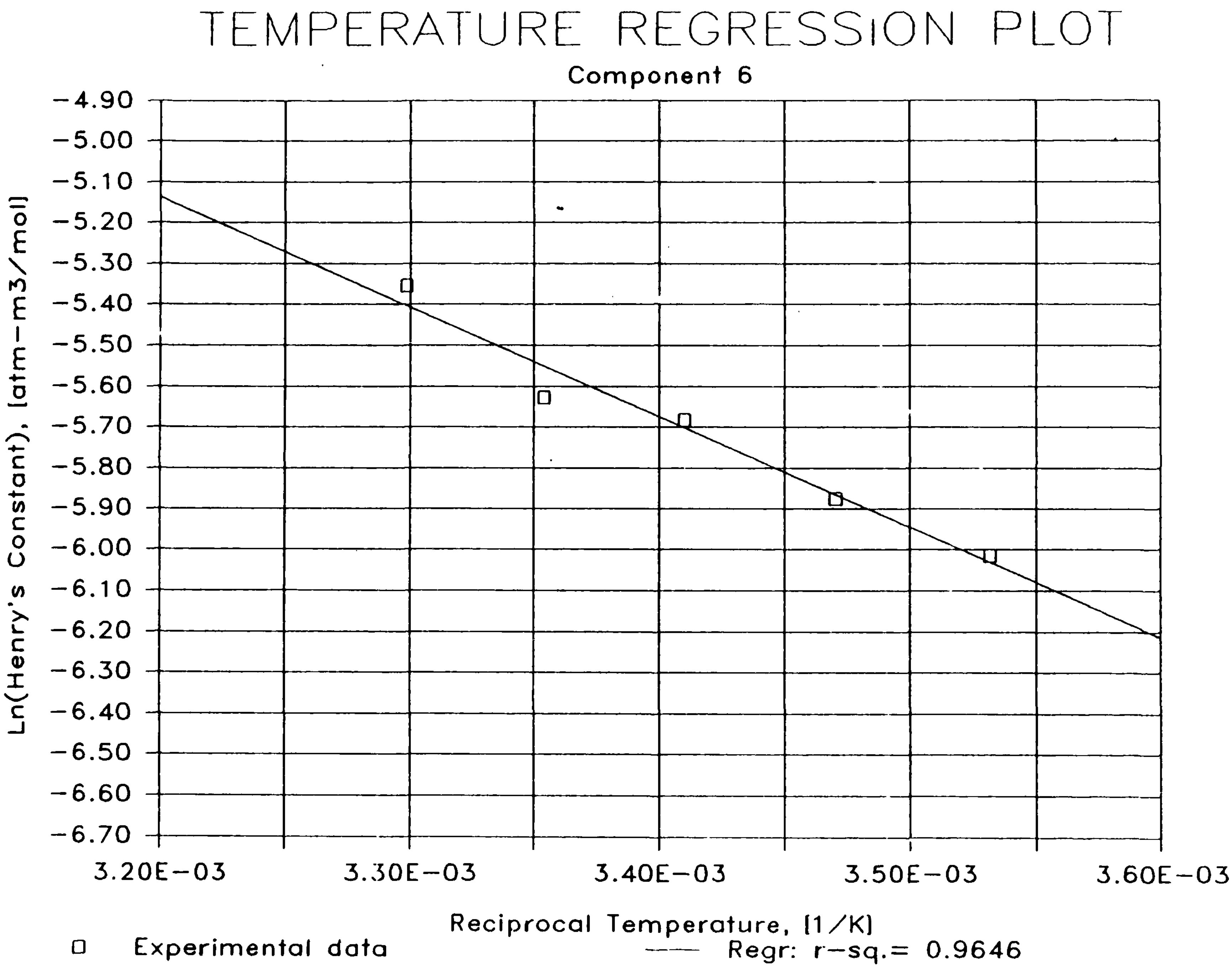
Temperature Regression Parameters:

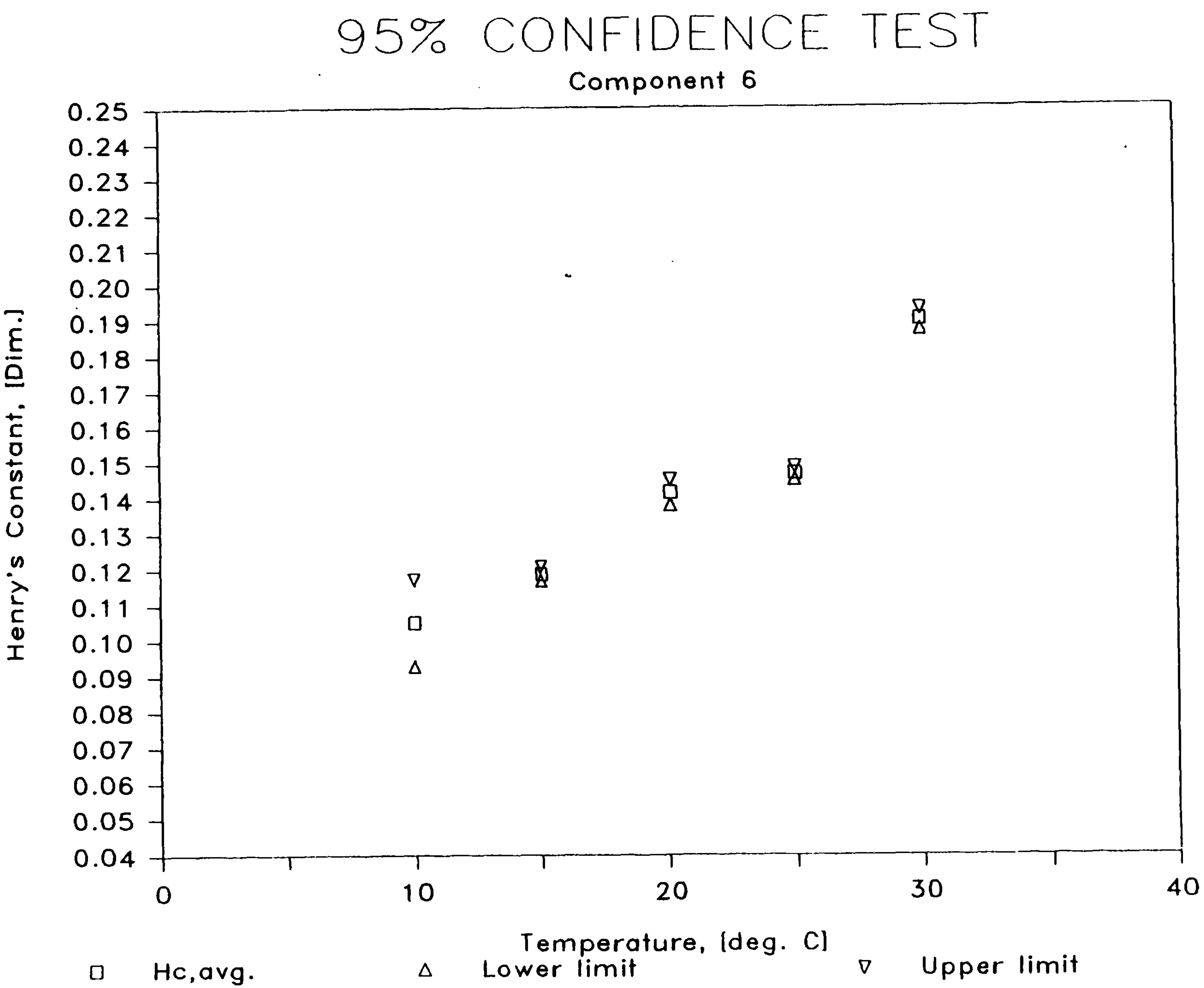
OF POINTS = 5

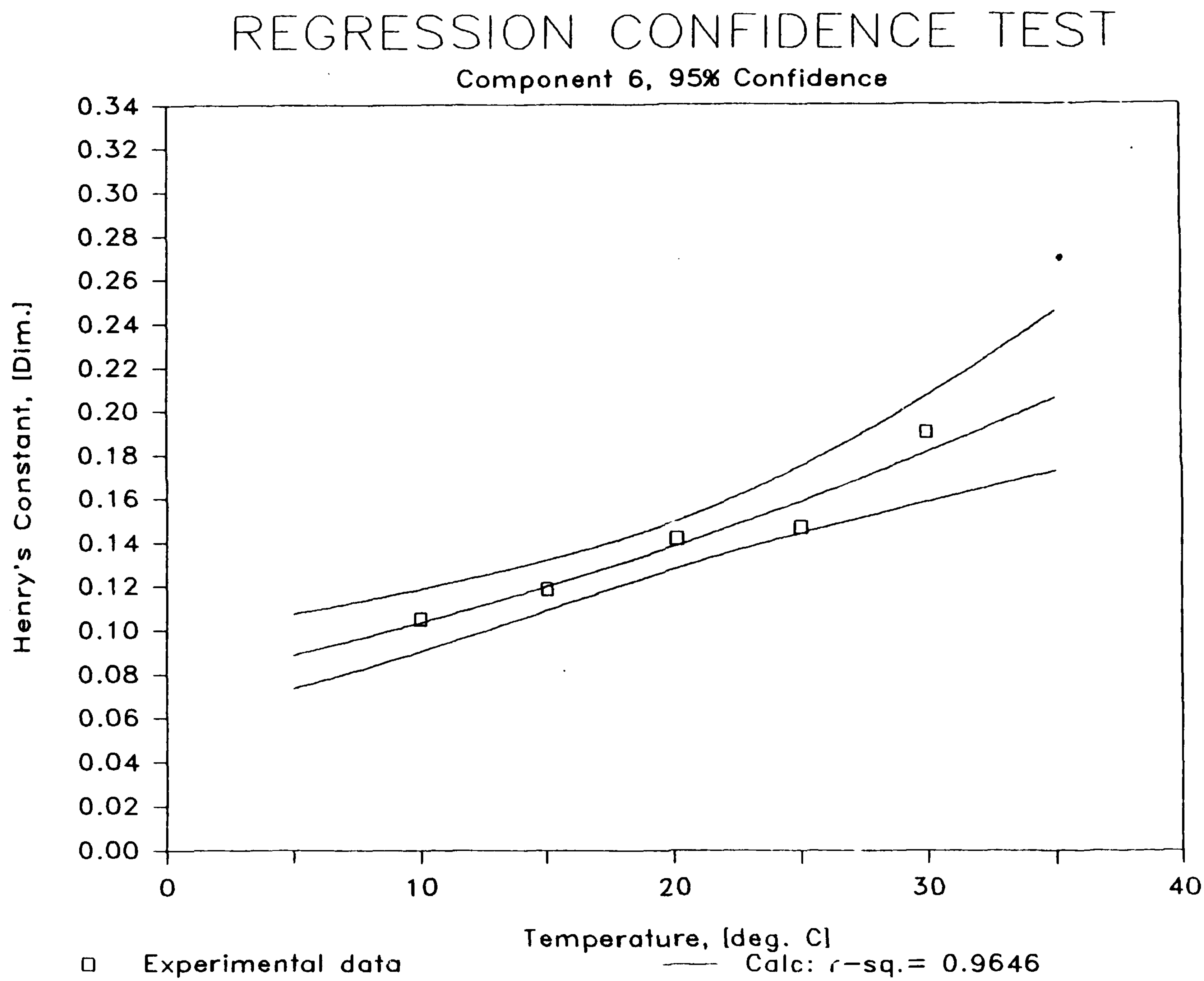
SLOPE = -2.7E+03

Y-INTERCEPT = 3.5E+00

R-SQUARED = 0.9646


TEMPERATURE REGRESSION PLOT
Component 6
Ln(Henry's Constant), [atm-m3/mol]
-4.90
-5.00
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
-6.40
-6.50
-6.60
-6.70
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9646


95% CONFIDENCE TEST
Component 6
Henry's Constant, [Dim.]
0.25
0.24
0.23
0.22
0.21
0.20
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 6, 95% Confidence
Henry's Constant, [Dim.]
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9646

Results Summary for Component 7

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	10		11		12	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	2		2		2	
Component ID	7		7		7	
Temperature (C)	10		15		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0953	1.0E-25	0.0977	1.0E-25	0.1221	1.0E-25
H, avg:atm-mol/mol	122.9		128.2		163.0	
H, avg: atm-m3/mol	2.21E-03	1	2.31E-03	1	2.94E-03	1
H, avg: kPa-m3/mol	0.2244		0.2341		0.2976	
COV, r [std/mean]	9.48		5.99		3.81	
COV, both replic.	------		------		------	
Observation: (1)	0.1063		0.1033		0.1215	
[atm-m3/m3] (2)	0.0971		0.1022		0.1278	
(3)	0.0932		0.0932		0.1164	
(4)	0.0846		0.0921		0.1225	
Injection: (1)	500440		553140		694170	
[Peak Area] (2)	471490		528210		679760	
(3)	2145900		2404100		2791500	
(4)	2236100		2415600		2721900	

	Temperature 4		Temperature 5	
RUN Number —)	11		9	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	2		2	
Component ID	7		7	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.1166	1.0E-25	0.1696	1.0E-25
H, avg:atm-mol/mol	158.3		234.2	
H, avg: atm-m3/mol	2.85E-03	1	4.22E-03	1
H, avg: kPa-m3/mol	0.2890		0.4276	
COV, r [std/mean]	0.59		4.16	
COV, both replic.	———		———	
Observation: (1)	0.1160		0.1781	
[atm-m3/m3] (2)	0.1160		0.1677	
(3)	0.1172		0.1714	
(4)	0.1172		0.1612	
Injection: (1)	824190		1093500	
[Peak Area] (2)	828310		1069500	
(3)	3390000		3579100	
(4)	3390700		3704500	

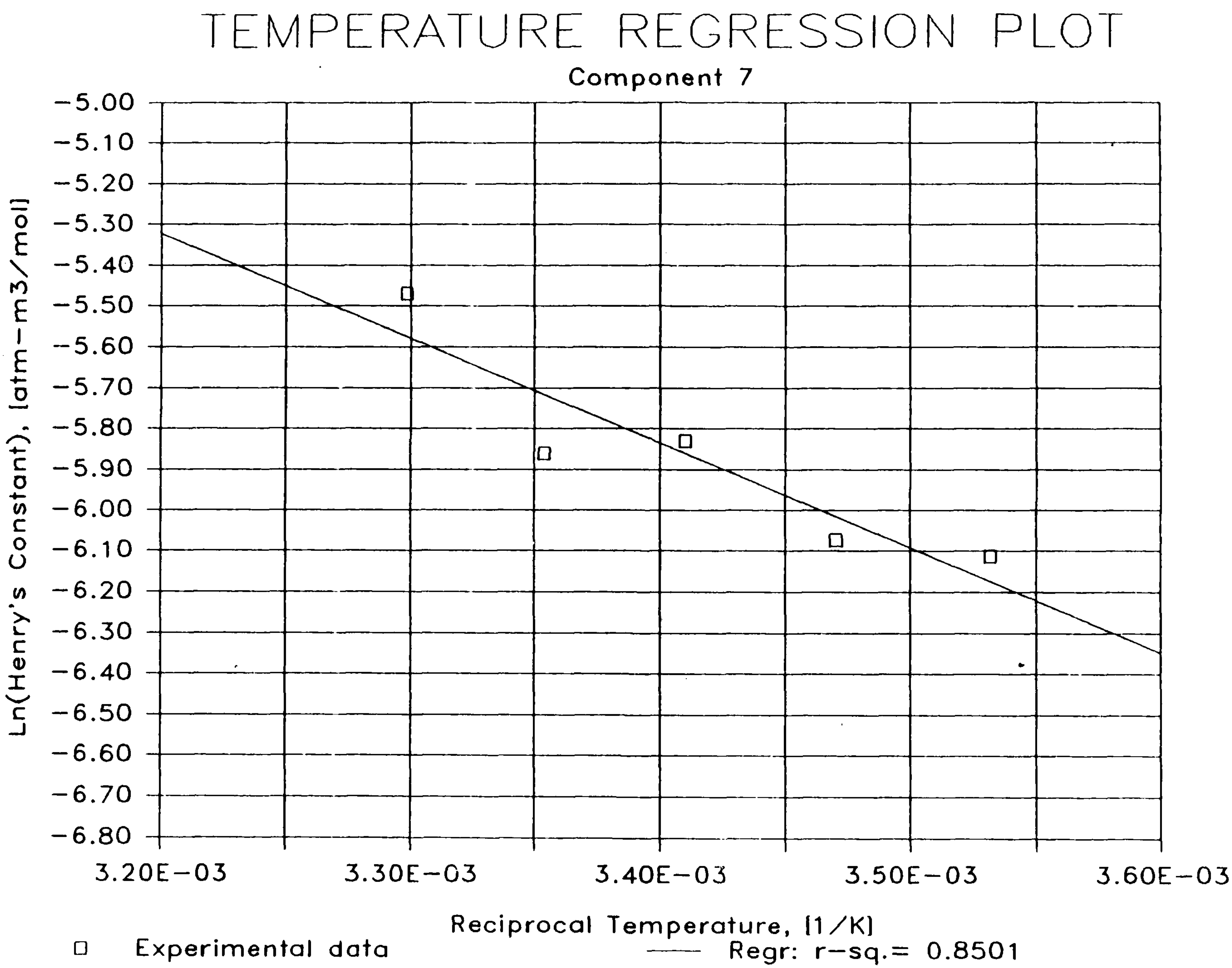
Temperature Regression Parameters:

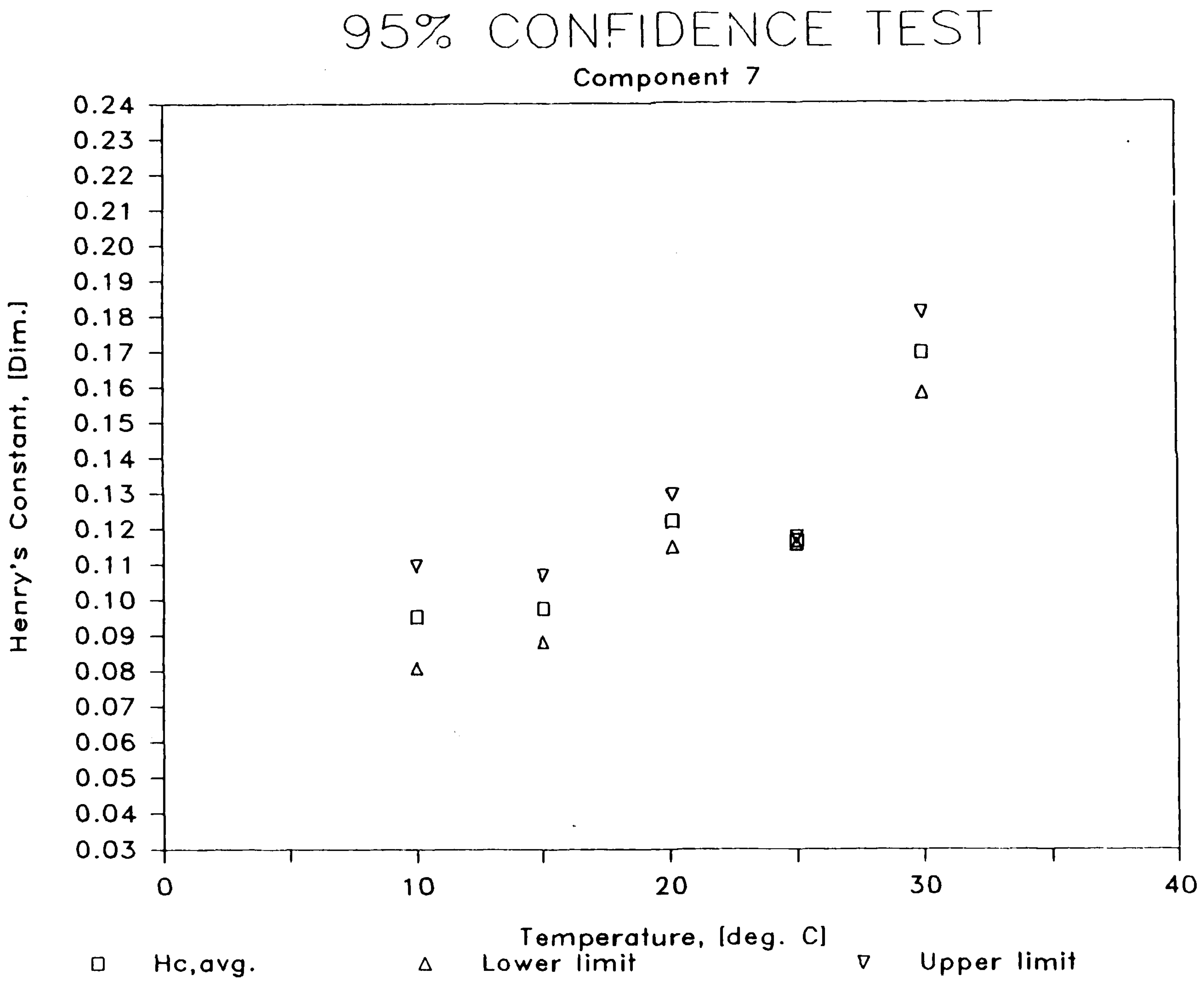
OF POINTS = 5

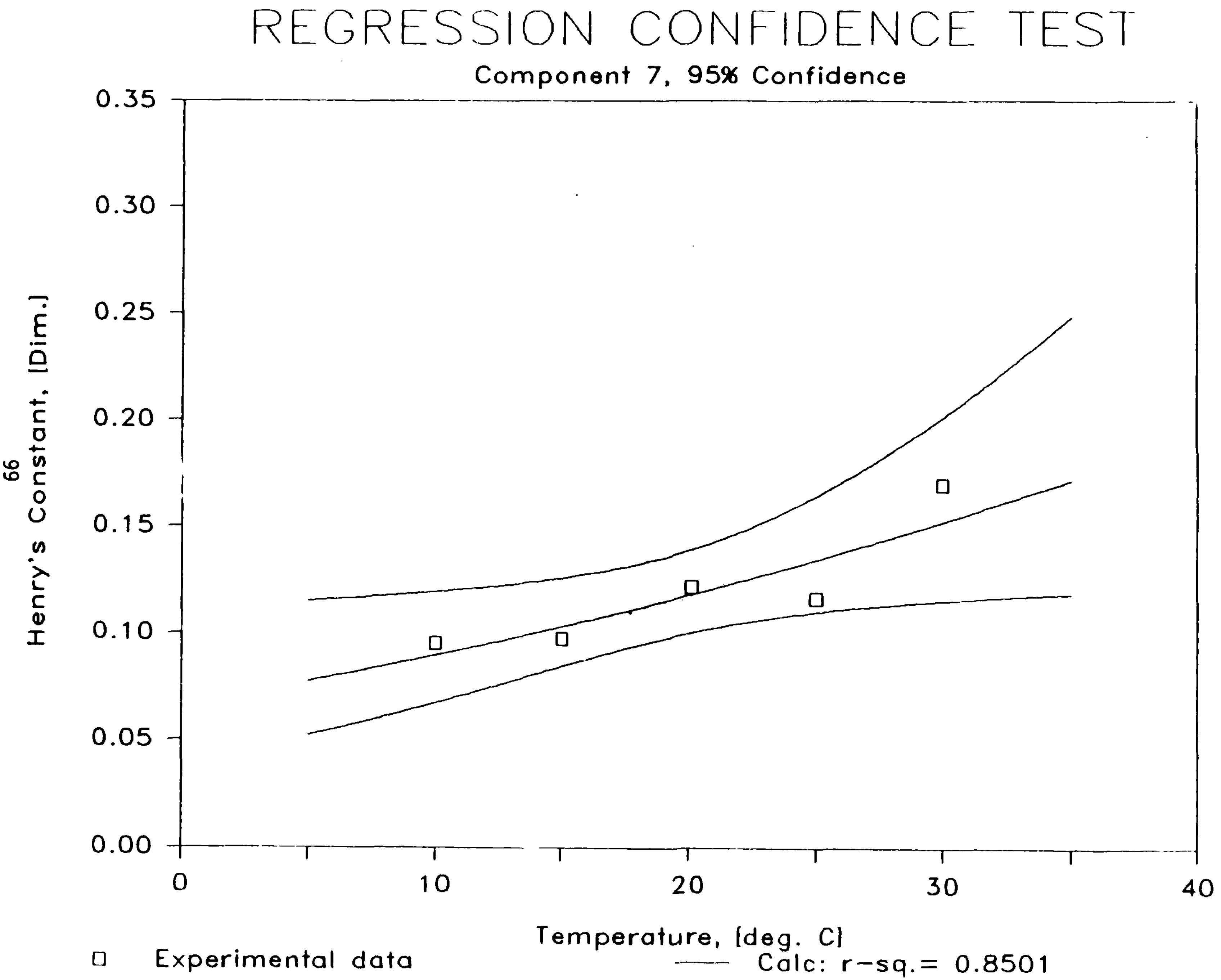
SLOPE = -2.6E+03

Y-INTERCEPT = 2.9E+00

R-SQUARED = 0.8501


TEMPERATURE REGRESSION PLOT
Component 7
Ln(Henry's Constant), [atm-m3/mol]
-5.00
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
-6.40
-6.50
-6.60
-6.70
-6.80
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.8501


95% CONFIDENCE TEST
Component 7
Henry's Constant, [Dim.]
0.24
0.23
0.22
0.21
0.20
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 7, 95% Confidence
Henry's Constant, [Dim.]
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.8501

04-Nov-86

Results Summary for Component 107

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	79		91		104	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	14		14		14	
Component ID	107		107		107	
Temperature (C)	10.5		15.3		19.5	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0506	1.0E-25	0.0994	1.0E-25	0.1215	1.0E-25
H, avg:atm-mol/mol	65.4		130.6		161.9	
H, avg: atm-m3/mol	1.18E-03	1	2.35E-03	1	2.92E-03	1
H, avg: kPa-m3/mol	0.1194		0.2384		0.2956	
COV, r [std/mean]	16.52		16.97		19.71	
COV, both replic.	------		------		------	
Observation: (1)	0.0607		0.1128		0.1160	
[atm-m3/m3] (2)	0.0478		0.1151		0.1513	
(3)	0.0532		0.0838		0.0935	
(4)	0.0409		0.0858		0.1251	
Injection: (1)	193660		263660		265060	
[Peak Area] (2)	185550		230970		239940	
(3)	1040900		1099300		1090600	
(4)	1122100		1088800		950770	

	Temperature 4		Temperature 5	
RUN Number ---)	92		80	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	14		14	
Component ID	107		107	
Temperature (C)	25.2		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.1231	1.0E-25	0.1501	1.0E-25
H,avg:atm-mol/mol	167.2		207.2	
H,avg: atm-m3/mol	3.01E-03	1	3.73E-03	1
H,avg: kPa-m3/mol	0.3053		0.3782	
COV, r [std/mean]	20.19		4.92	
COV, both replic.	------		------	
Observation: (1)	0.1462		0.1525	
[atm-m3/m3] (2)	0.1429		0.1414	
(3)	0.1029		0.1588	
(4)	0.1003		0.1475	
Injection: (1)	419960		578310	
[Peak Area] (2)	352660		591410	
(3)	1535000		2065800	
(4)	1553600		2151100	

ANALYSIS COMPLETED ...

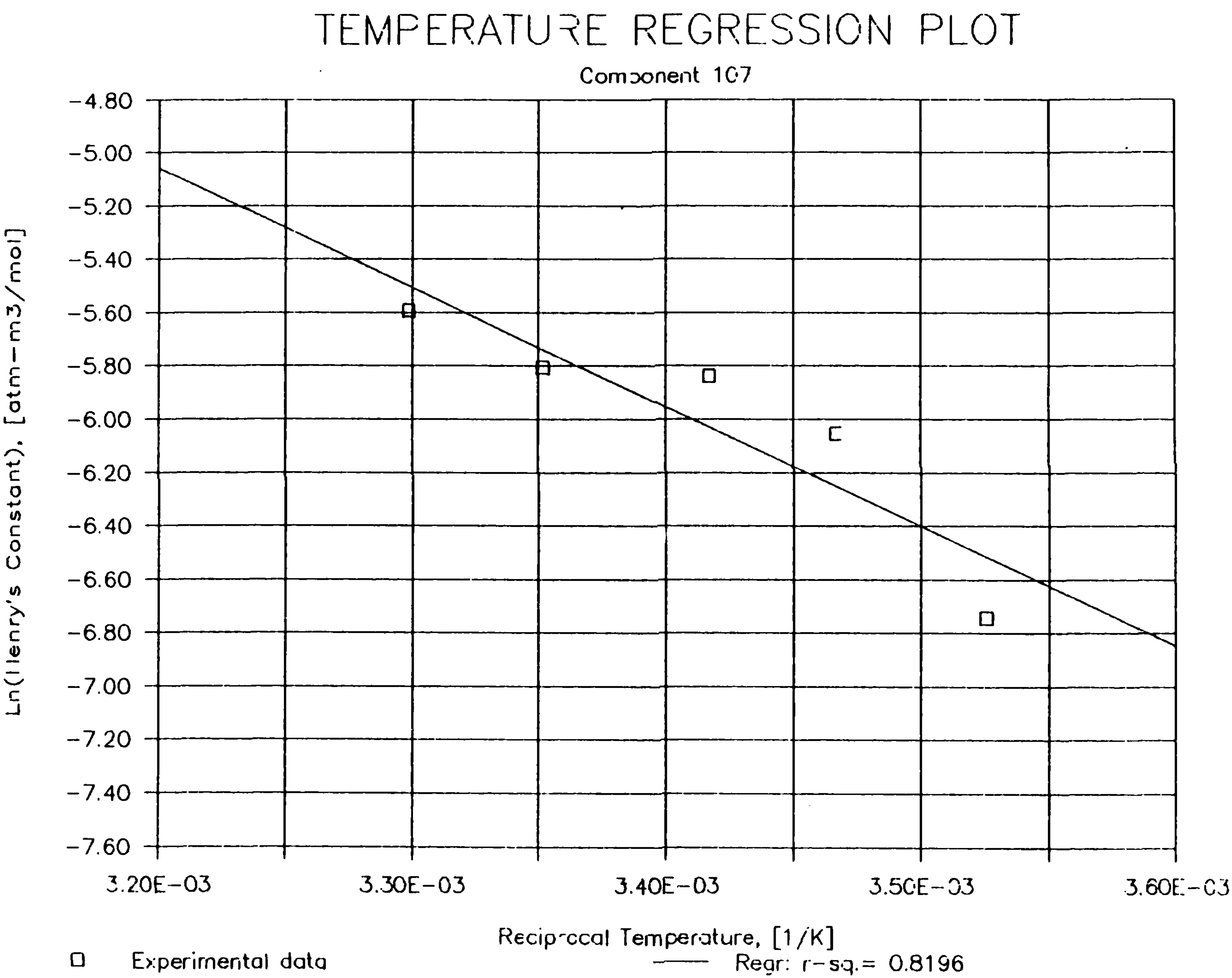
Temperature Regression Parameters:

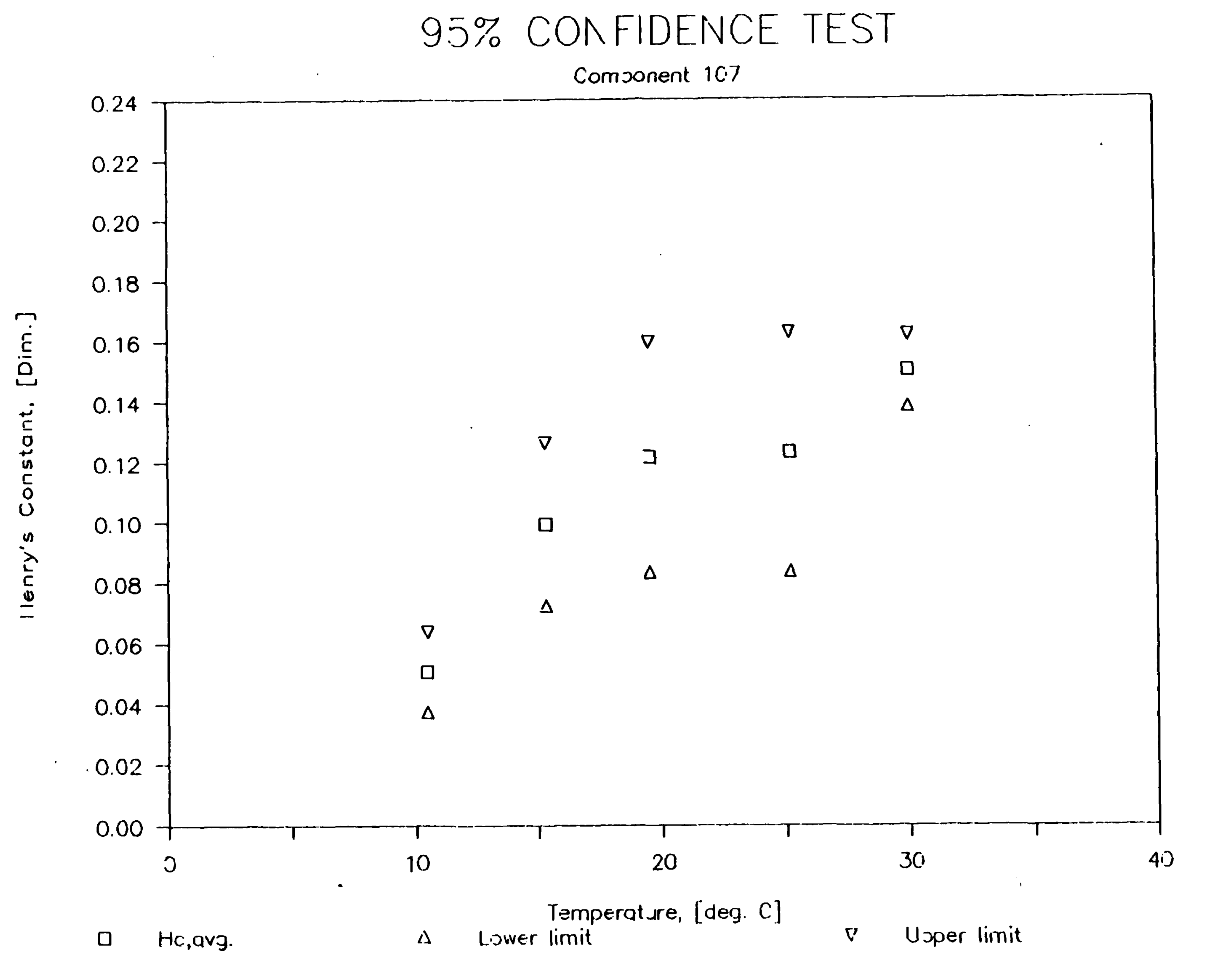
OF POINTS = 5

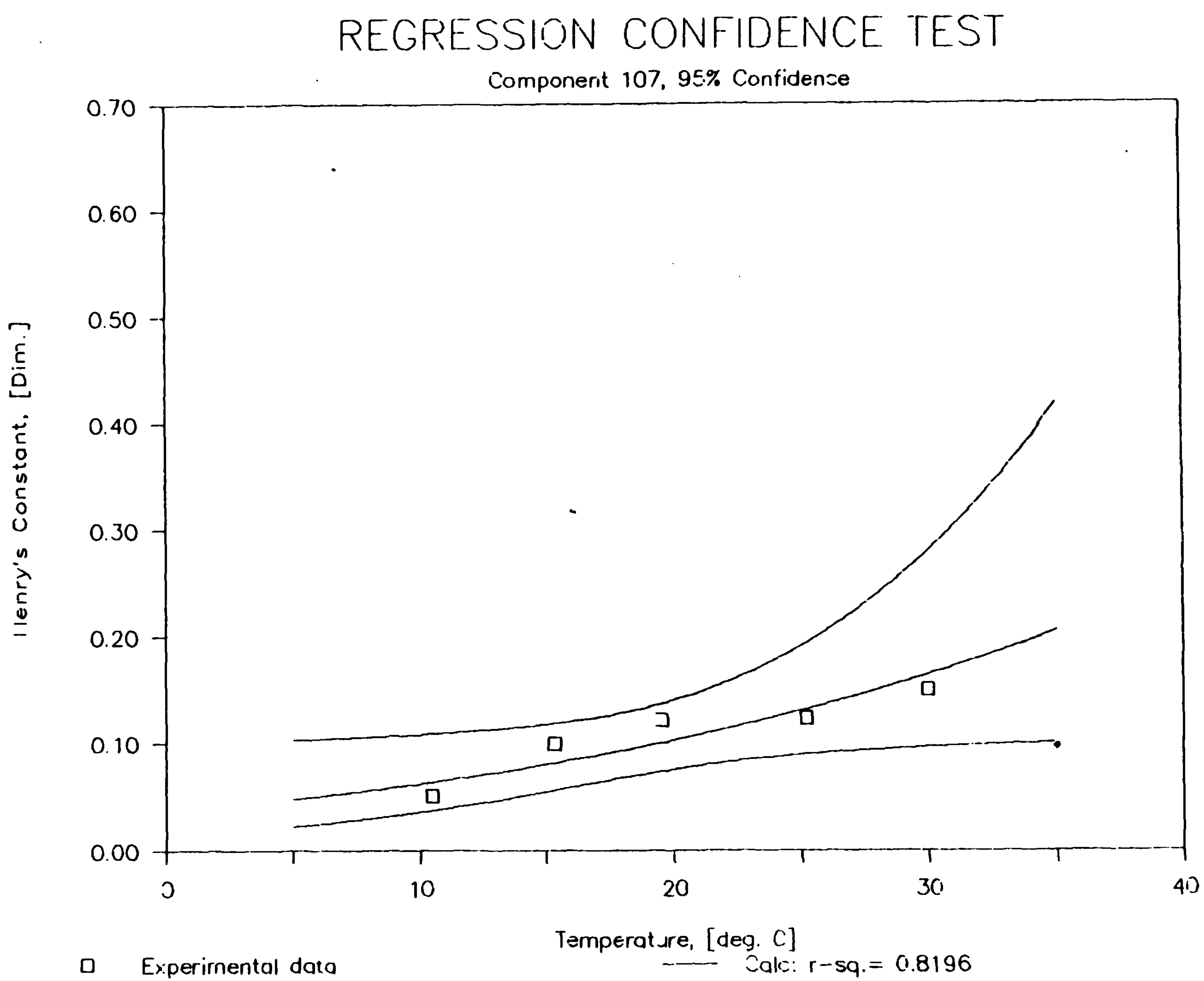
SLOPE = -4.5E+03

Y-INTERCEPT = 9.2E+00

R-SQUARED = 0.8196


TEMPERATURE REGRESSION PLOT
Component 107
Ln(Henry's Constant), [atm-m3/mol]
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
-6.60
-6.80
-7.00
-7.20
-7.40
-7.60
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.8196


95% CONFIDENCE TEST
Component 107
Henry's Constant, [Dim.]
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 107, 95% Confidence
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.8196

Results Summary for Component 8

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	14		15		16	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	2		2		2	
Component ID	8		8		8	
Temperature (C)	10		15		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0912	1.0E-25	0.0918	1.0E-25	0.1075	1.0E-25
H, avg:atm-mol/mol	117.6		120.5		143.6	
H, avg: atm-m3/mol	2.12E-03	1	2.17E-03	1	2.59E-03	1
H, avg: kPa-m3/mol	0.2148		0.2200		0.2622	
COV, r [std/mean]	5.03		5.59		4.08	
COV, both replic.	------		------		------	
Observation: (1)	0.0857		0.0965		0.1129	
[atm-m3/m3] (2)	0.0901		0.0960		0.1075	
(3)	0.0923		0.0877		0.1075	
(4)	0.0968		0.0871		0.1022	
Injection: (1)	254220		289080		356620	
[Peak Area] (2)	262270		277250		348390	
(3)	1198000		1295300		1486100	
(4)	1173900		1298800		1521500	

	Temperature 4		Temperature 5	
RUN Number —)	15		13	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	2		2	
Component ID	8		8	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.1296	1.0E-25	0.1563	1.0E-25
H, avg:atm-mol/mol	176.0		215.8	
H, avg: atm-m3/mol	3.17E-03	1	3.89E-03	1
H, avg: kPa-m3/mol	0.3212		0.3940	
COV, r [std/mean]	8.35		9.17	
COV, both replic.	———		———	
Observation: (1)	0.1428		0.1741	
[atm-m3/m3] (2)	0.1273		0.1571	
(3)	0.1315		0.1549	
(4)	0.1167		0.1391	
Injection: (1)	463370		549630	
[Peak Area] (2)	443770		514710	
(3)	1714600		1822700	
(4)	1820400		1931400	

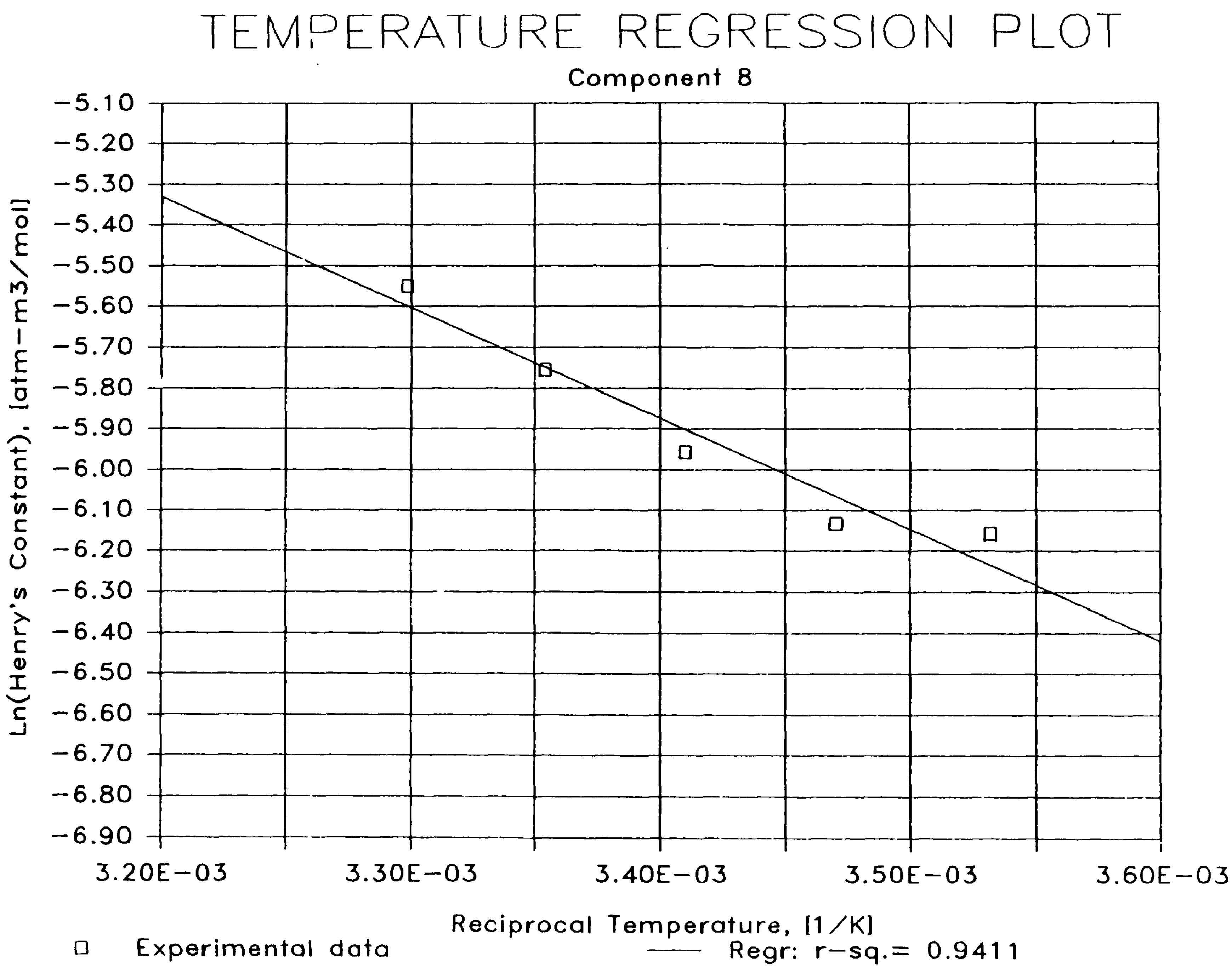
Temperature Regression Parameters:

OF POINTS = 5

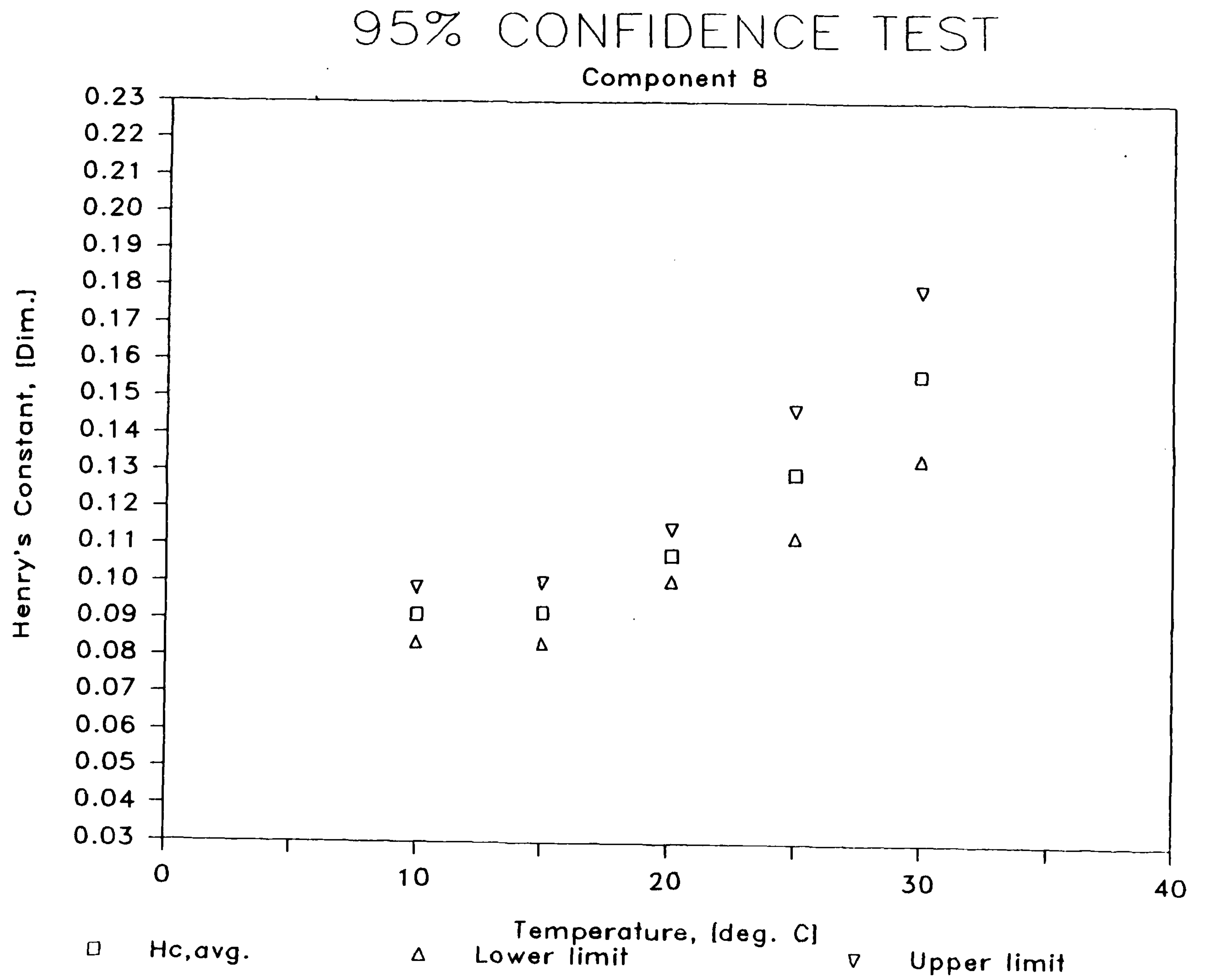
SLOPE = -2.7E+03

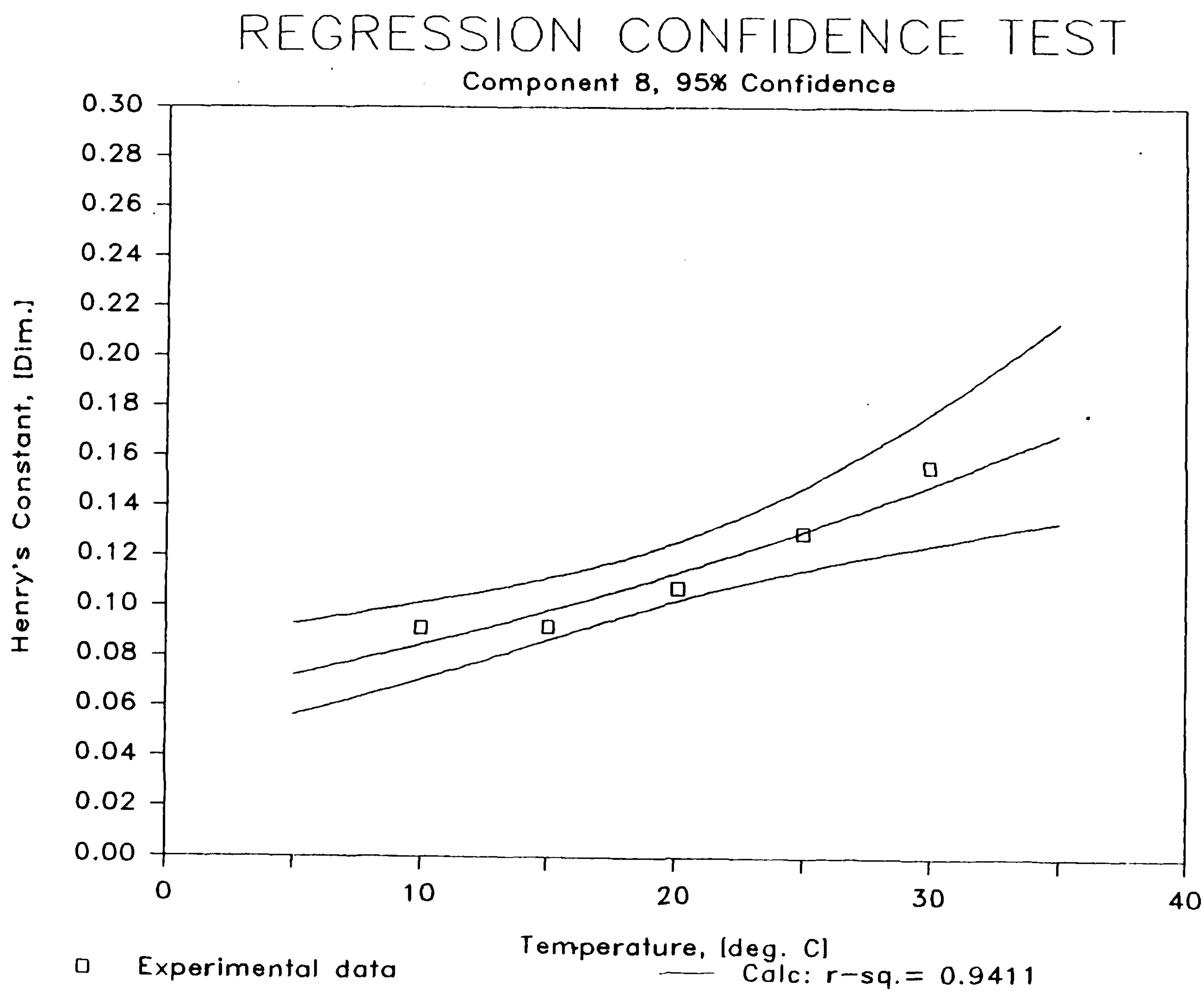
Y-INTERCEPT = 3.4E+00

R-SQUARED = 0.9411



TEMPERATURE REGRESSION PLOT
Component 8
Ln(Henry's Constant), [atm-m3/mol]
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
-6.40
-6.50
-6.60
-6.70
-6.80
-6.90
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9411


95% CONFIDENCE TEST
Component 8
Henry's Constant, [Dim.]
0.23
0.22
0.21
0.20
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 8, 95% Confidence
Henry's Constant, [Dim.]
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r−sq.= 0.9411

04-Nov-86 Results Summary for Component 108

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	83		96		107	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	14		14		14	
Component ID	108		108		108	
Temperature (C)	10.5		15.3		19.5	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.0700	1.0E-25	0.0909	1.0E-25	0.1034	1.0E-25
H,avg:atm-mol/mol	90.4		119.5		137.9	
H,avg: atm-m3/mol	1.63E-03	1	2.15E-03	1	2.48E-03	1
H,avg: kPa-m3/mol	0.1650		0.2181		0.2517	
COV, r [std/mean]	21.53		13.64		16.65	
COV, both replic.	------		------		------	
Observation: (1)	0.0778		0.1017		0.1089	
[atm-m3/m3] (2)	0.0868		0.1016		0.1241	
(3)	0.0537		0.0802		0.0837	
(4)	0.0615		0.0801		0.0970	
Injection: (1)	216910		262360		290240	
[Peak Area] (2)	190240		236960		258320	
(3)	1064100		1148300		1230600	
(4)	1017500		1148700		1154800	

	Temperature 4		Temperature 5	
RUN Number ——)	97		84	
REPLICATE ——)	No. 1	No. 2	No. 1	No. 2
Group No.	14		14	
Component ID	108		108	
Temperature (C)	25.2		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.1159	1.0E-25	0.1607	1.0E-25
H, avg:atm-mol/mol	157.6		221.9	
H, avg: atm-m3/mol	2.84E-03	1	4.00E-03	1
H, avg: kPa-m3/mol	0.2876		0.4050	
COV, r [std/mean]	1.69		10.89	
COV, both replic.	——		——	
Observation: (1)	0.1171		0.1765	
[atm-m3/m3] (2)	0.1181		0.1461	
(3)	0.1138		0.1752	
(4)	0.1148		0.1450	
Injection: (1)	388280		564590	
[Peak Area] (2)	383020		562200	
(3)	1590200		1858000	
(4)	1583700		2063900	

ANALYSIS COMPLETED ...

Temperature Regression Parameters:

OF POINTS = 5

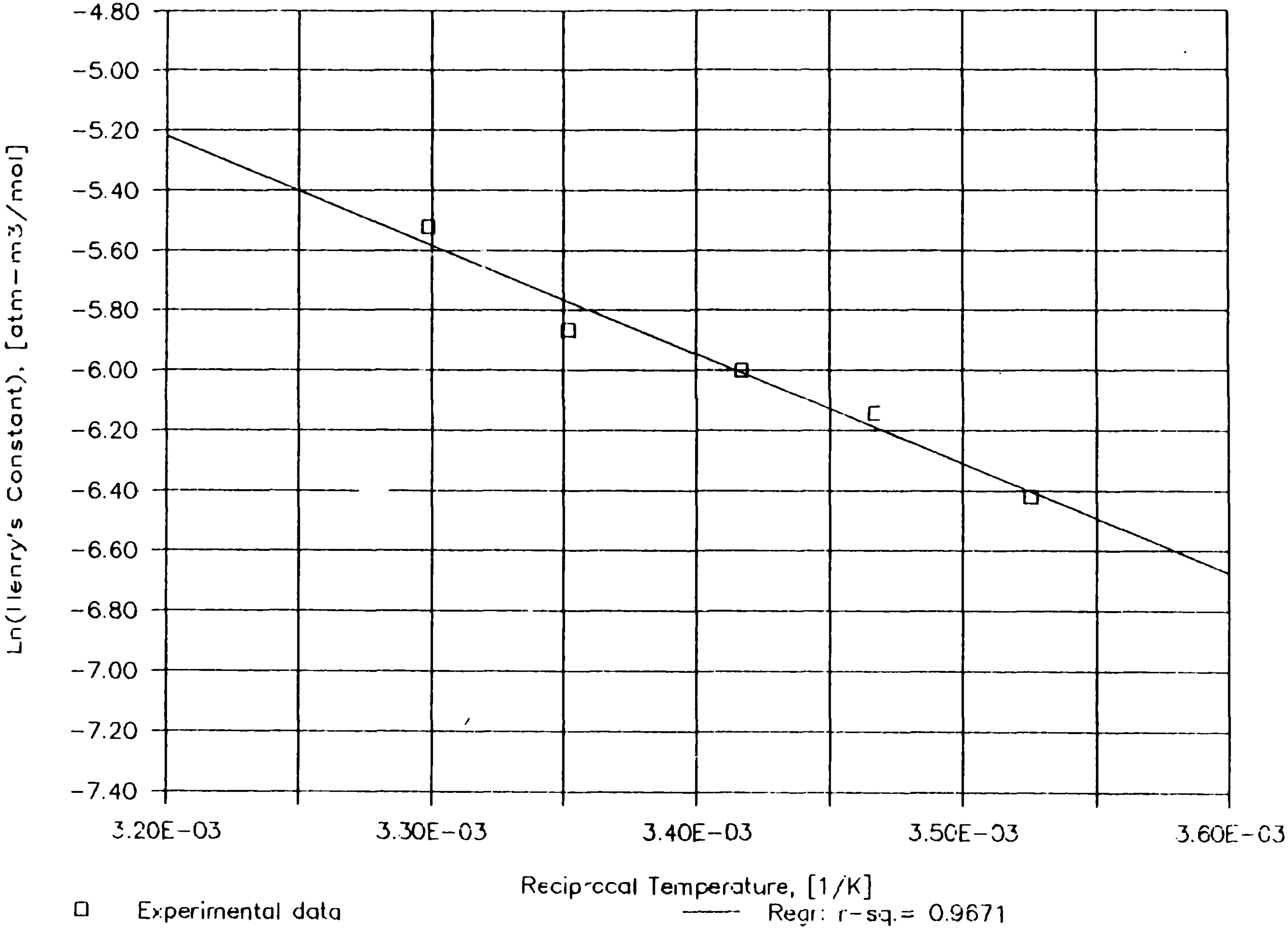
SLOPE = -3.6E+03

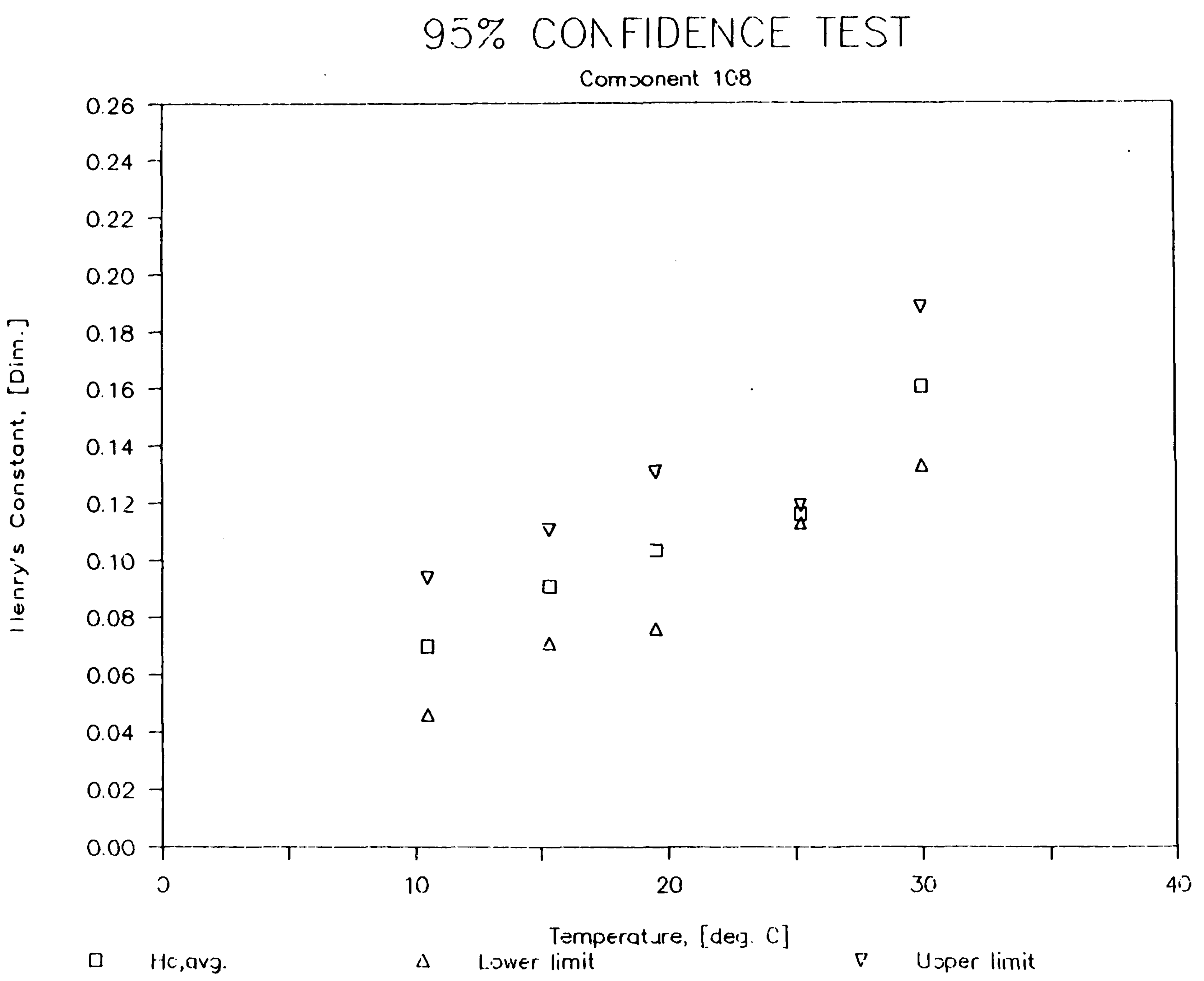
Y-INTERCEPT = 6.4E+00

R-SQUARED = 0.9671

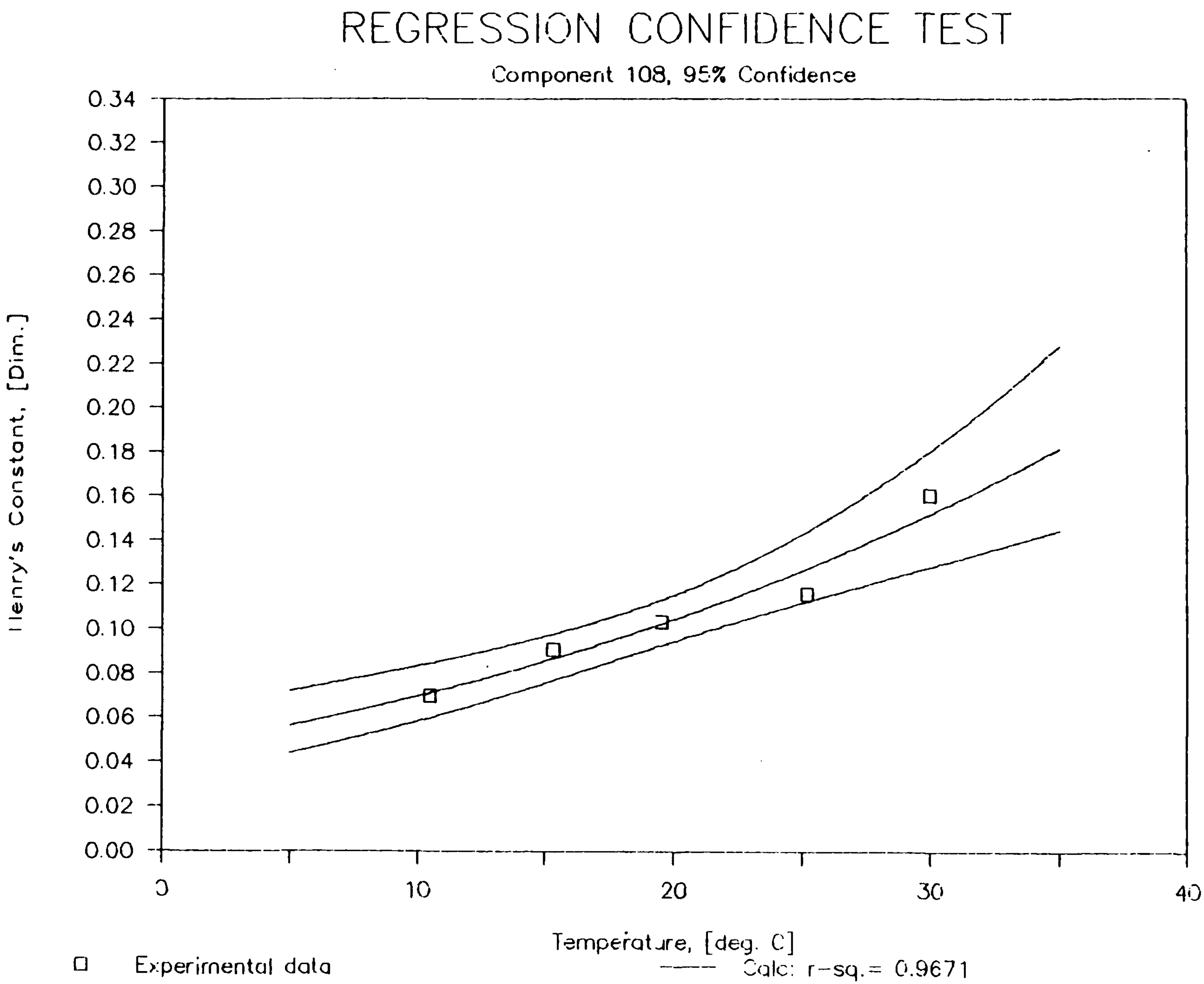
TEMPERATURE REGRESSION PLOT

Component 108





95% CONFIDENCE TEST
Component 108
Henry's Constant, [Dim.]
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 108, 95% Confidence
Henry's Constant, [Dim.]
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9671

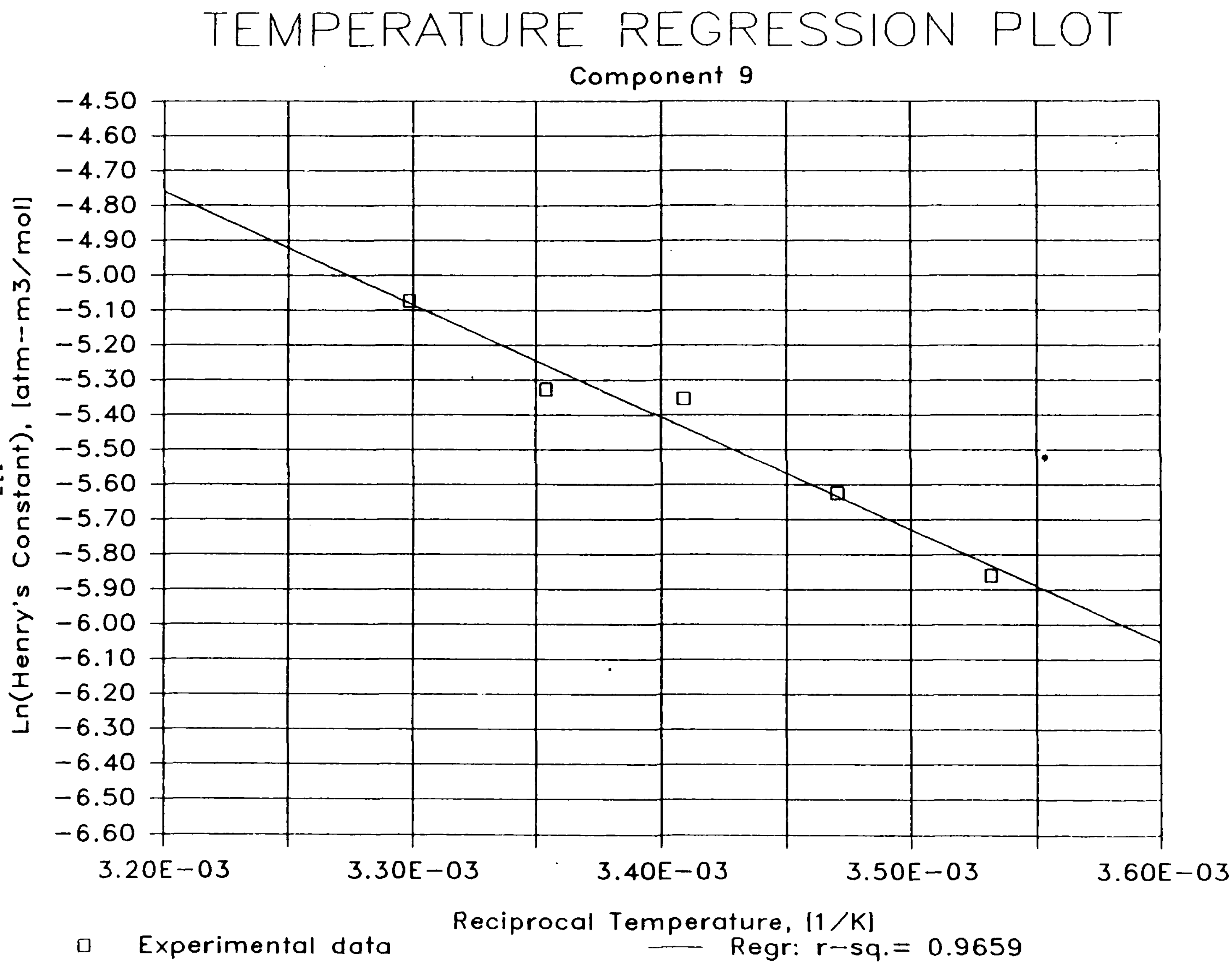
Results Summary for Component 9

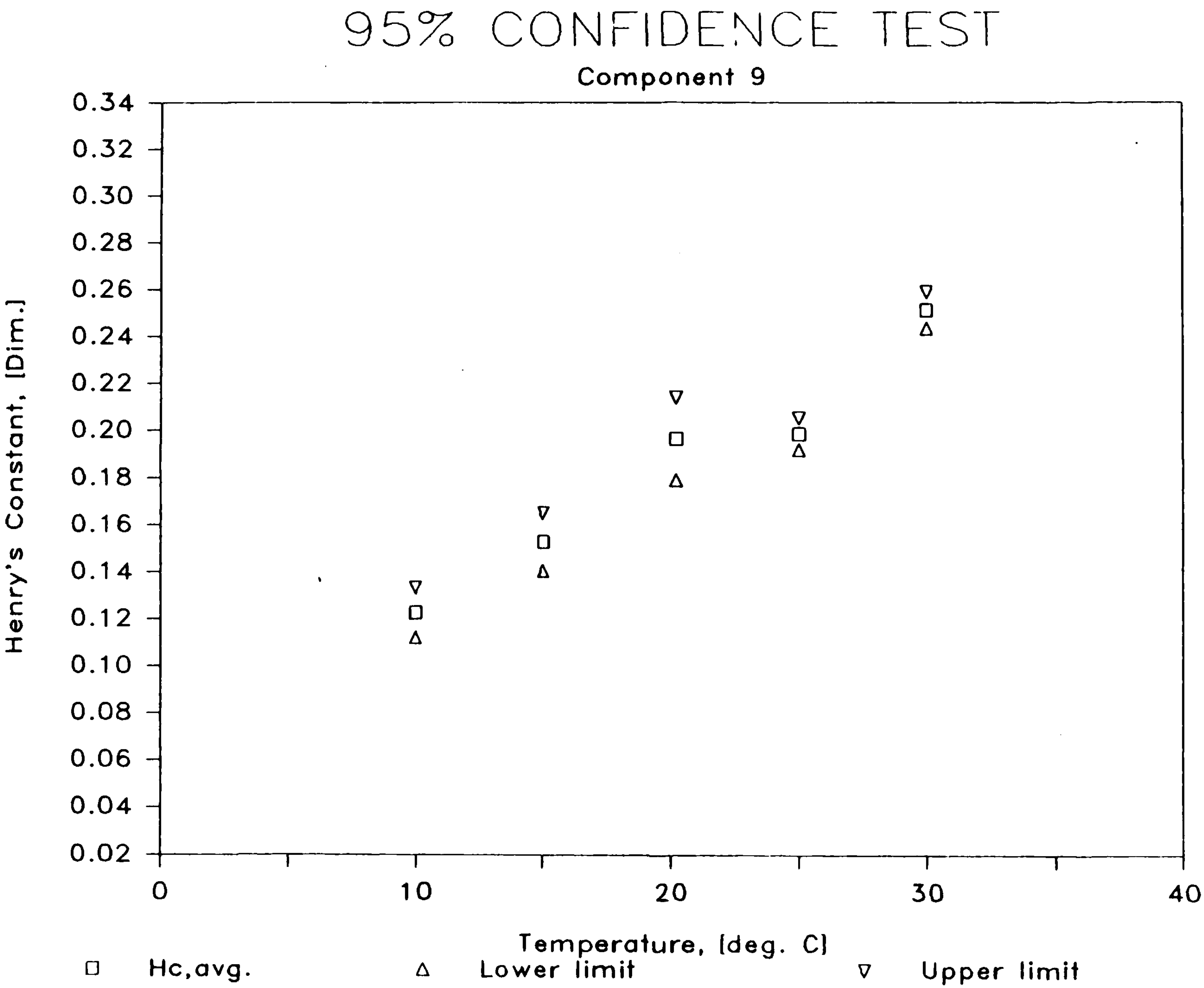
	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	2		1		2	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	3		3		3	
Component ID	9		9		9	
Temperature (C)	10		15		20.2	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.1228	1.0E-25	0.1528	1.0E-25	0.1969	1.0E-25
H,avg:atm-mol/mol	158.4		200.6		263.1	
H,avg: atm-m3/mol	2.85E-03	1	3.61E-03	1	4.74E-03	1
H,avg: kPa-m3/mol	0.2891		0.3661		0.4803	
COV, r [std/mean]	5.30		5.04		5.62	
COV, both replic.	———		———		———	
Observation: (1)	0.1207		0.1519		0.2041	
[atm-m3/m3] (2)	0.1305		0.1623		0.2084	
(3)	0.1152		0.1435		0.1855	
(4)	0.1248		0.1536		0.1896	
Injection: (1)	427950		545320		695270	
[Peak Area] (2)	419230		530300		659600	
(3)	1625900		1858200		2025300	
(4)	1568600		1796800		2001300	

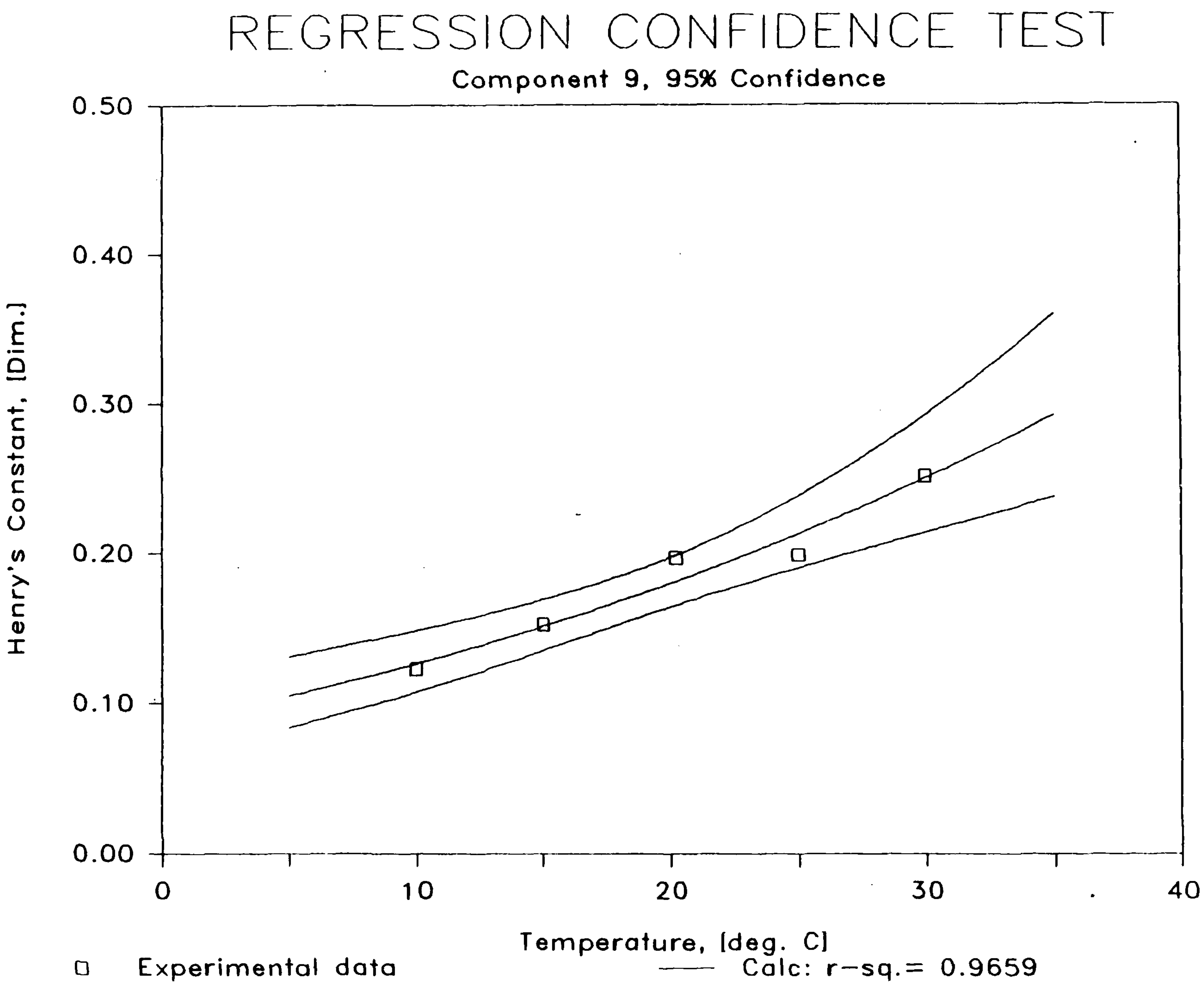
	Temperature 4		Temperature 5	
RUN Number ---)	3		12	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	3		3	
Component ID	9		9	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.1989	1.0E-25	0.2516	1.0E-25
H, avg:atm-mol/mol	270.1		347.5	
H, avg: atm-m3/mol	4.87E-03	1	6.26E-03	1
H, avg: kPa-m3/mol	0.4930		0.6343	
COV, r [std/mean]	2.11		1.93	
COV, both replic.	-----		-----	
Observation: (1)	0.2006		0.2459	
[atm-m3/m3] (2)	0.2037		0.2501	
(3)	0.1940		0.2531	
(4)	0.1971		0.2574	
Injection: (1)	826730		1048900	
[Peak Area] (2)	811700		1067300	
(3)	2431700		2741800	
(4)	2410500		2714000	

Temperature Regression Parameters:

# OF POINTS	=	5
SLOPE	=	-3.2E+03
Y-INTERCEPT	=	5.5E+00
R-SQUARED	=	0.9659


TEMPERATURE REGRESSION PLOT
Component 9
Ln(Henry's Constant), [atm--m3/mol]
-4.50
-4.60
-4.70
-4.80
-4.90
-5.00
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
-6.40
-6.50
-6.60
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9659


95% CONFIDENCE TEST
Component 9
Henry's Constant, [Dim.]
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 9, 95% Confidence
Henry's Constant, [Dim.]
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9659

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	6		5		6	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	3		3		3	
Component ID	10		10		10	
Temperature (C)	10		15		20.2	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.1809	1.0E-25	0.2044	1.0E-25	0.2680	1.0E-25
H, avg:atm-mol/mol	233.3		268.2		358.1	
H, avg: atm-m3/mol	4.20E-03	1	4.83E-03	1	6.45E-03	1
H, avg: kPa-m3/mol	0.4259		0.4897		0.6537	
COV, r [std/mean]	5.18		4.13		2.51	
COV, both replic.	----		----		----	
Observation: (1)	0.1839		0.2036		0.2624	
[atm-m3/m3] (2)	0.1920		0.2148		0.2741	
(3)	0.1699		0.1942		0.2620	
(4)	0.1777		0.2050		0.2736	
Injection: (1)	570570		718850		884190	
[Peak Area] (2)	547100		699270		883270	
(3)	1760100		2094200		2222300	
(4)	1719100		2031800		2163800	

	Temperature 4		Temperature 5	
RUN Number --->	7		14	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	3		3	
Component ID	10		10	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.3041	1.0E-25	0.3798	1.0E-25
H, avg:atm-mol/mol	412.9		524.4	
H, avg: atm-m3/mol	7.44E-03	1	9.45E-03	1
H, avg: kPa-m3/mol	0.7538		0.9572	
COV, r [std/mean]	1.90		2.14	
COV, both replic.	------		------	
Observation: (1)	0.2989		0.3821	
[atm-m3/m3] (2)	0.3089		0.3895	
(3)	0.2992		0.3702	
(4)	0.3093		0.3773	
Injection: (1)	1078900		1336700	
[Peak Area] (2)	1079000		1300600	
(3)	2501000		2639900	
(4)	2449200		2606600	

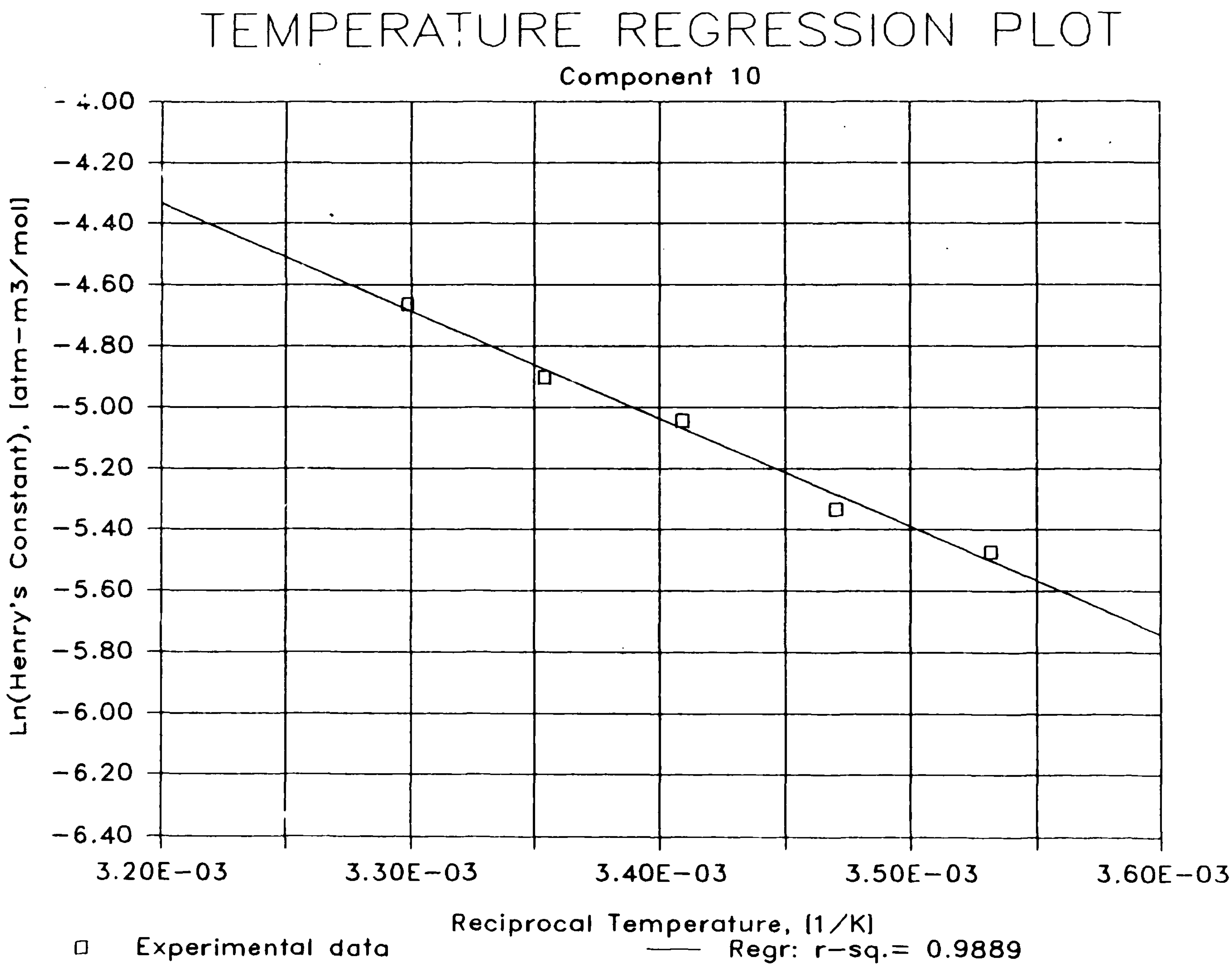
Temperature Regression Parameters:

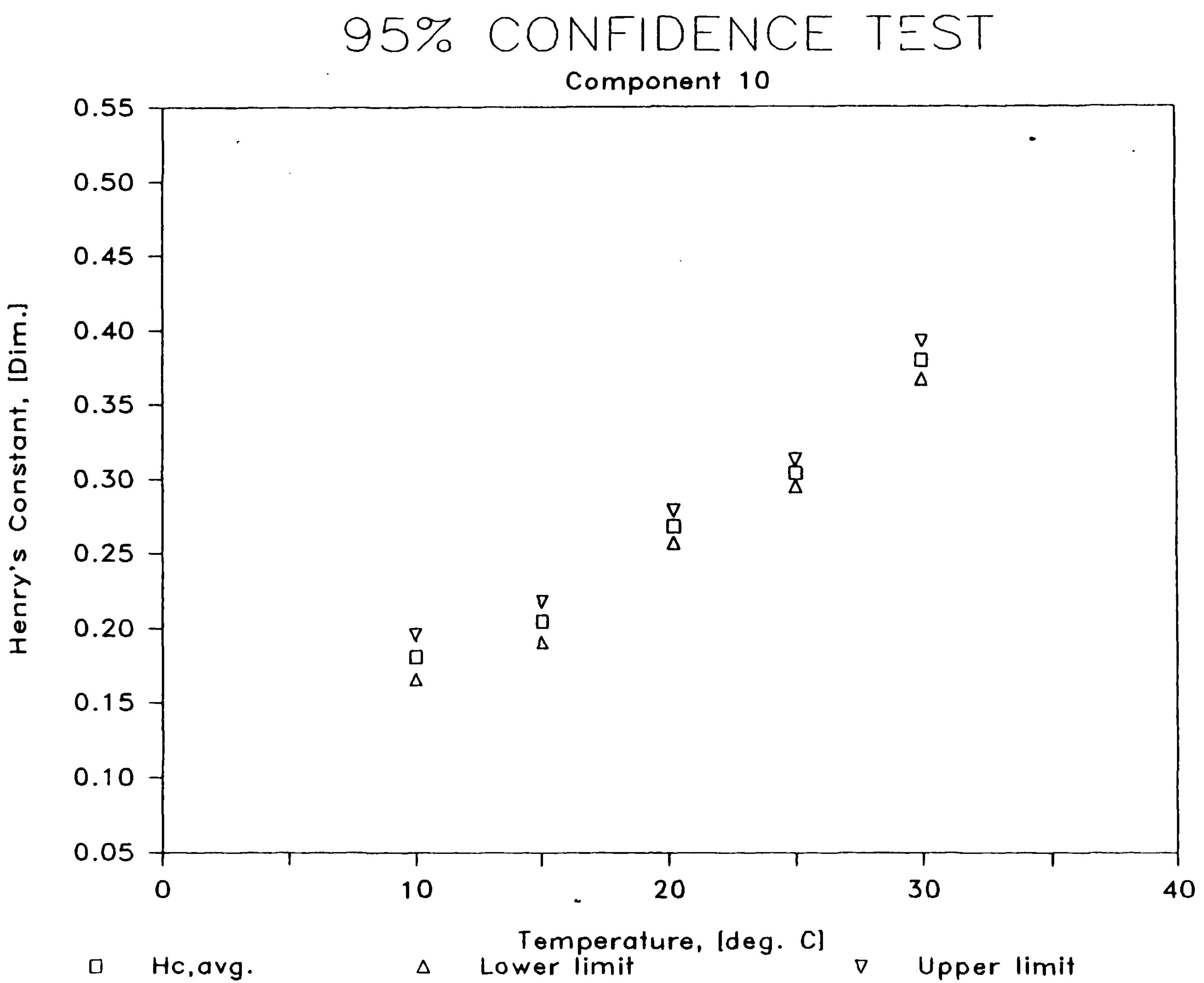
OF POINTS = 5

SLOPE = -3.5E+03

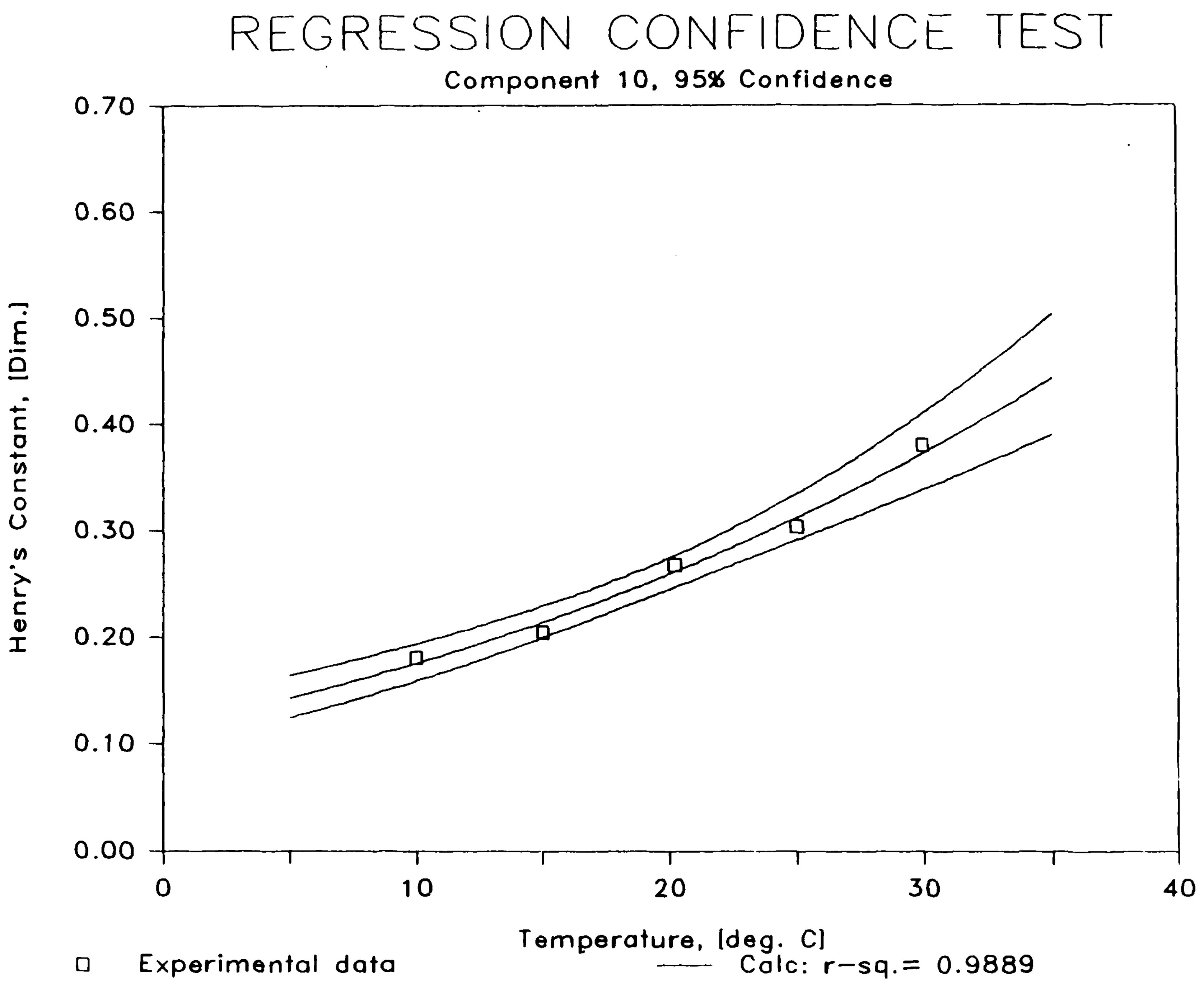
Y-INTERCEPT = 6.9E+00

R-SQUARED = 0.9889


TEMPERATURE REGRESSION PLOT
Component 10
-4.00
-4.20
-4.40
-4.60
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9889



95% CONFIDENCE TEST
Component 10
Henry's Constant, [Dim.]
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 10, 95% Confidence
Henry's Constant, [Dim.]
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9889

06-Nov-86 Results Summary for Component 11

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	10		9		10	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	3		3		3	
Component ID	11		11		11	
Temperature (C)	10		15		20.2	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.1768	1.0E-25	0.2099	1.0E-25	0.2483	1.0E-25
H, avg:atm-mol/mol	228.0		275.4		331.8	
H, avg: atm-m3/mol	4.11E-03	1	4.96E-03	1	5.98E-03	1
H, avg: kPa-m3/mol	0.4161		0.5028		0.6057	
COV, r [std/mean]	4.71		2.31		3.01	
COV, both replic.	------		------		------	
Observation: (1)	0.1839		0.2095		0.2464	
[atm-m3/m3] (2)	0.1841		0.2158		0.2573	
(3)	0.1694		0.2039		0.2394	
(4)	0.1696		0.2102		0.2501	
Injection: (1)	539200		671850		828900	
[Peak Area] (2)	516360		661730		814790	
(3)	1663800		1928200		2164100	
(4)	1662800		1895800		2108200	

	Temperature 4		Temperature 5	
RUN Number —)	11		17	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	3		3	
Component ID	11		11	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.3041	1.0E-25	0.3567	1.0E-25
H, avg:atm-mol/mol	413.0		492.5	
H, avg: atm-m3/mol	7.44E-03	1	8.87E-03	1
H, avg: kPa-m3/mol	0.7538		0.8991	
COV, r [std/mean]	4.67		2.50	
COV, both replic.	———		———	
Observation: (1)	0.2956		0.3550	
[atm-m3/m3] (2)	0.3194		0.3675	
(3)	0.2890		0.3460	
(4)	0.3124		0.3583	
Injection: (1)	1030200		1201800	
[Peak Area] (2)	1015600		1181700	
(3)	2404700		2492700	
(4)	2288900		2436000	

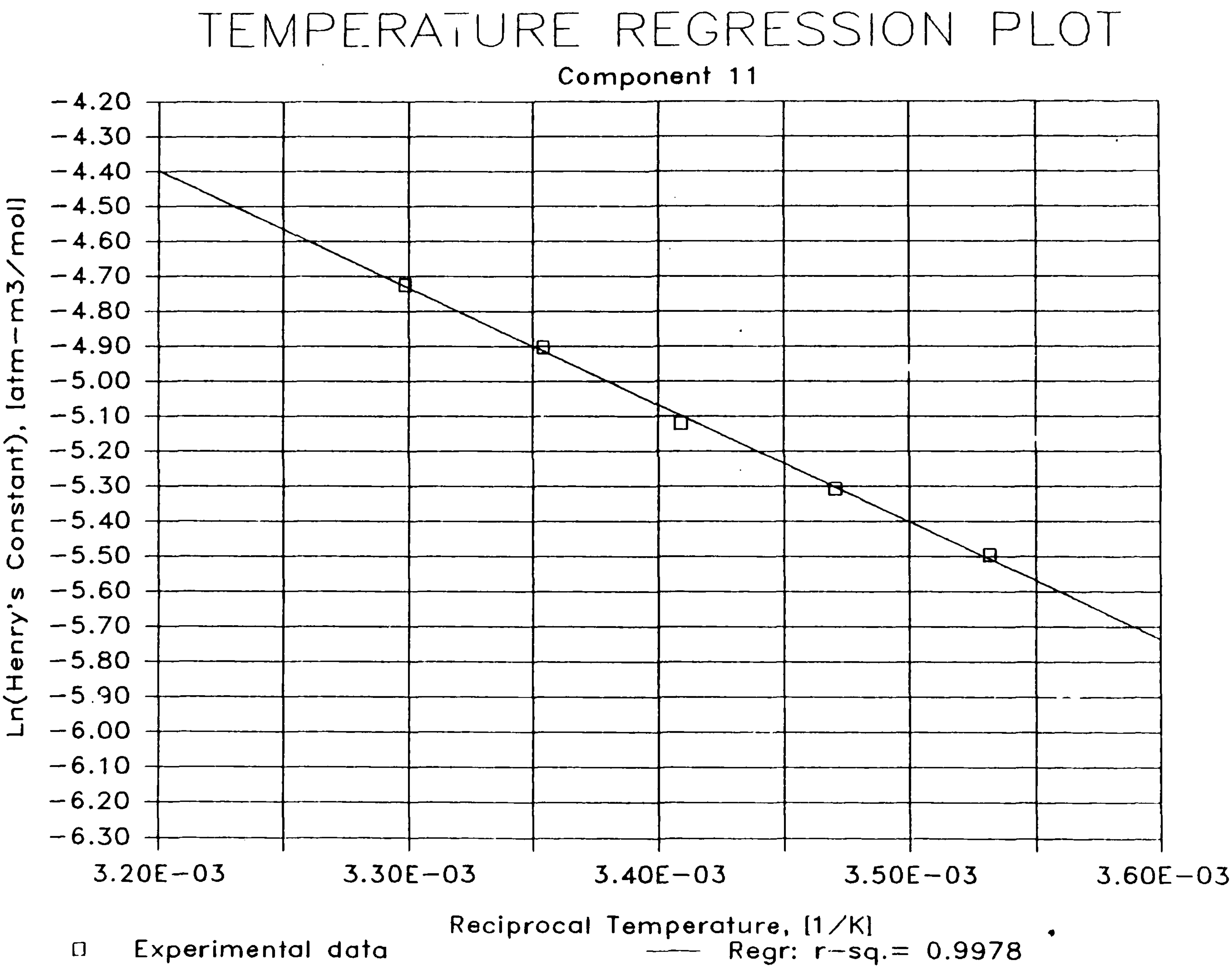
Temperature Regression Parameters:

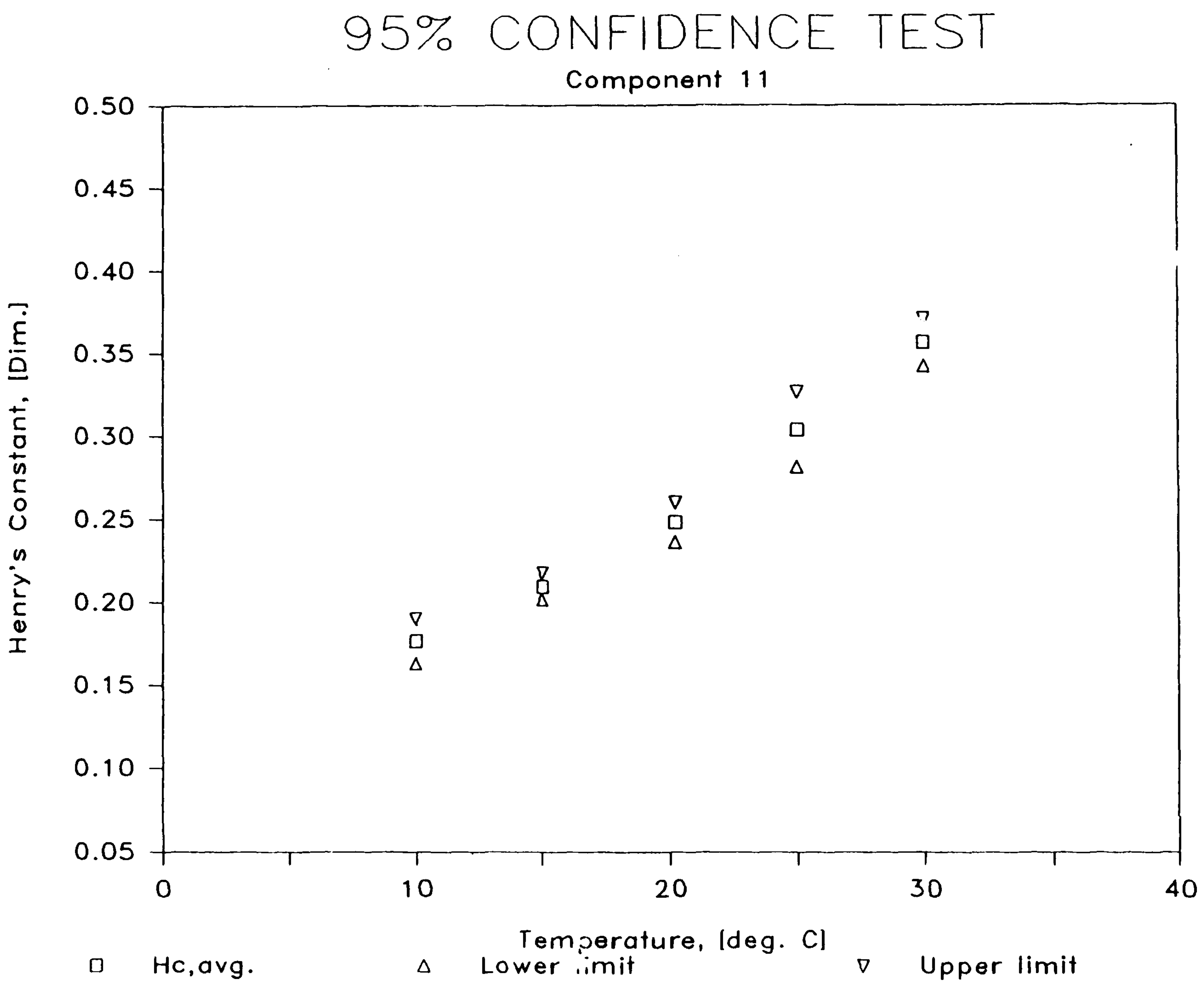
OF POINTS = 5

SLOPE = -3.3E+03

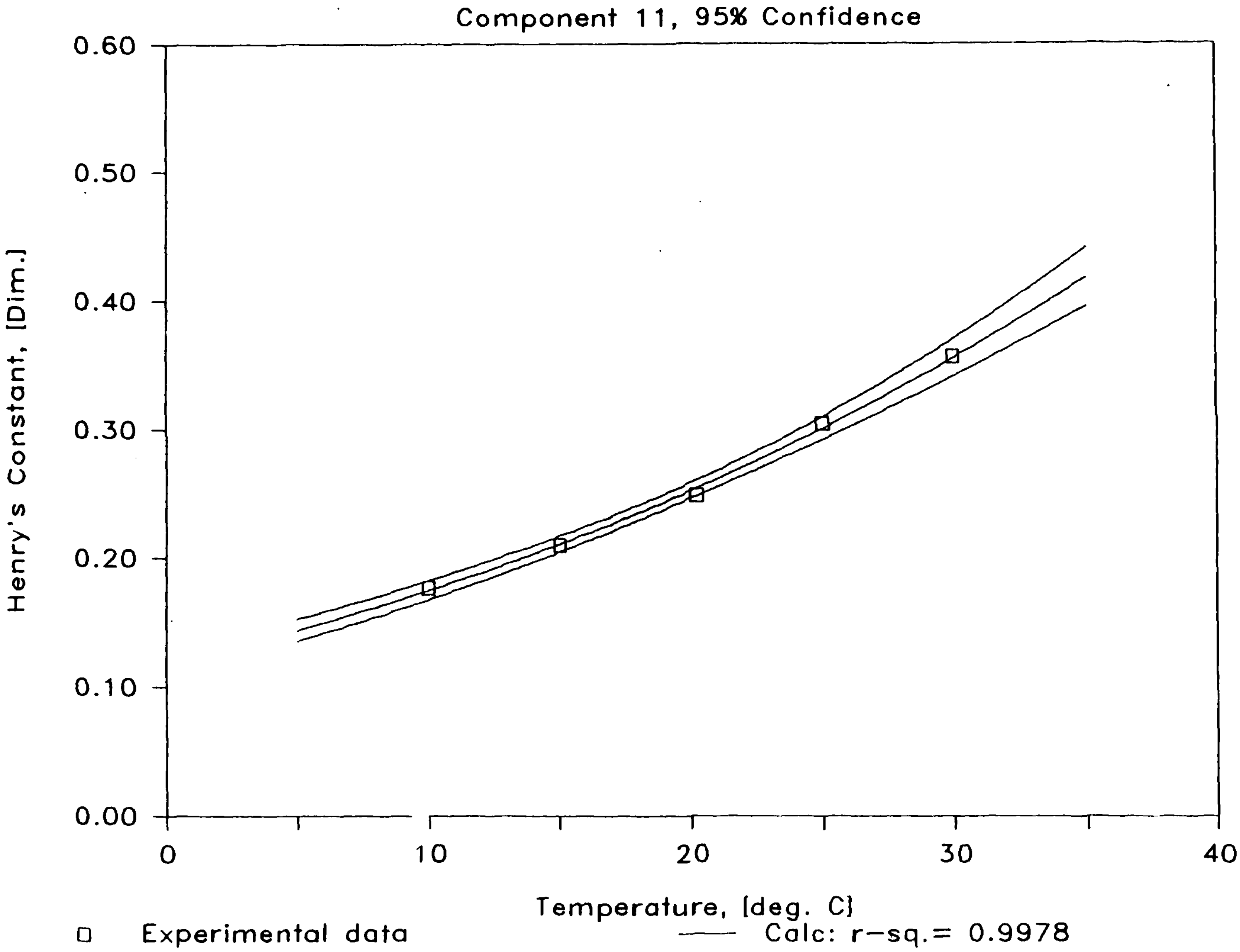
Y-INTERCEPT = 6.3E+00

R-SQUARED = 0.9978


TEMPERATURE REGRESSION PLOT
Component 11
Ln(Henry's Constant), [atm-m3/mol]
-4.20
-4.30
-4.40
-4.50
-4.60
-4.70
-4.80
-4.90
-5.00
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9978


95% CONFIDENCE TEST
Component 11
Henry's Constant, [Dim.]
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

REGRESSION CONFIDENCE TEST



06-Nov-86 Results Summary for Component 12

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	14		13		14	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	3		3		3	
Component ID	12		12		12	
Temperature (C)	10		15		20.2	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.2445	1.0E-25	0.3091	1.0E-25	0.3659	1.0E-25
H, avg:atm-mol/mol	315.3		405.7		489.0	
H, avg: atm-m3/mol	5.68E-03	1	7.31E-03	1	8.81E-03	1
H, avg: kPa-m3/mol	0.5756		0.7407		0.8926	
COV, r [std/mean]	3.45		4.82		1.24	
COV, both replic.	——		——		——	
Observation: (1)	0.2390		0.3102		0.3715	
[atm-m3/m3] (2)	0.2533		0.3275		0.3659	
(3)	0.2357		0.2911		0.3660	
(4)	0.2499		0.3076		0.3604	
Injection: (1)	236500		300360		362820	
[Peak Area] (2)	234600		288510		359210	
(3)	628850		679910		730160	
(4)	607340		656600		737630	

	Temperature 4		Temperature 5	
RUN Number ---)	15		20	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	3		3	
Component ID	12		12	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.4399	1.0E-25	0.5502	1.0E-25
H, avg:atm-mol/mol	597.4		759.7	
H, avg: atm-m3/mol	1.08E-02	1	1.37E-02	1
H, avg: kPa-m3/mol	1.0906		1.3868	
COV, r [std/mean]	2.62		1.38	
COV, both replic.	------		------	
Observation: (1)	0.4342		0.5584	
[atm-m3/m3] (2)	0.4529		0.5544	
(3)	0.4270		0.5459	
(4)	0.4455		0.5419	
Injection: (1)	462950		556820	
[Peak Area] (2)	457740		547960	
(3)	838600		846340	
(4)	814600		850720	

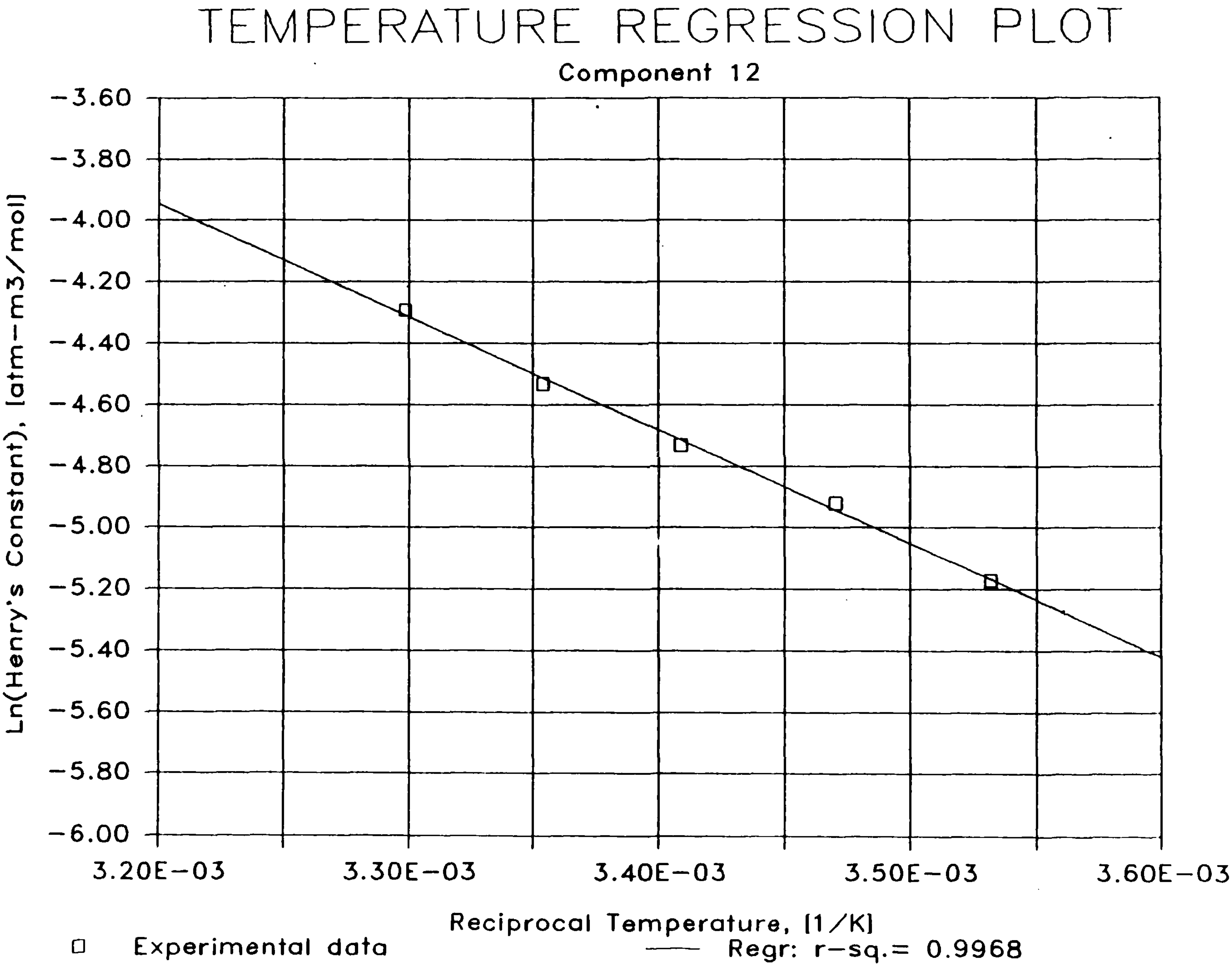
Temperature Regression Parameters:

OF POINTS = 5

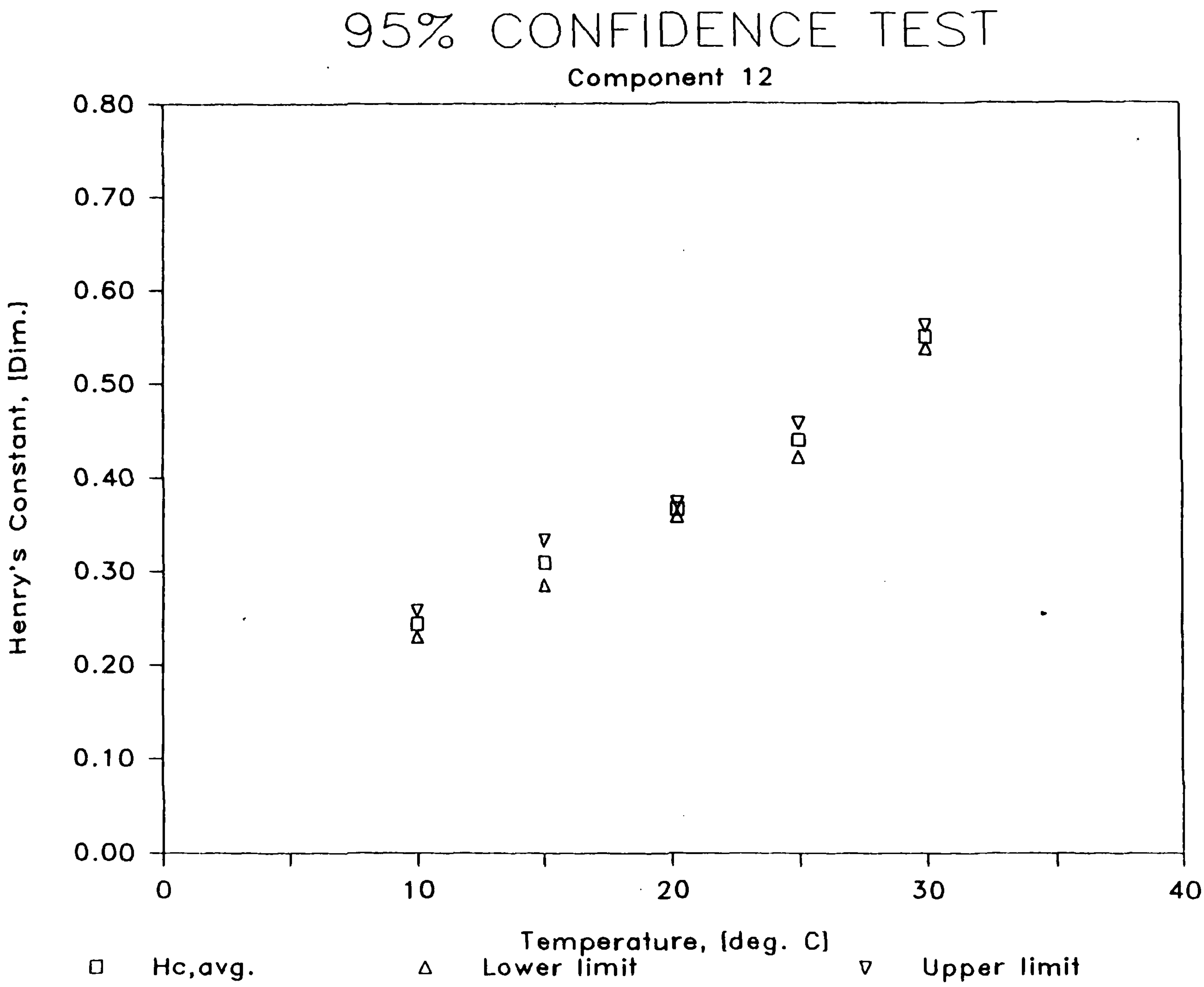
SLOPE = -3.7E+03

Y-INTERCEPT = 7.8E+00

R-SQUARED = 0.9968

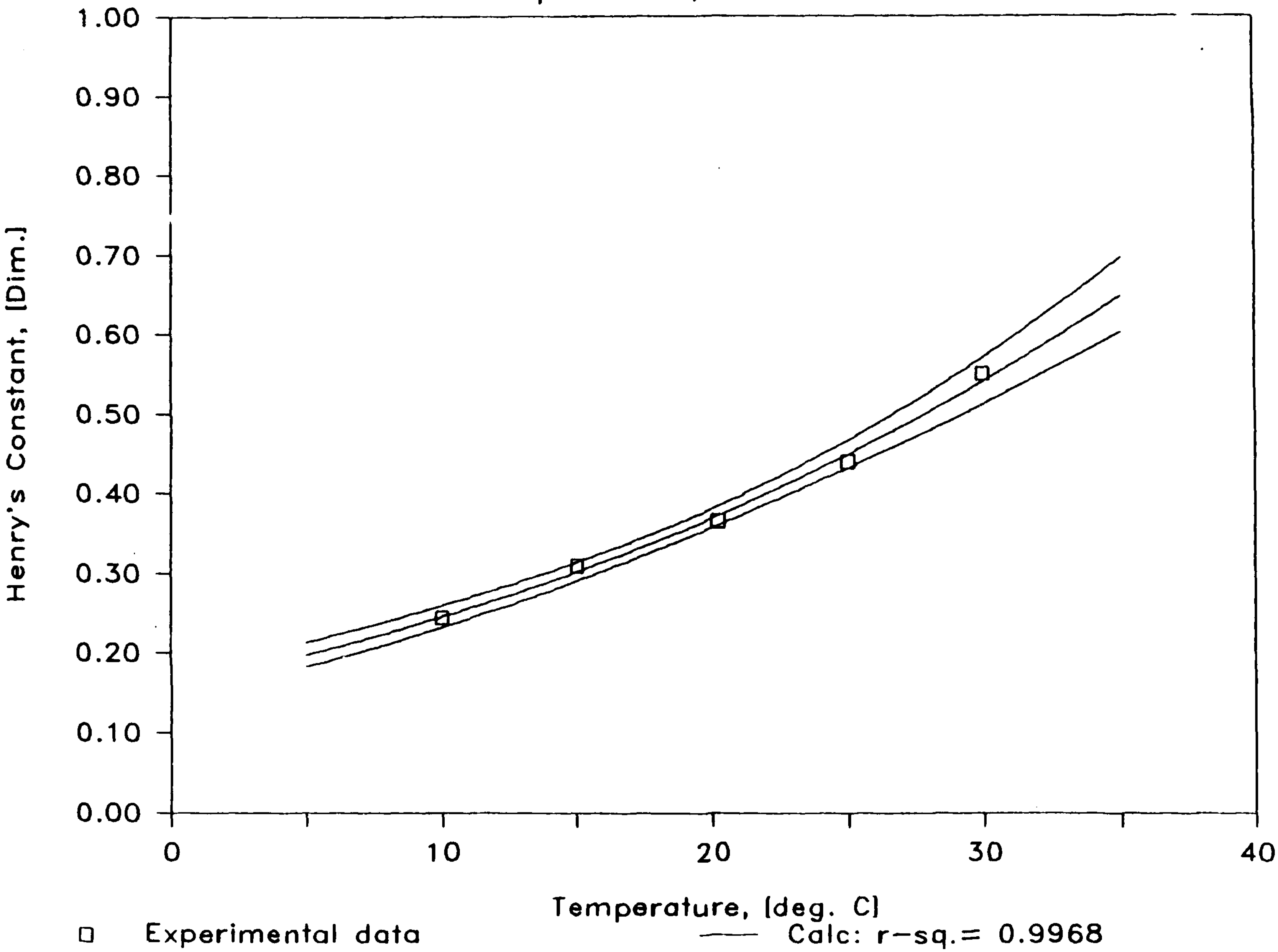


TEMPERATURE REGRESSION PLOT
Component 12
-3.60
-3.80
-4.00
-4.20
-4.40
-4.60
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9968


95% CONFIDENCE TEST
Component 12
Henry's Constant, [Dim.]
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

REGRESSION CONFIDENCE TEST

Component 12, 95% Confidence



06-Nov-86 Results Summary for Component 13

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	17		16		17	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	3		3		3	
Component ID	13		13		13	
Temperature (C)	10		15		20.2	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.1902	1.0E-25	0.2764	1.0E-25	0.3054	1.0E-25
H, avg: atm-mol/mol	245.3		362.7		408.0	
H, avg: atm-m3/mol	4.42E-03	1	6.54E-03	1	7.35E-03	1
H, avg: kPa-m3/mol	0.4478		0.6622		0.7448	
COV, r [std/mean]	7.48		2.97		4.71	
COV, both replic.	——		——		——	
Observation: (1)	0.2006		0.2791		0.2884	
[atm-m3/m3] (2)	0.2042		0.2861		0.3009	
(3)	0.1764		0.2668		0.3094	
(4)	0.1796		0.2736		0.3226	
Injection: (1)	628740		769580		897750	
[Peak Area] (2)	586050		748450		938560	
(3)	1848900		1862200		2128100	
(4)	1830900		1833600		2071900	

	Temperature 4		Temperature 5	
RUN Number —)	18		23	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	3		3	
Component ID	13		13	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.3237	1.0E-25	0.4136	1.0E-25
H,avg:atm-mol/mol	439.6		571.1	
H,avg: atm-m3/mol	7.92E-03	1	1.03E-02	1
H,avg: kPa-m3/mol	0.8024		1.0425	
COV, r [std/mean]	1.42		4.48	
COV, both replic.	——		——	
Observation: (1)	0.3271		0.4184	
[atm-m3/m3] (2)	0.3281		0.4359	
(3)	0.3192		0.3917	
(4)	0.3202		0.4083	
Injection: (1)	1162700		1397200	
[Peak Area] (2)	1144500		1336300	
(3)	2543700		2595700	
(4)	2538800		2524000	

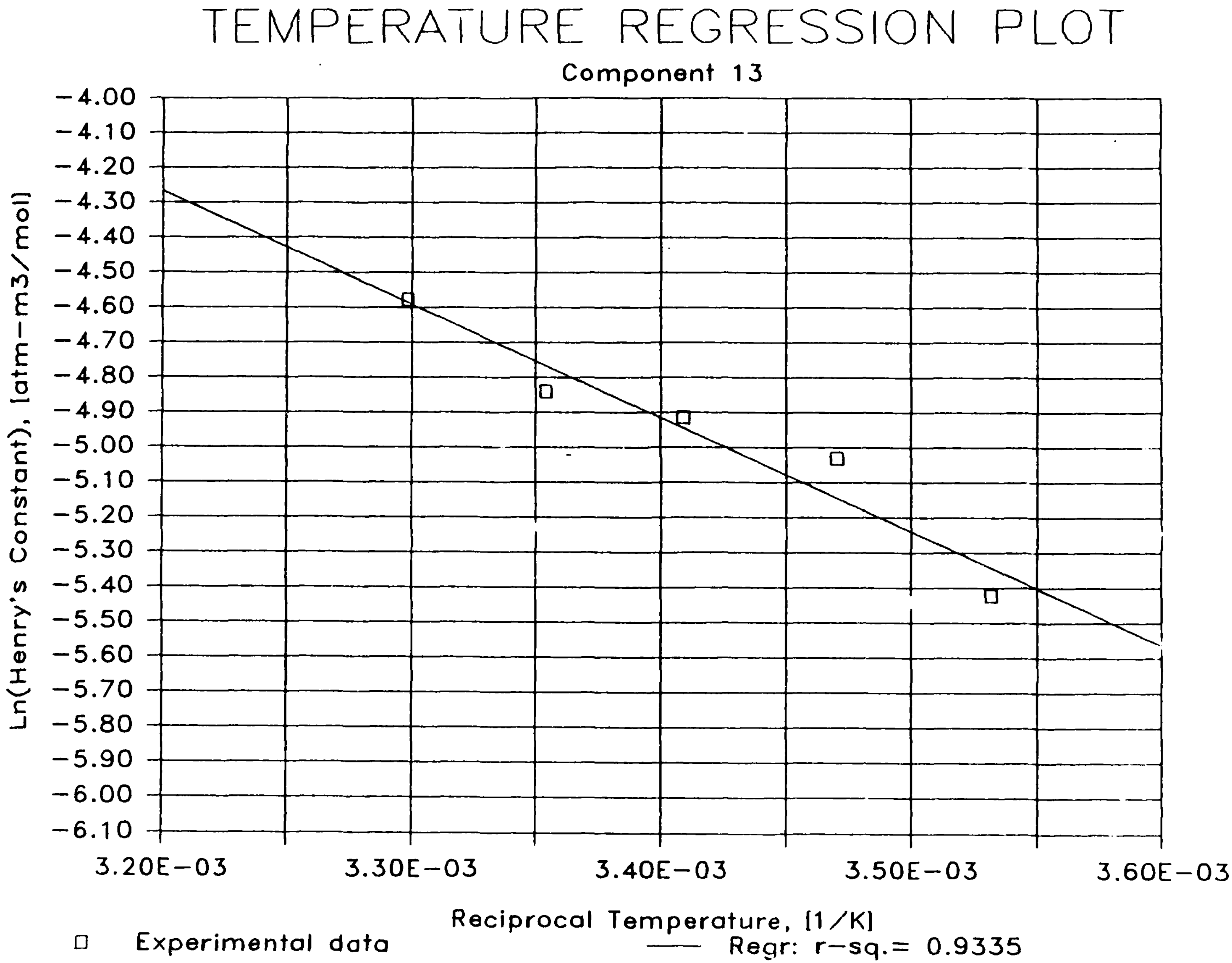
Temperature Regression Parameters:

OF POINTS = 5

SLOPE = -3.2E+03

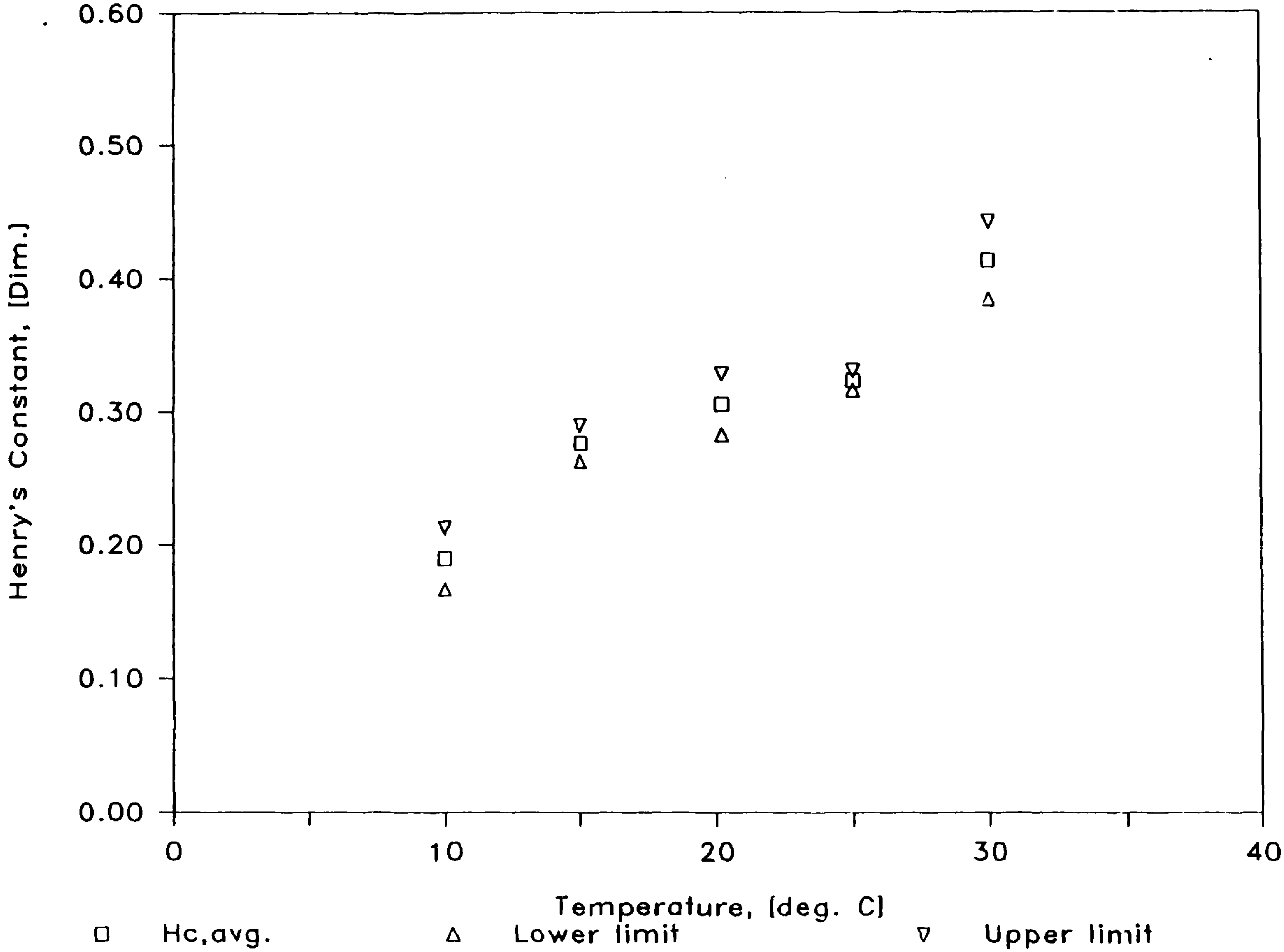
Y-INTERCEPT = 6.1E+00

R-SQUARED = 0.9335


TEMPERATURE REGRESSION PLOT
Component 13
−4.00
−4.10
−4.20
−4.30
−4.40
−4.50
−4.60
−4.70
−4.80
−4.90
−5.00
−5.10
−5.20
−5.30
−5.40
−5.50
−5.60
−5.70
−5.80
−5.90
−6.00
−6.10
Ln(Henry's Constant), [atm−m3/mol]
3.20E−03
3.30E−03
3.40E−03
3.50E−03
3.60E−03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r−sq.= 0.9335

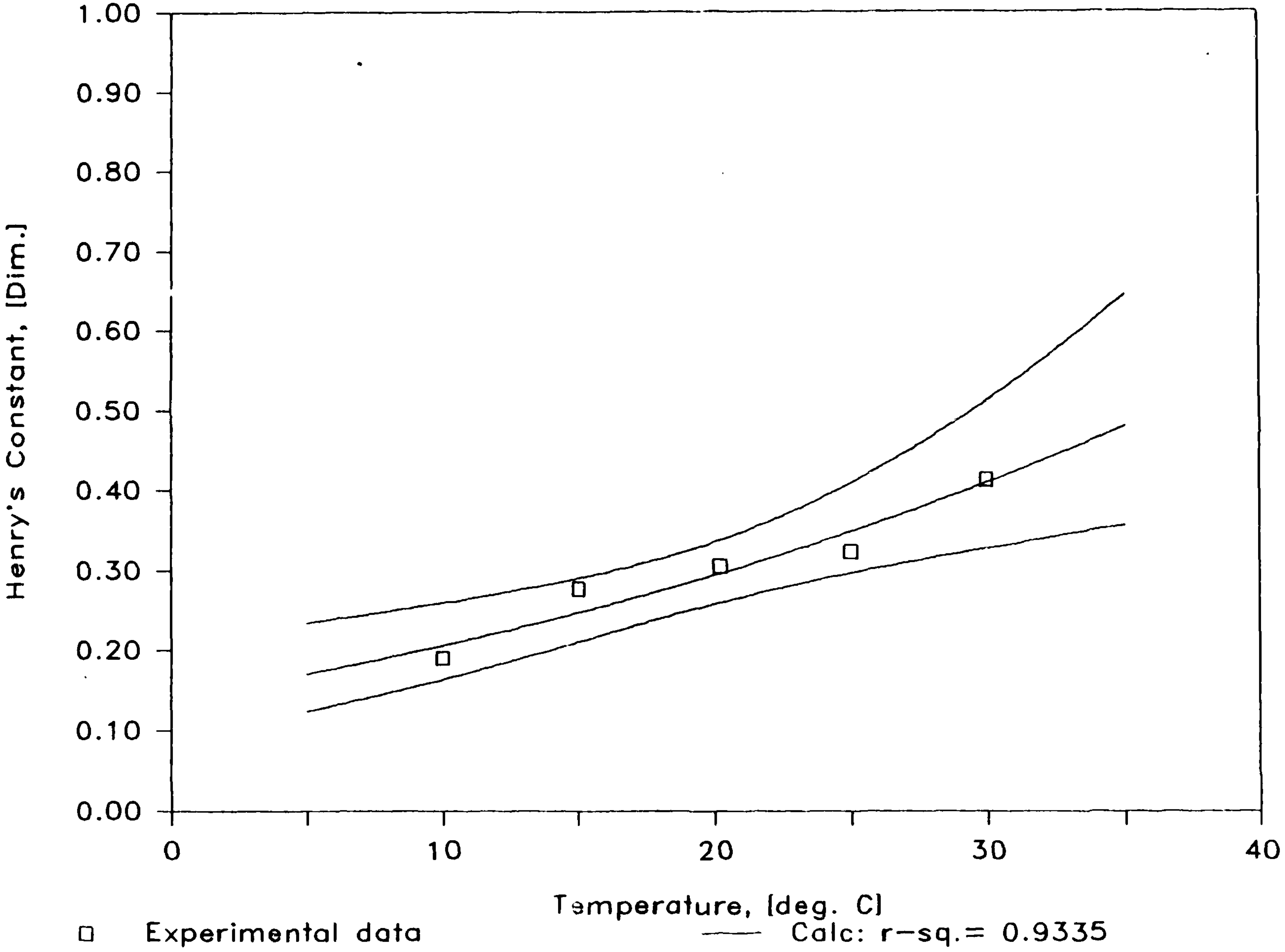
95% CONFIDENCE TEST

Component 13



REGRESSION CONFIDENCE TEST

Component 13, 95% Confidence



Results Summary for Component 113

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	50		69		2	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	15		15		15	
Component ID	113		113		113	
Temperature (C)	10		15.2		19.9	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.1403	1.0E-25	0.1906	1.0E-25	0.2499	1.0E-25
H, avg:atm-mol/mol	180.9		250.3		333.5	
H, avg: atm-m3/mol	3.26E-03	1	4.51E-03	1	6.01E-03	1
H, avg: kPa-m3/mol	0.3303		0.4569		0.6088	
COV, r [std/mean]	0.63		5.64		3.46	
COV, both replic.	———		———		———	
Observation: (1)	0.1403		0.1860		0.2534	
[atm-m3/m3] (2)	0.1392		0.1783		0.2599	
(3)	0.1414		0.2031		0.2400	
(4)	0.1402		0.1949		0.2462	
Injection: (1)	502780		692840		993870	
[Peak Area] (2)	504550		727200		961960	
(3)	1780800		2124200		2551400	
(4)	1787700		2173100		2512900	

	Temperature 4		Temperature 5	
RUN Number --->	70		52	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	15		15	
Component ID	113		113	
Temperature (C)	25.15		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.3220	1.0E-25	0.4237	1.0E-25
H,avg:atm-mol/mol	437.4		585.1	
H,avg: atm-m3/mol	7.88E-03	1	1.05E-02	1
H,avg: kPa-m3/mol	0.7986		1.0680	
COV, r [std/mean]	2.97		2.28	
COV, both replic.	-----		-----	
Observation: (1)	0.3217		0.4188	
[atm-m3/m3] (2)	0.3337		0.4346	
(3)	0.3103		0.4129	
(4)	0.3221		0.4285	
Injection: (1)	1192500		1487300	
[Peak Area] (2)	1165400		1473000	
(3)	2637500		2761100	
(4)	2575300		2692400	

ANALYSIS COMPLETED ...

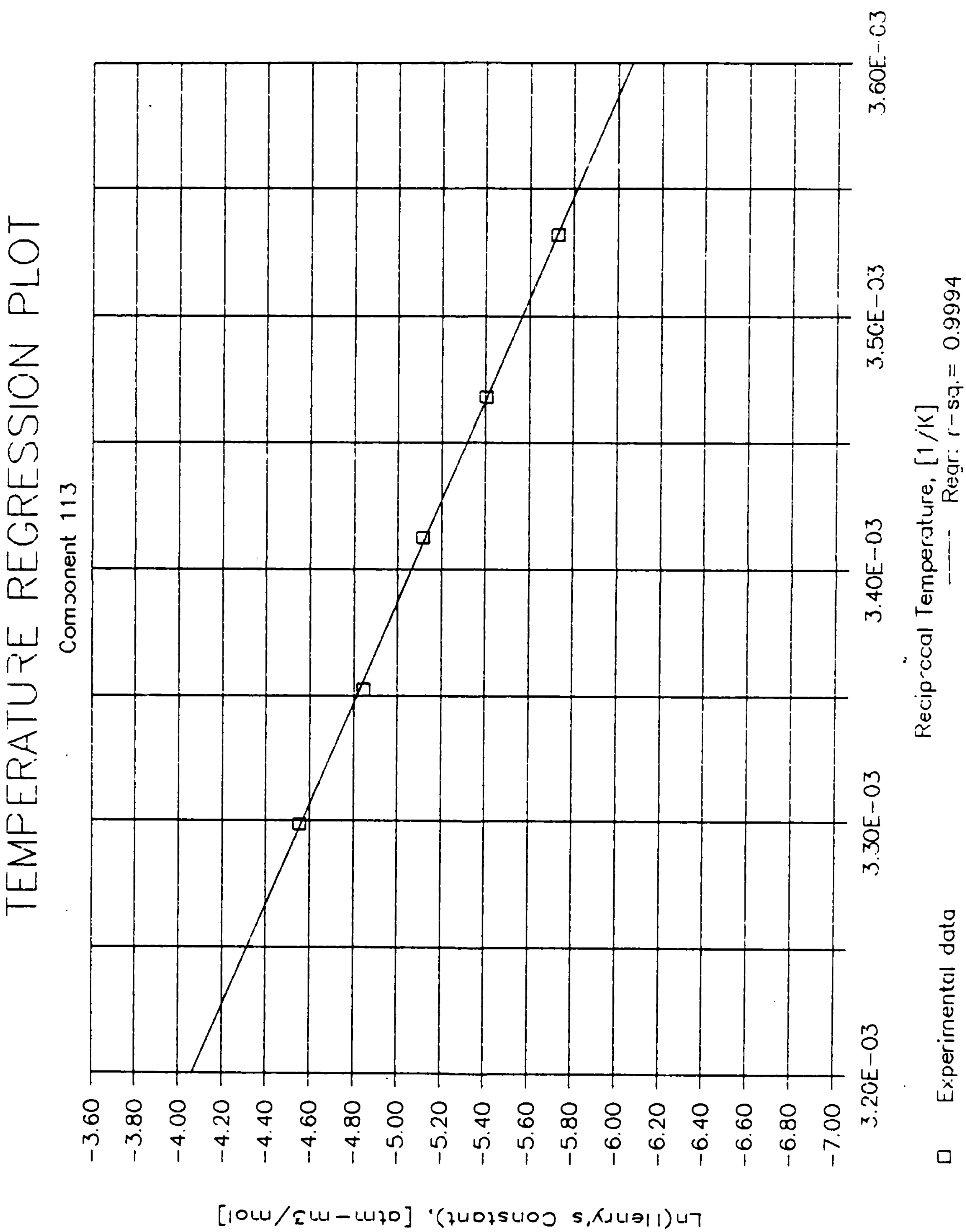
Temperature Regression Parameters:

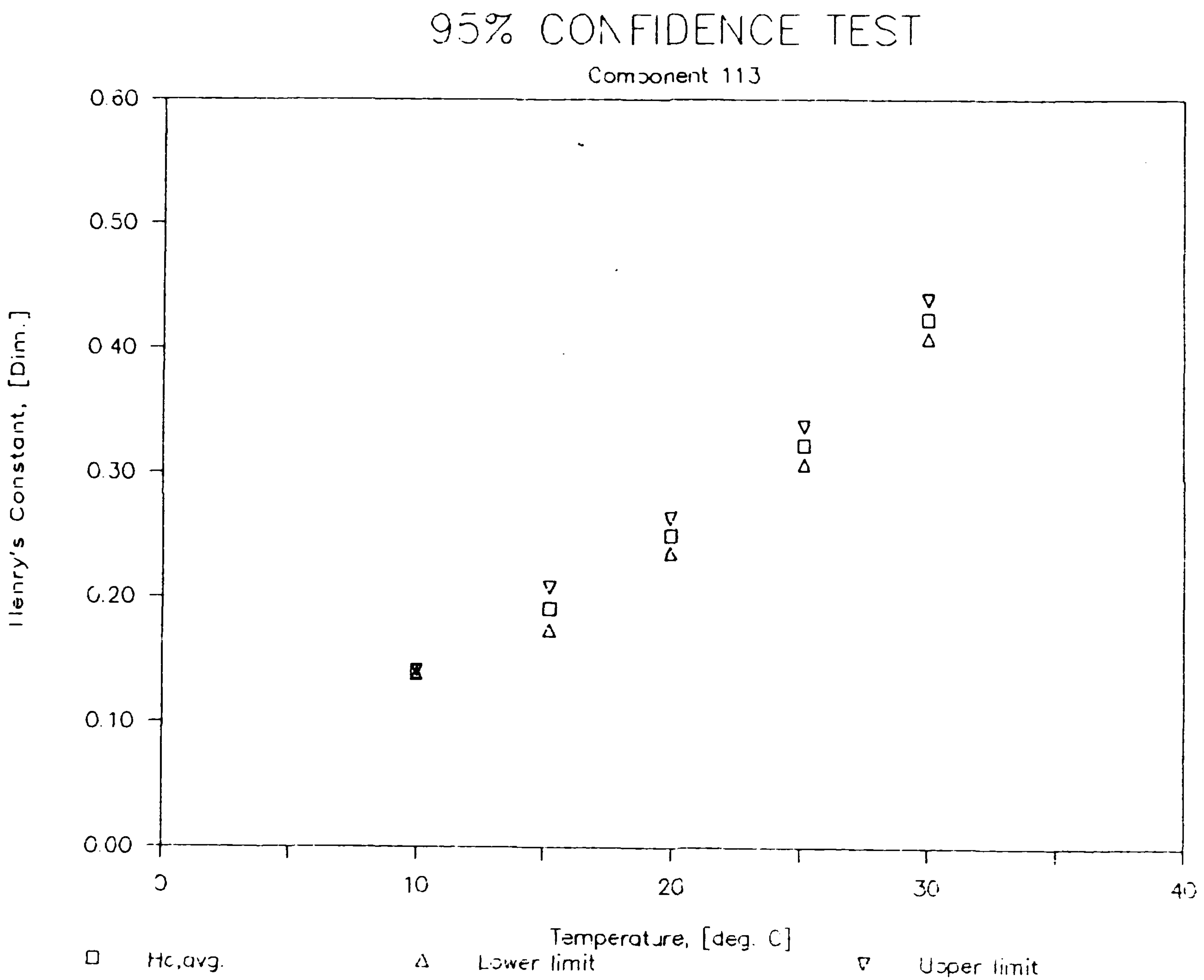
OF POINTS = 5

SLOPE = -5.0E+03

Y-INTERCEPT = 1.2E+01

R-SQUARED = 0.9994

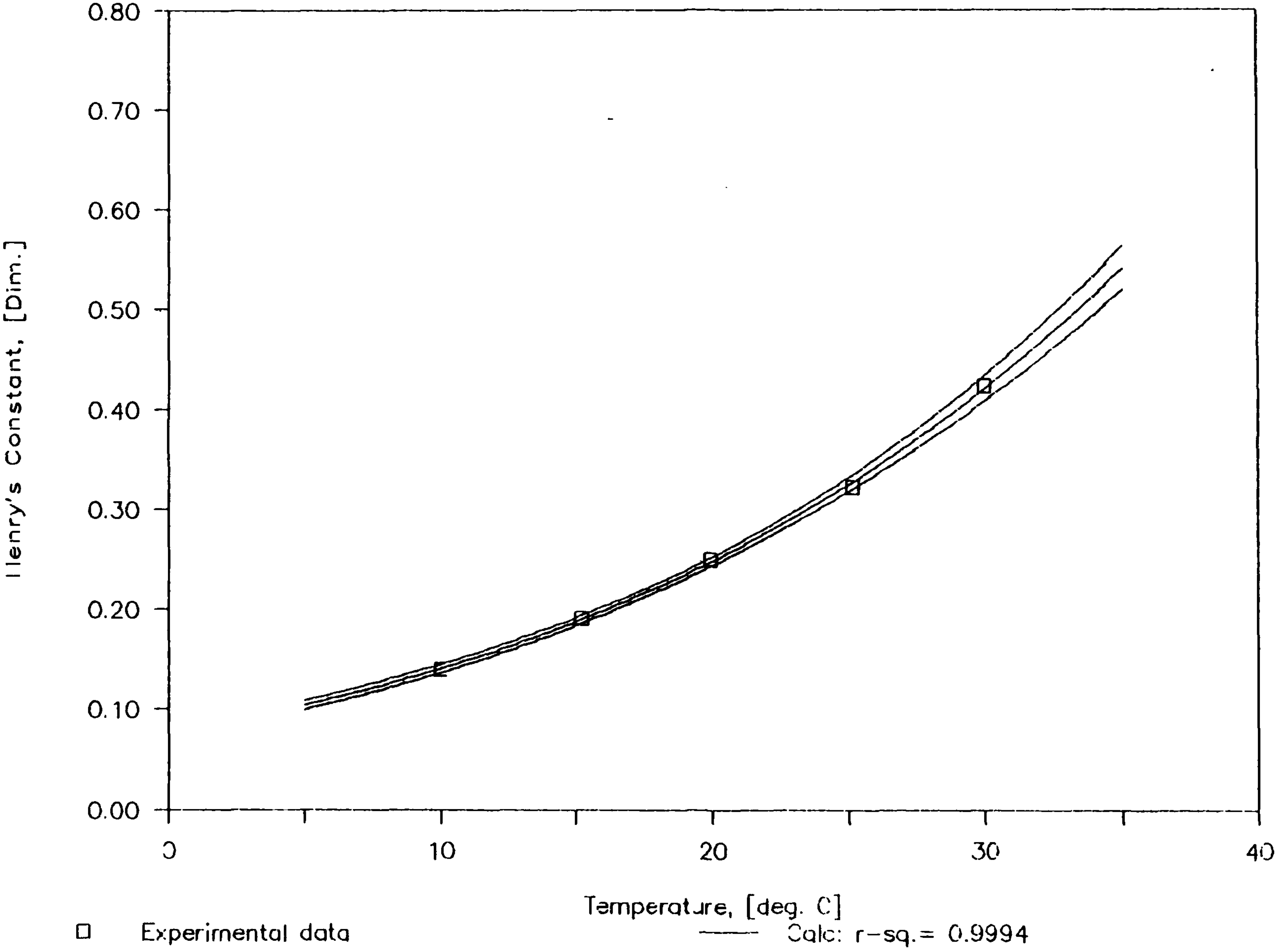

TEMPERATURE REGRESSION PLOT
Component 113
Ln(Henry's Constant), [atm-m3/mol]
-3.60
-3.80
-4.00
-4.20
-4.40
-4.60
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
-6.60
-6.80
-7.00
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9994



95% CONFIDENCE TEST
Component 113
Henry's Constant, [Dim.]
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

REGRESSION CONFIDENCE TEST

Component 113, 95% Confidence



	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	2		2		3	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	4		4		4	
Component ID	14		14		14	
Temperature (C)	10		14.9		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.1641	1.0E-25	0.2083	1.0E-25	0.2305	1.0E-25
H,avg:atm-mol/mol	211.6		273.2		307.9	
H,avg: atm-m3/mol	3.81E-03	1	4.92E-03	1	5.55E-03	1
H,avg: kPa-m3/mol	0.3863		0.4988		0.5621	
COV, r [std/mean]	5.25		7.83		2.61	
COV, both replic.	-----		-----		-----	
Observation: (1)	0.1626		0.2285		0.2276	
[atm-m3/m3] (2)	0.1746		0.2094		0.2374	
(3)	0.1537		0.2064		0.2238	
(4)	0.1654		0.1887		0.2334	
Injection: (1)	842030		1205500		1387400	
[Peak Area] (2)	816370		1132300		1372600	
(3)	2903400		3396300		3918000	
(4)	2787700		3583900		3816500	

	Temperature 4		Temperature 5	
RUN Number --->	3		3	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	4		4	
Component ID	14		14	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.2623	1.0E-25	0.3246	1.0E-25
H,avg:atm-mol/mol	356.2		448.3	
H,avg: atm-m3/mol	6.42E-03	1	8.00E-03	1
H,avg: kPa-m3/mol	0.6503		0.8183	
COV, r [std/mean]	0.60		1.34	
COV, both replic.	----		----	
Observation: (1)	0.2605		0.3261	
[atm-m3/m3] (2)	0.2630		0.3298	
(3)	0.2616		0.3195	
(4)	0.2641		0.3232	
Injection: (1)	1464900		2072500	
[Peak Area] (2)	1468800		2044100	
(3)	3796800		4628100	
(4)	3773200		4592800	

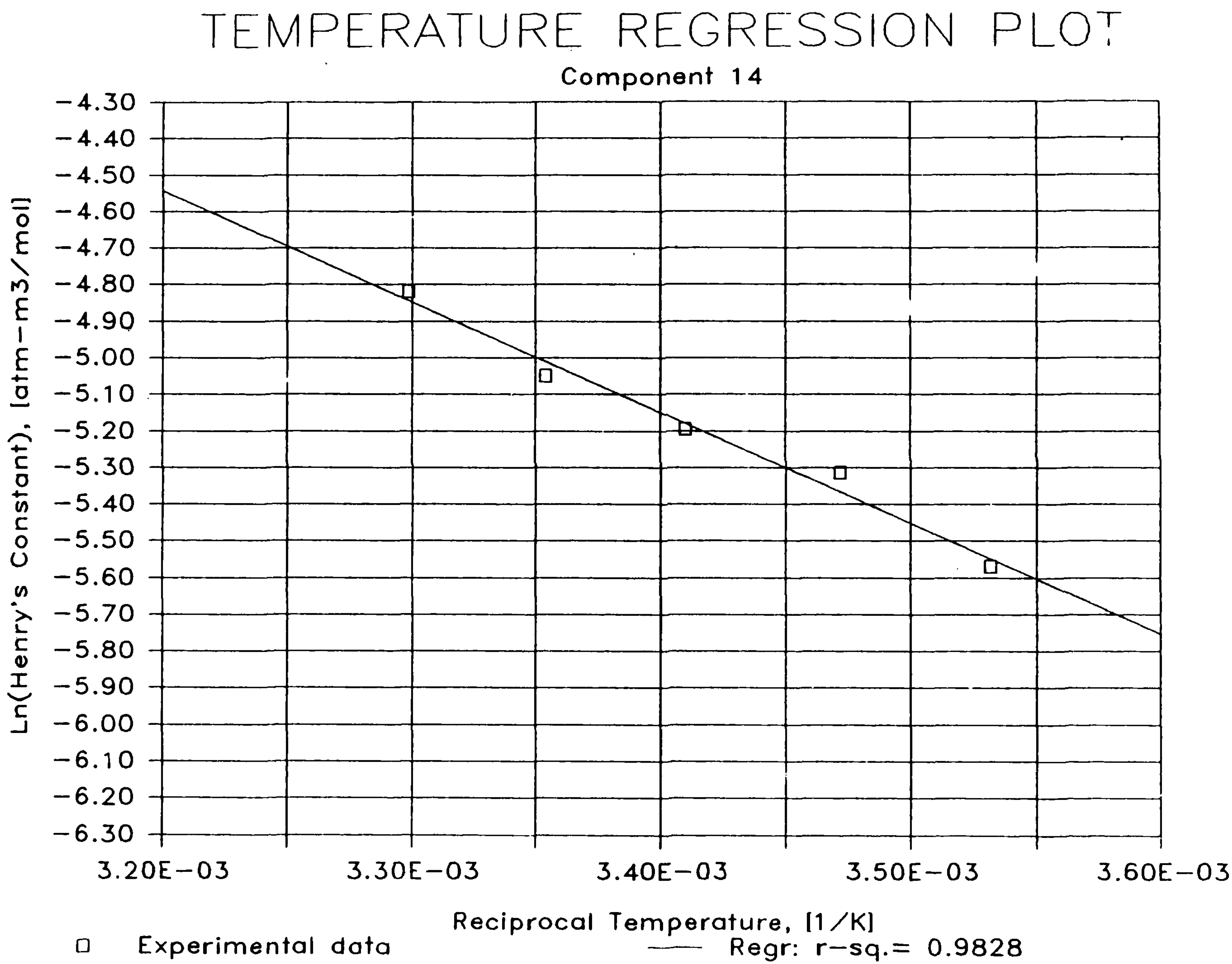
Temperature Regression Parameters:

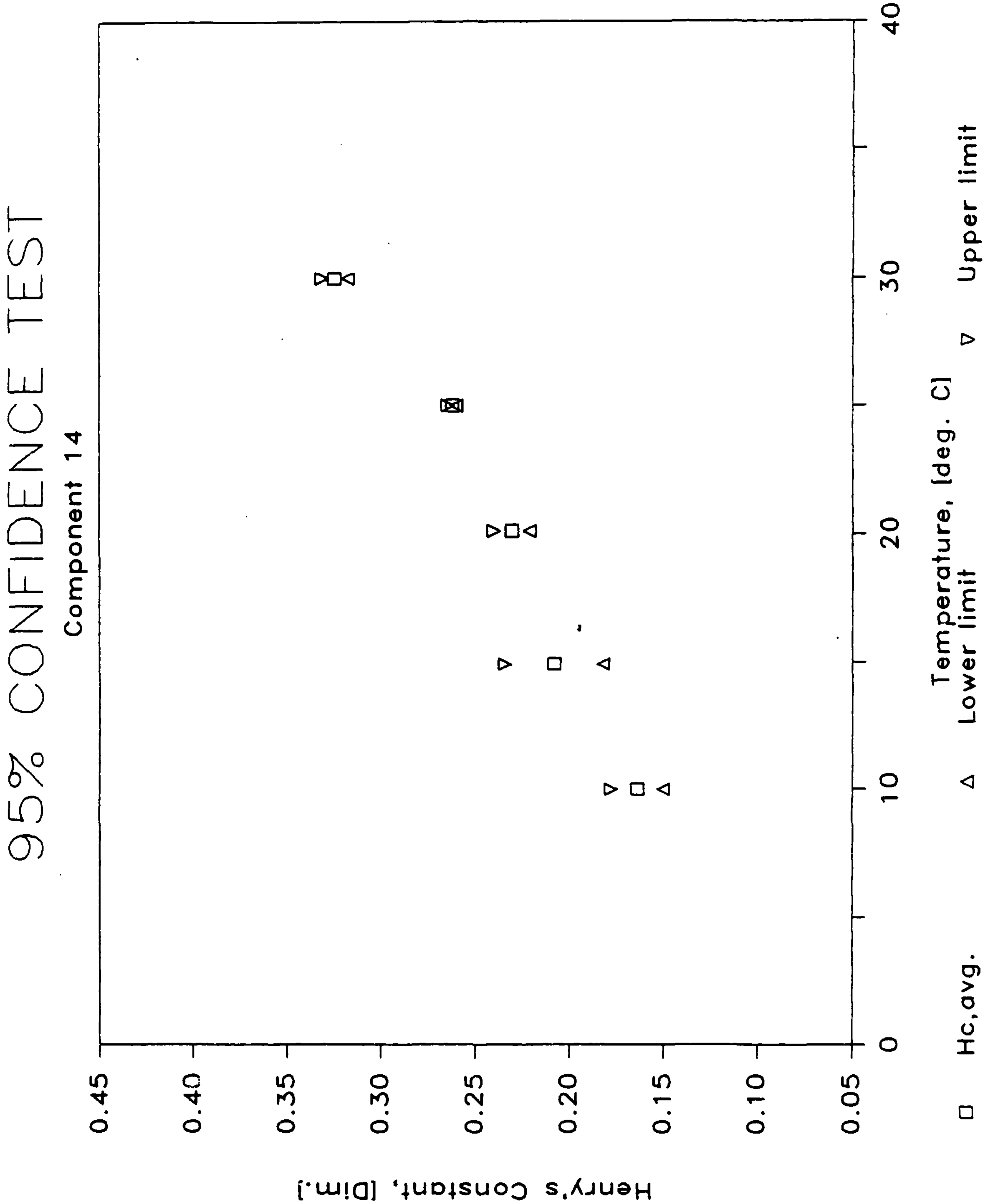
OF POINTS = 5

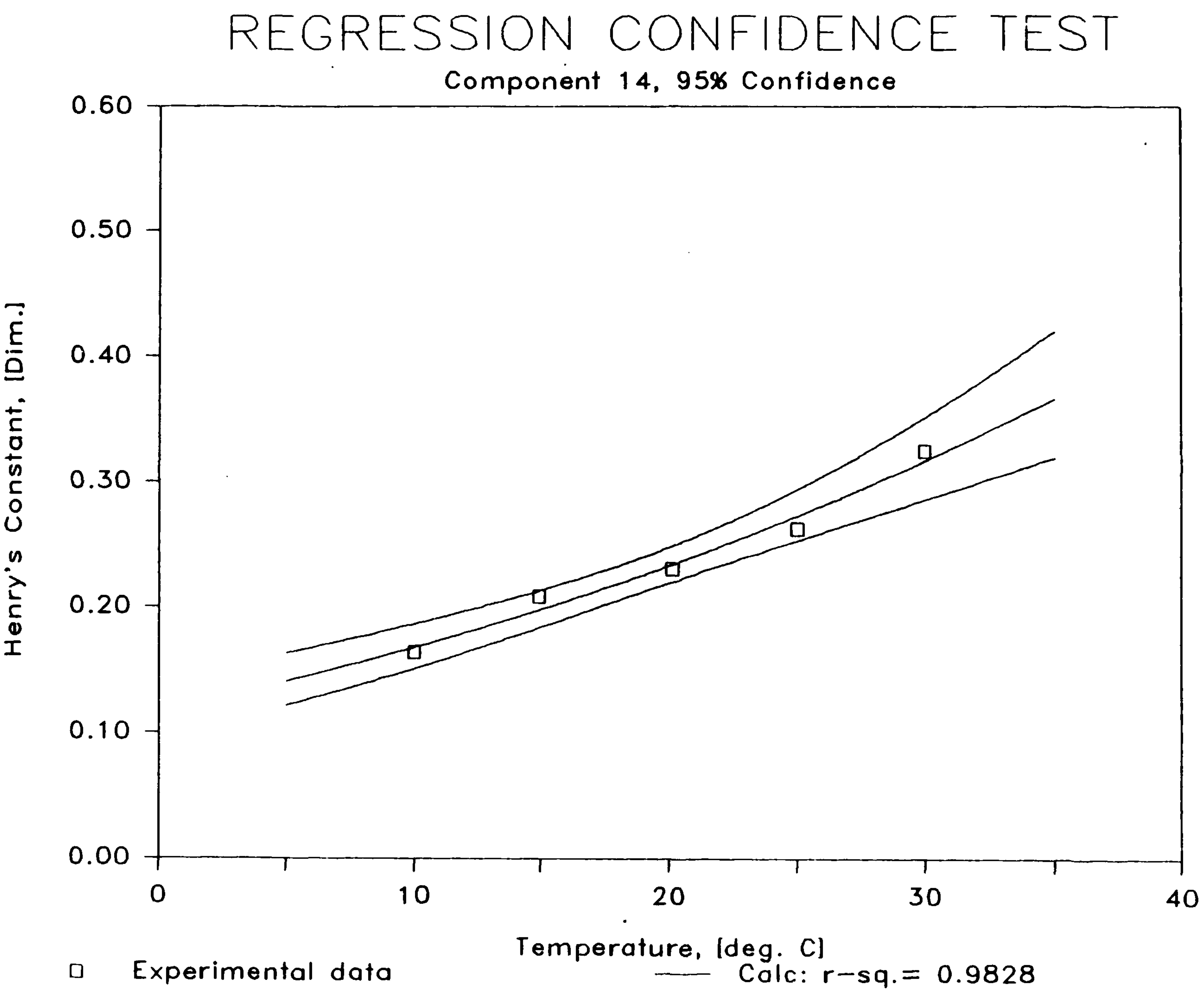
SLOPE = -3.0E+03

Y-INTERCEPT = 5.1E+00

R-SQUARED = 0.9828


TEMPERATURE REGRESSION PLOT
Component 14
-4.30
-4.40
-4.50
-4.60
-4.70
-4.80
-4.90
-5.00
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9828


95% CONFIDENCE TEST
Component 14
Henry's Constant, [Dim.]
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 14, 95% Confidence
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9828

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	2		2		3	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	9		9		9	
Component ID	15		15		15	
Temperature (C)	10		15		20	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.1421	1.0E-25	0.1643	1.0E-25	0.1879	1.0E-25
H, avg:atm-mol/mol	183.2		215.6		250.8	
H, avg: atm-m3/mol	3.30E-03	1	3.88E-03	1	4.52E-03	1
H, avg: kPa-m3/mol	0.3345		0.3936		0.4579	
COV, r [std/mean]	1.50		6.35		4.83	
COV, both replic.	------		------		------	
Observation: (1)	0.1397		0.1518		0.1933	
[atm-m3/m3] (2)	0.1431		0.1626		0.1976	
(3)	0.1410		0.1657		0.1783	
(4)	0.1445		0.1771		0.1823	
Injection: (1)	423440		552750		670050	
[Peak Area] (2)	425750		582370		637720	
(3)	1661000		2066400		2163500	
(4)	1638000		1983500		2133500	

	Temperature 4		Temperature 5	
RUN Number ---)	3		3	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	9		9	
Component ID	15		15	
Temperature (C)	25		30	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.2156	1.0E-25	0.2895	1.0E-25
H, avg:atm-mol/mol	292.8		399.7	
H, avg: atm-m3/mol	5.28E-03	1	7.20E-03	1
H, avg: kPa-m3/mol	0.5345		0.7297	
COV, r [std/mean]	4.72		5.24	
COV, both replic.	-----		-----	
Observation: (1)	0.2229		0.2965	
[atm-m3/m3] (2)	0.2258		0.3067	
(3)	0.2056		0.2726	
(4)	0.2083		0.2821	
Injection: (1)	704830		984040	
[Peak Area] (2)	668700		928310	
(3)	2073300		2385500	
(4)	2056000		2329800	

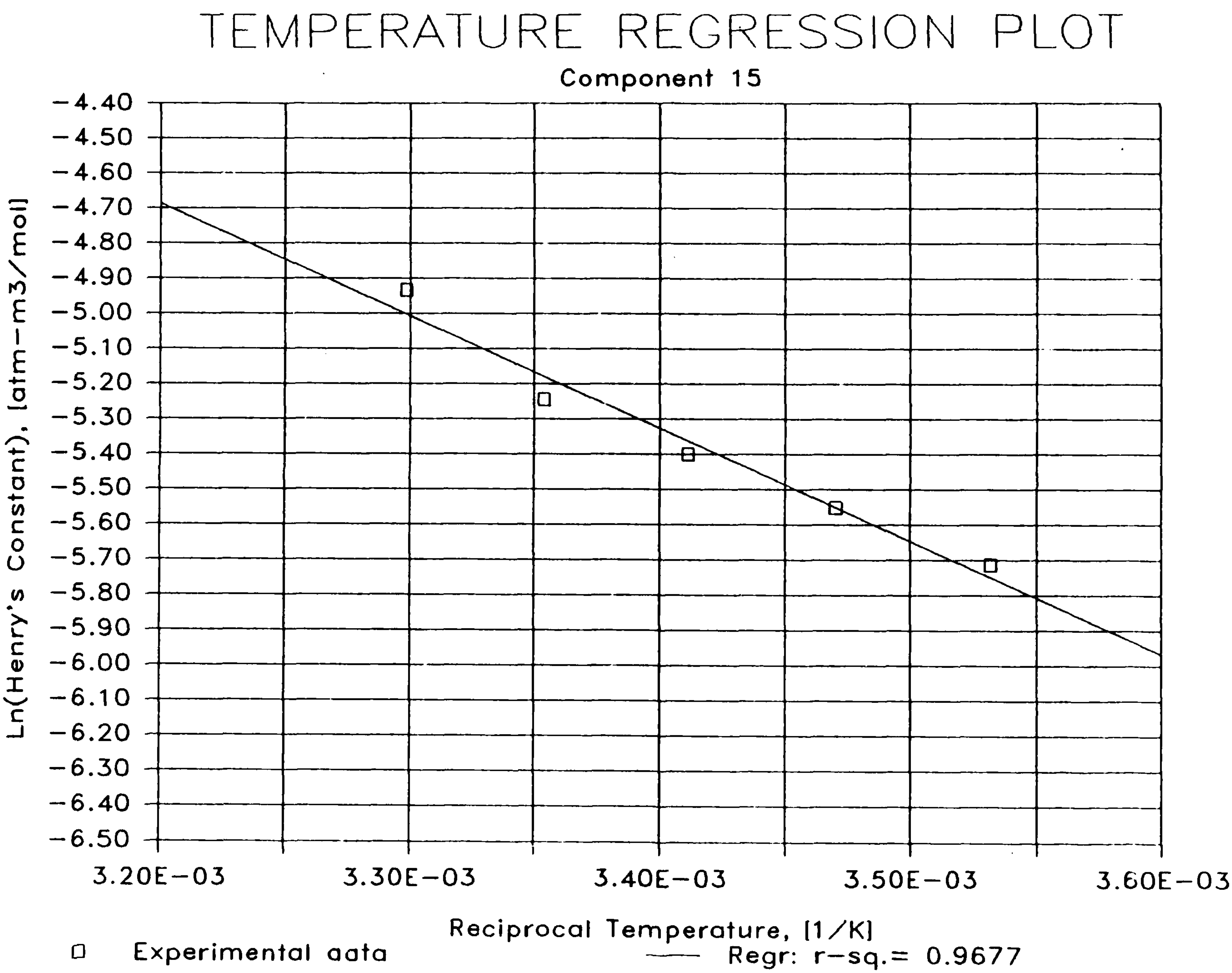
Temperature Regression Parameters:

OF POINTS = 5

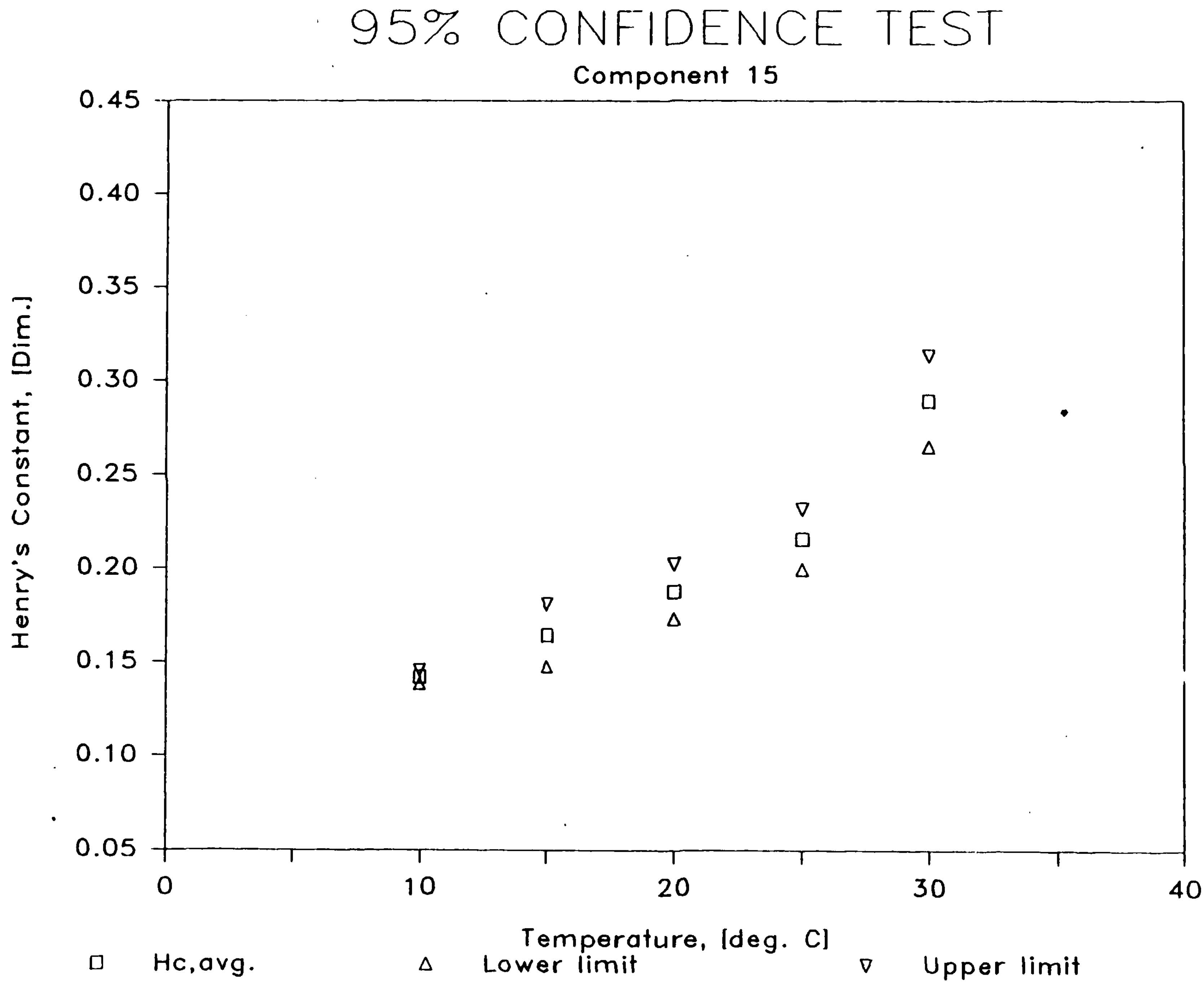
SLOPE = -3.2E+03

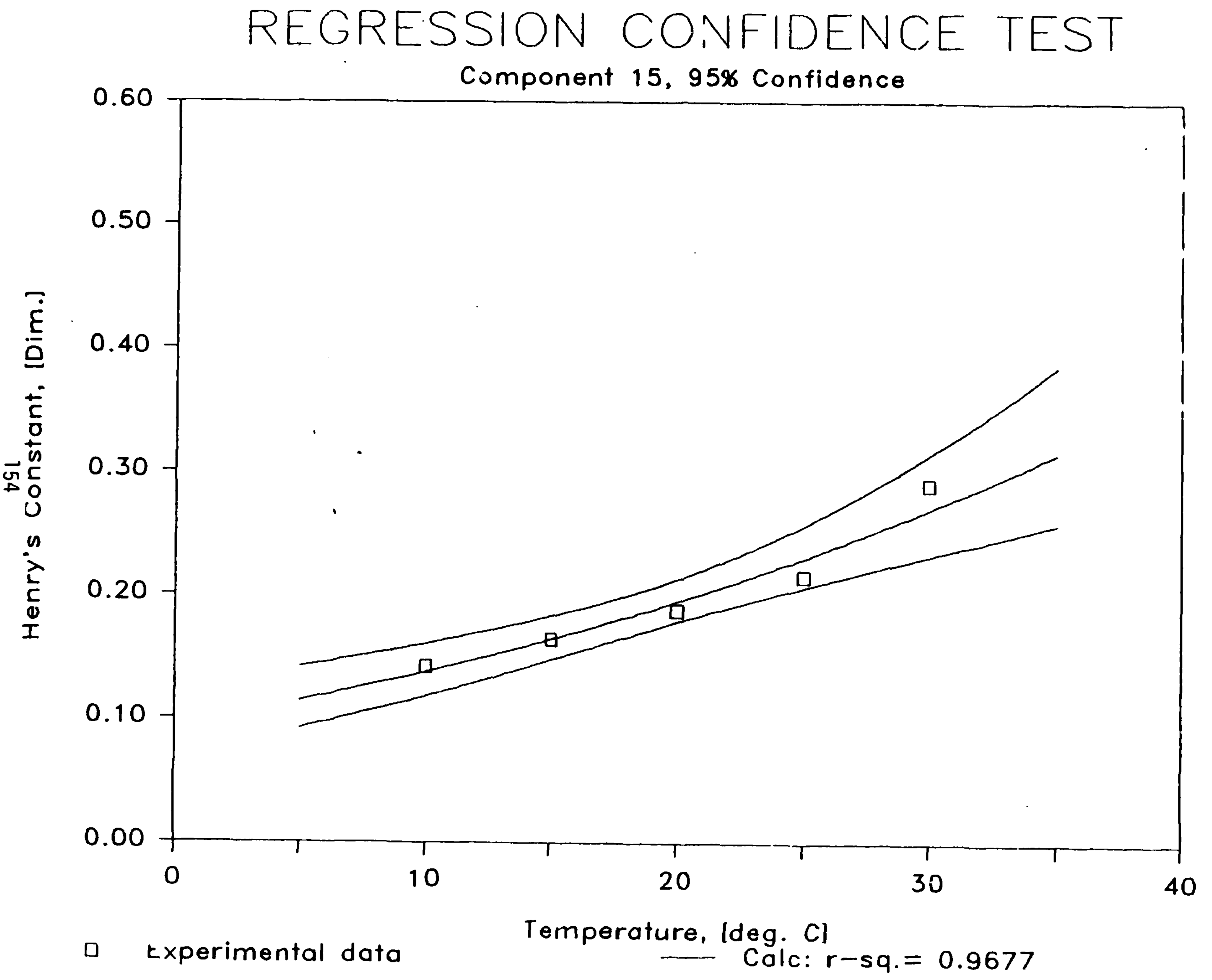
Y-INTERCEPT = 5.5E+00

R-SQUARED = 0.9677



TEMPERATURE REGRESSION PLOT
Component 15
Ln(Henry's Constant), [atm-m3/mol]
-4.40
-4.50
-4.60
-4.70
-4.80
-4.90
-5.00
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
-6.40
-6.50
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental aata
Regr: r-sq.= 0.9677


95% CONFIDENCE TEST
Component 15
Henry's Constant, [Dim.]
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 15, 95% Confidence
Henry's Constant, [Dim.]
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9677

Results Summary for Component 16

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	11		10		11	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	4		4		4	
Component ID	16		16		16	
Temperature (C)	10		14.9		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.2573	1.0E-25	0.3454	1.0E-25	0.4072	1.0E-25
H,avg:atm-mol/mol	331.8		453.1		543.8	
H,avg: atm-m3/mol	5.98E-03	1	8.16E-03	1	9.80E-03	1
H,avg: kPa-m3/mol	0.6058		0.8272		0.9928	
COV, r [std/mean]	6.02		9.57		53.81	
COV, both replic.	----		----		----	
Observation: (1)	0.2758		0.3132		0.2333	
[atm-m3/m3] (2)	0.2623		0.3209		0.2049	
(3)	0.2519		0.3693		0.6279	
(4)	0.2393		0.3781		0.5625	
Injection: (1)	3400		4877		4370	
[Peak Area] (2)	3206		5459		8664	
(3)	8492		11192		12154	
(4)	8774		11011		13165	

	Temperature 4		Temperature 5	
RUN Number ---)	12		11	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	4		4	
Component ID	16		16	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.5257	1.0E-25	0.7479	1.0E-25
H,avg:atm-mol/mol	713.9		1032.7	
H,avg: atm-m3/mol	1.29E-02	1	1.86E-02	1
H,avg: kPa-m3/mol	1.3032		1.8852	
COV, r [std/mean]	5.52		5.67	
COV, both replic.	------		------	
Observation: (1)	0.5611		0.8006	
[atm-m3/m3] (2)	0.5319		0.7511	
(3)	0.5184		0.7429	
(4)	0.4913		0.6971	
Injection: (1)	10118		17093	
[Peak Area] (2)	9555		16106	
(3)	15403		20084	
(4)	16010		21040	

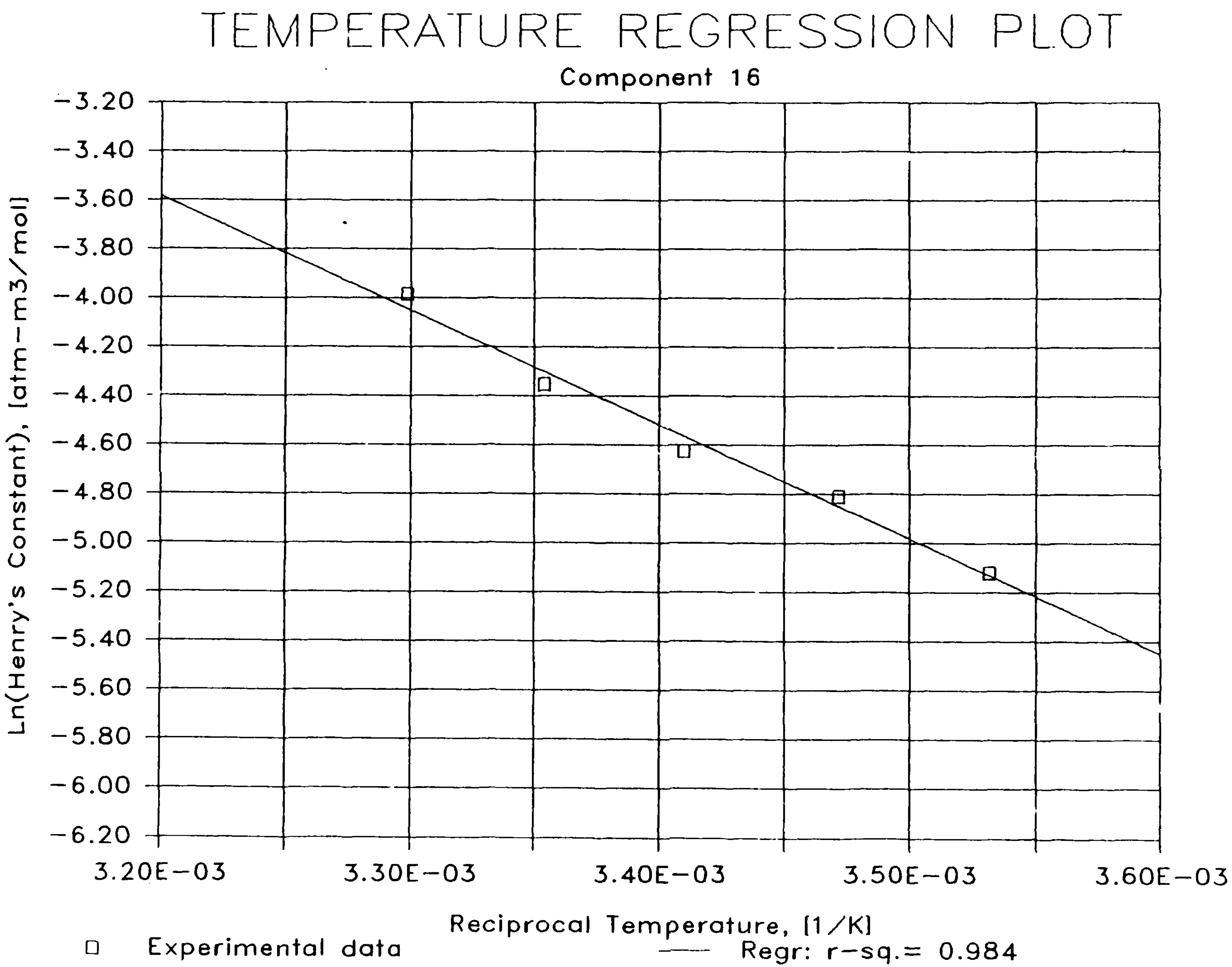
Temperature Regression Parameters:

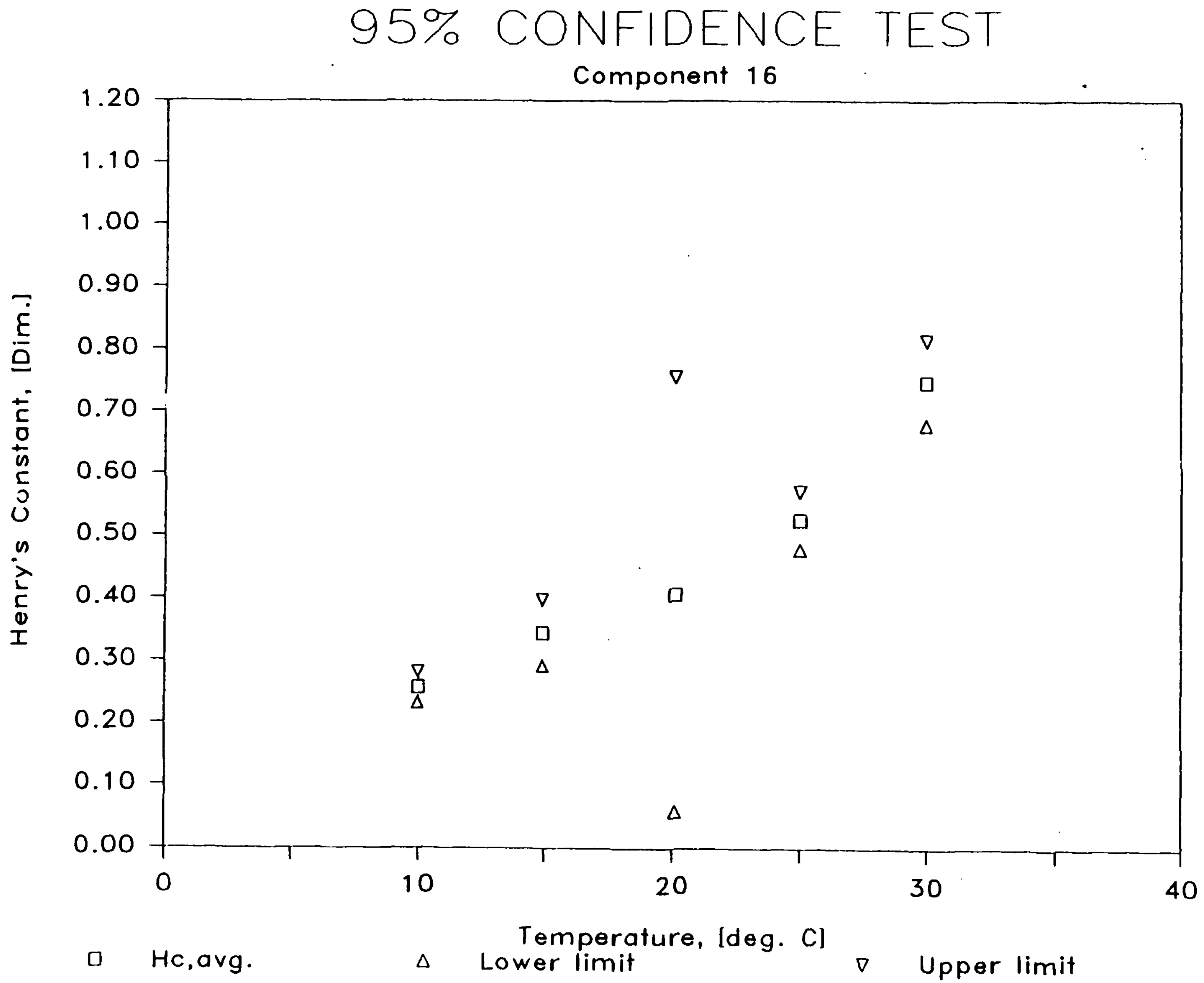
OF POINTS = 5

SLOPE = -4.7E+03

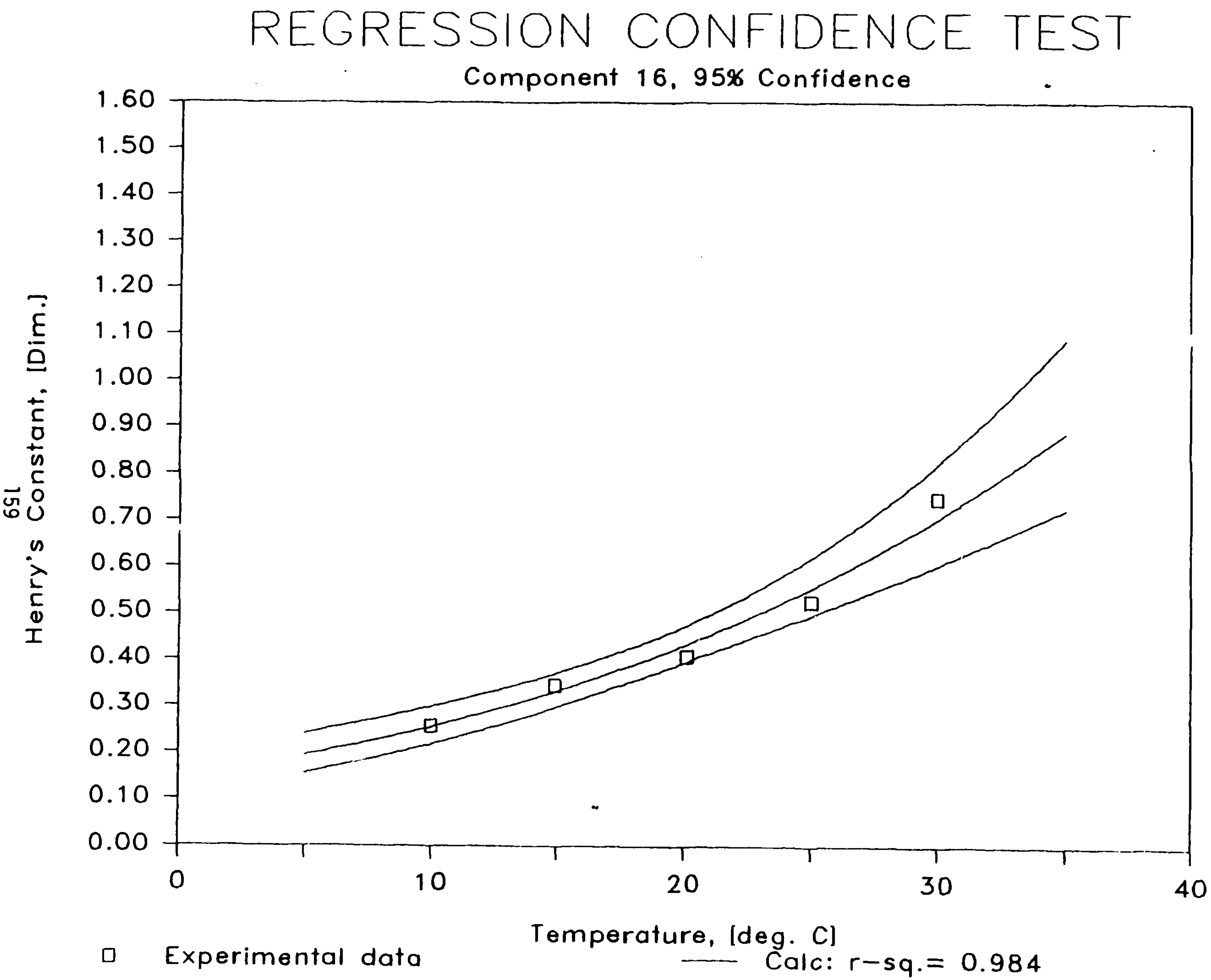
Y-INTERCEPT = 1.1E+01

R-SQUARED = 0.9840


TEMPERATURE REGRESSION PLOT
Component 16
-3.20
-3.40
-3.60
-3.80
-4.00
-4.20
-4.40
-4.60
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.984



95% CONFIDENCE TEST
Component 16
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 16, 95% Confidence
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.984

06-Nov-86 Results Summary for Component 17

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	16		14		15	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	4		4		4	
Component ID	17		17		17	
Temperature (C)	10		14.9		20.1	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.1509	1.0E-25	0.1776	1.0E-25	0.2092	1.0E-25
H, avg:atm-mol/mol	194.6		233.0		279.4	
H, avg: atm-m3/mol	3.51E-03	1	4.20E-03	1	5.03E-03	1
H, avg: kPa-m3/mol	0.3552		0.4253		0.5100	
COV, r [std/mean]	1.66		2.38		3.61	
COV, both replic.	------		------		------	
Observation: (1)	0.1518		0.1827		0.2126	
[atm-m3/m3] (2)	0.1538		0.1779		0.2006	
(3)	0.1480		0.1772		0.2178	
(4)	0.1499		0.1724		0.2056	
Injection: (1)	128310		205400		256860	
[Peak Area] (2)	126690		202090		260430	
(3)	437310		636050		731090	
(4)	434460		645260		755360	

	Temperature 4		Temperature 5	
RUN Number ---)	17		15	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	4		4	
Component ID	17		17	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.2281	1.0E-25	0.3097	1.0E-25
H, avg:atm-mol/mol	309.8		427.7	
H, avg: atm-m3/mol	5.58E-03	1	7.70E-03	1
H, avg: kPa-m3/mol	0.5655		0.7807	
COV, r [std/mean]	1.97		1.12	
COV, both replic.	------		------	
Observation: (1)	0.2268		0.3087	
[atm-m3/m3] (2)	0.2228		0.3139	
(3)	0.2335		0.3056	
(4)	0.2294		0.3107	
Injection: (1)	259590		433000	
[Peak Area] (2)	264030		430250	
(3)	711730		983360	
(4)	719220		972920	

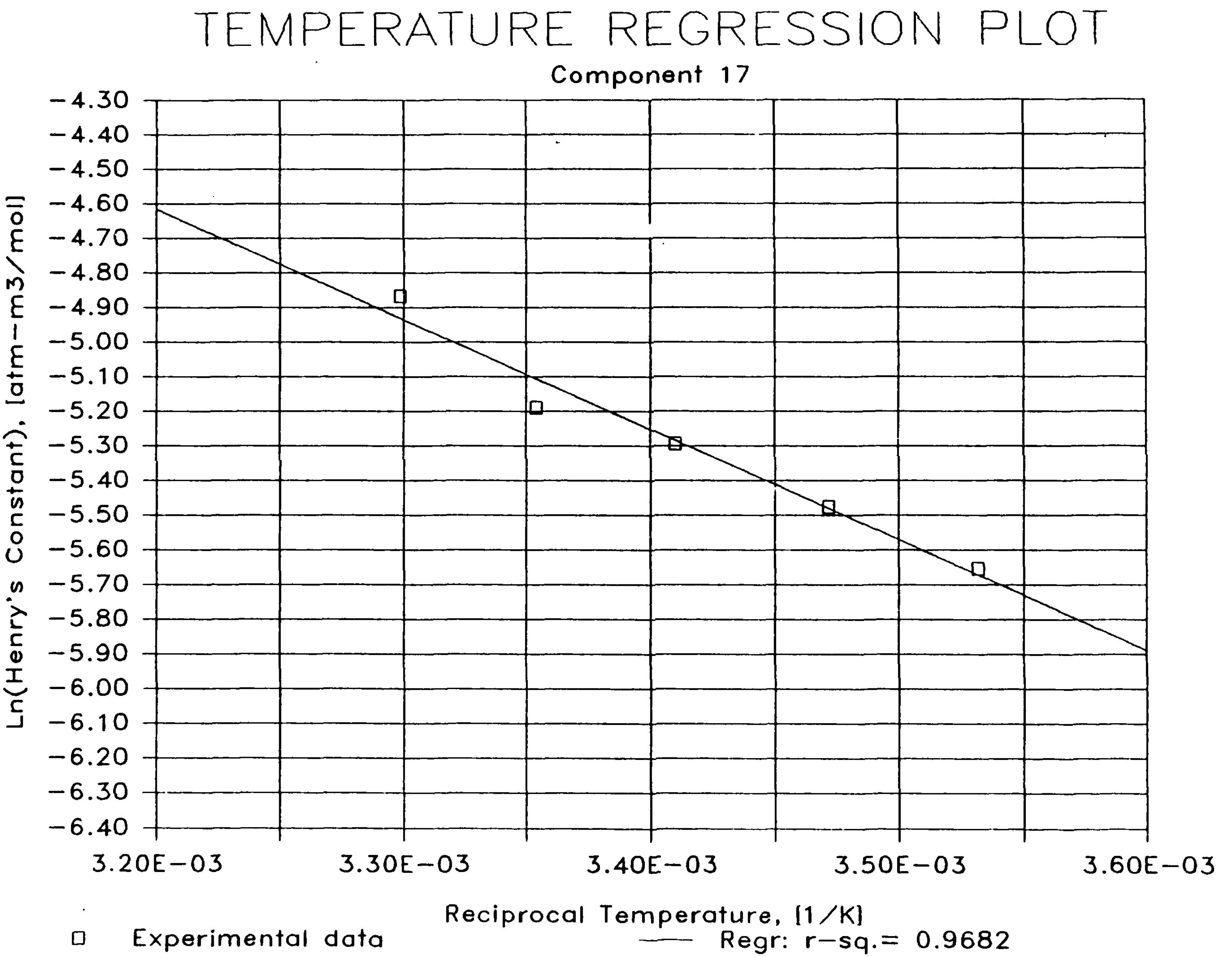
Temperature Regression Parameters:

OF POINTS = 5

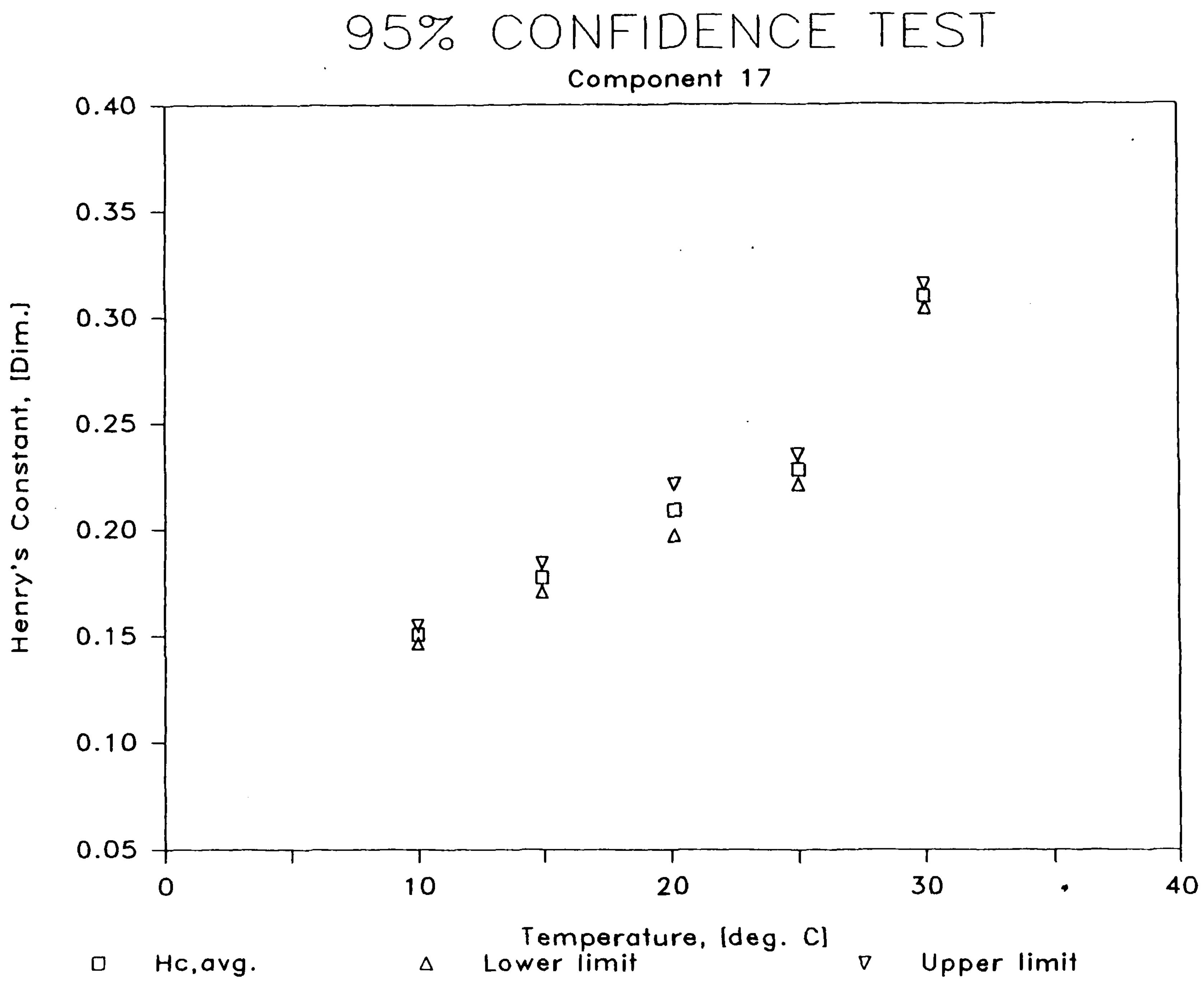
SLOPE = -3.2E+03

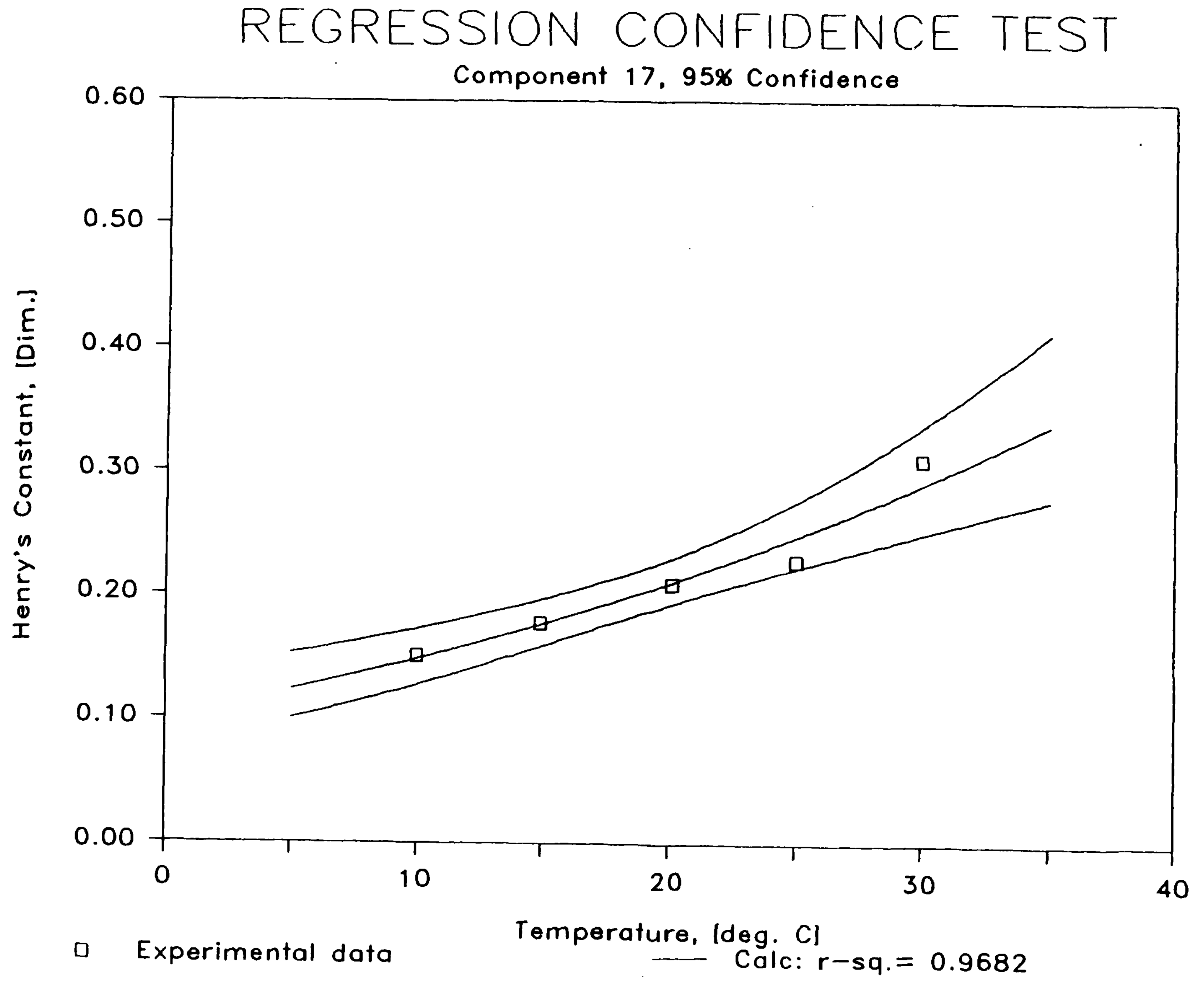
Y-INTERCEPT = 5.6E+00

R-SQUARED = 0.9682



TEMPERATURE REGRESSION PLOT
Component 17
Ln(Henry's Constant), [atm-m3/mol]
-4.30
-4.40
-4.50
-4.60
-4.70
-4.80
-4.90
-5.00
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
-6.40
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9682


95% CONFIDENCE TEST
Component 17
Henry's Constant, [Dim.]
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 17, 95% Confidence
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9682

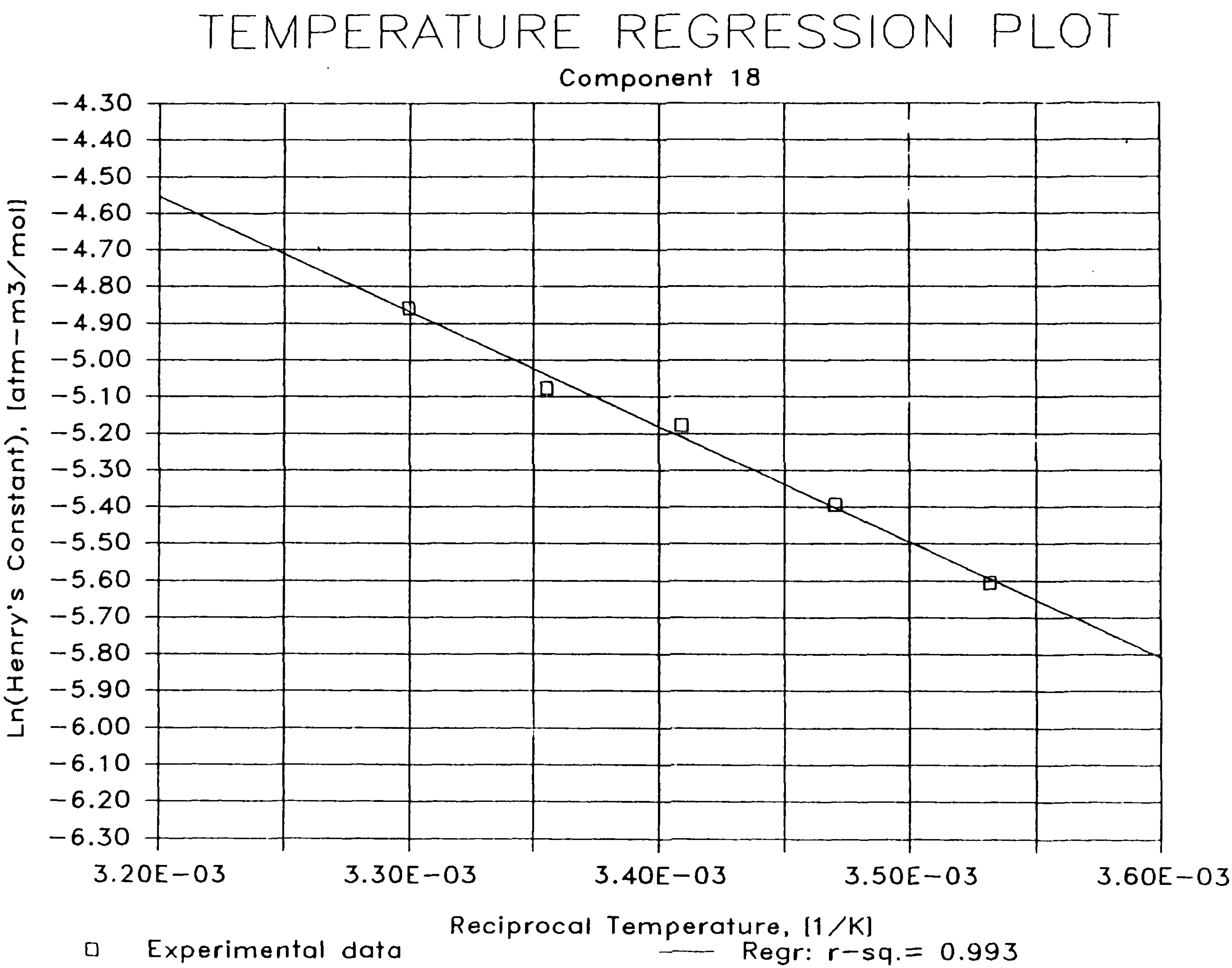
06-Nov-86 Results Summary for Component 18

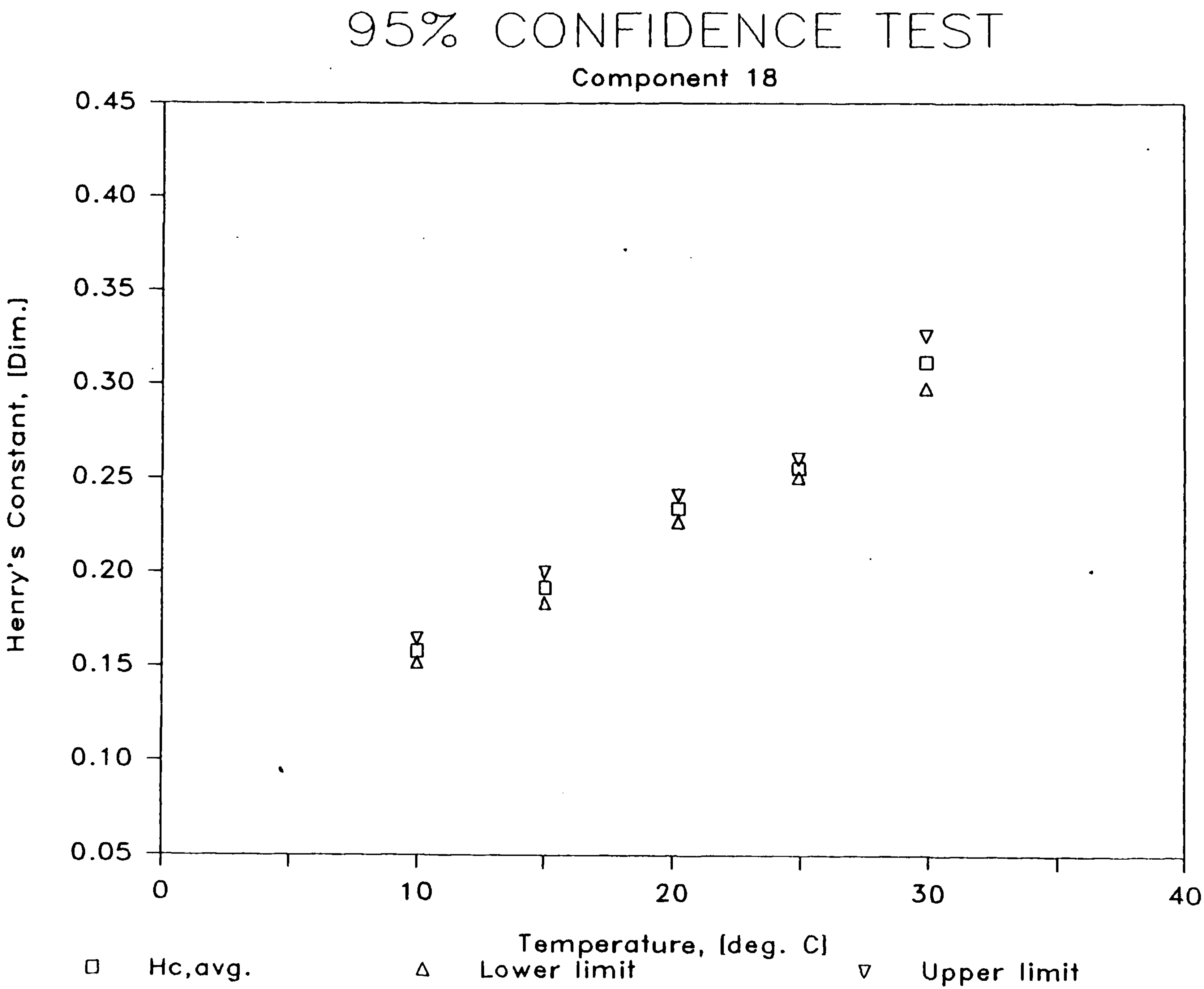
	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	1		1		2	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	5		5		5	
Component ID	18		18		18	
Temperature (C)	10		15		20.2	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.1583	1.0E-25	0.1920	1.0E-25	0.2340	1.0E-25
H, avg:atm-mol/mol	204.1		252.1		312.7	
H, avg: atm-m3/mol	3.68E-03	1	4.54E-03	1	5.63E-03	1
H, avg: kPa-m3/mol	0.3726		0.4601		0.5708	
COV, r [std/mean]	2.43		2.66		1.92	
COV, both replic.	———		———		———	
Observation: (1)	0.1630		0.1946		0.2395	
[atm-m3/m3] (2)	0.1588		0.1978		0.2339	
(3)	0.1577		0.1864		0.2340	
(4)	0.1536		0.1894		0.2285	
Injection: (1)	1638800		1825900		2181000	
[Peak Area] (2)	1609100		1779700		2149300	
(3)	5642600		5673700		5965300	
(4)	5724900		5619900		6054900	

	Temperature 4		Temperature 5	
RUN Number —)	2		3	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	5		5	
Component ID	18		18	
Temperature (C)	24.9		29.9	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.2556	1.0E-25	0.3122	1.0E-25
H, avg:atm-mol/mol	347.0		430.9	
H, avg: atm-m3/mol	6.25E-03	1	7.76E-03	1
H, avg: kPa-m3/mol	0.6334		0.7867	
COV, r [std/mean]	1.21		2.02	
COV, both replic.	——		——	
Observation: (1)	0.2590		0.3204	
[atm-m3/m3] (2)	0.2572		0.3192	
(3)	0.2540		0.3051	
(4)	0.2522		0.3040	
Injection: (1)	2788800		3695300	
[Peak Area] (2)	2753600		3576100	
(3)	7254900		8351900	
(4)	7288200		8371900	

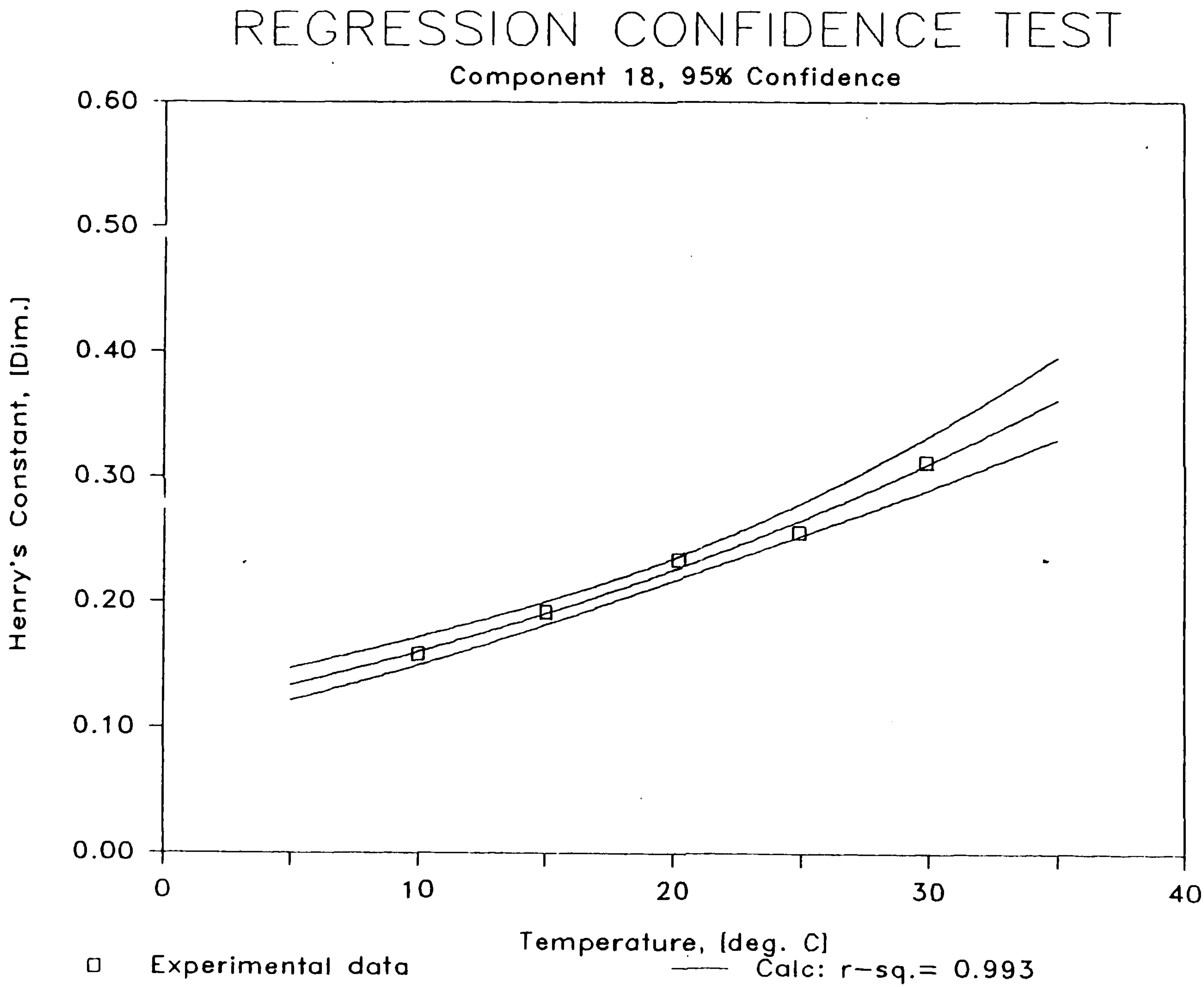
Temperature Regression Parameters:

# OF POINTS	=	5
SLOPE	=	-3.1E+03
Y-INTERCEPT	=	5.5E+00
R-SQUARED	=	0.9930


TEMPERATURE REGRESSION PLOT
Component 18
Ln(Henry's Constant), [atm-m3/mol]
-4.30
-4.40
-4.50
-4.60
-4.70
-4.80
-4.90
-5.00
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.993



95% CONFIDENCE TEST
Component 18
Henry's Constant, [Dim.]
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 18, 95% Confidence
0.60
0.50
0.40
0.30
0.20
0.10
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r–sq.= 0.993

06-Nov-86 Results Summary for Component 19

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	5		5		6	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	5		5		5	
Component ID	19		19		19	
Temperature (C)	10		15		20.2	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0503	1.0E-25	0.0549	1.0E-25	0.0612	1.0E-25
H, avg:atm-mol/mol	64.9		72.1		81.7	
H, avg: atm-m3/mol	1.17E-03	1	1.30E-03	1	1.47E-03	1
H, avg: kPa-m3/mol	0.1184		0.1316		0.1492	
COV, r [std/mean]	7.49		1.23		1.91	
COV, both replic.	------		------		------	
Observation: (1)	0.0526		0.0558		0.0622	
[atm-m3/m3] (2)	0.0543		0.0550		0.0621	
(3)	0.0463		0.0549		0.0602	
(4)	0.0480		0.0541		0.0601	
Injection: (1)	712420		880120		1087600	
[Peak Area] (2)	686070		875610		1075400	
(3)	4011000		4864500		5795100	
(4)	3971200		4886200		5798700	

	Temperature 4		Temperature 5	
RUN Number ---)	6		7	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	5		5	
Component ID	19		19	
Temperature (C)	25		29.9	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0577	1.0E-25	0.0701	1.0E-25
H,avg:atm-mol/mol	78.3		96.8	
H,avg: atm-m3/mol	1.41E-03	1	1.74E-03	1
H,avg: kPa-m3/mol	0.1430		0.1767	
COV, r [std/mean]	1.93		2.42	
COV, both replic.	———		———	
Observation: (1)	0.0574		0.0684	
[atm-m3/m3] (2)	0.0590		0.0689	
(3)	0.0564		0.0713	
(4)	0.0580		0.0718	
Injection: (1)	1209900		1434300	
[Peak Area] (2)	1203000		1456500	
(3)	6625600		7388000	
(4)	6563600		7369000	

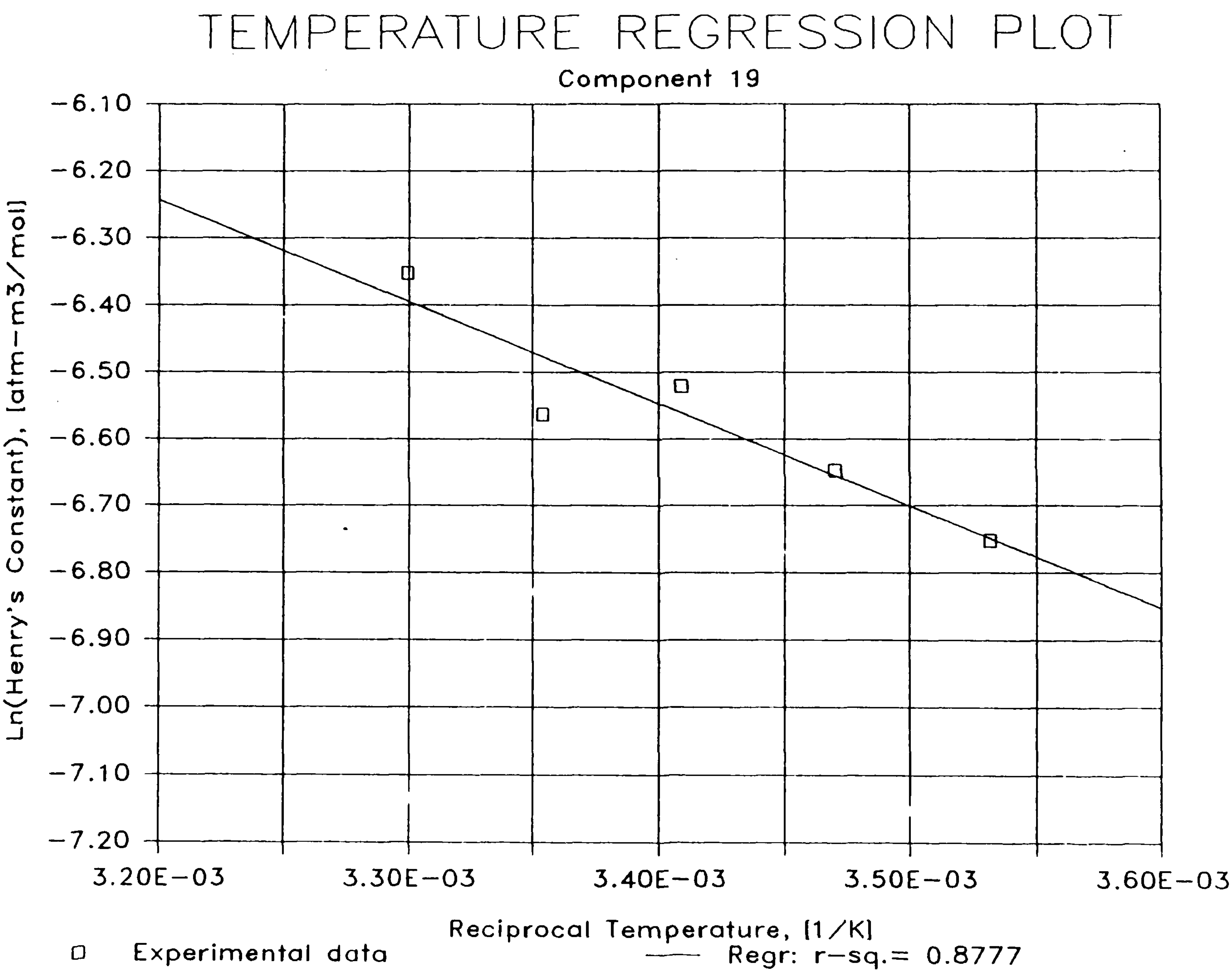
Temperature Regression Parameters:

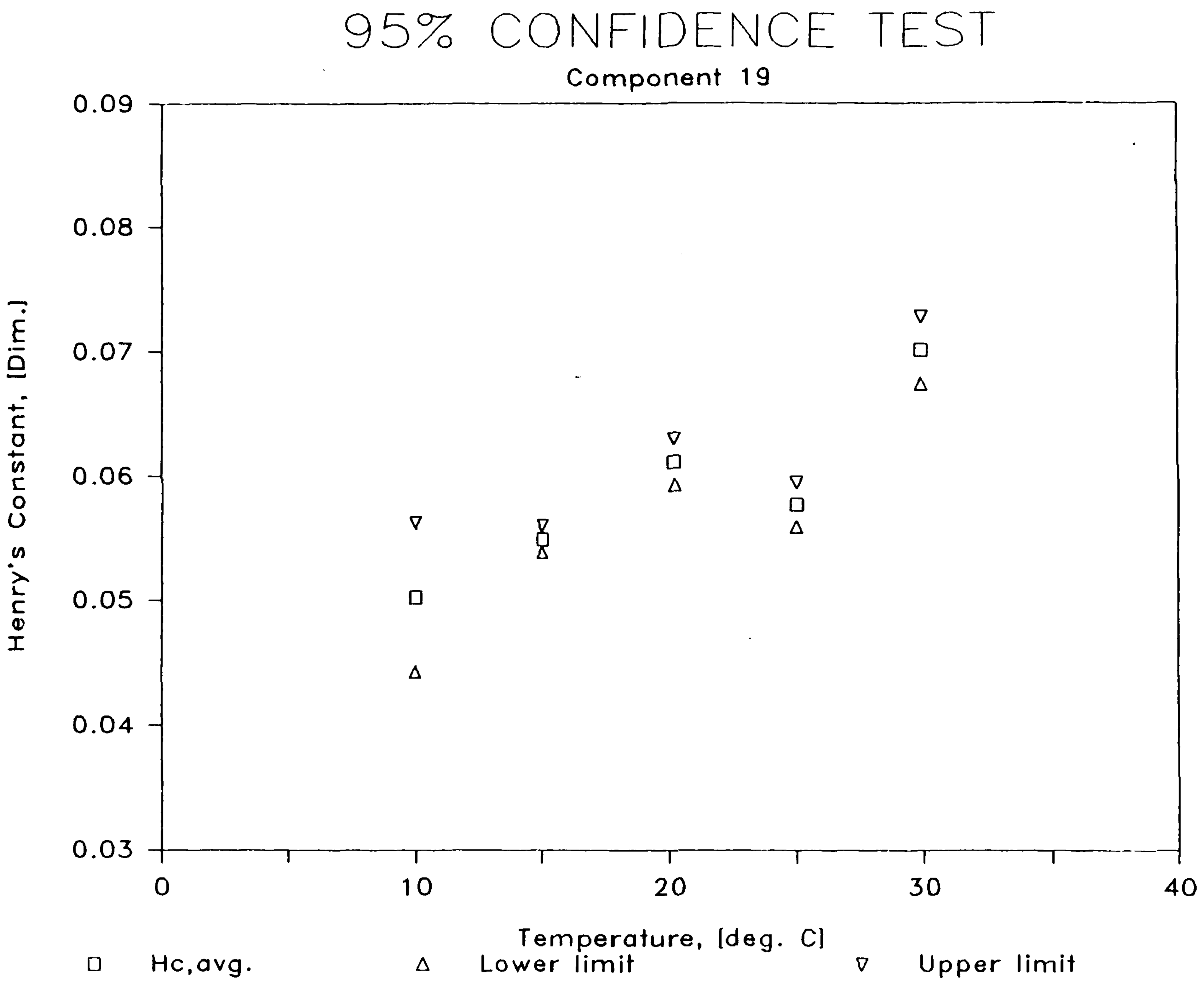
OF POINTS = 5

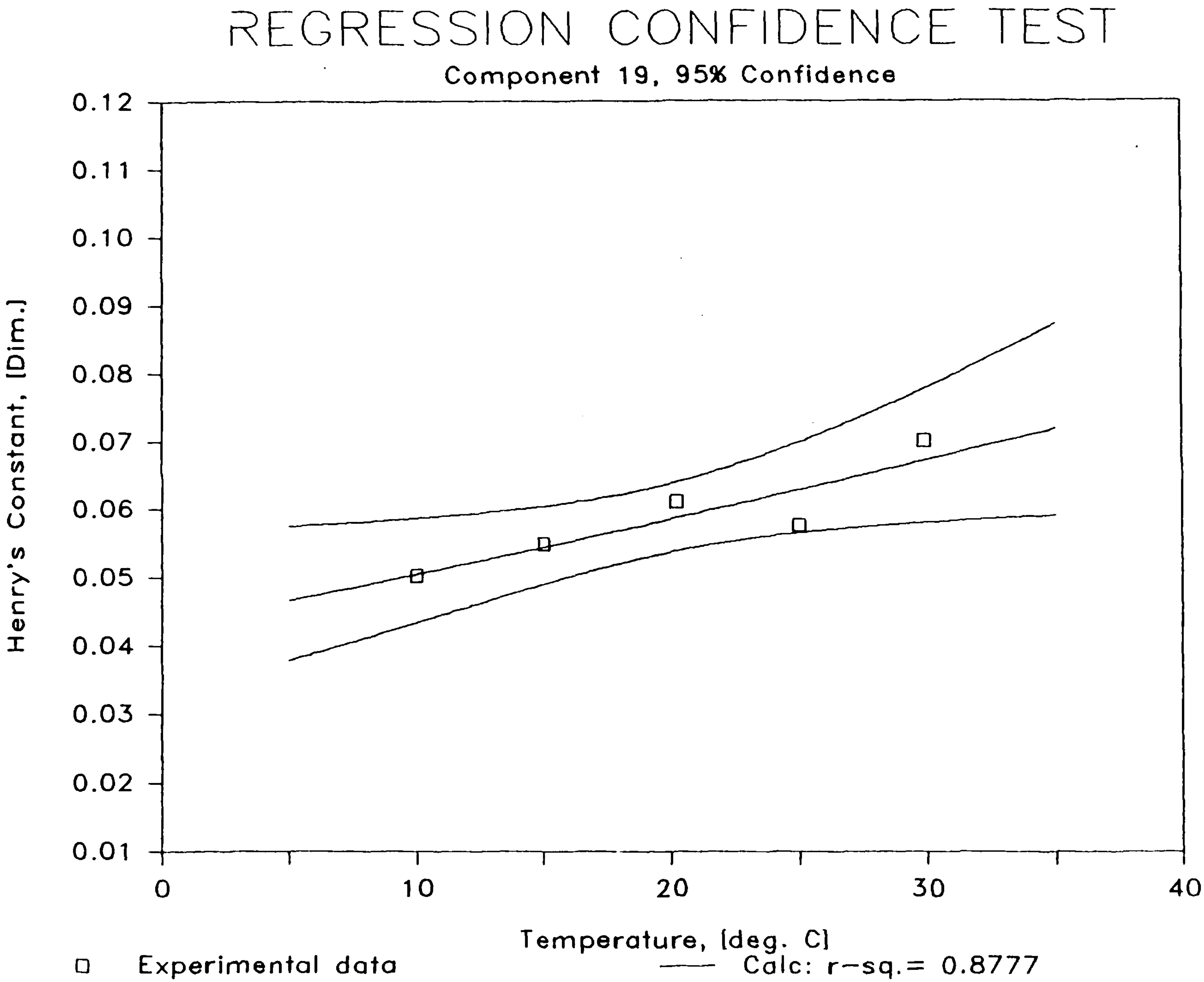
SLOPE = -1.5E+03

Y-INTERCEPT = -1.4E+00

R-SQUARED = 0.8777


TEMPERATURE REGRESSION PLOT
Component 19
Ln(Henry's Constant), [atm-m3/mol]
-6.10
-6.20
-6.30
-6.40
-6.50
-6.60
-6.70
-6.80
-6.90
-7.00
-7.10
-7.20
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.8777


95% CONFIDENCE TEST
Component 19
0.09
0.08
0.07
0.06
0.05
0.04
0.03
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 19, 95% Confidence
Henry's Constant, [Dim.]
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.8777

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	48		10		6	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	1		1		1	
Component ID	19		19		19	
Temperature (C)	10.1		15		20	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0303	1.0E-25	0.0372	1.0E-25	0.0504	1.0E-25
H, avg:atm-mol/mol	39.1		48.8		67.3	
H, avg: atm-m3/mol	7.05E-04	1	8.79E-04	1	1.21E-03	1
H, avg: kPa-m3/mol	0.0714		0.0890		0.1229	
COV, r [std/mean]	4.37		4.06		7.81	
COV, both replic.	——		——		——	
Observation: (1)	0.0318		0.0370		0.0530	
[atm-m3/m3] (2)	0.0310		0.0390		0.0464	
(3)	0.0296		0.0353		0.0545	
(4)	0.0289		0.0373		0.0478	
Injection: (1)	592870		769740		957000	
[Peak Area] (2)	584120		761090		965350	
(3)	3806400		4772400		5374700	
(4)	3825800		4711800		5593000	

	Temperature 4		Temperature 5	
RUN Number --->	11		49	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	1		1	
Component ID	19		19	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0596	1.0E-25	0.0705	1.0E-25
H,avg:atm-mol/mol	80.9		97.3	
H,avg: atm-m3/mol	1.46E-03	1	1.75E-03	1
H,avg: kPa-m3/mol	0.1477		0.1777	
COV, r [std/mean]	1.57		6.87	
COV, both replic.	------		------	
Observation: (1)	0.0597		0.0702	
[atm-m3/m3] (2)	0.0607		0.0646	
(3)	0.0584		0.0765	
(4)	0.0594		0.0706	
Injection: (1)	1222000		1432100	
[Peak Area] (2)	1213200		1479200	
(3)	6603100		7305500	
(4)	6566300		7530500	

ANALYSIS COMPLETED ...

Temperature Regression Parameters:

OF POINTS = 5

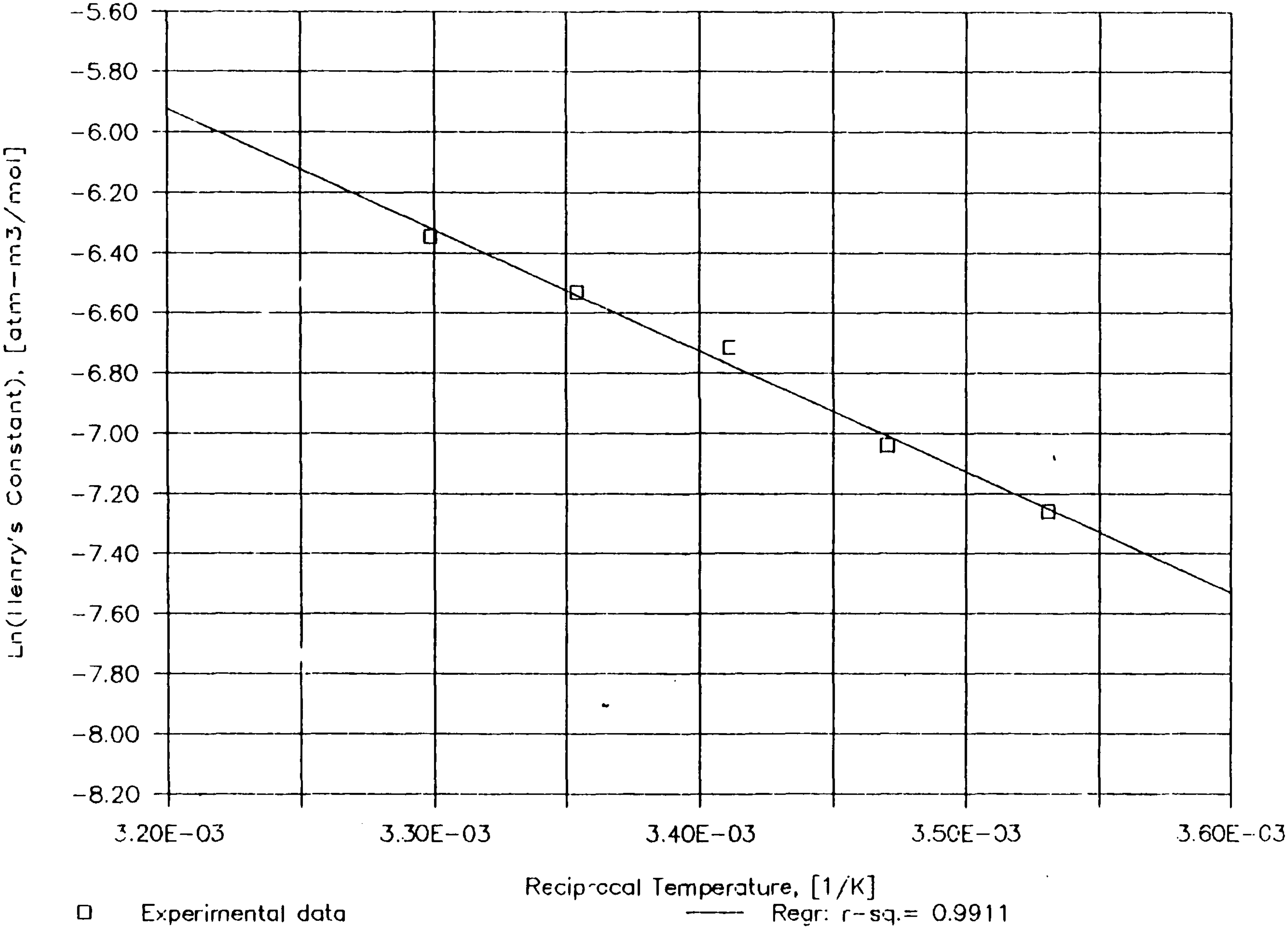
SLOPE = -4.0E+03

Y-INTERCEPT = 6.9E+00

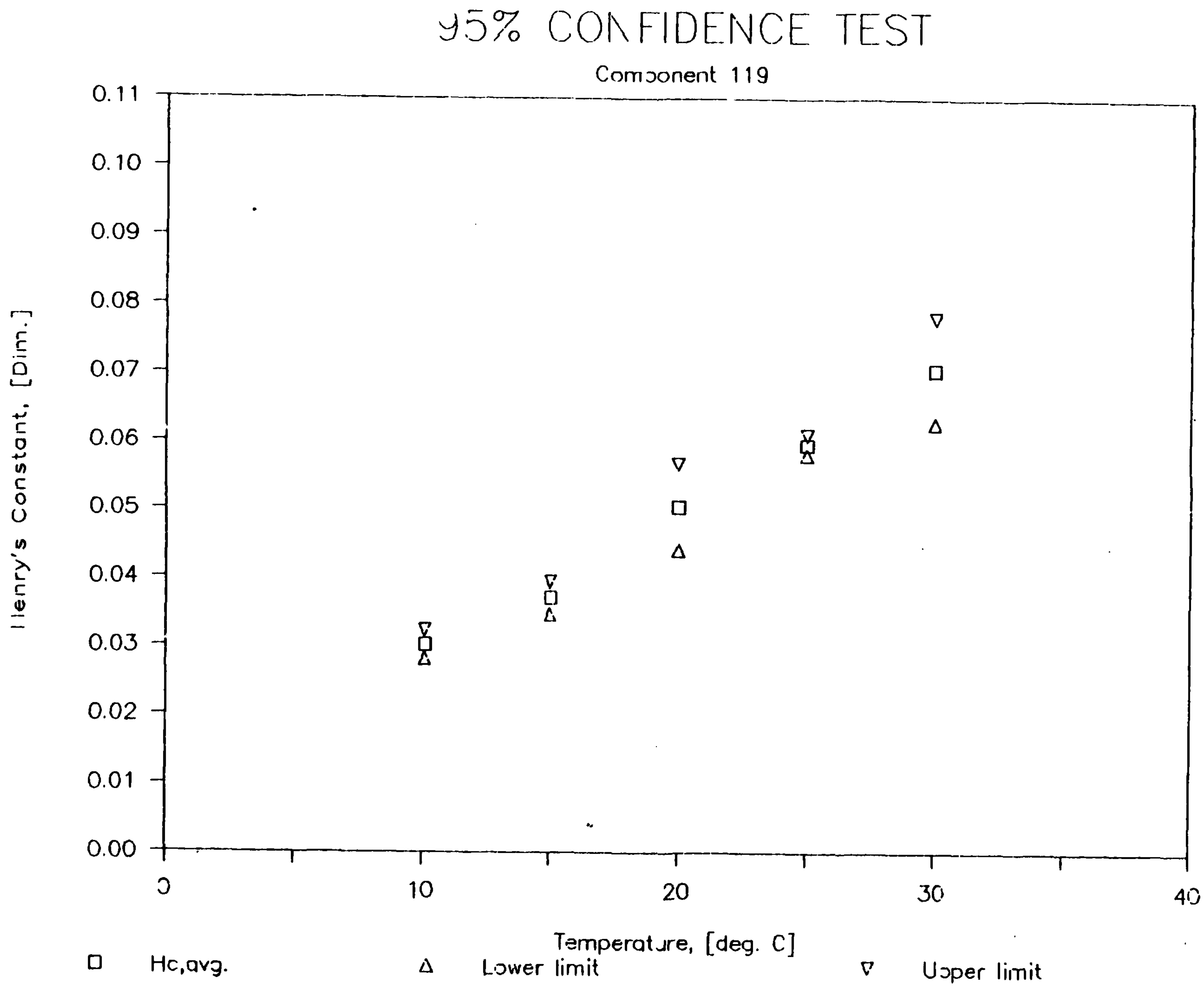
R-SQUARED = 0.9911

TEMPERATURE REGRESSION PLOT

Component 119



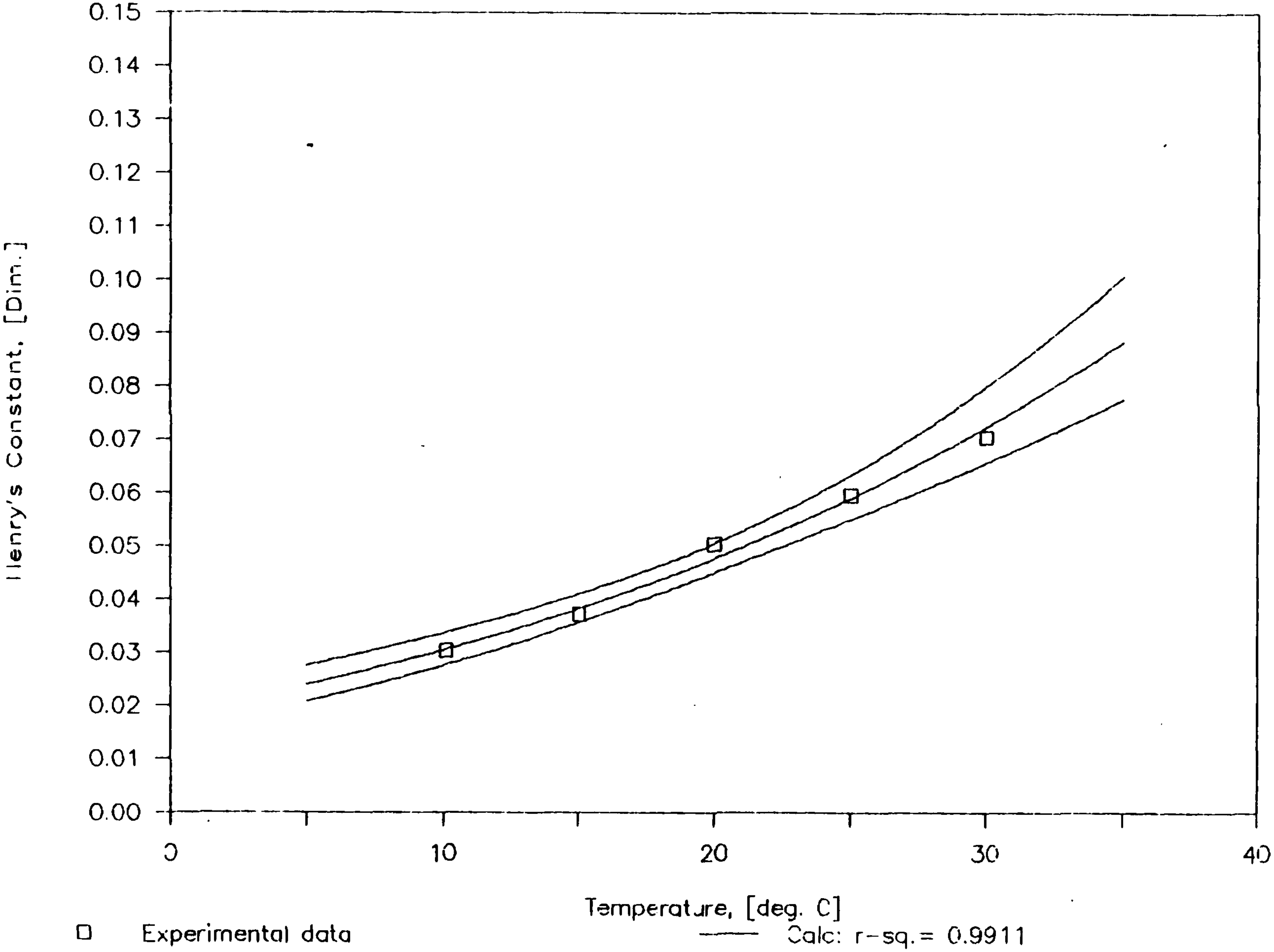
121



95% CONFIDENCE TEST
Component 119
Henry's Constant, [Dim.]
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

REGRESSION CONFIDENCE TEST

Component 119, 95% Confidence



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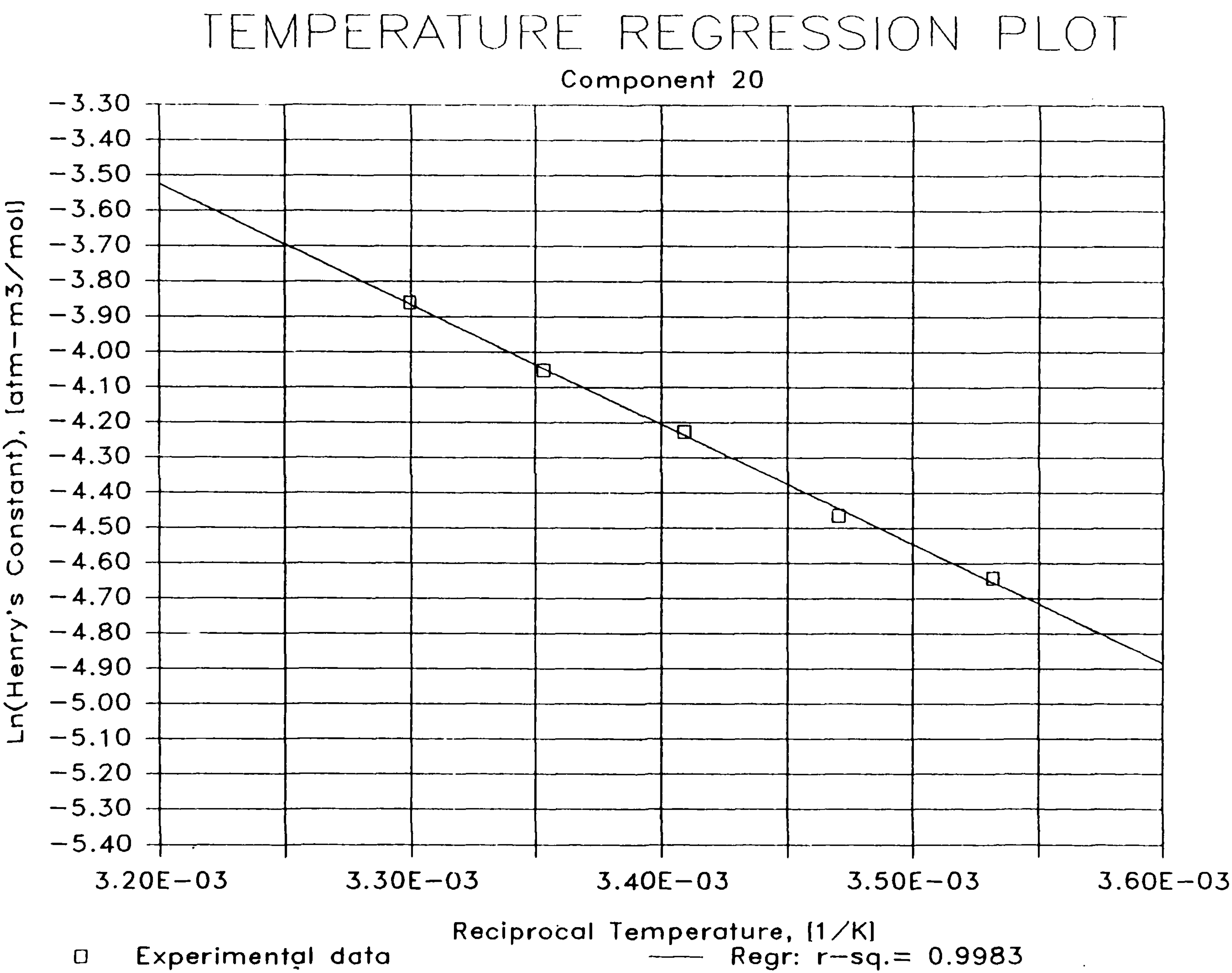
06-Nov-86 Results Summary for Component 20

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —>	9		9		10	
REPLICATE —>	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	5		5		5	
Component ID	20		20		20	
Temperature (C)	10		15		20.2	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.4151	1.0E-25	0.4870	1.0E-25	0.6069	1.0E-25
H,avg:atm-mol/mol	535.4		639.2		810.9	
H,avg: atm-m3/mol	9.65E-03	1	1.15E-02	1	1.46E-02	1
H,avg: kPa-m3/mol	0.9774		1.1668		1.4802	
COV, r [std/mean]	2.98		5.51		0.58	
COV, both replic.	———		———		———	
Observation: (1)	0.4301		0.5012		0.6025	
[atm-m3/m3] (2)	0.4117		0.5168		0.6071	
(3)	0.4183		0.4578		0.6066	
(4)	0.4005		0.4722		0.6112	
Injection: (1)	701970		729790		871160	
[Peak Area] (2)	688380		683970		875420	
(3)	1293400		1205400		1259300	
(4)	1333800		1179100		1252400	

	Temperature 4		Temperature 5	
RUN Number —)	10		11	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	5		5	
Component ID	20		20	
Temperature (C)	25.1		29.9	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.7105	1.0E-25	0.8480	1.0E-25
H, avg:atm-mol/mol	965.2		1170.5	
H, avg:.atm-m3/mol	1.74E-02	1	2.11E-02	1
H, avg: kPa-m3/mol	1.7620		2.1367	
COV, r [std/mean]	1.35		2.24	
COV, both replic.	———		———	
Observation: (1)	0.7193		0.8713	
[atm-m3/m3] (2)	0.7028		0.8463	
(3)	0.7183		0.8493	
(4)	0.7017		0.8249	
Injection: (1)	1193200		1550900	
[Peak Area] (2)	1191900		1522300	
(3)	1515800		1713400	
(4)	1541800		1750100	

Temperature Regression Parameters:

# OF POINTS	=	5
SLOPE	=	-3.4E+03
Y-INTERCEPT	=	7.4E+00
R-SQUARED	=	0.9983


TEMPERATURE REGRESSION PLOT
Component 20
Ln(Henry's Constant), [atm-m3/mol]
-3.30
-3.40
-3.50
-3.60
-3.70
-3.80
-3.90
-4.00
-4.10
-4.20
-4.30
-4.40
-4.50
-4.60
-4.70
-4.80
-4.90
-5.00
-5.10
-5.20
-5.30
-5.40
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9983

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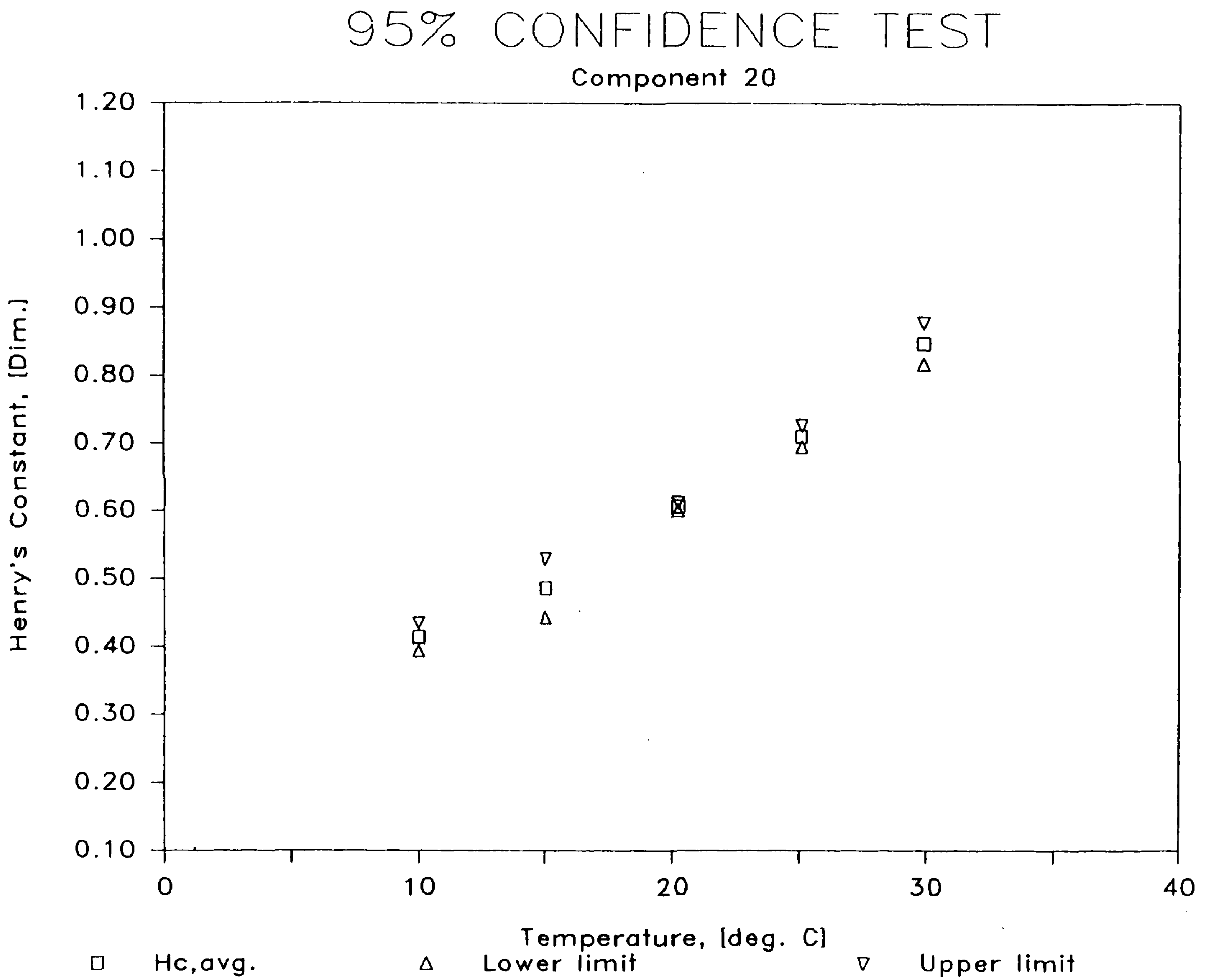
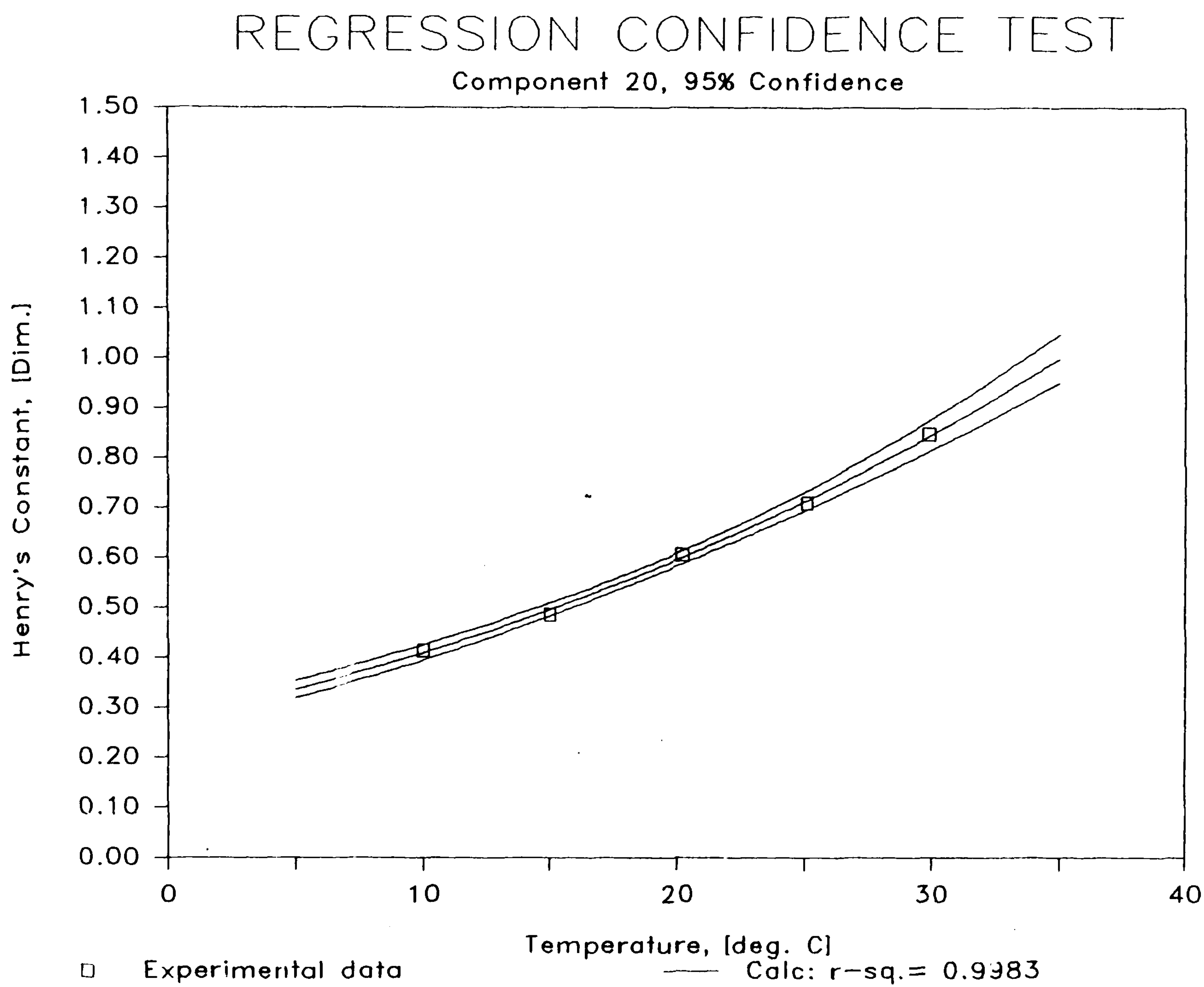

95% CONFIDENCE TEST
Component 20
Henry's Constant, [Dim.]
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

183



REGRESSION CONFIDENCE TEST
Component 20, 95% Confidence
Henry's Constant, [Dim.]
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9983

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	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	13		13		14	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	5		5		5	
Component ID	21		21		21	
Temperature (C)	10		15		20.2	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0500	1.0E-25	0.0422	1.0E-25	0.0506	1.0E-25
H, avg:atm-mol/mol	64.5		55.3		67.6	
H, avg: atm-m3/mol	1.16E-03	1	9.97E-04	1	1.22E-03	1
H, avg: kPa-m3/mol	0.1178		0.1010		0.1234	
COV, r [std/mean]	11.24		6.24		5.12	
COV, both replic.	----		----		----	
Observation: (1)	0.0564		0.0439		0.0536	
[atm-m3/m3] (2)	0.0526		0.0449		0.0518	
(3)	0.0473		0.0394		0.0494	
(4)	0.0437		0.0404		0.0477	
Injection: (1)	179240		222690		291140	
[Peak Area] (2)	169820		216540		284070	
(3)	986870		1321800		1629700	
(4)	1008900		1313400		1647100	

	Temperature 4		Temperature 5	
RUN Number --->	14		15	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	5		5	
Component ID	21		21	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0429	1.0E-25	0.0504	1.0E-25
H,avg:atm-mol/mol	58.2		69.6	
H,avg: atm-m3/mol	1.05E-03	1	1.25E-03	1
H,avg: kPa-m3/mol	0.1063		0.1270	
COV, r [std/mean]	10.91		9.18	
COV, both replic.	------		------	
Observation: (1)	0.0464		0.0504	
[atm-m3/m3] (2)	0.0474		0.0561	
(3)	0.0384		0.0448	
(4)	0.0394		0.0503	
Injection: (1)	344840		410050	
[Peak Area] (2)	327870		397070	
(3)	2015300		2343600	
(4)	2002200		2266300	

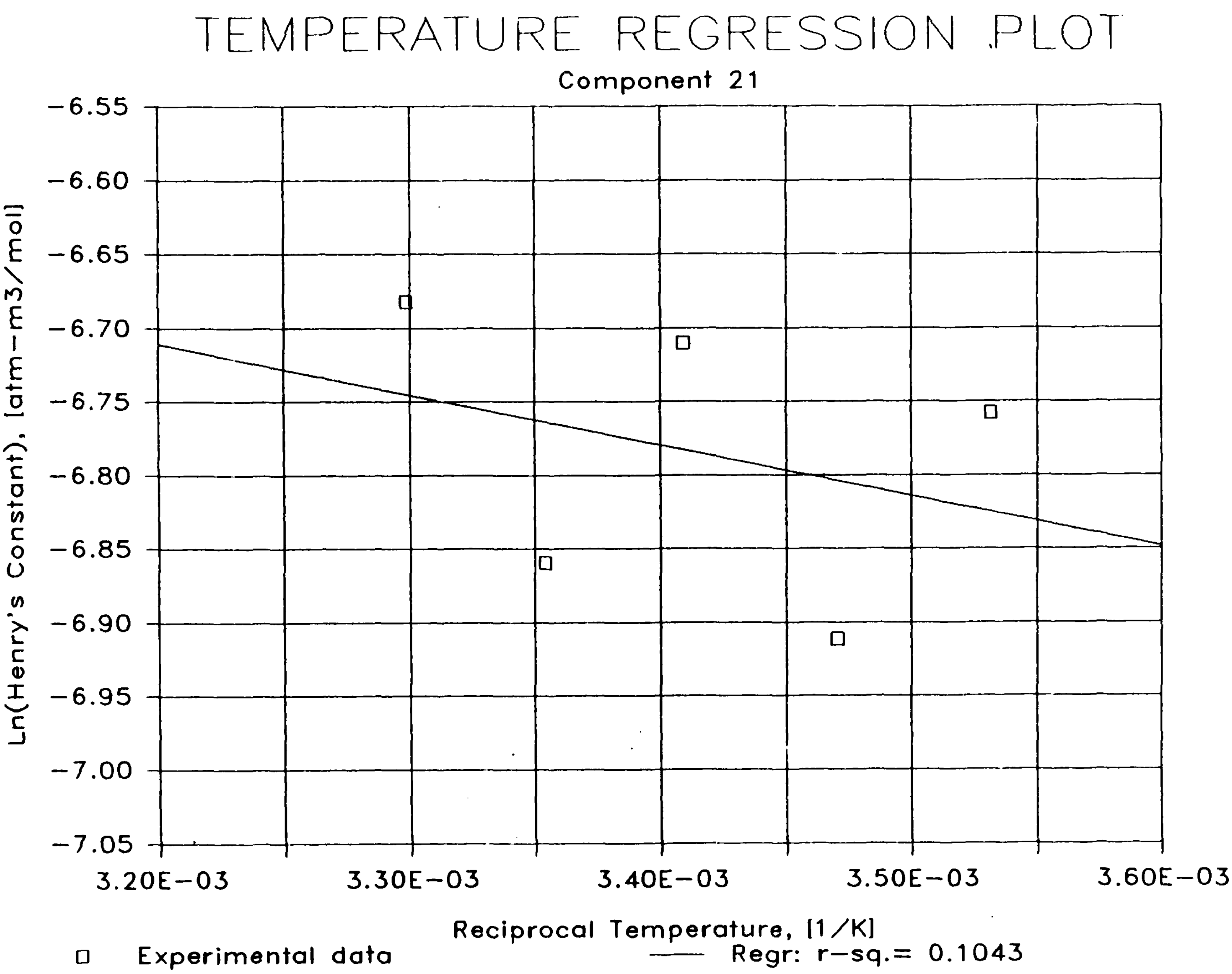
Temperature Regression Parameters:

OF POINTS = 5

SLOPE = -3.4E+02

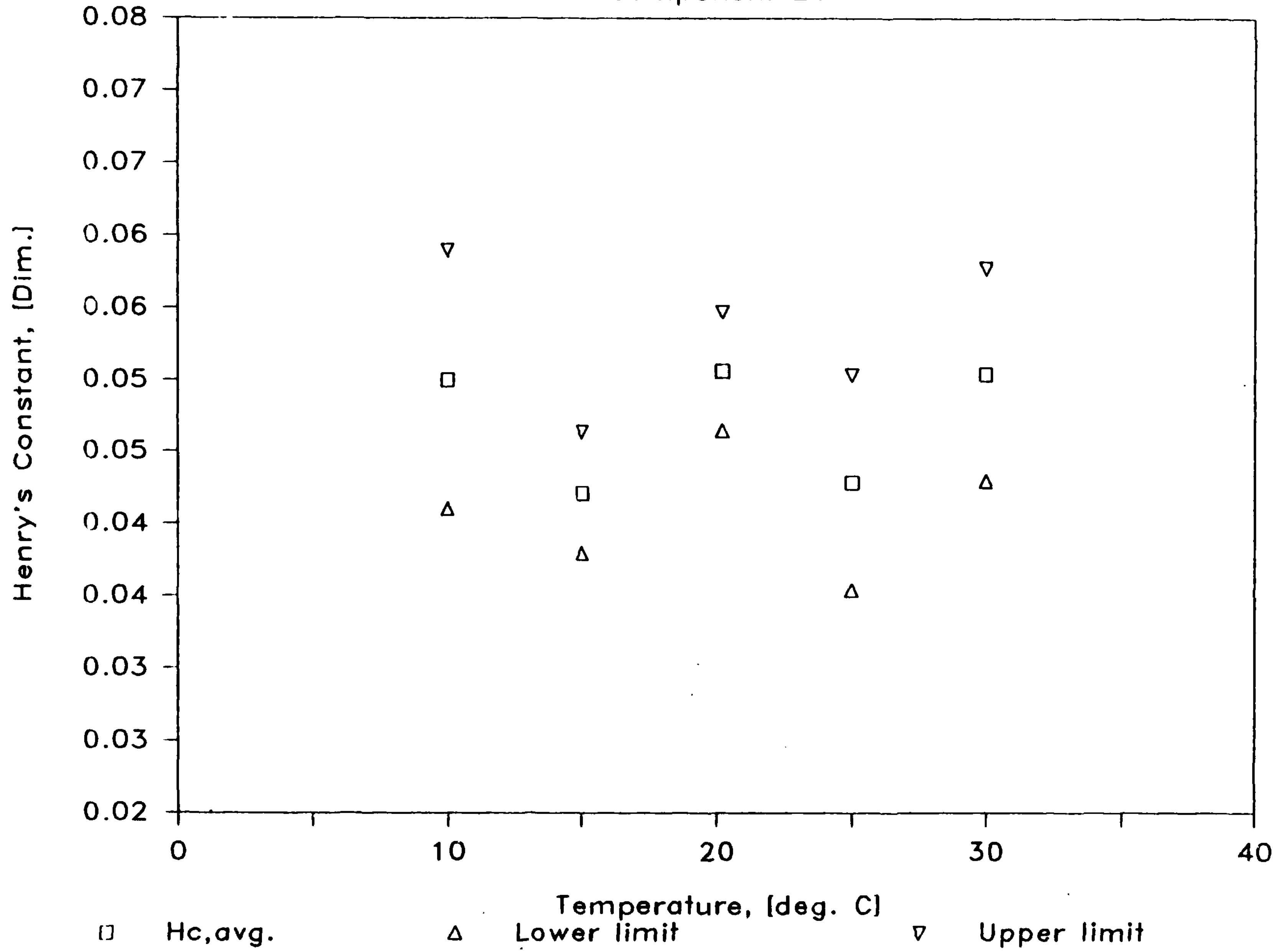
Y-INTERCEPT = -5.6E+00

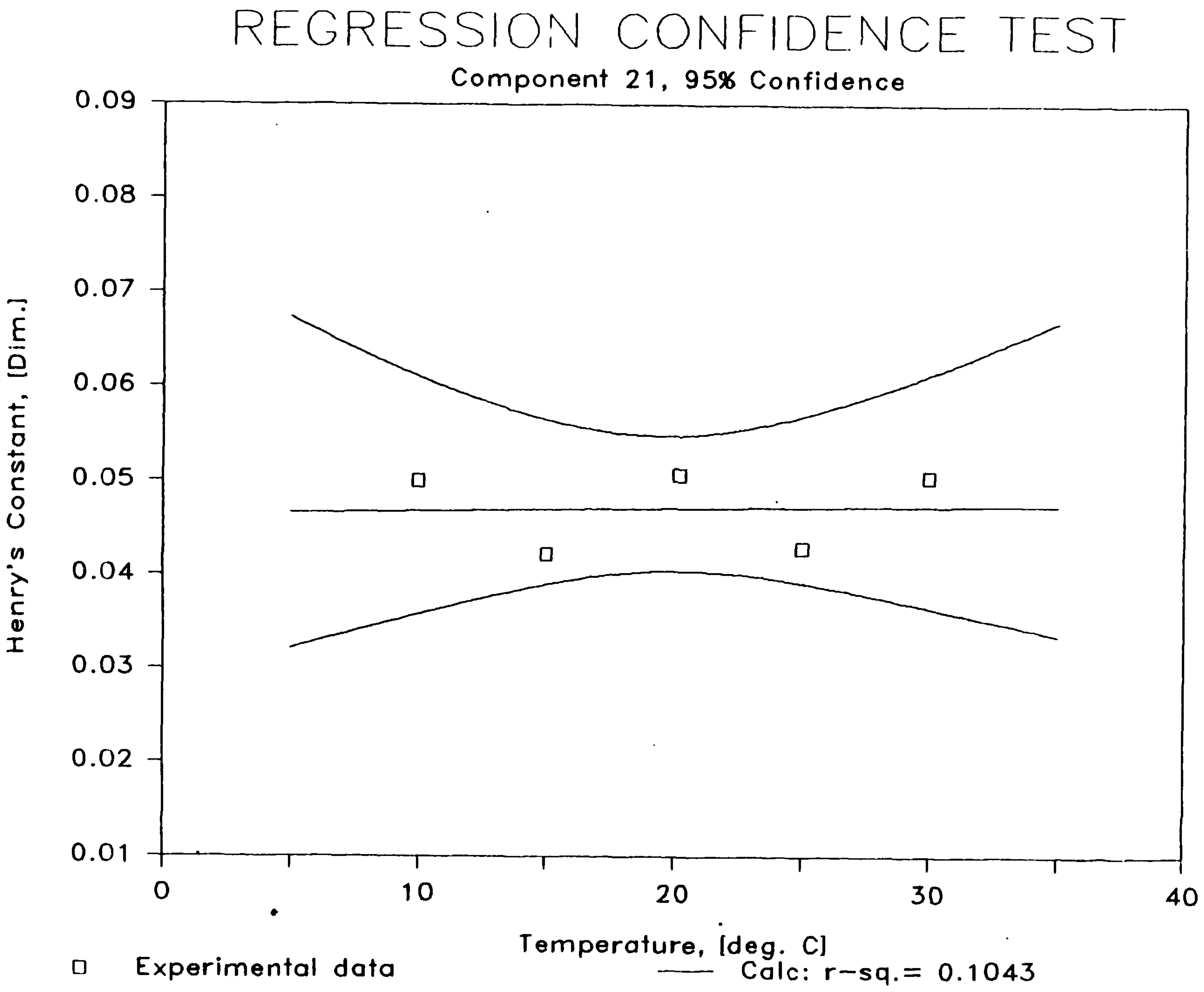
R-SQUARED = 0.1043


TEMPERATURE REGRESSION PLOT
Component 21
Ln(Henry's Constant), [atm-m3/mol]
-6.55
-6.60
-6.65
-6.70
-6.75
-6.80
-6.85
-6.90
-6.95
-7.00
-7.05
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.1043

95% CONFIDENCE TEST

Component 21




REGRESSION CONFIDENCE TEST
Component 21, 95% Confidence
Henry's Constant, [Dim.]
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r–sq.= 0.1043

Results Summary for Component 121

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	2		2		3	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	1		1		1	
Component ID	121		121		121	
Temperature (C)	10.1		15		20	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.0169	1.0E-25	0.0267	1.0E-25	0.0308	1.0E-25
H,avg:atm-mol/mol	21.8		35.0		41.1	
H,avg: atm-m3/mol	3.92E-04	1	6.30E-04	1	7.41E-04	1
H,avg: kPa-m3/mol	0.0397		0.0639		0.0751	
COV, r [std/mean]	25.79		7.41		8.64	
COV, both replic.	------		------		------	
Observation: (1)	0.0219		0.0282		0.0340	
[atm-m3/m3] (2)	0.0150		0.0285		0.0315	
(3)	0.0187		0.0248		0.0301	
(4)	0.0119		0.0251		0.0276	
Injection: (1)	178840		232120		287330	
[Peak Area] (2)	174610		226620		279850	
(3)	1230800		1527500		1817400	
(4)	1296500		1524200		1848900	

	Temperature 4		Temperature 5	
RUN Number --->	3		3	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	1		1	
Component ID	121		121	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0371	1.0E-25	0.0535	1.0E-25
H,avg:atm-mol/mol	50.4		73.8	
H,avg: atm-m3/mol	9.08E-04	1	1.33E-03	1
H,avg: kPa-m3/mol	0.0920		0.1348	
COV, r [std/mean]	8.82		2.55	
COV, both replic.	------		------	
Observation: (1)	0.0404		0.0552	
[atm-m3/m3] (2)	0.0395		0.0535	
(3)	0.0347		0.0535	
(4)	0.0339		0.0518	
Injection: (1)	392020		520400	
[Peak Area] (2)	377940		515300	
(3)	2378900		2886300	
(4)	2392500		2914500	

ANALYSIS COMPLETED ...

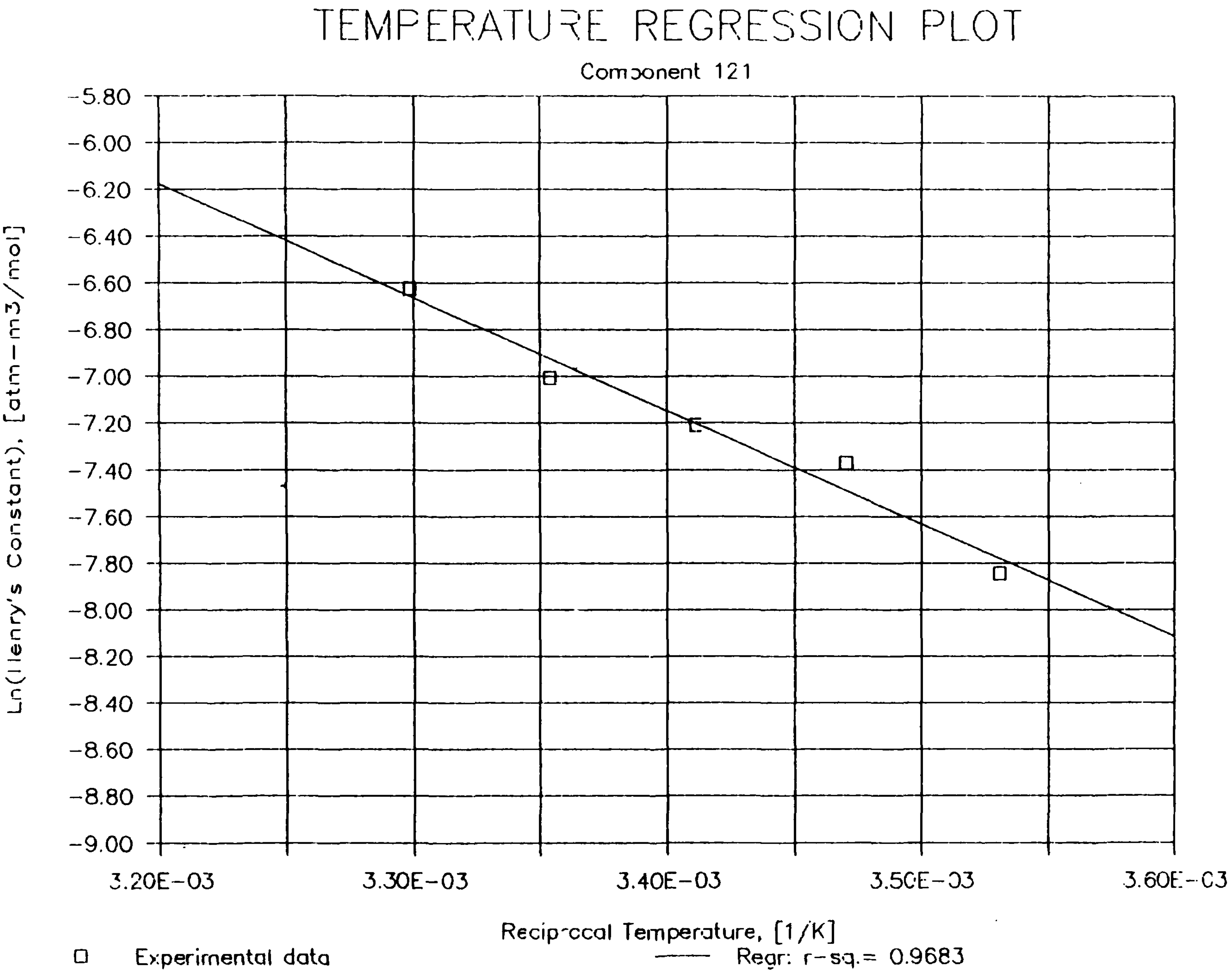
Temperature Regression Parameters:

OF POINTS = 5

SLOPE = -4.8E+03

Y-INTERCEPT = 9.3E+00

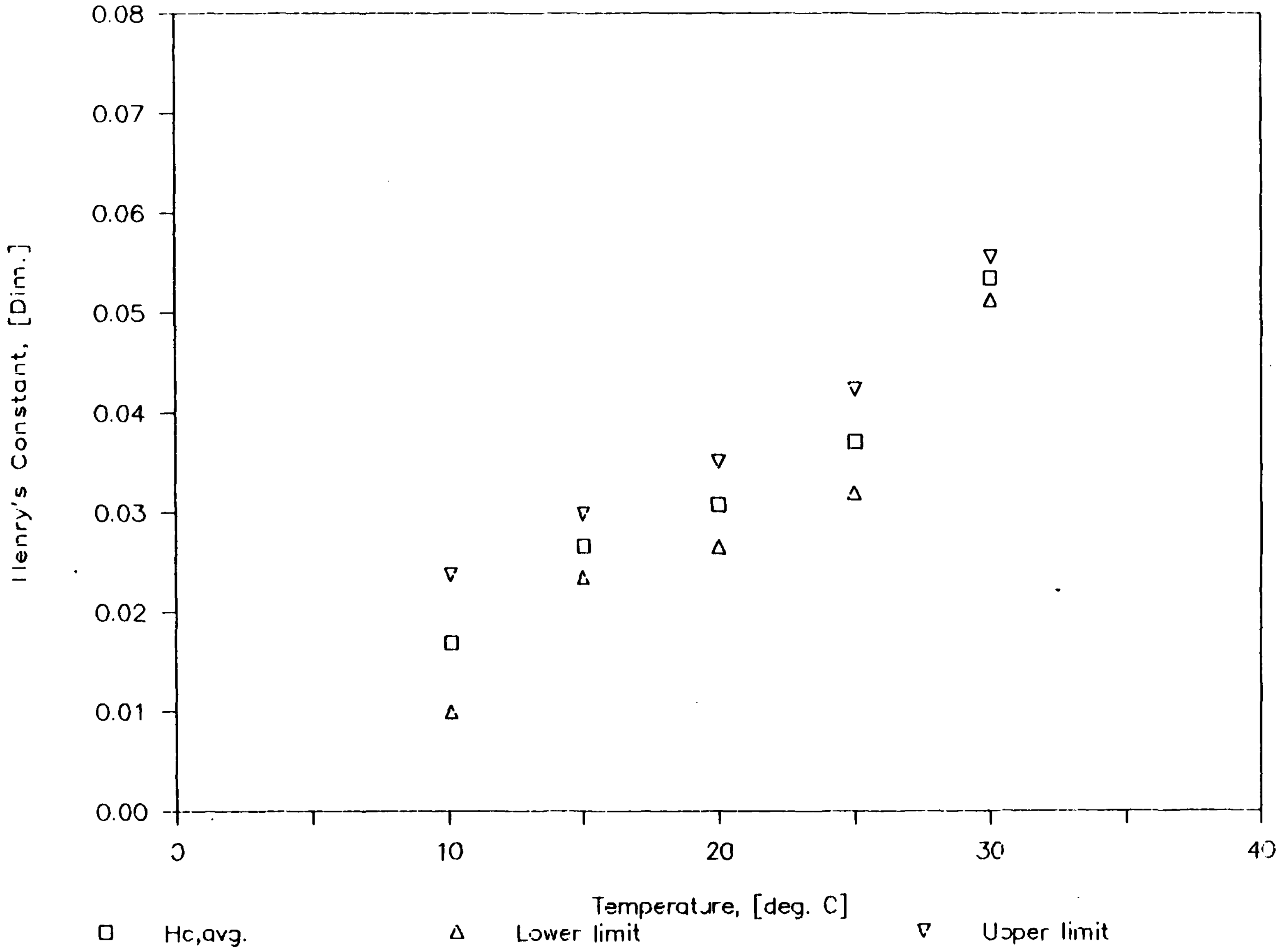
R-SQUARED = 0.9683

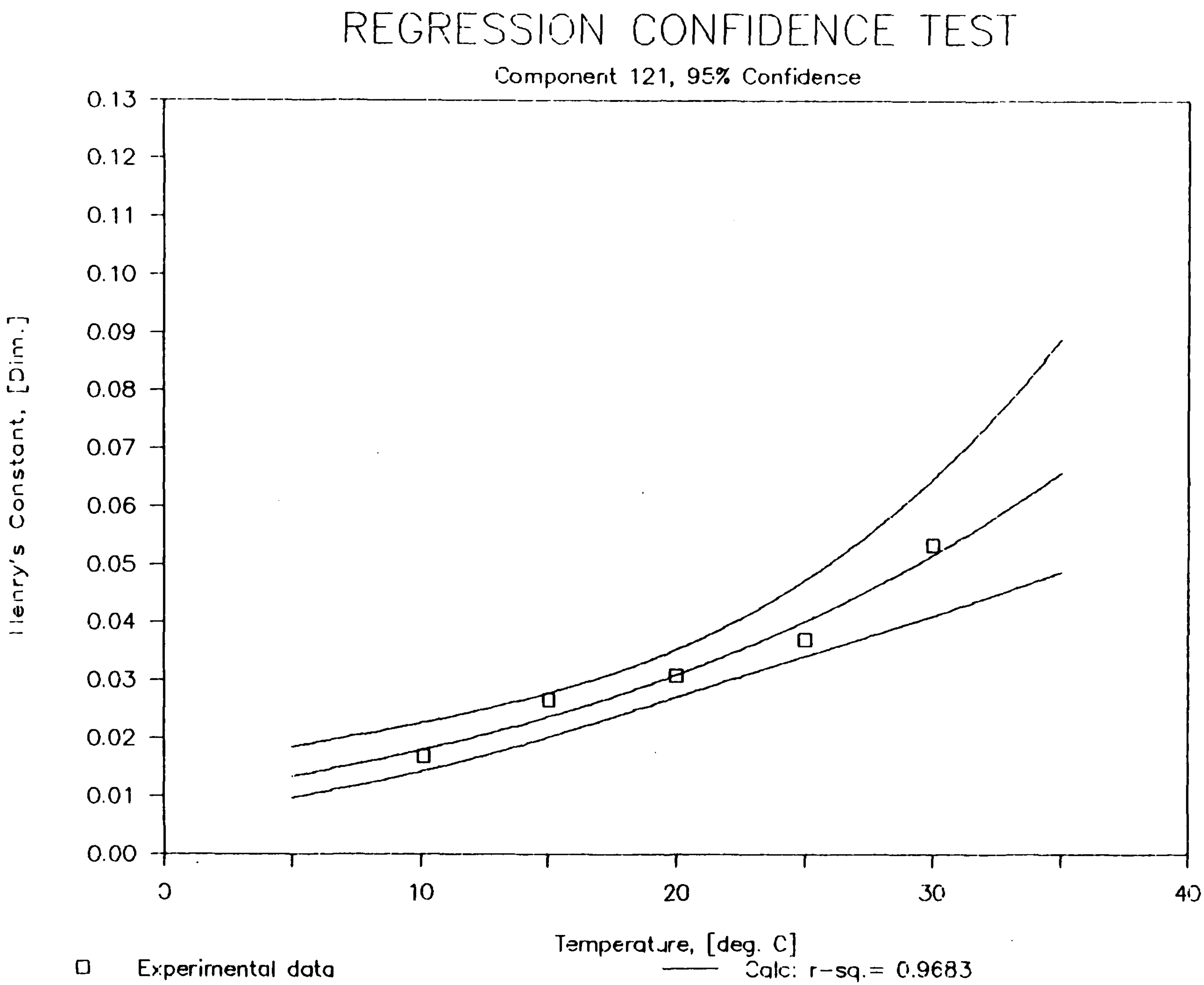


TEMPERATURE REGRESSION PLOT
Component 121
-5.80
-6.00
-6.20
-6.40
-6.60
-6.80
-7.00
-7.20
-7.40
-7.60
-7.80
-8.00
-8.20
-8.40
-8.60
-8.80
-9.00
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9683

95% CONFIDENCE TEST

Component 121




REGRESSION CONFIDENCE TEST
Component 121, 95% Confidence
Henry's Constant, [Dim.]
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9683

06-Nov-86 Results Summary for Component 22

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	2		2		3	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	6		6		6	
Component ID	22		22		22	
Temperature (C)	9.9		15		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.1164	1.0E-25	0.1379	1.0E-25	0.1494	1.0E-25
H, avg:atm-mol/mol	150.1		181.0		199.6	
H, avg: atm-m3/mol	2.70E-03	1	3.26E-03	1	3.60E-03	1
H, avg: kPa-m3/mol	0.2740		0.3304		0.3643	
COV, r [std/mean]	3.86		4.26		0.17	
COV, both replic.	-----		-----		-----	
Observation: (1)	0.1139		0.1452		0.1497	
[atm-m3/m3] (2)	0.1214		0.1379		0.1493	
(3)	0.1115		0.1378		0.1495	
(4)	0.1189		0.1308		0.1491	
Injection: (1)	976550		1158000		1321600	
[Peak Area] (2)	966690		1127300		1320600	
(3)	4052500		4251200		4768600	
(4)	3929000		4368500		4775300	

	Temperature 4		Temperature 5	
RUN Number —)	3		3	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	6		6	
Component ID	22		22	
Temperature (C)	25		29.9	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.1858	1.0E-25	0.2311	1.0E-25
H,avg:atm-mol/mol	252.3		319.0	
H,avg: atm-m3/mol	4.54E-03	1	5.75E-03	1
H,avg: kPa-m3/mol	0.4605		0.5823	
COV, r [std/mean]	4.00		6.32	
COV, both replic.	——		——	
Observation: (1)	0.1923		0.2460	
[atm-m3/m3] (2)	0.1794		0.2410	
(3)	0.1921		0.2210	
(4)	0.1792		0.2164	
Injection: (1)	1689800		2262600	
[Peak Area] (2)	1688500		2115000	
(3)	5288300		6084400	
(4)	5507600		6164000	

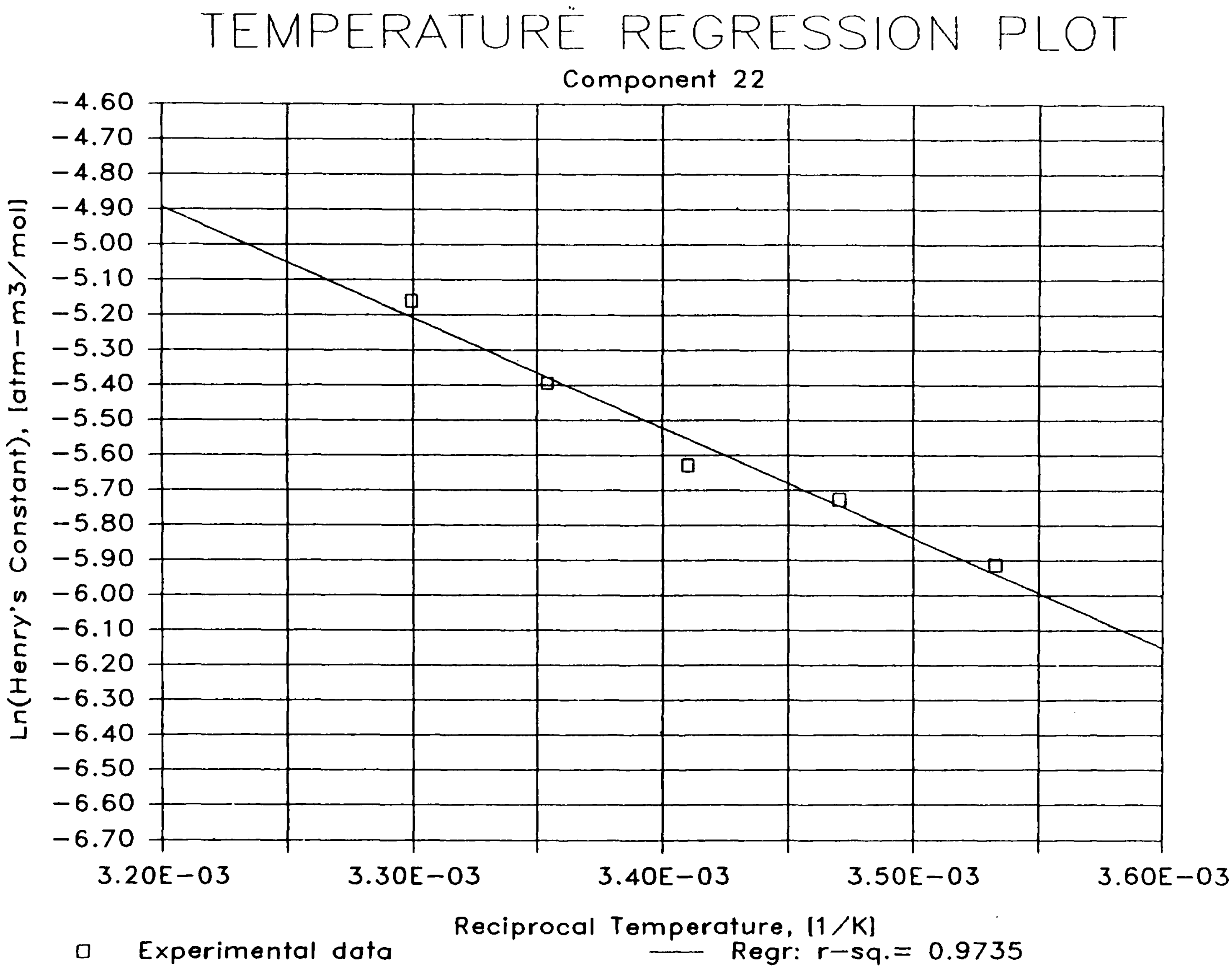
Temperature Regression Parameters:

OF POINTS = 5

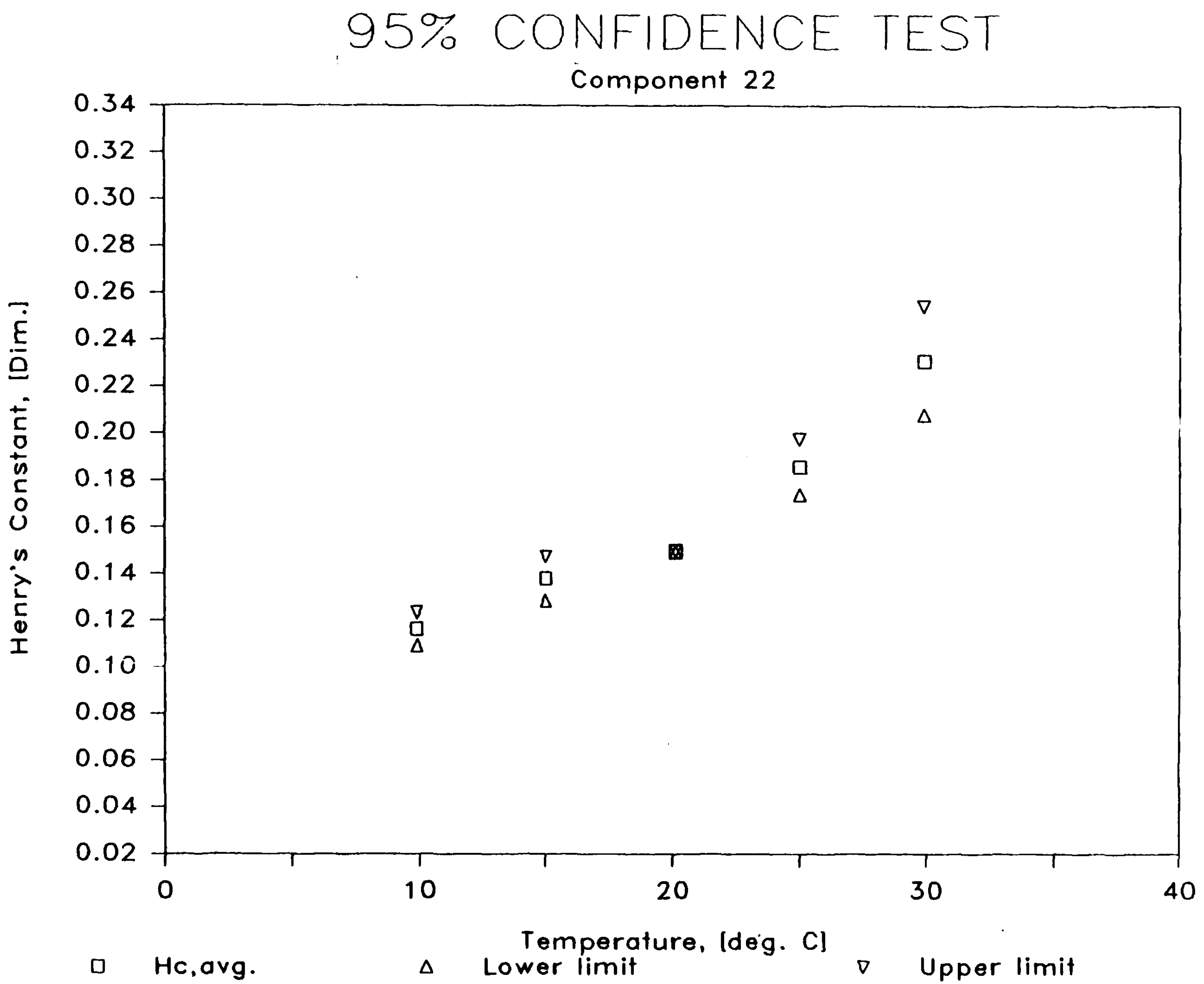
SLOPE = -3.1E+03

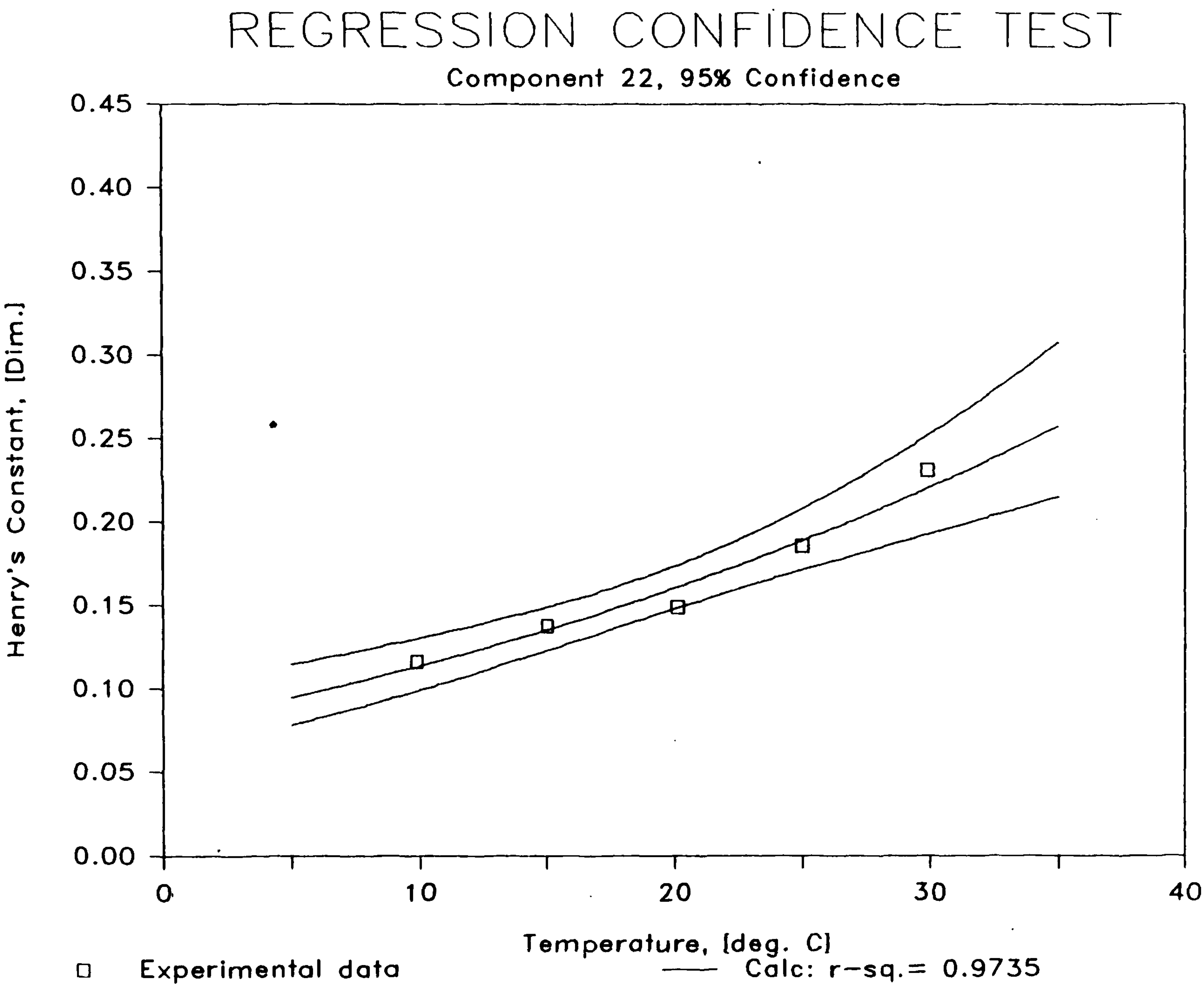
Y-INTERCEPT = 5.2E+00

R-SQUARED = 0.9735



TEMPERATURE REGRESSION PLOT
Component 22
-4.60
-4.70
-4.80
-4.90
-5.00
-5.10
-5.20
-5.30
-5.40
-5.50
-5.60
-5.70
-5.80
-5.90
-6.00
-6.10
-6.20
-6.30
-6.40
-6.50
-6.60
-6.70
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9735


95% CONFIDENCE TEST
Component 22
Henry's Constant, [Dim.]
0.34
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 22, 95% Confidence
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9735

06-Nov-86 Results Summary for Component 23

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	6		6		7	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	6		6		6	
Component ID	23		23		23	
Temperature (C)	9.9		15		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.2547	1.0E-25	0.2980	1.0E-25	0.3559	1.0E-25
H, avg:atm-mol/mol	328.4		391.1		475.4	
H, avg: atm-m3/mol	5.92E-03	1	7.05E-03	1	8.57E-03	1
H, avg: kPa-m3/mol	0.5995		0.7140		0.8679	
COV, r [std/mean]	5.24		0.79		4.48	
COV, both replic.	------		------		------	
Observation: (1)	0.2695		0.2991		0.3755	
[atm-m3/m3] (2)	0.2619		0.3007		0.3585	
(3)	0.2473		0.2953		0.3529	
(4)	0.2402		0.2970		0.3368	
Injection: (1)	2123400		2451600		2964300	
[Peak Area] (2)	2009000		2431100		2839900	
(3)	5383700		5803300		6008200	
(4)	5484600		5781800		6203300	

	Temperature 4		Temperature 5	
RUN Number —)	7		7	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	6		6	
Component ID	23		23	
Temperature (C)	25		29.9	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.3862	1.0E-25	0.4879	1.0E-25
H,avg:atm-mol/mol	524.5		673.4	
H,avg: atm-m3/mol	9.45E-03	1	1.21E-02	1
H,avg: kPa-m3/mol	0.9575		1.2293	
COV, r [std/mean]	1.30		2.82	
COV, both replic.	——		——	
Observation: (1)	0.3921		0.4712	
[atm-m3/m3] (2)	0.3881		0.4861	
(3)	0.3843		0.4894	
(4)	0.3804		0.5048	
Injection: (1)	3506400		4200800	
[Peak Area] (2)	3457500		4324500	
(3)	6895400		7266300	
(4)	6944200		7106100	

Temperature Regression Parameters:

OF POINTS = 5

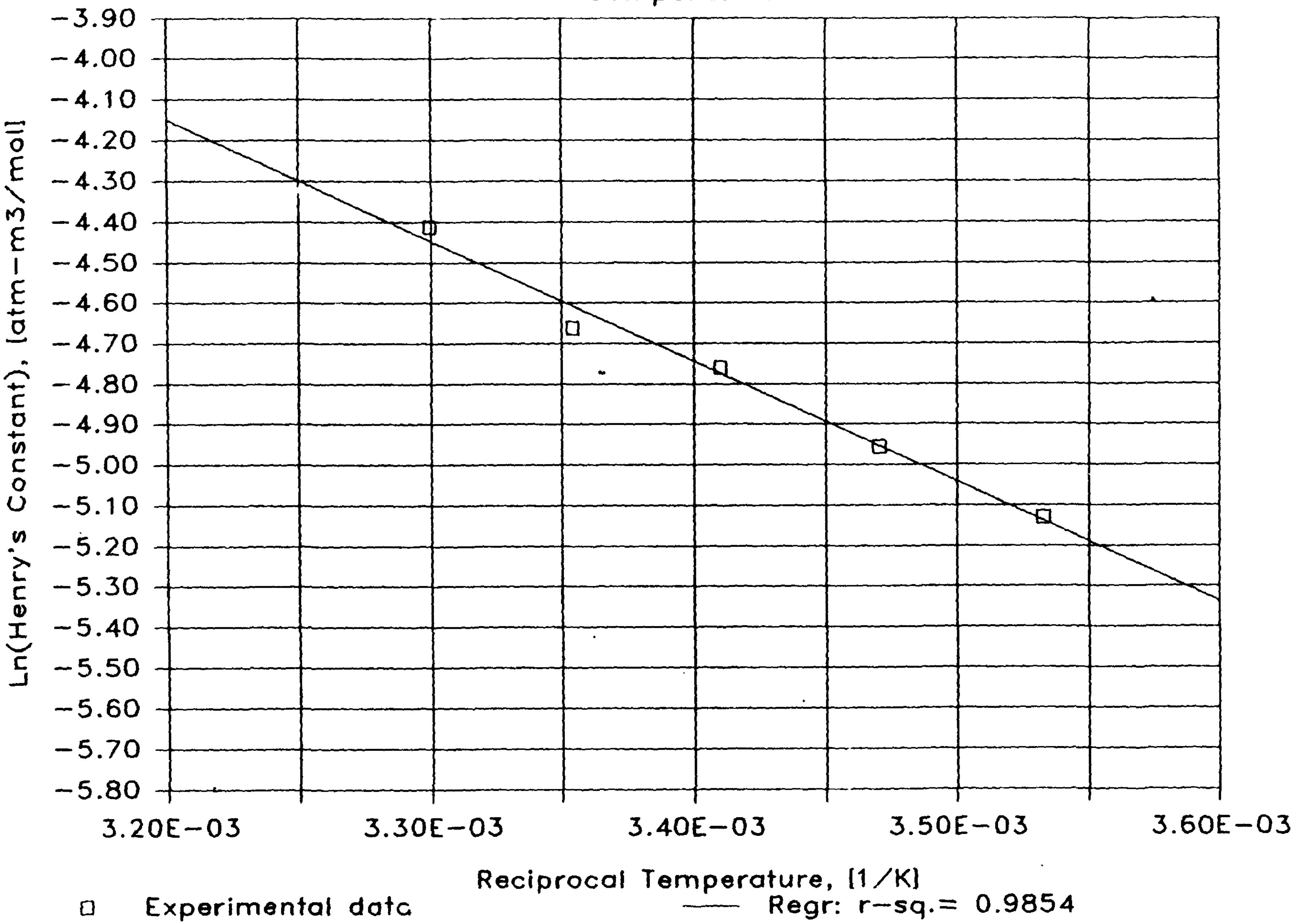
SLOPE = -3.0E+03

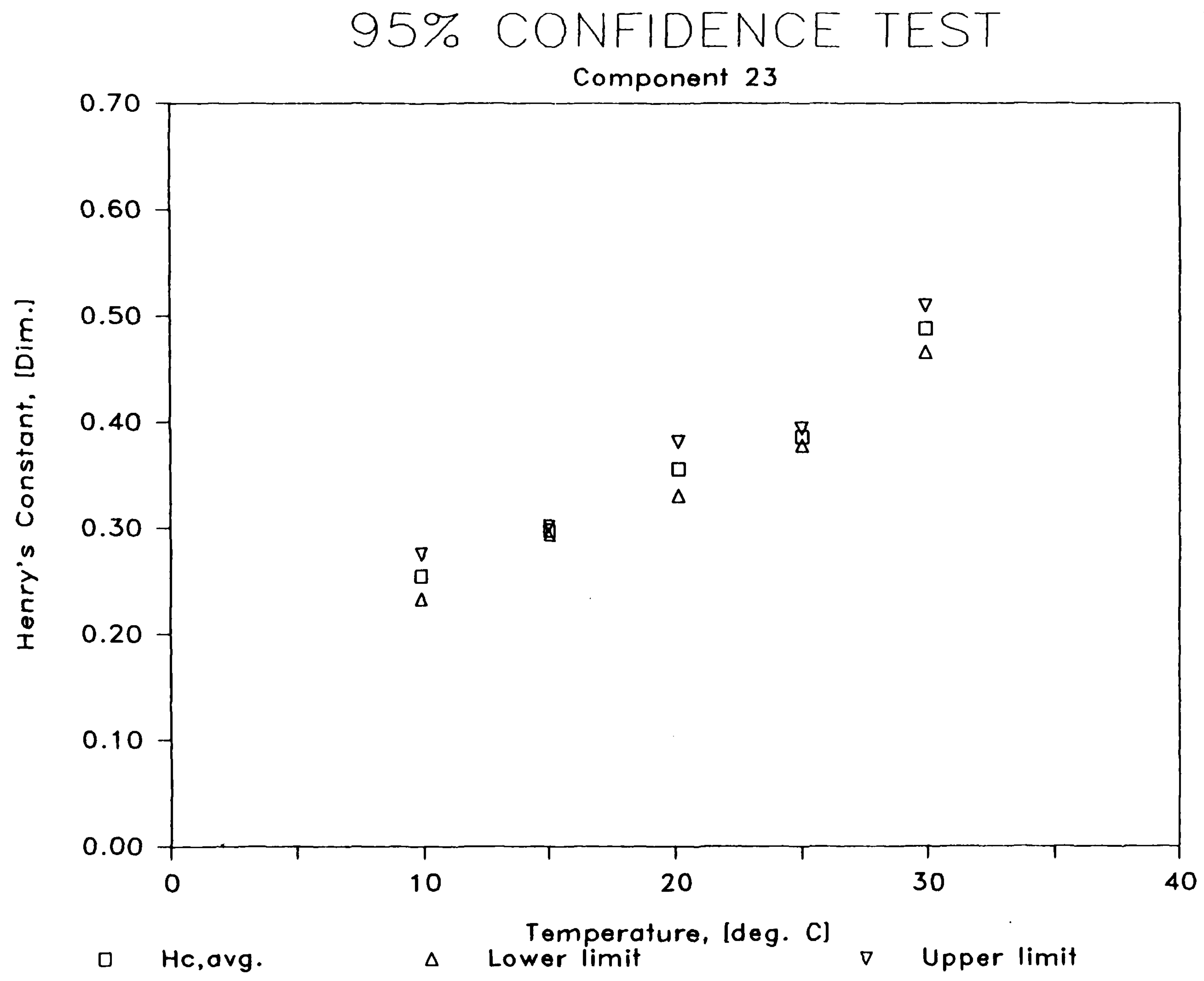
Y-INTERCEPT = 5.3E+00

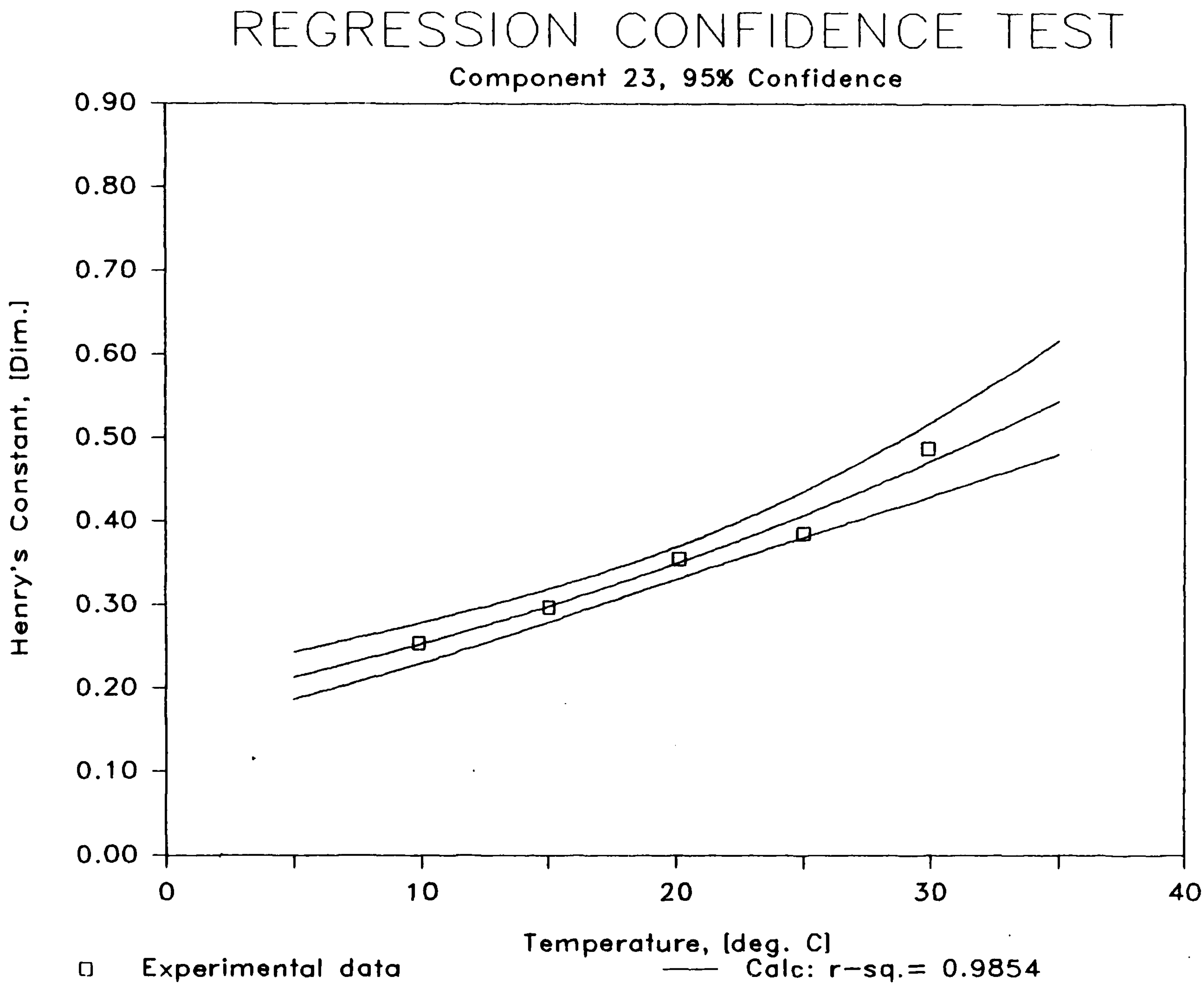
R-SQUARED = 0.9854

TEMPERATURE REGRESSION PLOT

Component 23




95% CONFIDENCE TEST
Component 23
Henry's Constant, [Dim.]
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 23, 95% Confidence
Henry's Constant, [Dim.]
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9854

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	10		10		11	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	6		6		6	
Component ID	24		24		24	
Temperature (C)	9.9		15		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.3644	1.0E-25	0.4702	1.0E-25	0.5840	1.0E-25
H, avg:atm-mol/mol	469.8		617.1		780.0	
H, avg: atm-m3/mol	8.46E-03	1	1.11E-02	1	1.41E-02	1
H, avg: kPa-m3/mol	0.8576		1.1266		1.4239	
COV, r [std/mean]	4.19		4.99		1.52	
COV, both replic.	-----		-----		-----	
Observation: (1)	0.3713		0.4922		0.5829	
[atm-m3/m3] (2)	0.3819		0.4887		0.5949	
(3)	0.3472		0.4516		0.5732	
(4)	0.3573		0.4483		0.5849	
Injection: (1)	582480		973110		1192400	
[Peak Area] (2)	556140		914900		1177900	
(3)	1189800		1628300		1765700	
(4)	1166700		1636700		1739800	

	Temperature 4		Temperature 5	
RUN Number —)	11		11	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	6		6	
Component ID	24		24	
Temperature (C)	25		29.9	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.6970	1.0E-25	0.9839	1.0E-25
H, avg:atm-mol/mol	946.5		1358.1	
H, avg: atm-m3/mol	1.71E-02	1	2.45E-02	1
H, avg: kPa-m3/mol	1.7278		2.4793	
COV, r [std/mean]	1.65		4.04	
COV, both replic.	———		———	
Observation: (1)	0.6973		1.0259	
[atm-m3/m3] (2)	0.7112		0.9584	
(3)	0.6829		1.0088	
(4)	0.6965		0.9425	
Injection: (1)	1107000		1129300	
[Peak Area] (2)	1090300		1115700	
(3)	1438600		1108700	
(4)	1418100		1164400	

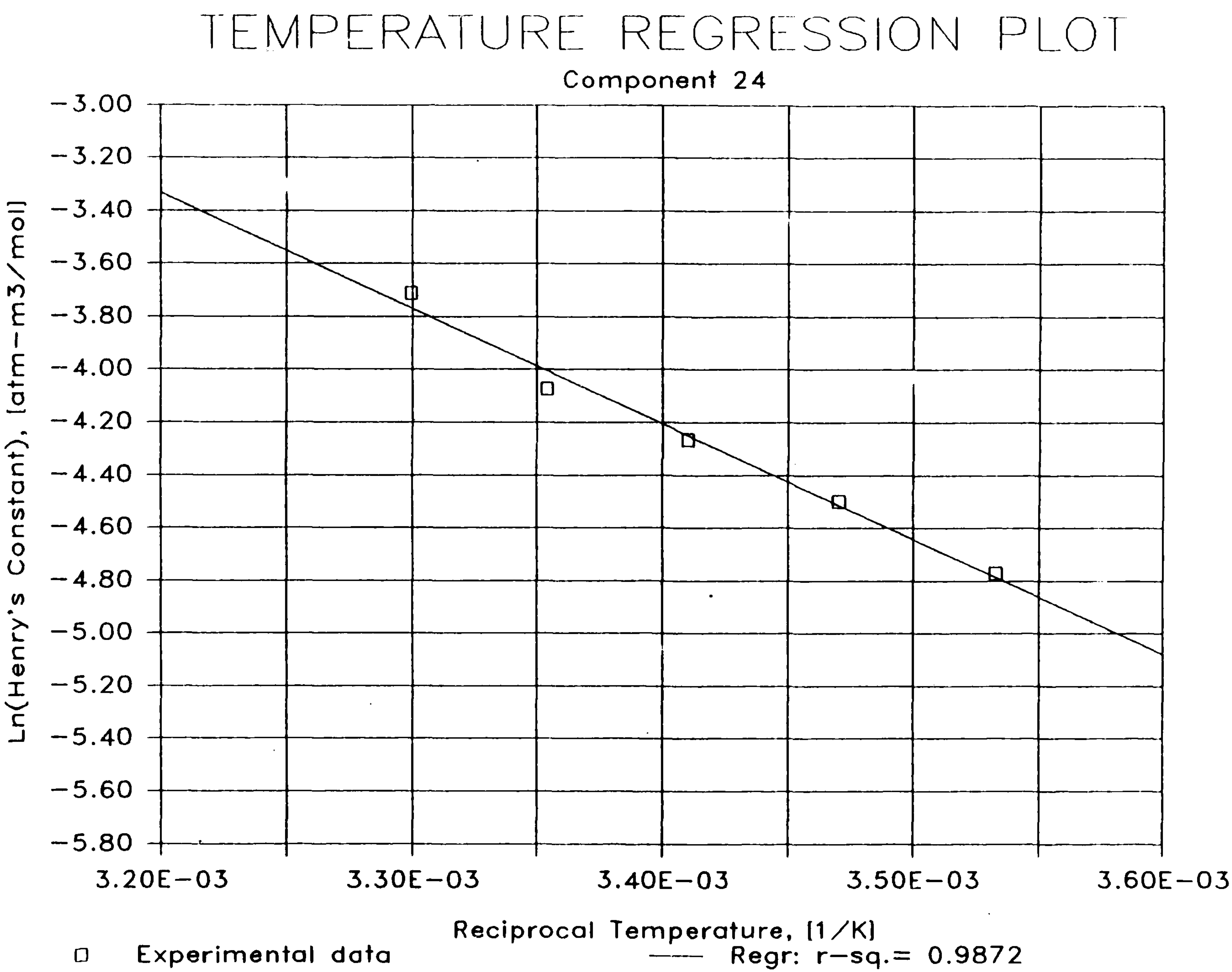
Temperature Regression Parameters:

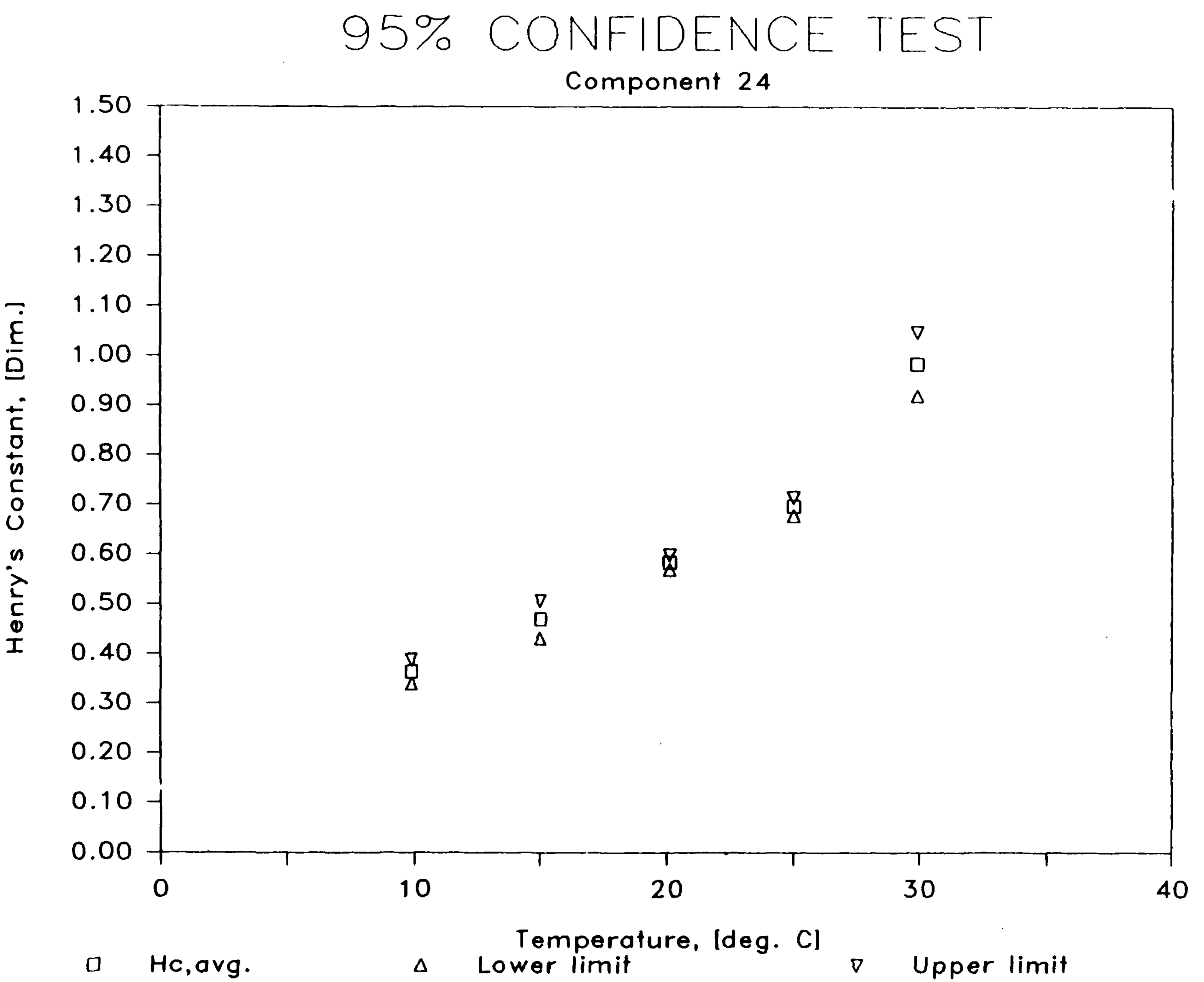
\# OF POINTS = 5

SLOPE = -4.4E+03

Y-INTERCEPT = 1.1E+01

R-SQUARED = 0.9872

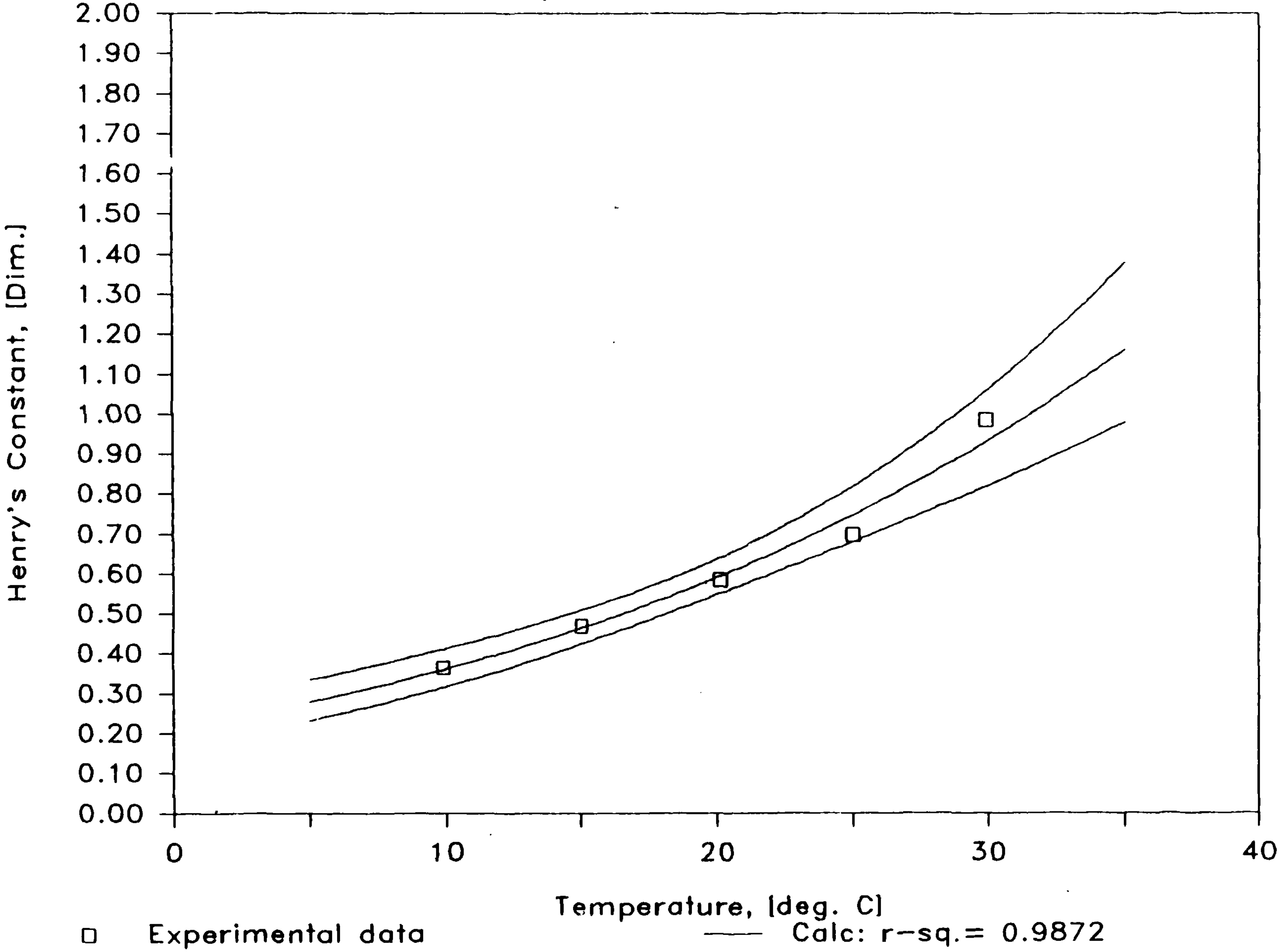

TEMPERATURE REGRESSION PLOT
Component 24
-3.00
-3.20
-3.40
-3.60
-3.80
-4.00
-4.20
-4.40
-4.60
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9872



95% CONFIDENCE TEST
Component 24
Henry's Constant, [Dim.]
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

REGRESSION CONFIDENCE TEST

Component 24, 95% Confidence

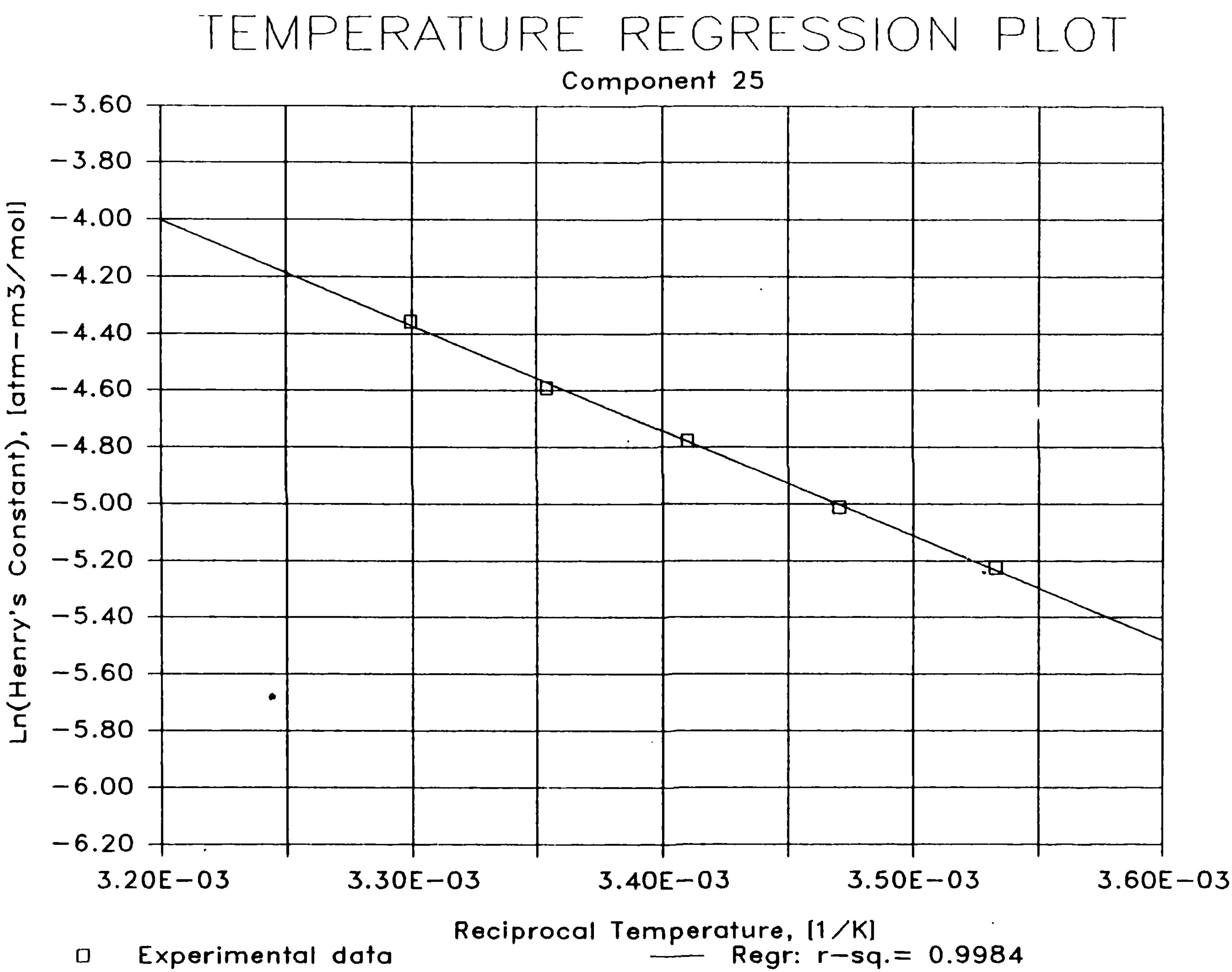


	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	14		14		15	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	6		6		6	
Component ID	25		25		25	
Temperature (C)	9.9		15		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.2317	1.0E-25	0.2823	1.0E-25	0.3498	1.0E-25
H,avg:atm-mol/mol	298.7		370.5		467.2	
H,avg: atm-m3/mol	5.38E-03	1	6.68E-03	1	8.42E-03	1
H,avg: kPa-m3/mol	0.5452		0.6763		0.8530	
COV, r [std/mean]	3.85		4.41		3.72	
COV, both replic.	------		------		------	
Observation: (1)	0.2290		0.2796		0.3579	
[atm-m3/m3] (2)	0.2424		0.2975		0.3636	
(3)	0.2211		0.2674		0.3362	
(4)	0.2342		0.2847		0.3416	
Injection: (1)	210770		296900		375060	
[Peak Area] (2)	206250		288350		359280	
(3)	593030		734820		785850	
(4)	572190		705270		777310	

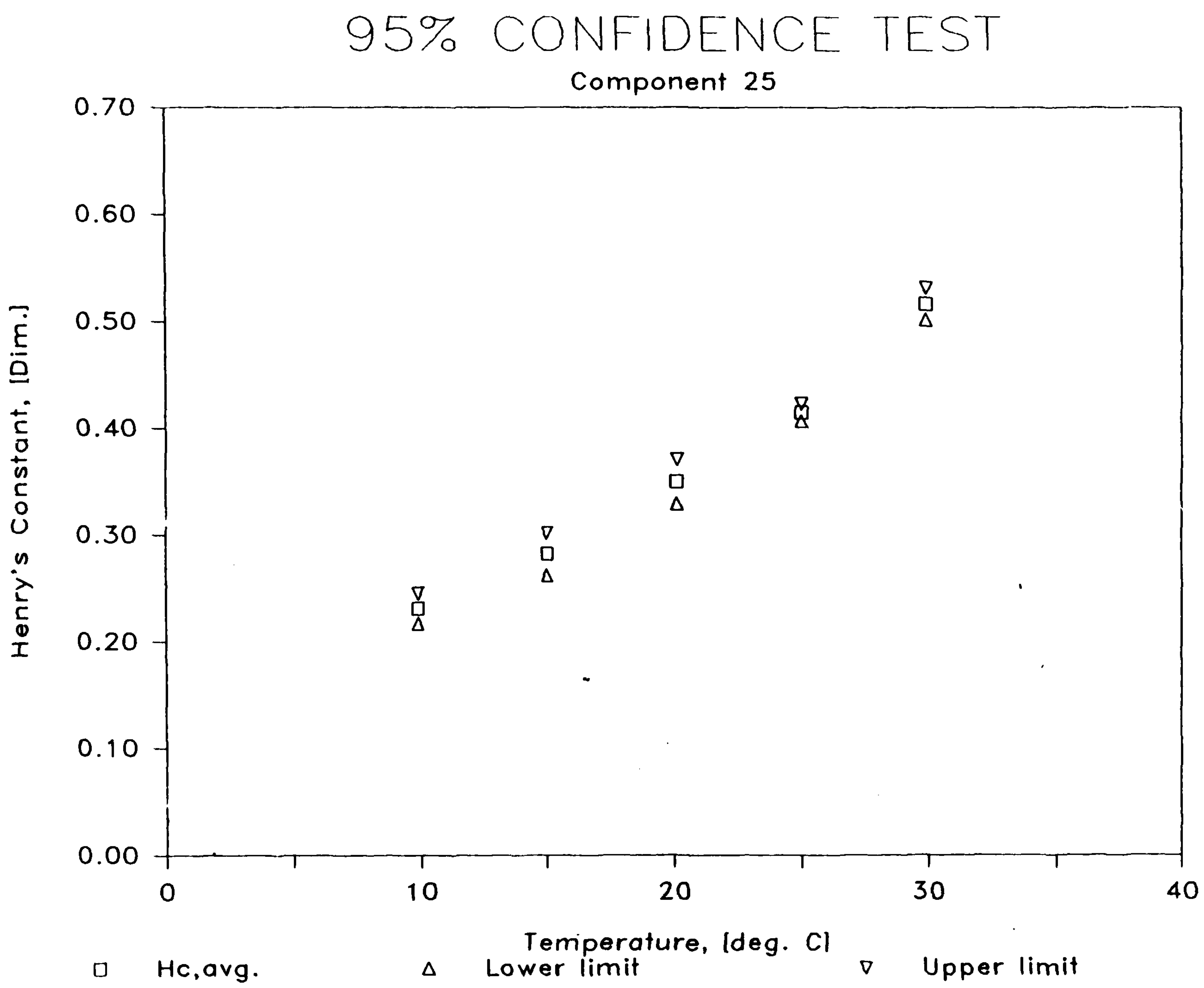
	Temperature 4		Temperature 5	
RUN Number --->	15		15	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	6		6	
Component ID	25		25	
Temperature (C)	25		29.9	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.4149	1.0E-25	0.5164	1.0E-25
H,avg:atm-mol/mol	563.5		712.8	
H,avg: atm-m3/mol	1.02E-02	1	1.28E-02	1
H,avg: kPa-m3/mol	1.0286		1.3011	
COV, r [std/mean]	1.25		1.04	
COV, both replic.	----		----	
Observation: (1)	0.4182		0.5278	
[atm-m3/m3] (2)	0.4203		0.5184	
(3)	0.4095		0.5142	
(4)	0.4116		0.5050	
Injection: (1)	398990		463500	
[Peak Area] (2)	393110		454010	
(3)	749820		737510	
(4)	747130		747140	

Temperature Regression Parameters:

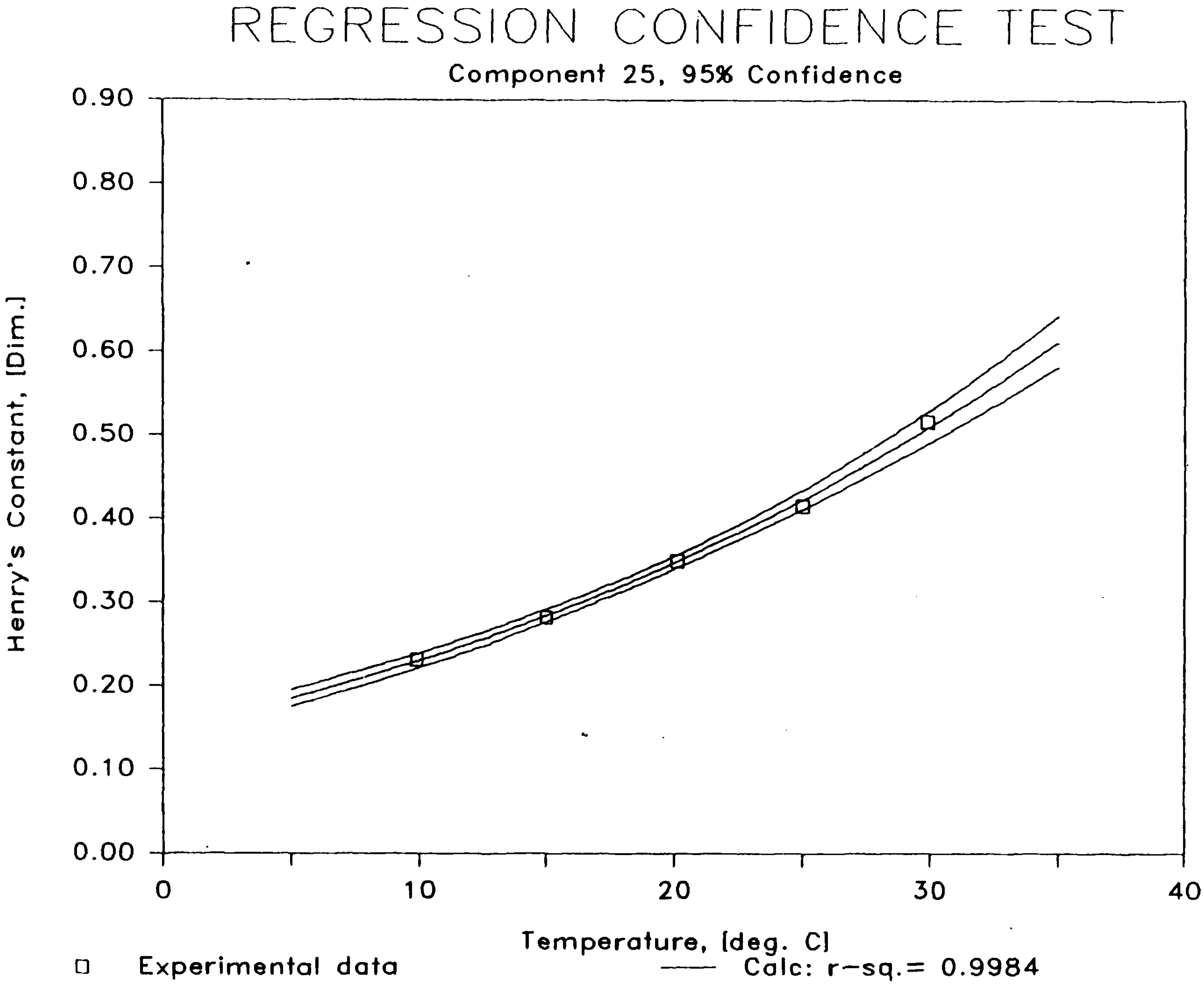
# OF POINTS	=	5
SLOPE	=	-3.7E+03
Y-INTERCEPT	=	7.8E+00
R-SQUARED	=	0.9984



TEMPERATURE REGRESSION PLOT
Component 25
Ln(Henry's Constant), [atm-m3/mol]
-3.60
-3.80
-4.00
-4.20
-4.40
-4.60
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9984



95% CONFIDENCE TEST
Component 25
Henry's Constant, [Dim.]
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 25, 95% Confidence
Henry's Constant, [Dim.]
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9984

Results Summary for Component 26

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	8		1		2	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	7		7		7	
Component ID	26		26		26	
Temperature (C)	10		14.9		20.2	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.1105	1.0E-25	0.0125	1.0E-25	0.0258	1.0E-25
H,avg:atm-mol/mol	142.5		16.3		34.5	
H,avg: atm-m3/mol	2.57E-03	1	2.94E-04	1	6.21E-04	1
H,avg: kPa-m3/mol	0.2601		0.0298		0.0629	
COV, r [std/mean]	38.57		74.63		12.93	
COV, both replic.	——		——		——	
Observation: (1)	0.1514		0.0095		0.0298	
[atm-m3/m3] (2)	0.1430		0.0237		0.0266	
(3)	0.0769		0.0016		0.0249	
(4)	0.0707		0.0150		0.0218	
Injection: (1)	60315		41886		53285	
[Peak Area] (2)	45313		39680		51772	
(3)	205820		274600		307810	
(4)	211730		250920		313720	

	Temperature 4		Temperature 5	
RUN Number —)	9		1	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	7		7	
Component ID	26		26	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.0494	1.0E-25	0.0327	1.0E-25
H, avg:atm-mol/mol	67.1		45.2	
H, avg: atm-m3/mol	1.21E-03	1	8.14E-04	1
H, avg: kPa-m3/mol	0.1225		0.0825	
COV, r [std/mean]	29.07		6.50	
COV, both replic.	——		——	
Observation: (1)	0.0639		0.0352	
[atm-m3/m3] (2)	0.0595		0.0336	
(3)	0.0391		0.0319	
(4)	0.0352		0.0303	
Injection: (1)	91700		98912	
[Peak Area] (2)	80707		97049	
(3)	442400		554030	
(4)	451930		559110	

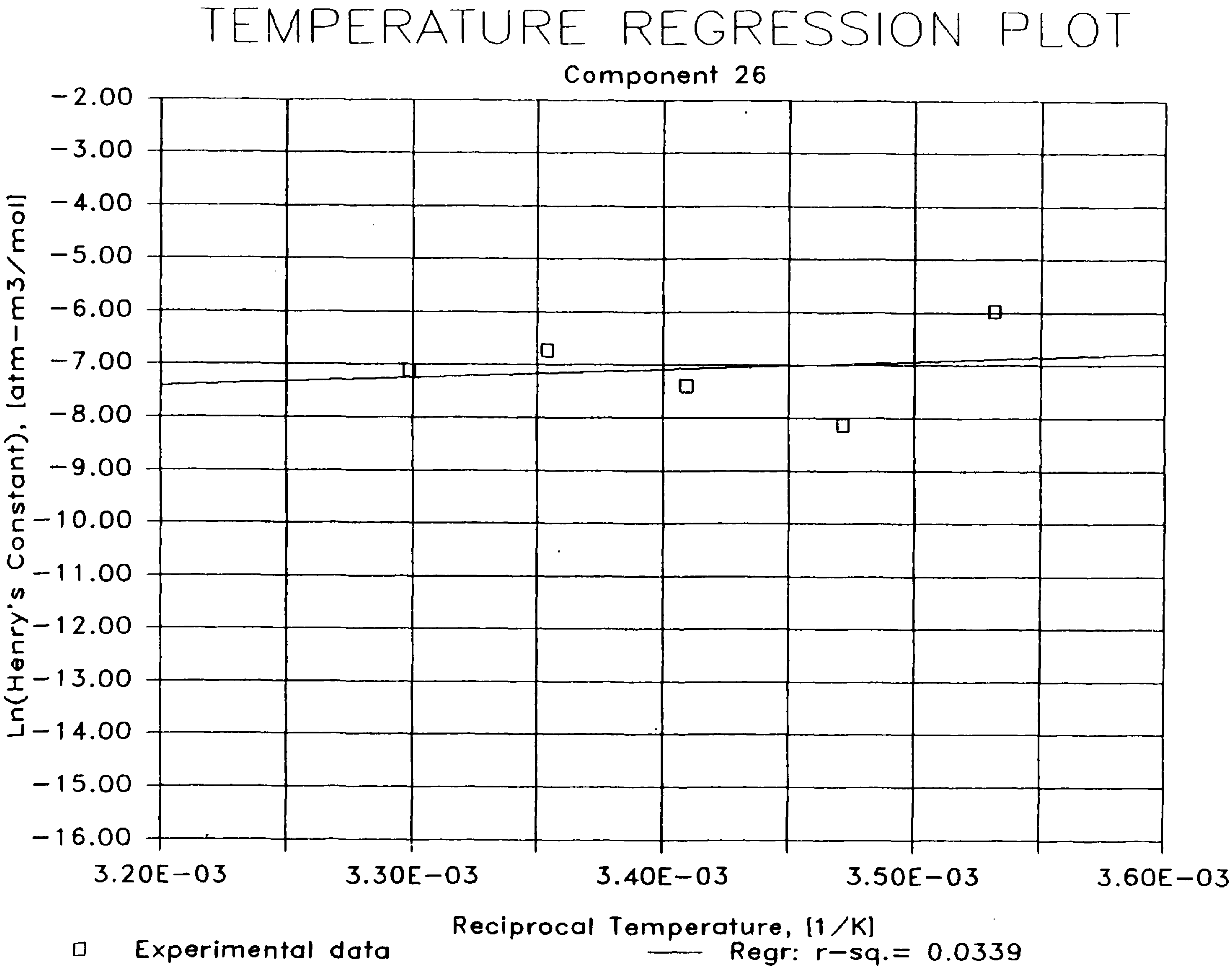
Temperature Regression Parameters:

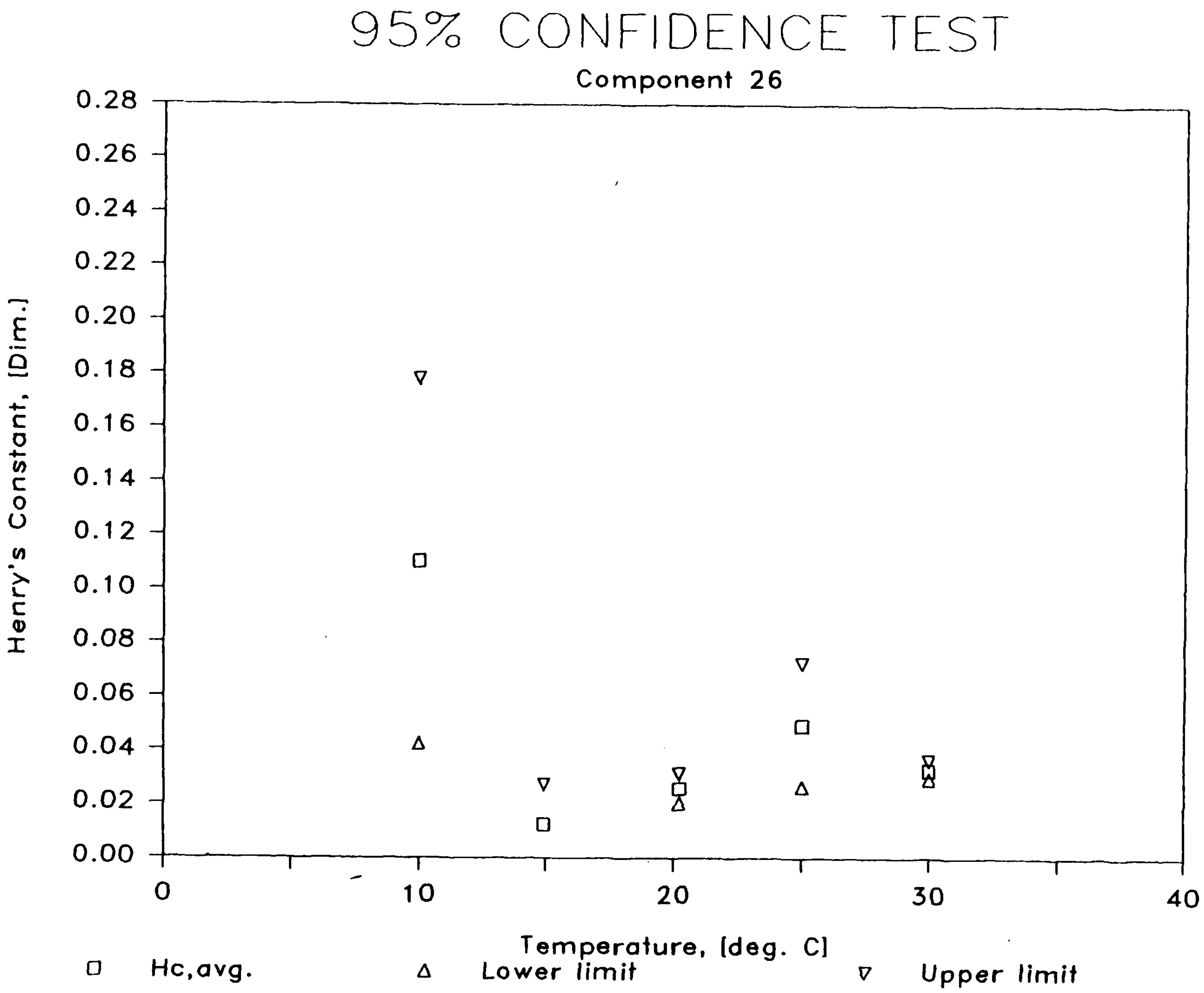
OF POINTS = 5

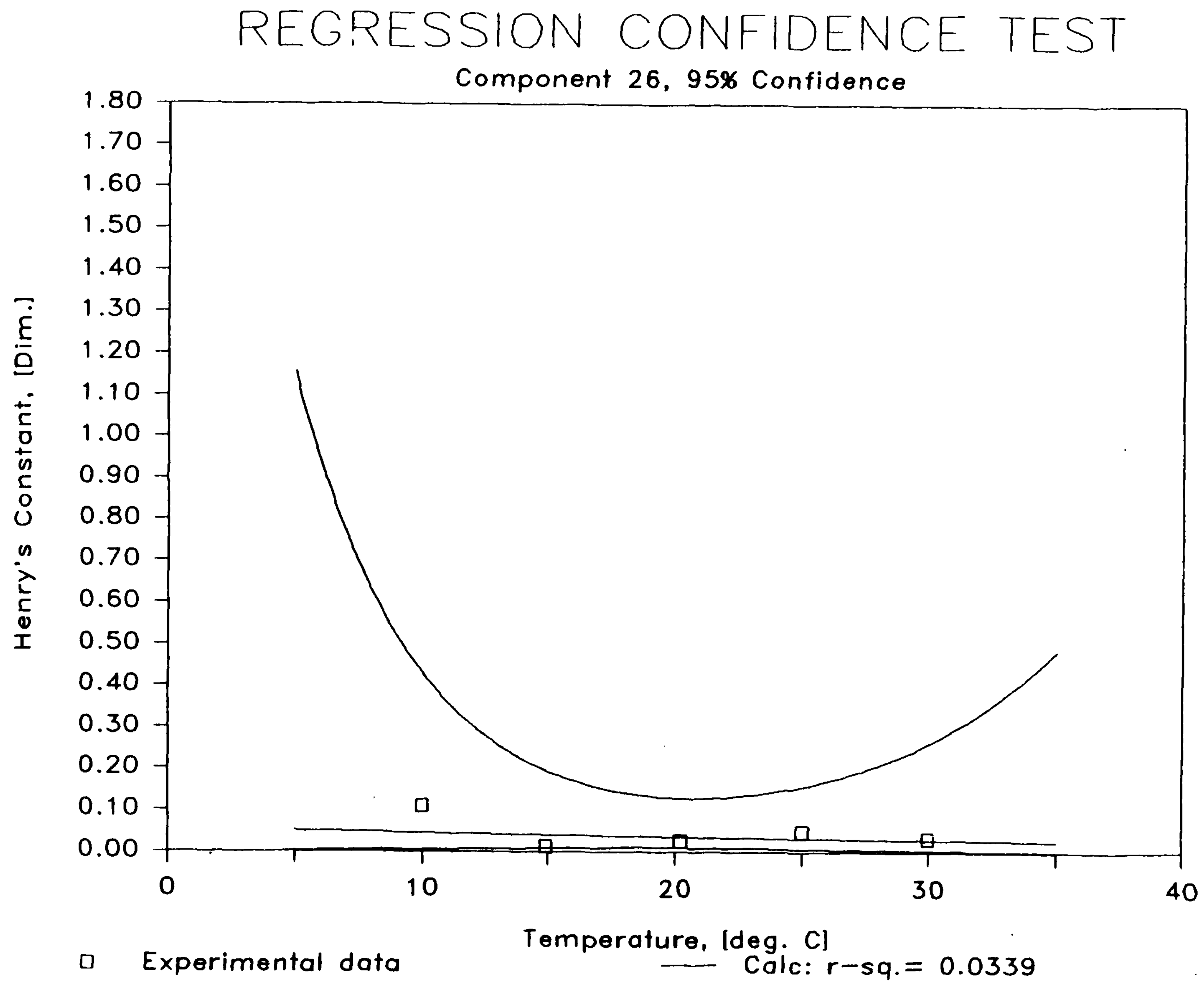
SLOPE = 1.6E+03

Y-INTERCEPT = -1.3E+01

R-SQUARED = 0.0339


TEMPERATURE REGRESSION PLOT
Component 26
Ln(Henry's Constant), [atm-m3/mol]
-2.00
-3.00
-4.00
-5.00
-6.00
-7.00
-8.00
-9.00
-10.00
-11.00
-12.00
-13.00
-14.00
-15.00
-16.00
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.0339


95% CONFIDENCE TEST
Component 26
Henry's Constant, [Dim.]
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 26, 95% Confidence
Henry's Constant, [Dim.]
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.0339

06-Nov-86 Results Summary for Component 27

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	12		5		6	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	7		7		7	
Component ID	27		27		27	
Temperature (C)	10		14.9		20.2	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.1399	1.0E-25	0.0724	1.0E-25	0.0800	1.0E-25
H,avg:atm-mol/mol	180.5		95.0		106.9	
H,avg: atm-m3/mol	3.25E-03	1	1.71E-03	1	1.93E-03	1
H,avg: kPa-m3/mol	0.3294		0.1734		0.1952	
COV, r [std/mean]	35.68		9.98		10.94	
COV, both replic.	----		----		----	
Observation: (1)	0.1736		0.0798		0.0868	
[atm-m3/m3] (2)	0.1914		0.0772		0.0883	
(3)	0.0910		0.0675		0.0718	
(4)	0.1038		0.0650		0.0732	
Injection: (1)	294410		250060		312060	
[Peak Area] (2)	219290		237090		291860	
(3)	936760		1124600		1356900	
(4)	888750		1137600		1348100	

	Temperature 4		Temperature 5	
RUN Number ---)	13		5	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	7		7	
Component ID	27		27	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0688	1.0E-25	0.1072	1.0E-25
H,avg:atm-mol/mol	93.5		148.0	
H,avg: atm-m3/mol	1.68E-03	1	2.67E-03	1
H,avg: kPa-m3/mol	0.1706		0.2702	
COV, r [std/mean]	5.80		10.34	
COV, both replic.	------		------	
Observation: (1)	0.0713		0.1150	
[atm-m3/m3] (2)	0.0730		0.1183	
(3)	0.0646		0.0962	
(4)	0.0663		0.0993	
Injection: (1)	388130		591170	
[Peak Area] (2)	376150		548890	
(3)	1808500		2294500	
(4)	1793800		2265500	

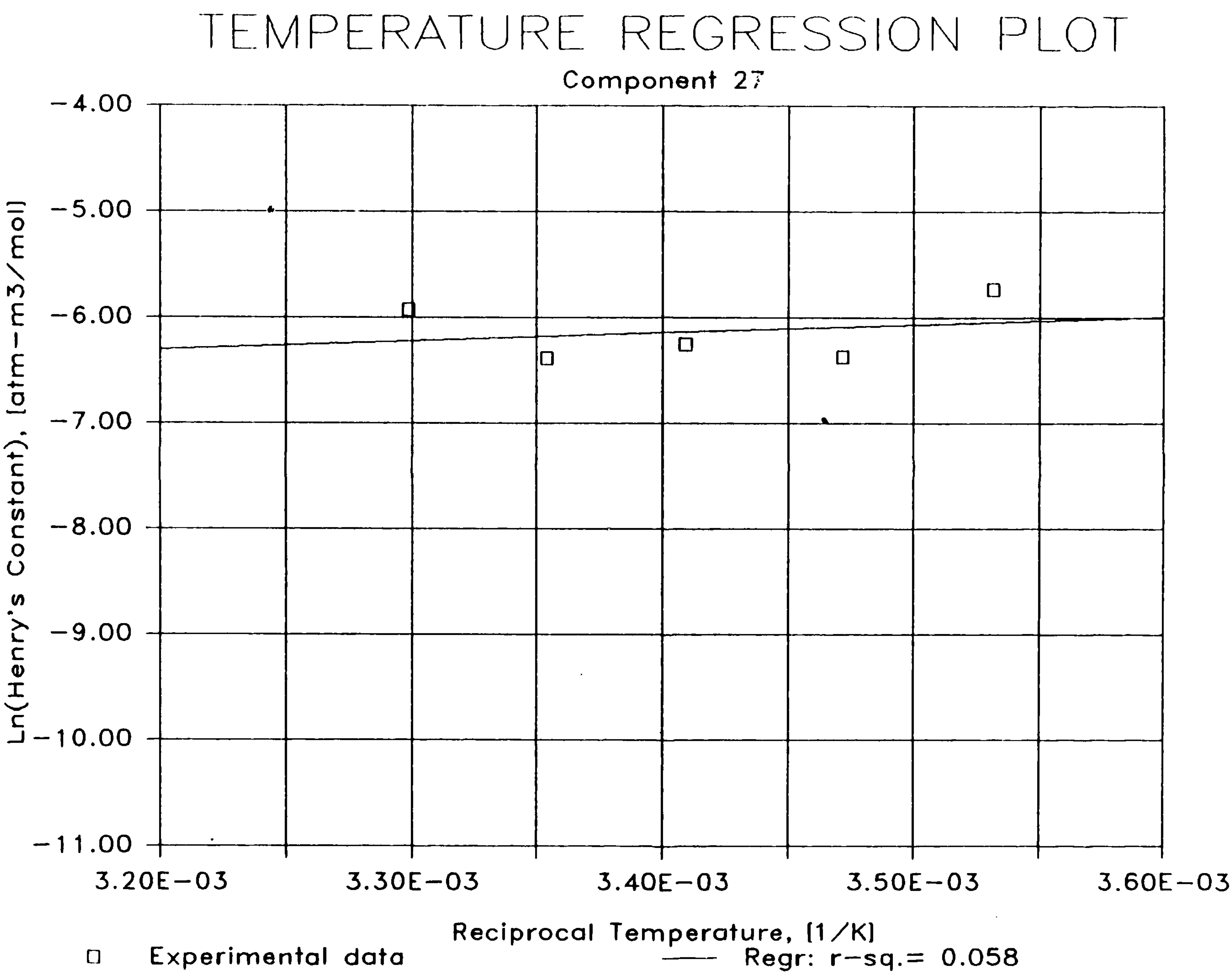
Temperature Regression Parameters:

OF POINTS = 5

SLOPE = 7.6E+02

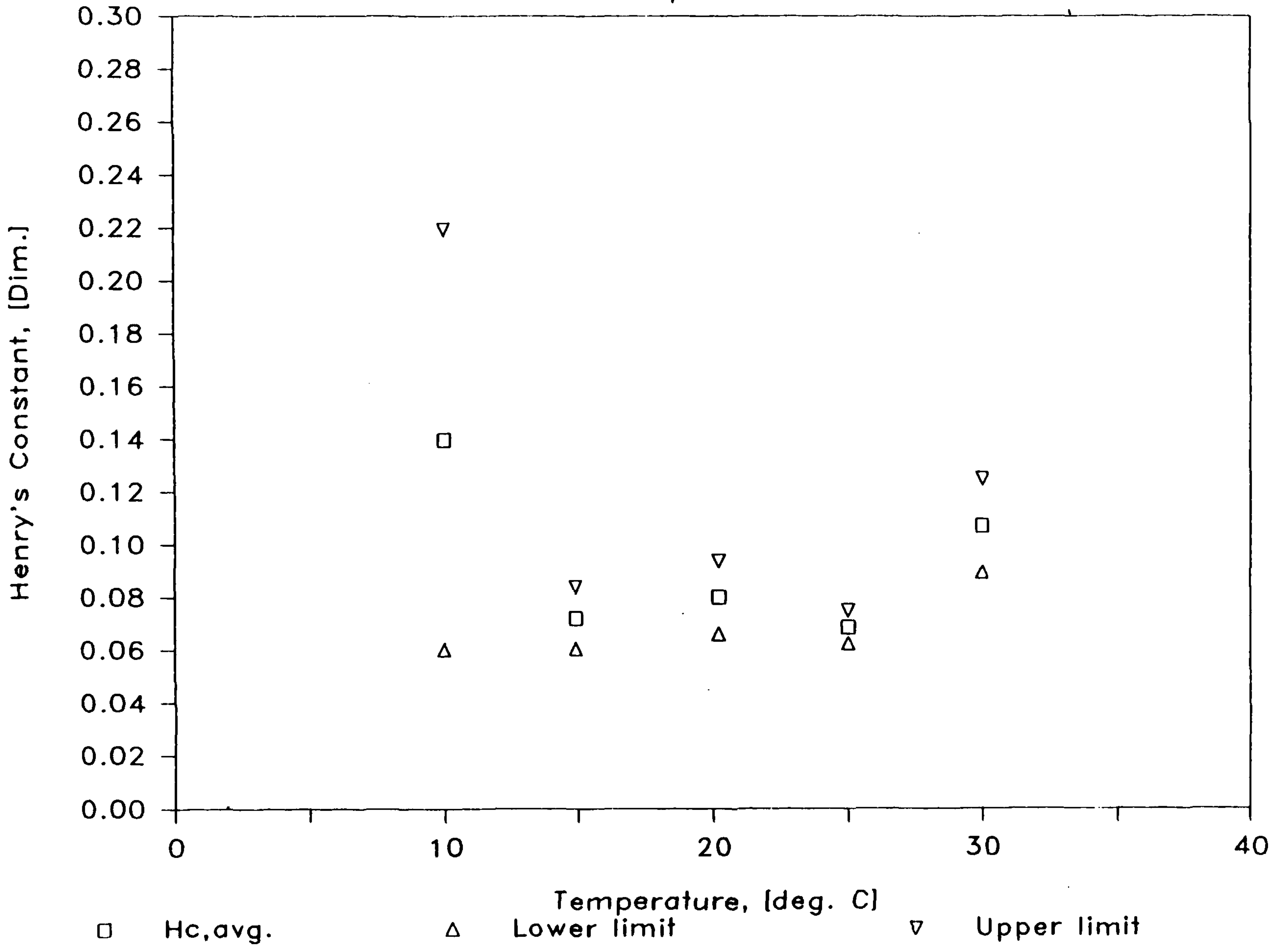
Y-INTERCEPT = -8.7E+00

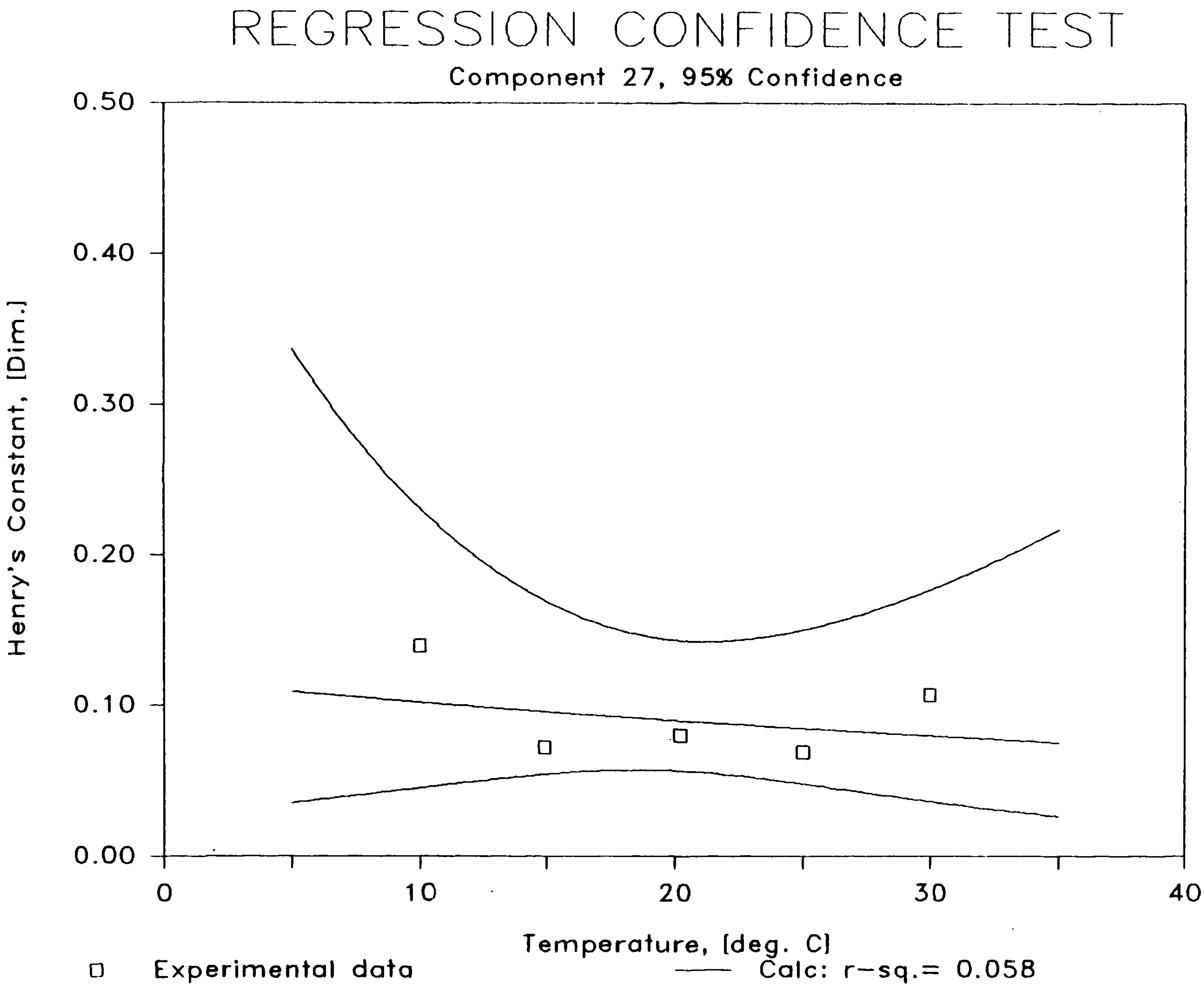
R-SQUARED = 0.0580


TEMPERATURE REGRESSION PLOT
Component 27
-4.00
-5.00
-6.00
-7.00
-8.00
-9.00
-10.00
-11.00
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.058

95% CONFIDENCE TEST

Component 27




REGRESSION CONFIDENCE TEST
Component 27, 95% Confidence
0.50
0.40
0.30
0.20
0.10
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.058

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	6		6		7	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	1		1		1	
Component ID	127		127		127	
Temperature (C)	10.1		15		20	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0321	1.0E-25	0.0445	1.0E-25	0.0563	1.0E-25
H, avg:atm-mol/mol	41.5		58.4		75.2	
H, avg: atm-m3/mol	7.47E-04	1	1.05E-03	1	1.35E-03	1
H, avg: kPa-m3/mol	0.0757		0.1066		0.1373	
COV, r [std/mean]	38.85		30.24		17.79	
COV, both replic.	------		------		------	
Observation: (1)	0.0343		0.0568		0.0656	
[atm-m3/m3] (2)	0.0476		0.0555		0.0643	
(3)	0.0174		0.0334		0.0482	
(4)	0.0293		0.0323		0.0471	
Injection: (1)	385740		338690		411480	
[Peak Area] (2)	348690		299060		377340	
(3)	2171800		1692200		1969100	
(4)	2020000		1703100		1981100	

	Temperature 4		Temperature 5	
RUN Number ---)	7		7	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	1		1	
Component ID	127		127	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0763	1.0E-25	0.1078	1.0E-25
H,avg:atm-mol/mol	103.6		148.8	
H,avg: atm-m3/mol	1.87E-03	1	2.68E-03	1
H,avg: kPa-m3/mol	0.1891		0.2717	
COV, r [std/mean]	10.03		3.26	
COV, both replic.	-------		-------	
Observation: (1)	0.0817		0.1073	
[atm-m3/m3] (2)	0.0839		0.1035	
(3)	0.0687		0.1121	
(4)	0.0708		0.1082	
Injection: (1)	547240		989510	
[Peak Area] (2)	515850		1007900	
(3)	2432400		3954900	
(4)	2409100		4014900	

ANALYSIS COMPLETED ...

Temperature Regression Parameters:

OF POINTS = 5

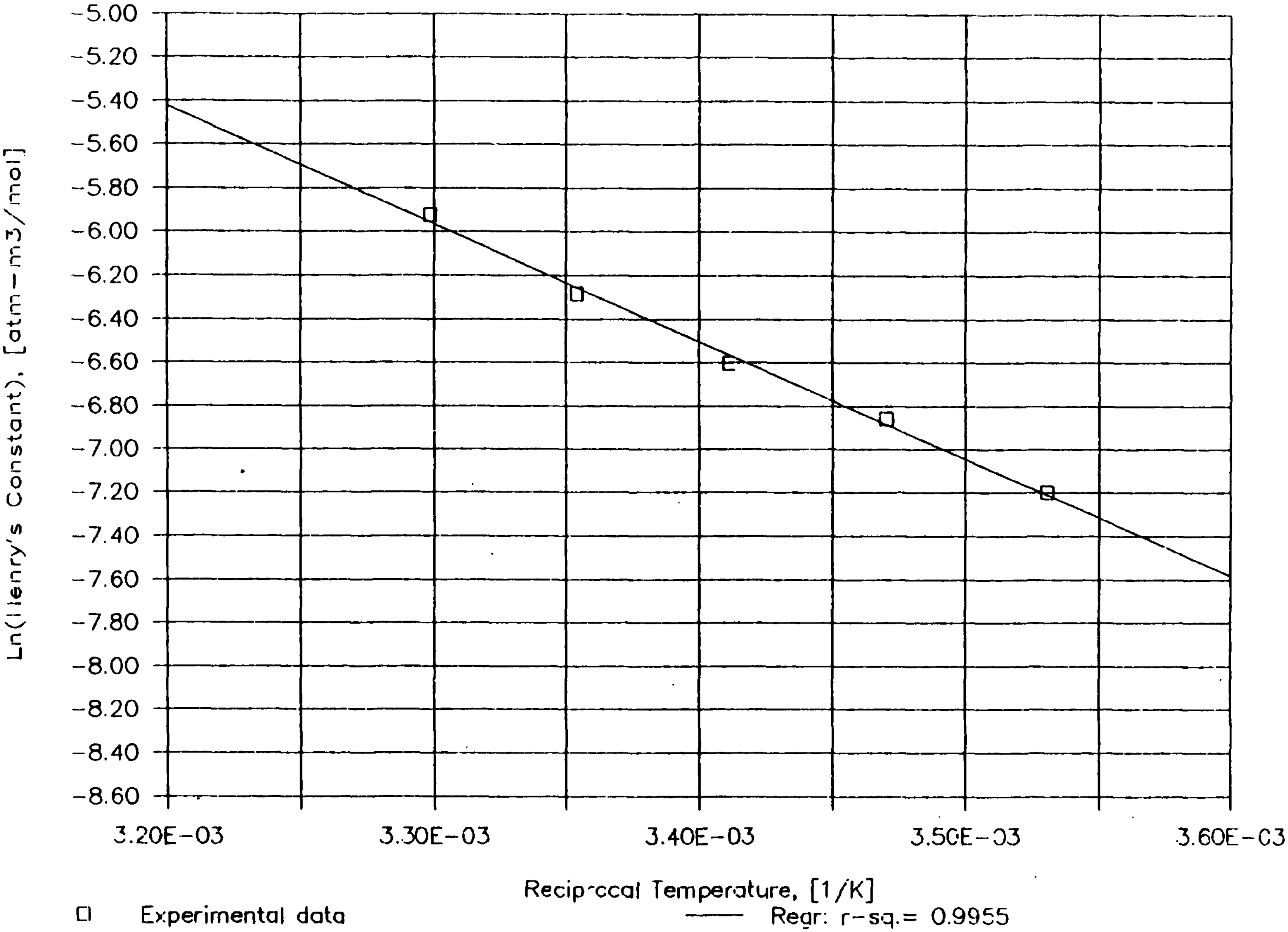
SLOPE = -5.4E+03

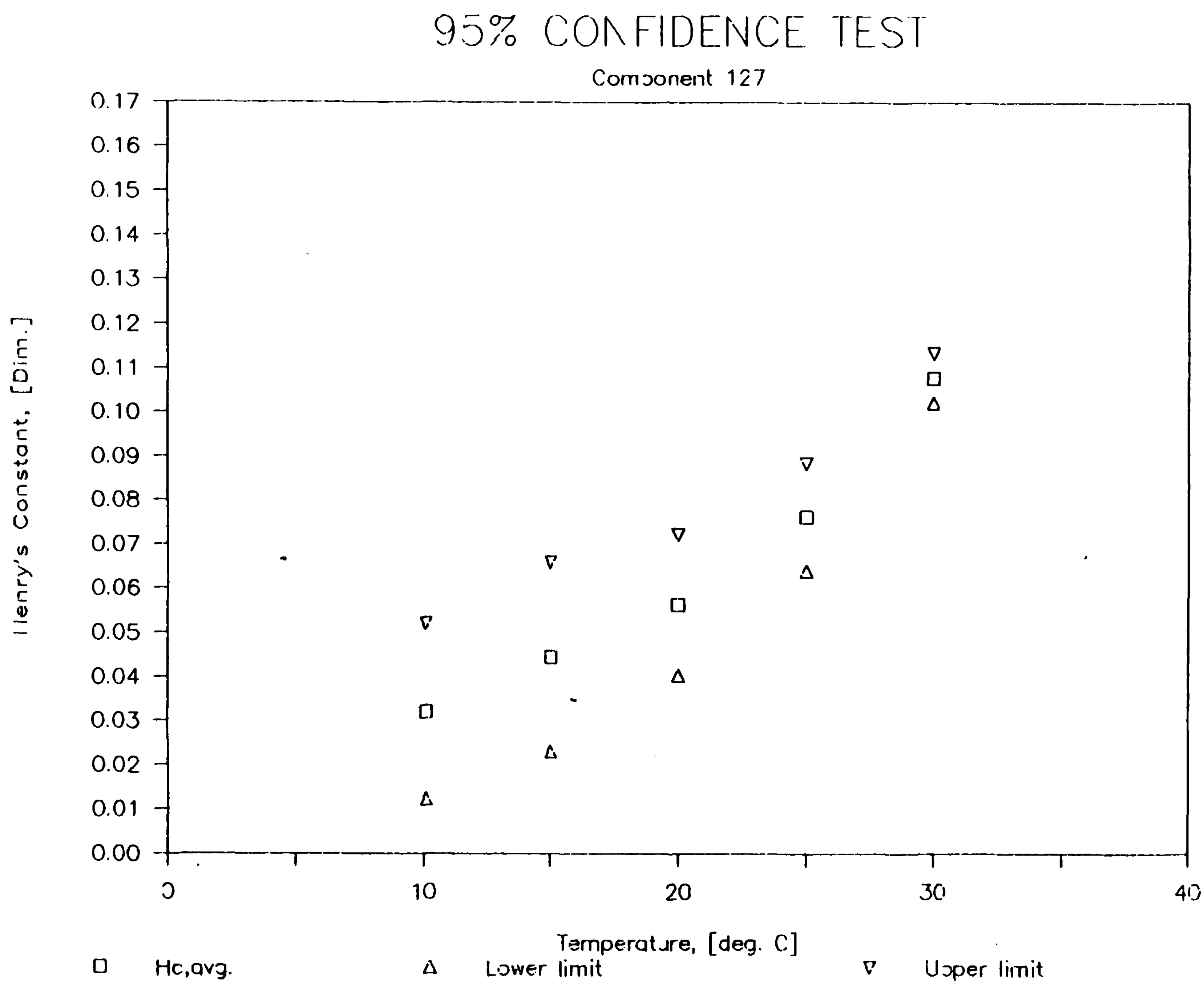
Y-INTERCEPT = 1.2E+01

R-SQUARED = 0.9955

TEMPERATURE REGRESSION PLOT

Component 127

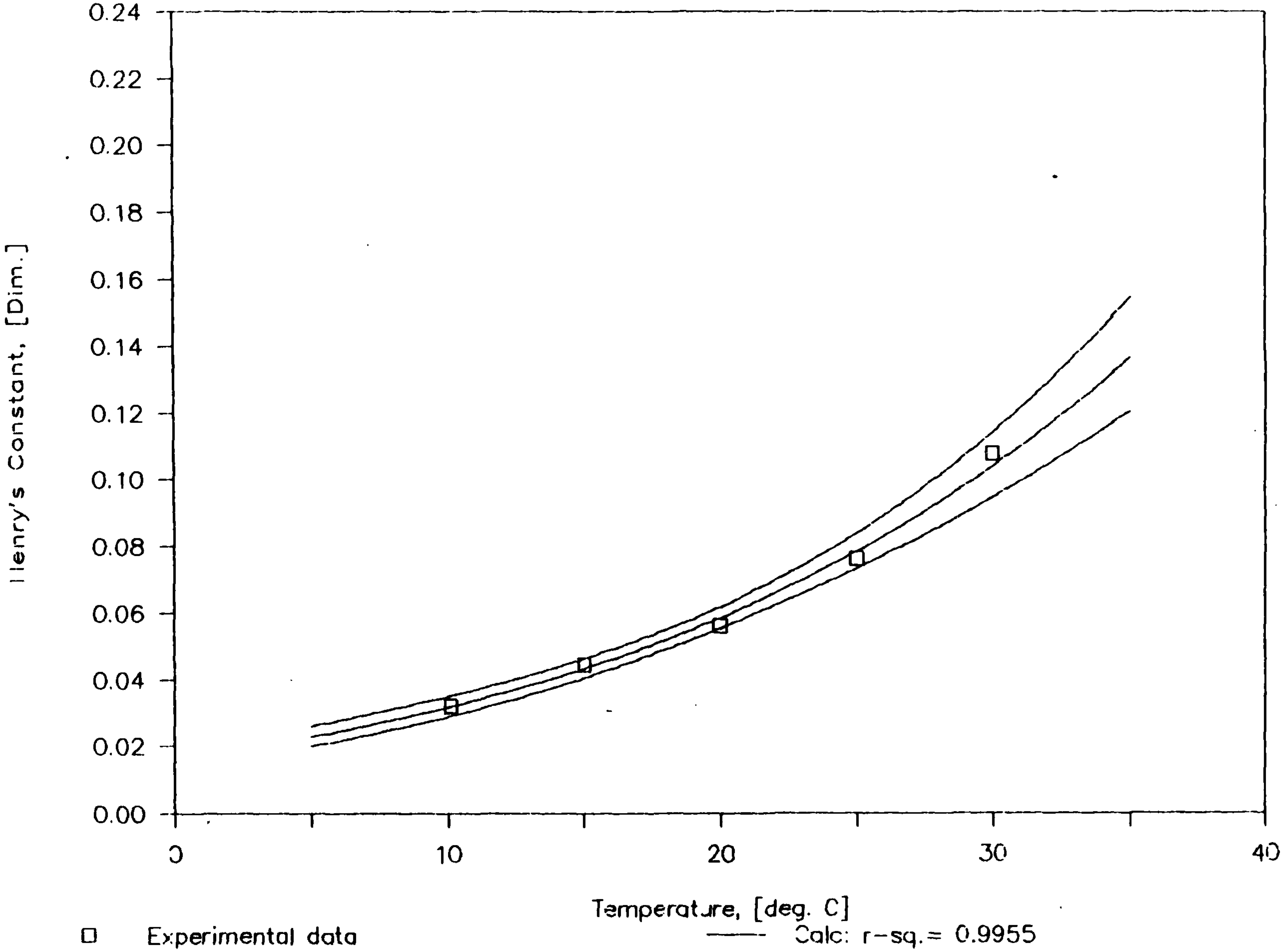




95% CONFIDENCE TEST
Component 127
Henry's Constant, [Dim.]
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

REGRESSION CONFIDENCE TEST

Component 127, 95% Confidence



	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	16		9		10	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	7		7		7	
Component ID	28		28		28	
Temperature (C)	10		14.9		20.2	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	3.0126	1.0E-25	3.5411	1.0E-25	4.3860	1.0E-25
H,avg:atm-mol/mol	3885.4		4646.0		5860.3	
H,avg: atm-m3/mol	7.00E-02	1	8.37E-02	1	1.06E-01	1
H,avg: kPa-m3/mol	7.0927		8.4812		10.6979	
COV, r [std/mean]	6.96		7.74		4.97	
COV, both replic.	------		------		------	
Observation: (1)	2.9477		3.5045		4.6384	
[atm-m3/m3] (2)	3.2691		3.8863		4.4800	
(3)	2.7690		3.2174		4.2835	
(4)	3.0646		3.5563		4.1419	
Injection: (1)	392540		348300		376960	
[Peak Area] (2)	378040		331710		361930	
(3)	189710		152270		141940	
(4)	178540		143830		144460	

	Temperature 4		Temperature 5	
RUN Number ---)	17		9	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	7		7	
Component ID	28		28	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	4.7742	1.0E-25	7.9859	1.0E-25
H, avg:atm-mol/mol	6483.5		11026.9	
H, avg: atm-m3/mol	1.17E-01	1	1.99E-01	1
H, avg: kPa-m3/mol	11.8355		20.1293	
COV, r [std/mean]	6.79		13.94	
COV, both replic.	-----		-----	
Observation: (1)	4.4337		6.8830	
[atm-m3/m3] (2)	4.9615		7.2016	
(3)	4.5744		8.6974	
(4)	5.1273		9.1614	
Injection: (1)	504230		542490	
[Peak Area] (2)	512310		593900	
(3)	194260		170490	
(4)	183640		167370	

Temperature Regression Parameters:

OF POINTS = 5

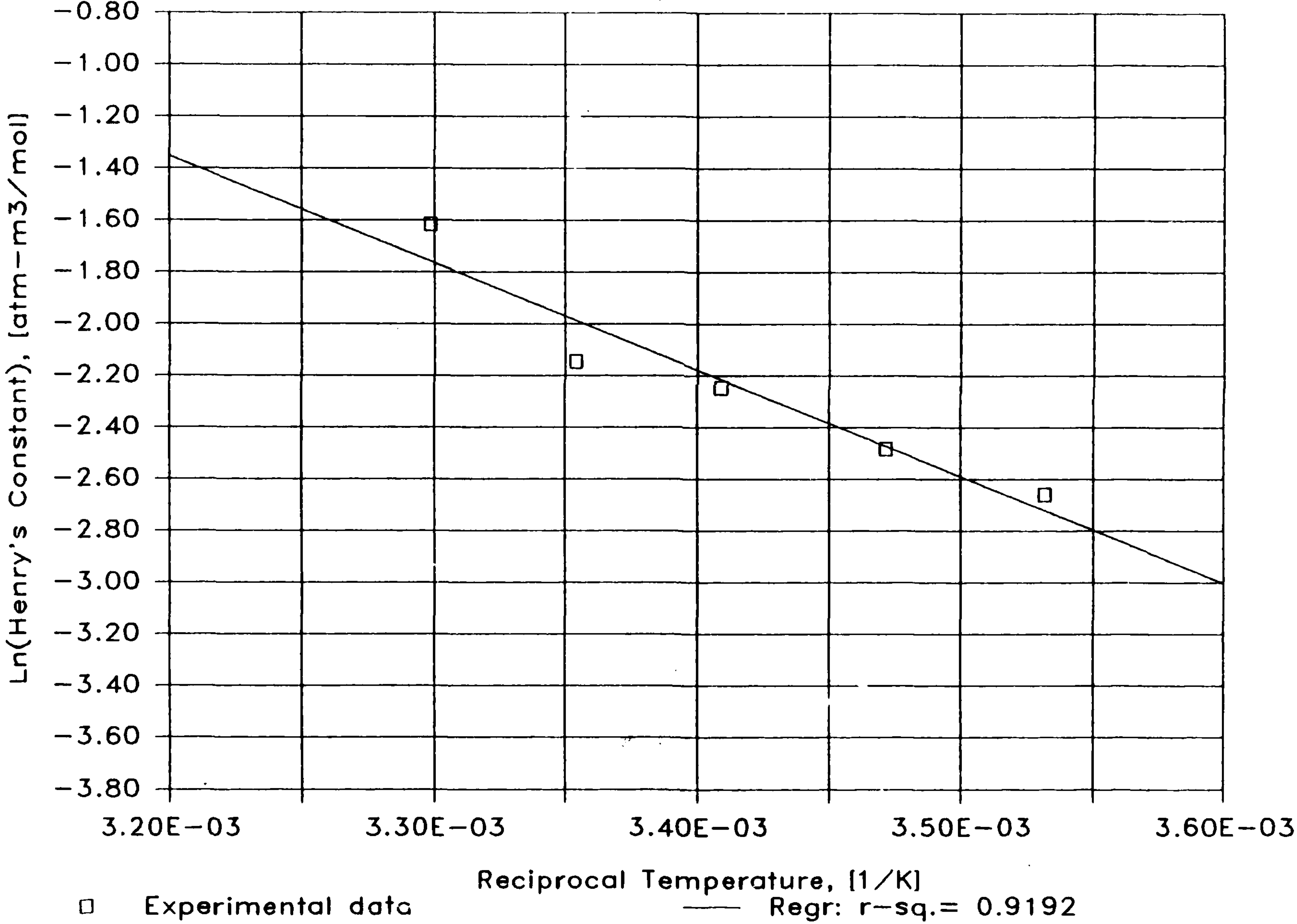
SLOPE = -4.1E+03

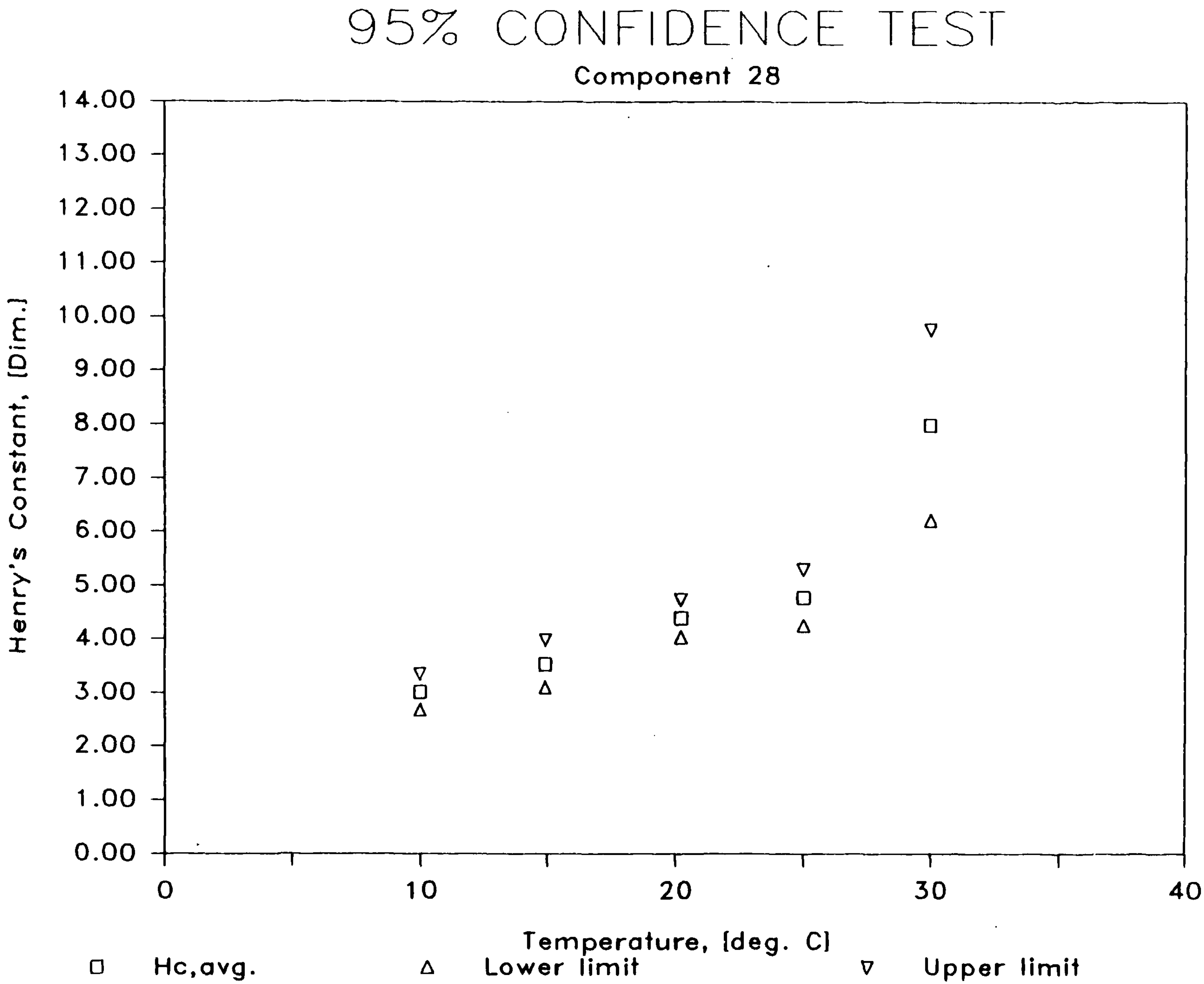
Y-INTERCEPT = 1.2E+01

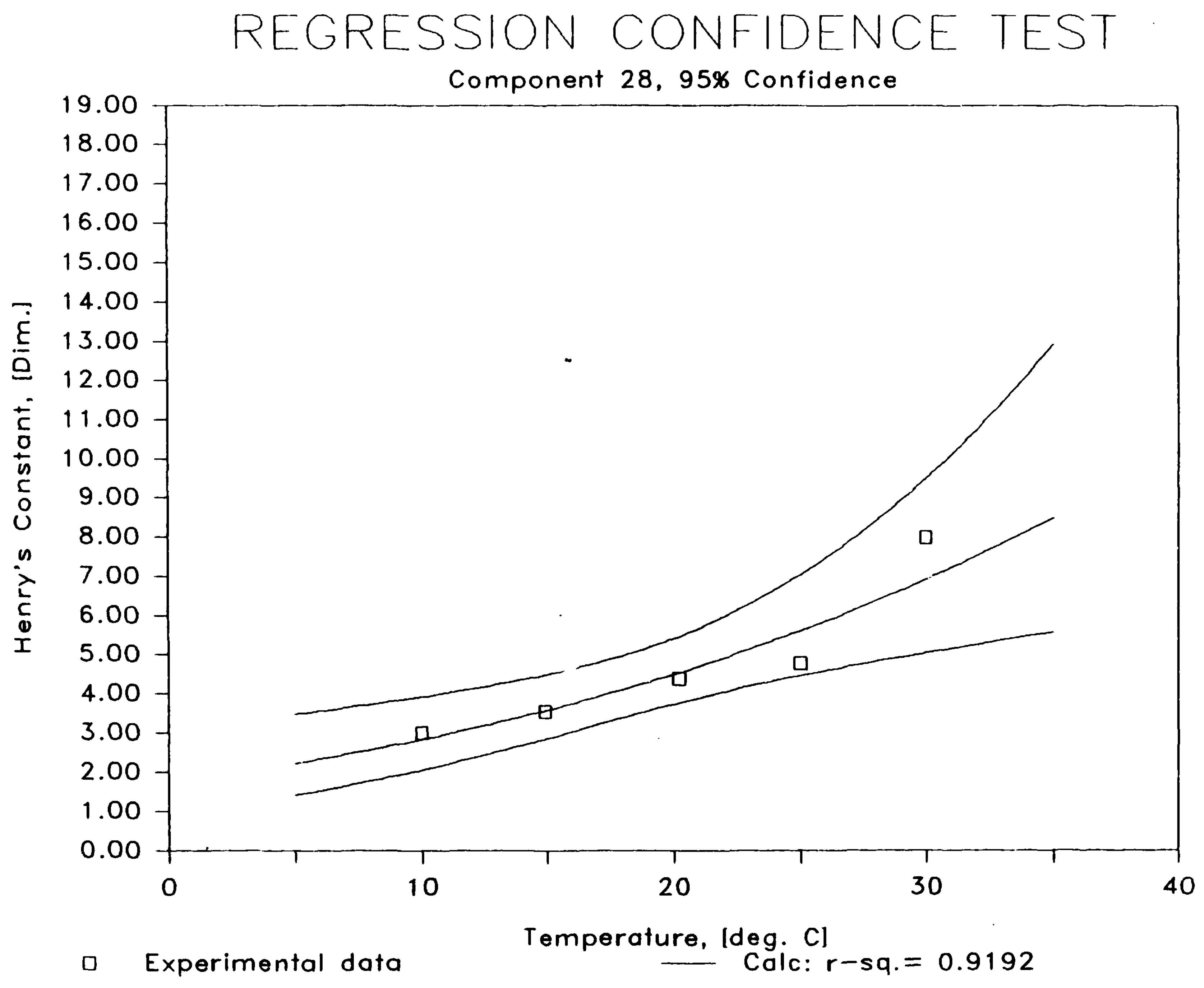
R-SQUARED = 0.9192

TEMPERATURE REGRESSION PLOT

Component 28




95% CONFIDENCE TEST
Component 28
Henry's Constant, [Dim.]
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 28, 95% Confidence
Henry's Constant, [Dim.]
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9192

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	57		74		5	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	15		15		15	
Component ID	128		128		128	
Temperature (C)	10		15.2		19.9	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	2.8119	1.0E-25	3.2727	1.0E-25	4.0582	1.0E-25
H, avg:atm-mol/mol	3626.5		4298.3		5416.9	
H, avg: atm-m3/mol	6.53E-02	1	7.74E-02	1	9.76E-02	1
H, avg: kPa-m3/mol	6.6201		7.8464		9.8884	
COV, r [std/mean]	17.41		9.34		5.76	
COV, both replic.	----		----		----	
Observation: (1)	2.3697		3.0019		3.9925	
[atm-m3/m3] (2)	2.4072		3.5293		4.3445	
(3)	3.2075		3.0145		3.7848	
(4)	3.2631		3.5450		4.1110	
Injection: (1)	272660		355170		292260	
[Peak Area] (2)	327770		356050		283940	
(3)	150730		169800		118950	
(4)	149240		154660		113780	

	Temperature 4		Temperature 5	
RUN Number ---)	75		58	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	15		15	
Component ID	128		128	
Temperature (C)	25.15		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	5.3682	1.0E-25	9.1613	1.0E-25
H,avg:atm-mol/mol	7293.9		12650.0	
H,avg: atm-m3/mol	1.31E-01	1	2.28E-01	1
H,avg: kPa-m3/mol	13.3147		23.0922	
COV, r [std/mean]	3.19		27.78	
COV, both replic.	------		------	
Observation: (1)	5.3430		8.7157	
[atm-m3/m3] (2)	5.5796		6.4985	
(3)	5.1628		12.6278	
(4)	5.3876		8.8034	
Injection: (1)	462700		494020	
[Peak Area] (2)	455230		556470	
(3)	162640		141710	
(4)	159390		159050	

ANALYSIS COMPLETED ...

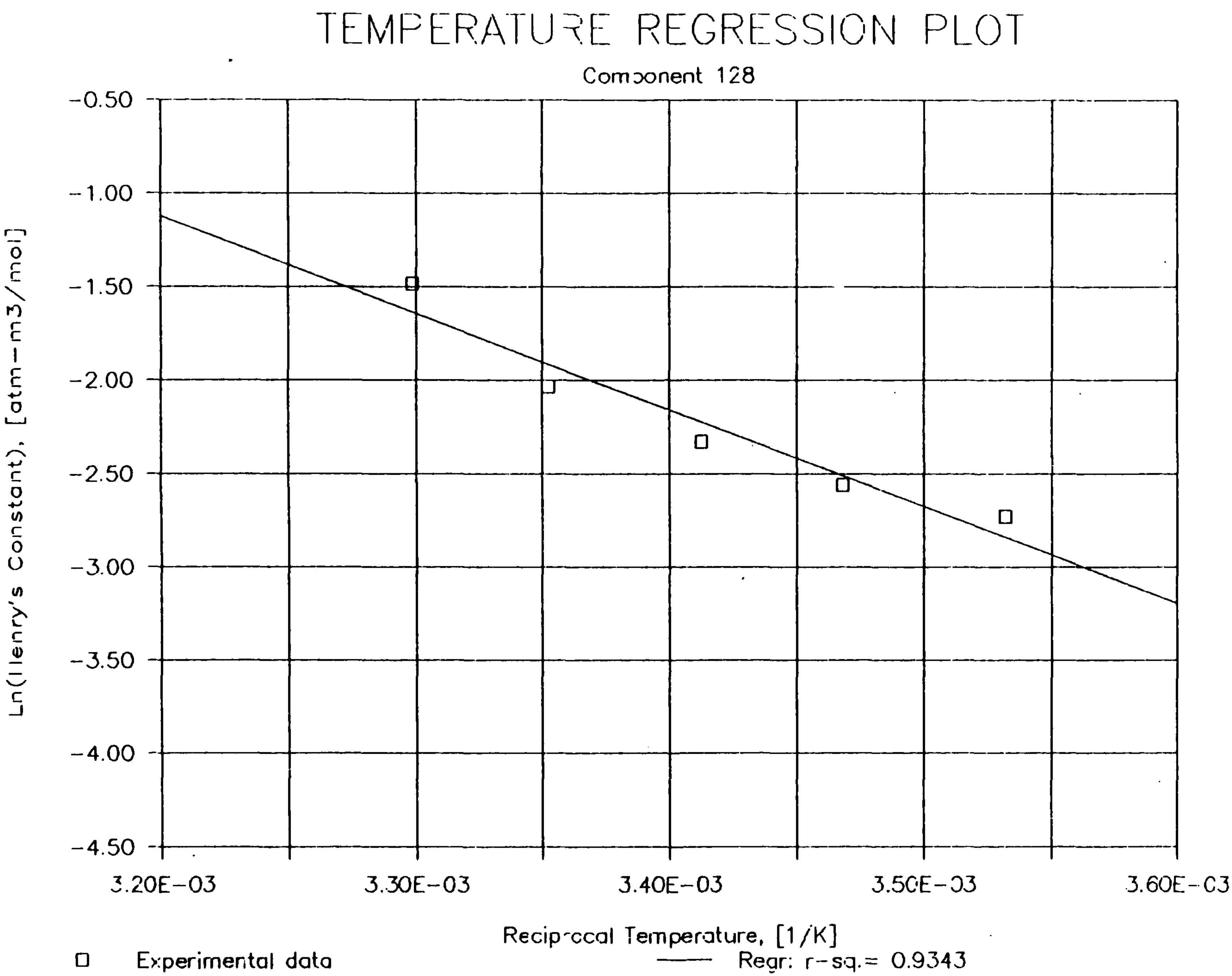
Temperature Regression Parameters:

\# OF POINTS = 5

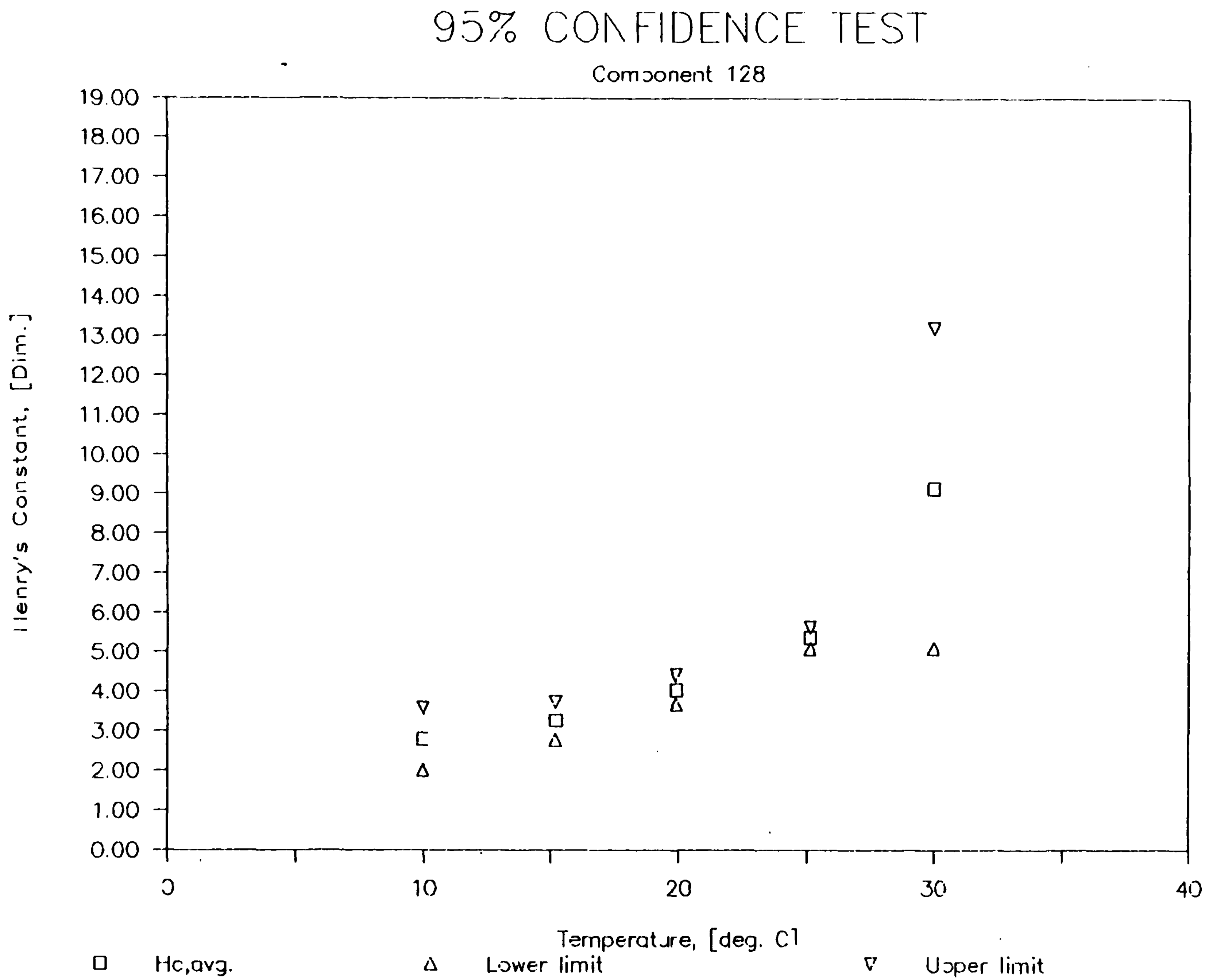
SLOPE = -5.2E+03

Y-INTERCEPT = 1.5E+01

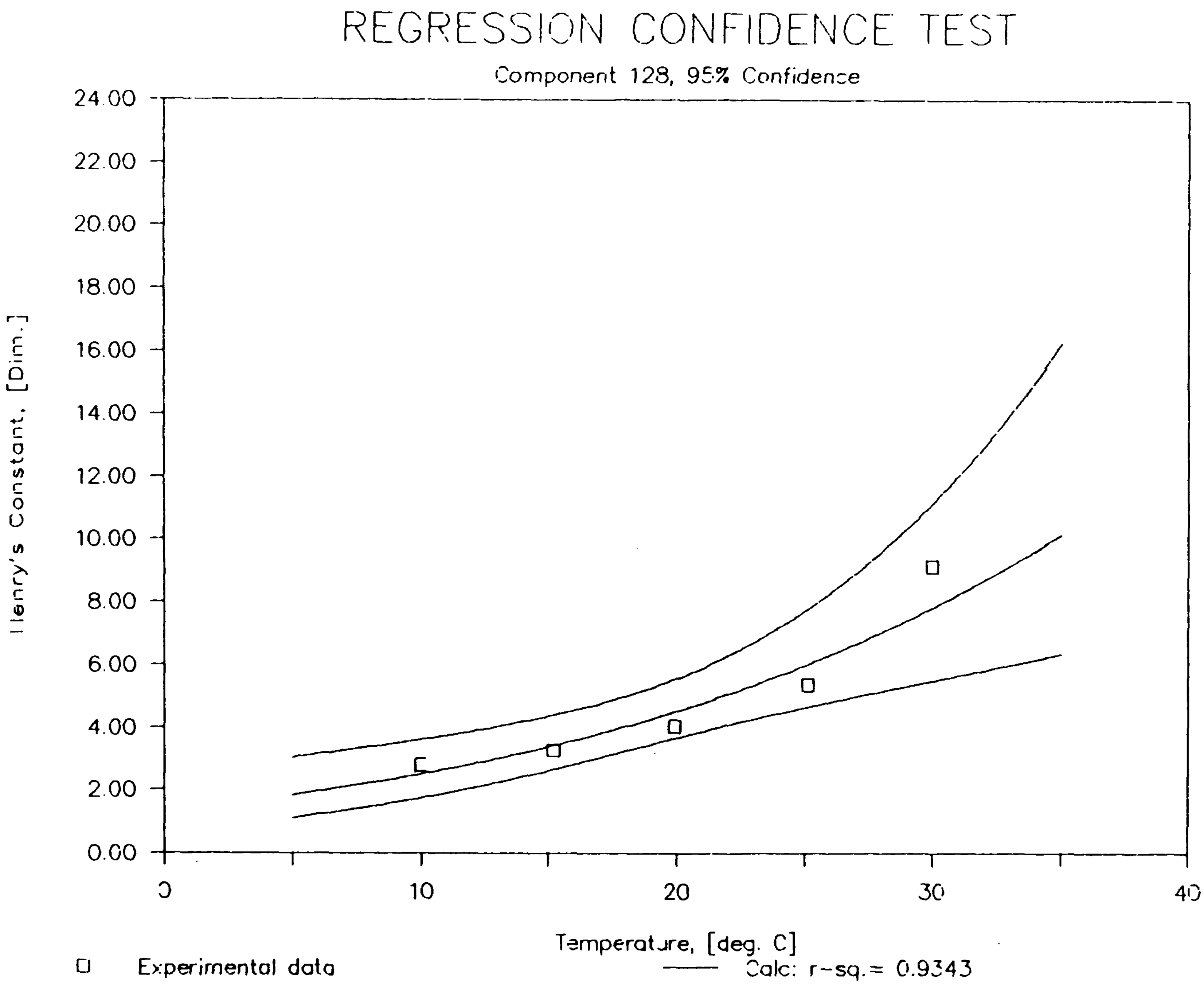
R-SQUARED = 0.9343



TEMPERATURE REGRESSION PLOT
Component 128
Ln(Henry's Constant), [atm-m3/mol]
-0.50
-1.00
-1.50
-2.00
-2.50
-3.00
-3.50
-4.00
-4.50
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9343



95% CONFIDENCE TEST
Component 128
19.00
18.00
17.00
16.00
15.00
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 128, 95% Confidence
Henry's Constant, [Dim.]
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9343

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —>	14		14		15	
REPLICATE —>	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	8		8		8	
Component ID	30		30		30	
Temperature (C)	10		15		20.2	
Low Vol (ml)	20		20		20	
High Vol (ml)	200		200		200	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.4505	1.0E-25	0.5503	1.0E-25	0.6020	1.0E-25
H,avg:atm-mol/mol	581.0		722.3		804.3	
H,avg: atm-m3/mol	1.05E-02	1	1.30E-02	1	1.45E-02	1
H,avg: kPa-m3/mol	1.0606		1.3185		1.4683	
COV, r [std/mean]	3.89		6.31		9.12	
COV, both replic.	———		———		———	
Observation: (1)	0.4365		0.5365		0.6476	
[atm-m3/m3] (2)	0.4342		0.5914		0.5529	
(3)	0.4669		0.5105		0.6513	
(4)	0.4644		0.5628		0.5560	
Injection: (1)	933510		1043000		1135300	
[Peak Area] (2)	980890		1005300		1140100	
(3)	1719900		1649800		1561500	
(4)	1726600		1534600		1756200	

	Temperature 4		Temperature 5	
RUN Number —)	15		14	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	8		8	
Component ID	30		30	
Temperature (C)	25		30	
Low Vol (ml)	20		20	
High Vol (ml)	200		200	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.9061	1.0E-25	0.7089	1.0E-25
H, avg:atm-mol/mol	1230.5		978.8	
H, avg: atm-m3/mol	2.22E-02	1	1.76E-02	1
H, avg: kPa-m3/mol	2.2462		1.7869	
COV, r [std/mean]	6.18		19.09	
COV, both replic.	——		——	
Observation: (1)	0.9572		0.5666	
[atm-m3/m3] (2)	0.9517		0.6295	
(3)	0.8601		0.7761	
(4)	0.8552		0.8634	
Injection: (1)	1864900		1051500	
[Peak Area] (2)	1725200		1327700	
(3)	1924700		1597300	
(4)	1932700		1477000	

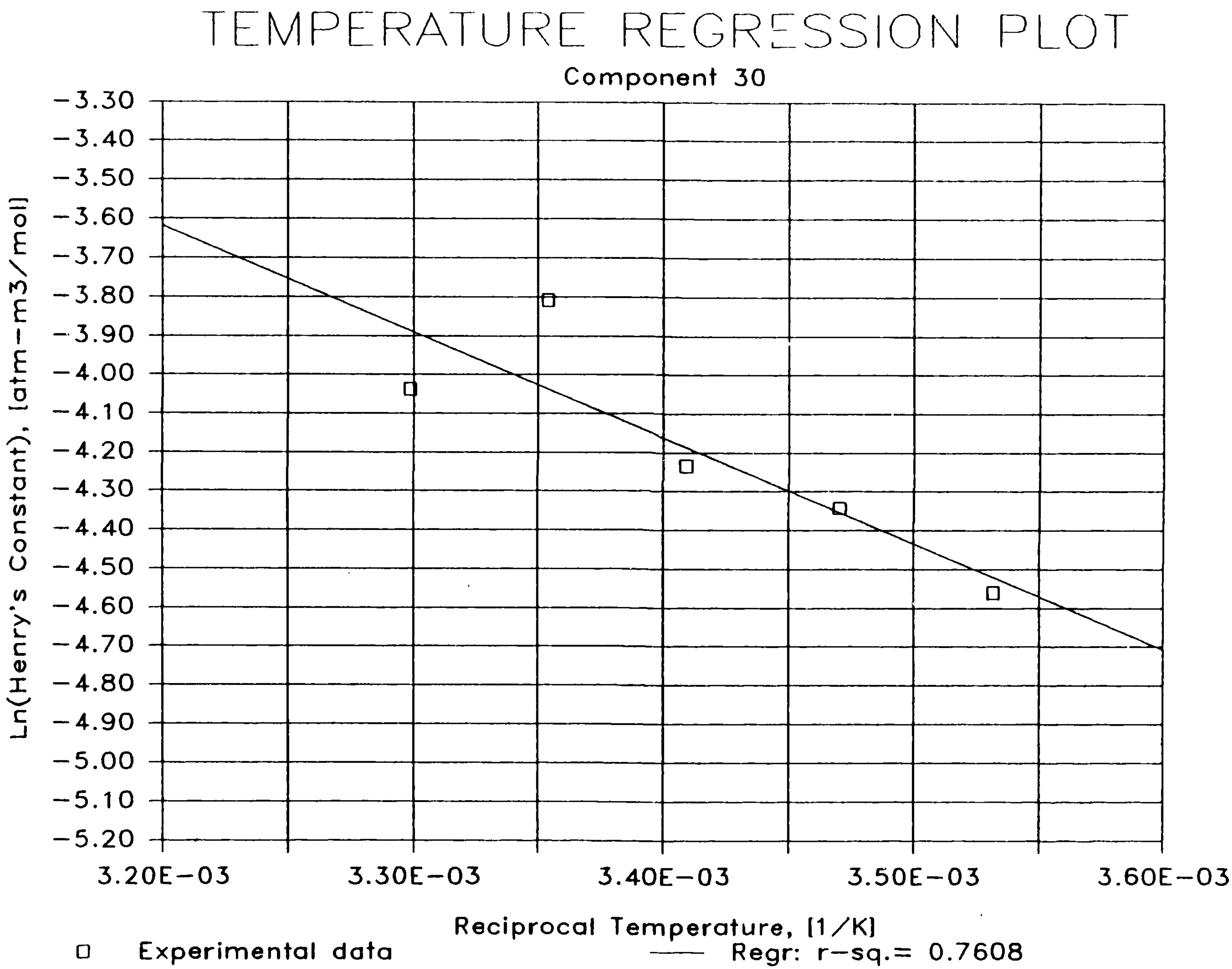
Temperature Regression Parameters:

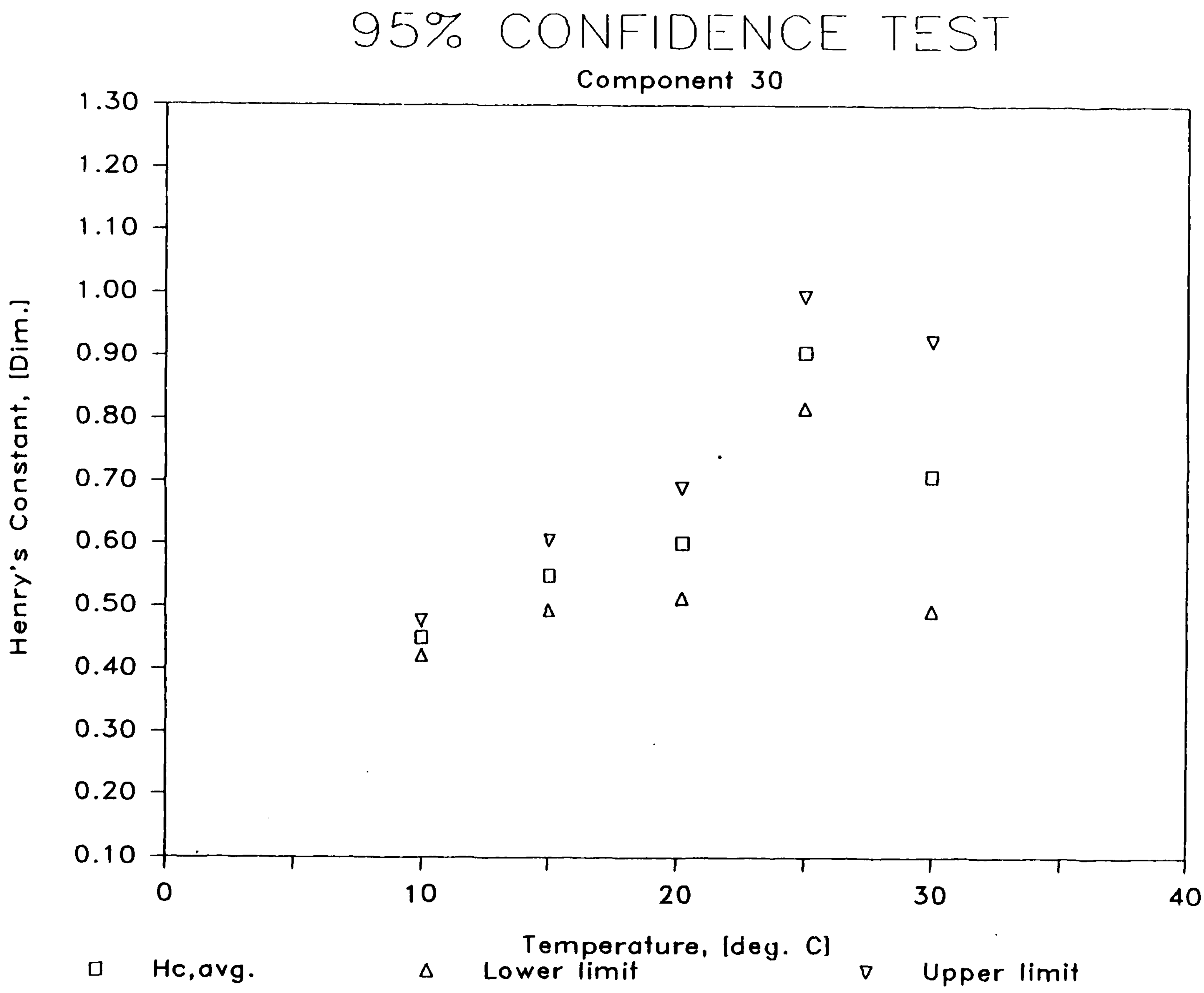
OF POINTS = 5

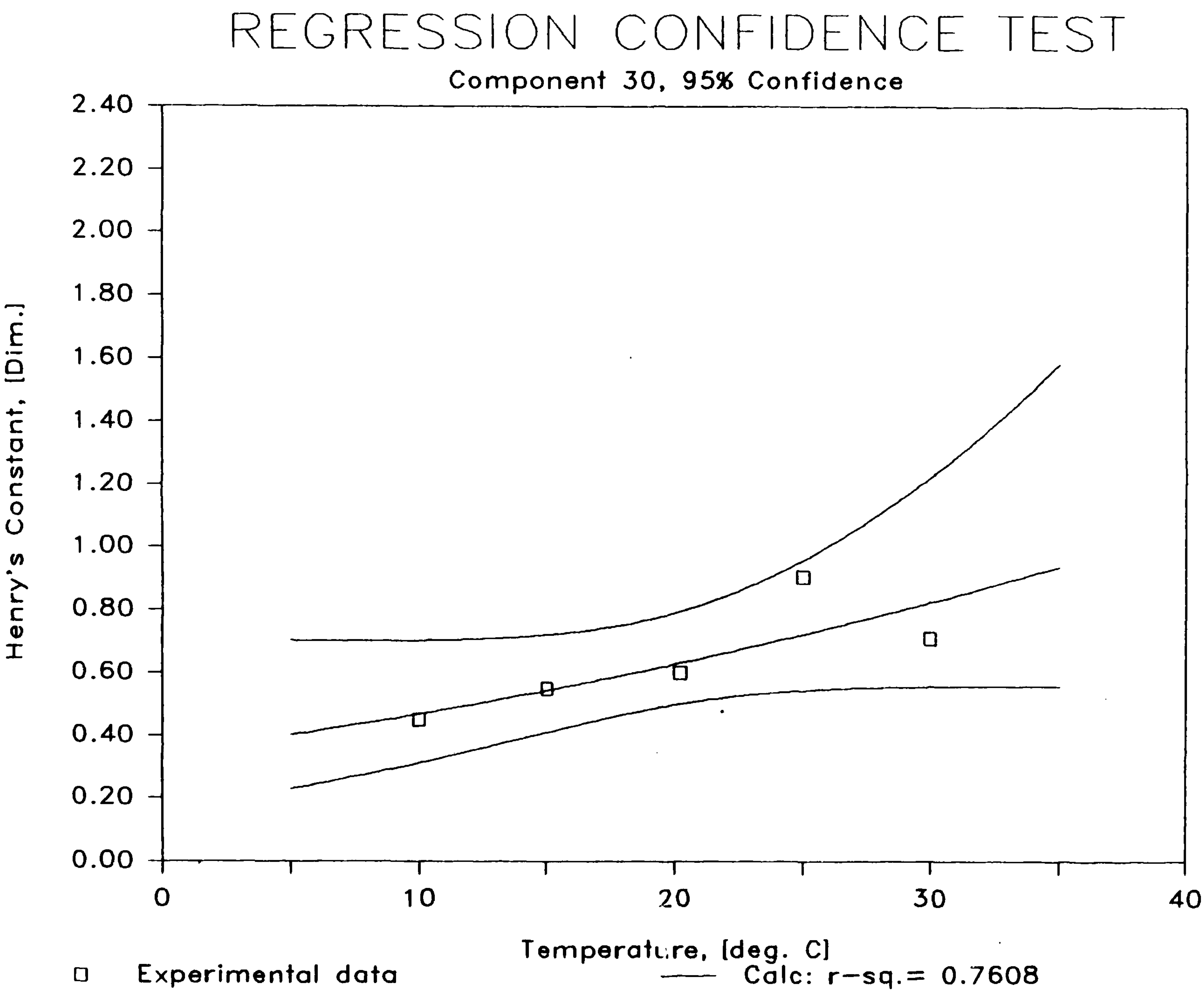
SLOPE = -2.7E+03

Y-INTERCEPT = 5.1E+00

R-SQUARED = 0.7600


TEMPERATURE REGRESSION PLOT
Component 30
Ln(Henry's Constant), [atm-m3/mol]
-3.30
-3.40
-3.50
-3.60
-3.70
-3.80
-3.90
-4.00
-4.10
-4.20
-4.30
-4.40
-4.50
-4.60
-4.70
-4.80
-4.90
-5.00
-5.10
-5.20
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.7608


95% CONFIDENCE TEST
Component 30
Henry's Constant, [Dim.]
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 30, 95% Confidence
Henry's Constant, [Dim.]
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.7608

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	2		2		2	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	16		16		16	
Component ID	130		130		130	
Temperature (C)	10		15		20.1	
Low Vol (ml)	20		20		20	
High Vol (ml)	200		200		200	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.6456	1.0E-25	0.7103	1.0E-25	0.9035	1.0E-25
H, avg:atm-mol/mol	832.7		932.2		1206.8	
H, avg: atm-m3/mol	1.50E-02	1	1.68E-02	1	2.17E-02	1
H, avg: kPa-m3/mol	1.5200		1.7017		2.2030	
COV, r [std/mean]	1.27		1.63		0.62	
COV, both replic.	------		------		------	
Observation: (1)	0.6521		0.7245		0.9061	
[atm-m3/m3] (2)	0.6379		0.7104		0.9098	
(3)	0.6534		0.7099		0.8972	
(4)	0.6392		0.6962		0.9008	
Injection: (1)	1372200		1544100		1765200	
[Peak Area] (2)	1374300		1521100		1752500	
(3)	1877800		1954400		1895800	
(4)	1908700		1982900		1890200	

	Temperature 4		Temperature 5	
RUN Number --->	3		3	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	16		16	
Component ID	130		130	
Temperature (C)	25.1		30	
Low Vol (ml)	20		20	
High Vol (ml)	200		200	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	1.0821	1.0E-25	1.1273	1.0E-25
H,avg:atm-mol/mol	1470.0		1556.5	
H,avg: atm-m3/mol	2.65E-02	1	2.80E-02	1
H,avg: kPa-m3/mol	2.6835		2.8414	
COV, r [std/mean]	1.24		2.97	
COV, both replic.	-----		-----	
Observation: (1)	1.0896		1.1408	
[atm-m3/m3] (2)	1.0967		1.1661	
(3)	1.0676		1.0891	
(4)	1.0746		1.1131	
Injection: (1)	2142000		2314200	
[Peak Area] (2)	2111100		2239200	
(3)	2014400		2106500	
(4)	2005000		2074100	

ANALYSIS COMPLETED ...

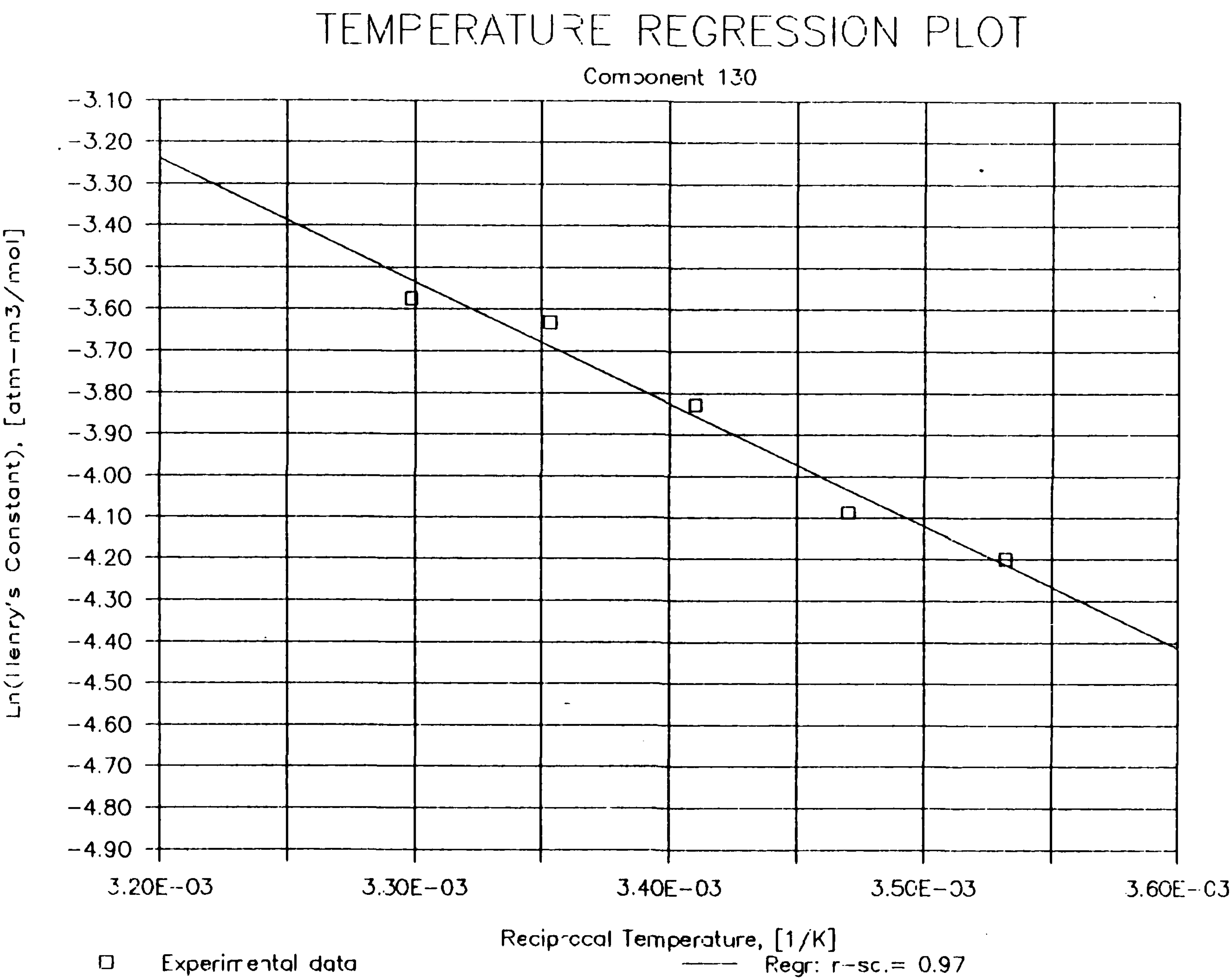
Temperature Regression Parameters:

OF POINTS = 5

SLOPE = -2.9E+03

Y-INTERCEPT = 6.1E+00

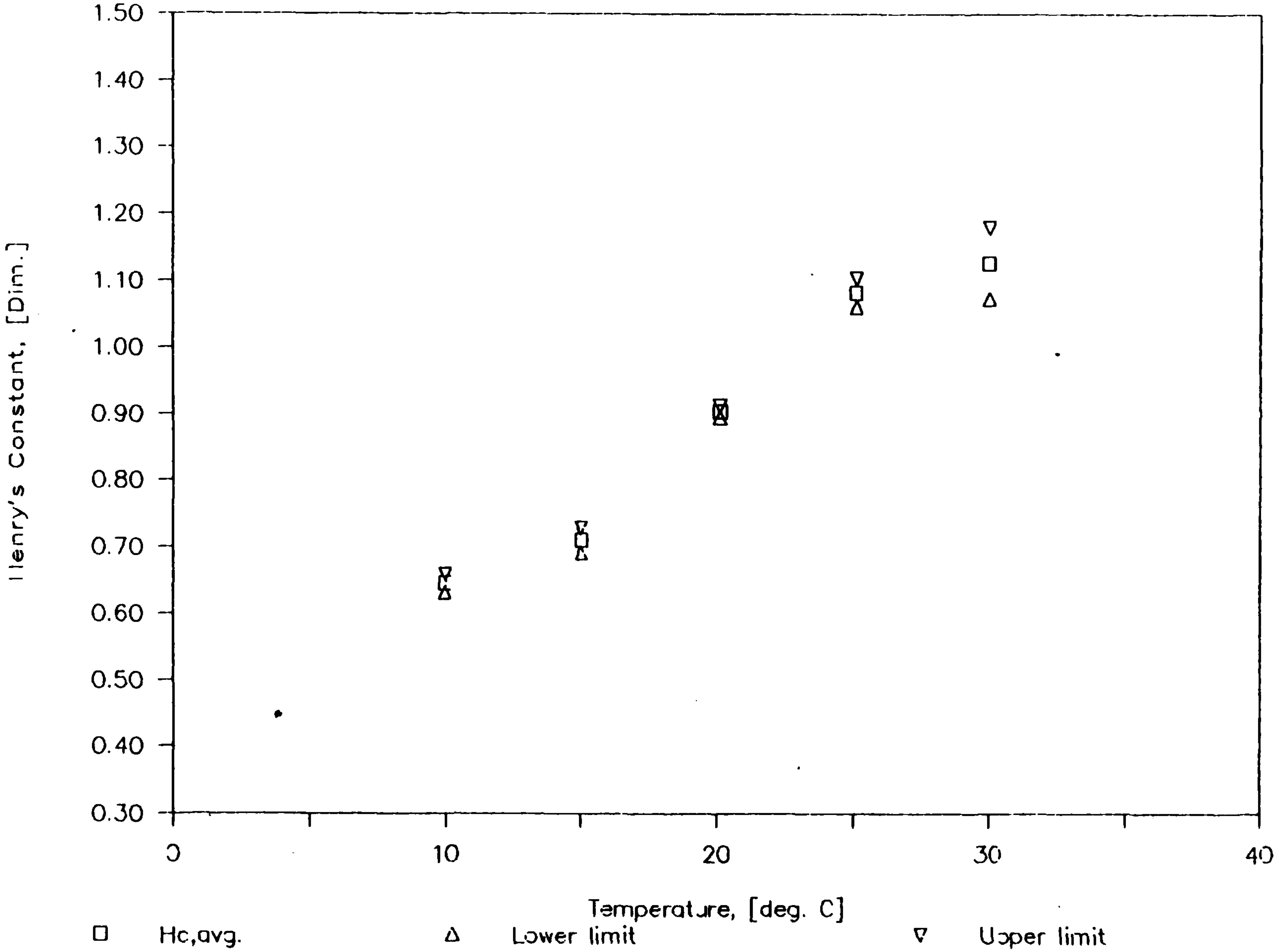
R-SQUARED = 0.9700

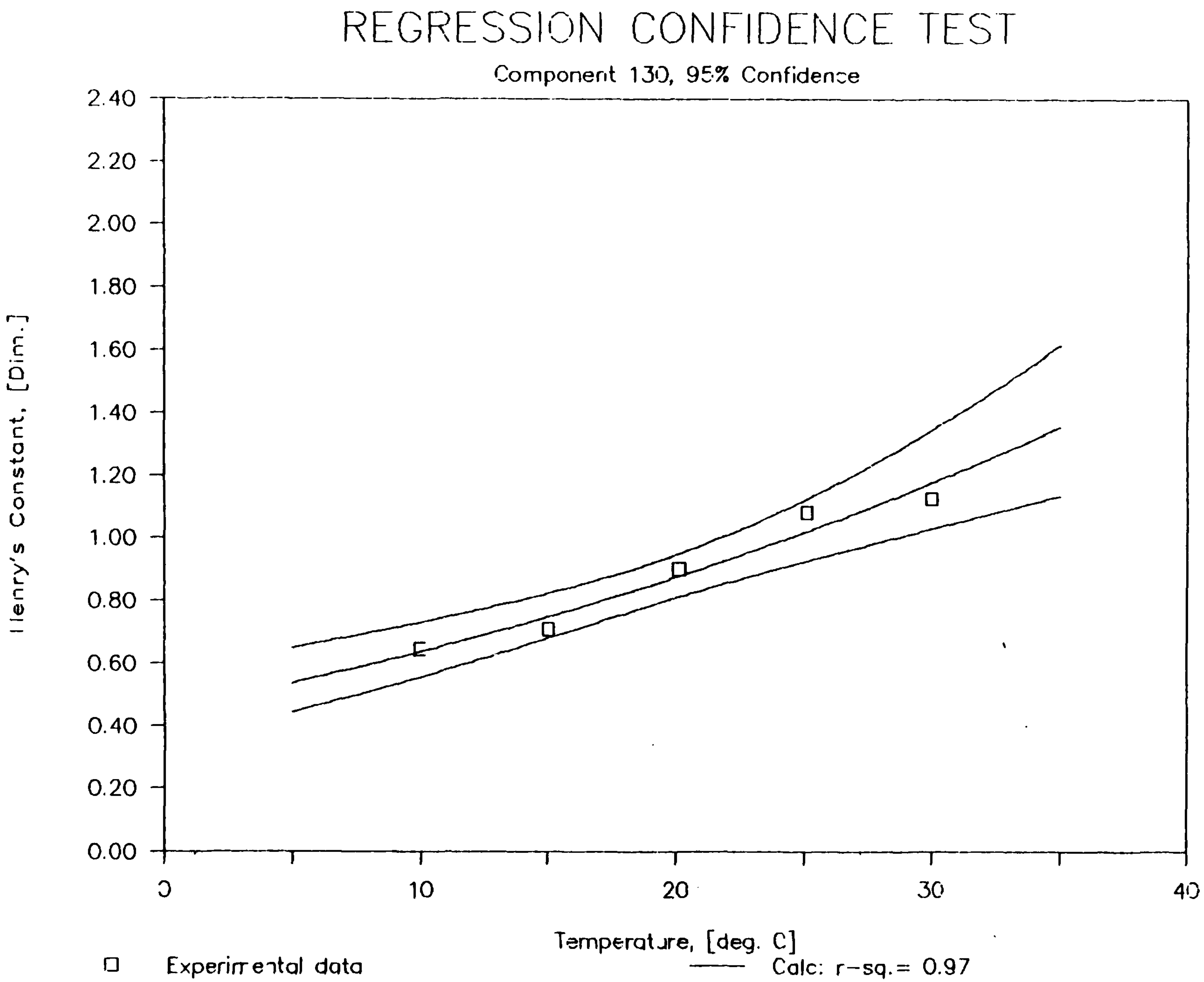


TEMPERATURE REGRESSION PLOT
Component 130
-3.10
-3.20
-3.30
-3.40
-3.50
-3.60
-3.70
-3.80
-3.90
-4.00
-4.10
-4.20
-4.30
-4.40
-4.50
-4.60
-4.70
-4.80
-4.90
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Ln(Henry's Constant), [atm-m3/mol]
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sc.= 0.97

95% CONFIDENCE TEST

Component 130




REGRESSION CONFIDENCE TEST
Component 130, 95% Confidence
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
Henry's Constant, [Dim.]
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.97

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	2		2		3	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	8		8		8	
Component ID	31		31		31	
Temperature (C)	10		15		20.2	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.3268	1.0E-25	0.4053	1.0E-25	0.4562	1.0E-25
H, avg:atm-mol/mol	421.4		531.9		609.6	
H, avg: atm-m3/mol	7.59E-03	1	9.58E-03	1	1.10E-02	1
H, avg: kPa-m3/mol	0.7693		0.9710		1.1128	
COV, r [std/mean]	3.50		1.50		0.99	
COV, both replic.	------		------		------	
Observation: (1)	0.3173		0.4080		0.4535	
[atm-m3/m3] (2)	0.3164		0.4122		0.4611	
(3)	0.3371		0.3984		0.4514	
(4)	0.3362		0.4025		0.4590	
Injection: (1)	689720		656590		737300	
[Peak Area] (2)	718730		645670		734900	
(3)	1569000		1255600		1308300	
(4)	1572000		1246500		1292900	

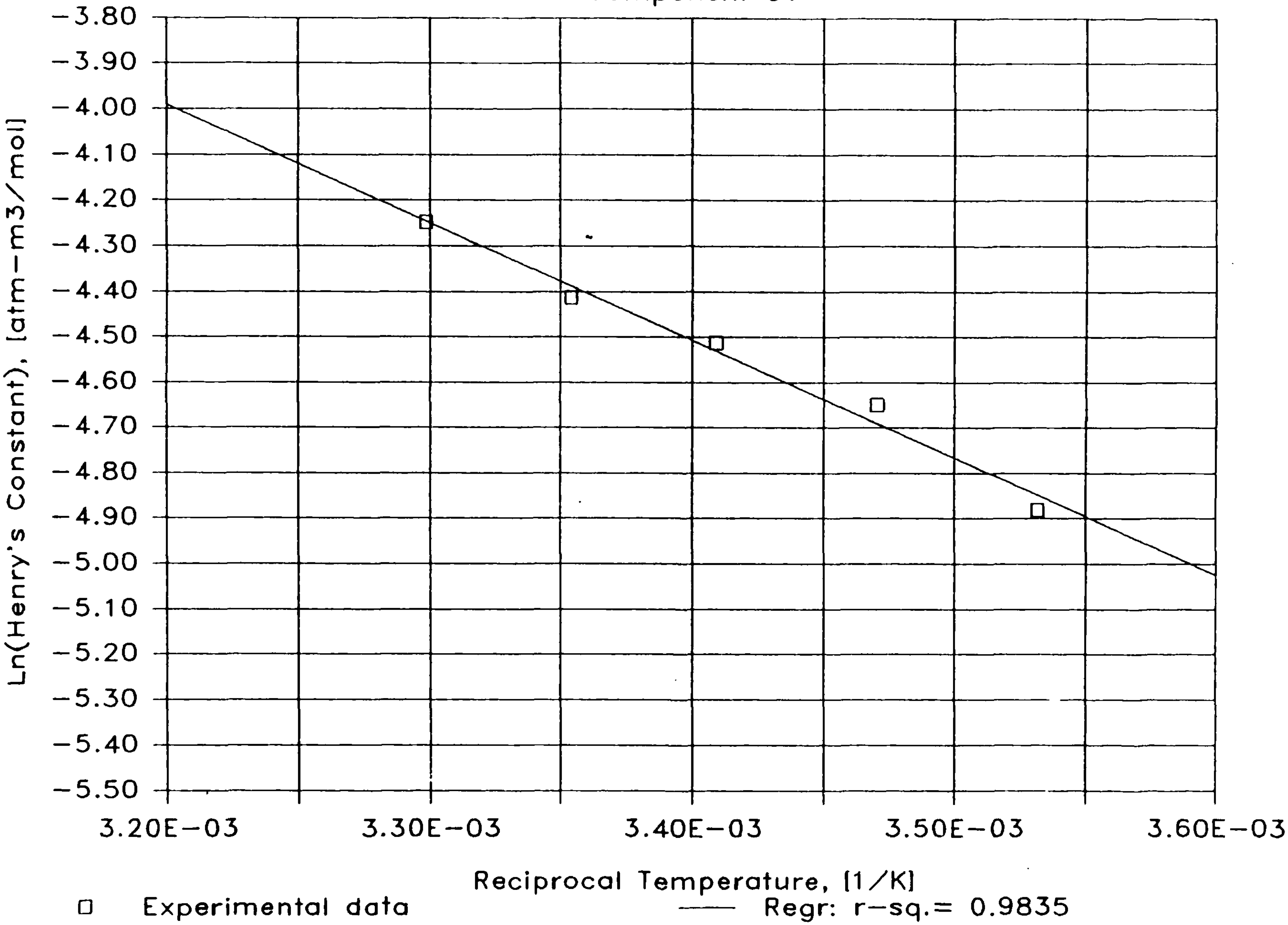
	Temperature 4		Temperature 5	
RUN Number ---)	3		3	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	8		8	
Component ID	31		31	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.4951	1.0E-25	0.5746	1.0E-25
H,avg:atm-mol/mol	672.3		793.4	
H,avg: atm-m3/mol	1.21E-02	1	1.43E-02	1
H,avg: kPa-m3/mol	1.2274		1.4484	
COV, r [std/mean]	1.46		0.59	
COV, both replic.	------		------	
Observation: (1)	0.4925		0.5712	
[atm-m3/m3] (2)	0.4867		0.5722	
(3)	0.5036		0.5770	
(4)	0.4976		0.5780	
Injection: (1)	1057500		780960	
[Peak Area] (2)	1074500		786730	
(3)	1768700		1173600	
(4)	1784000		1172100	

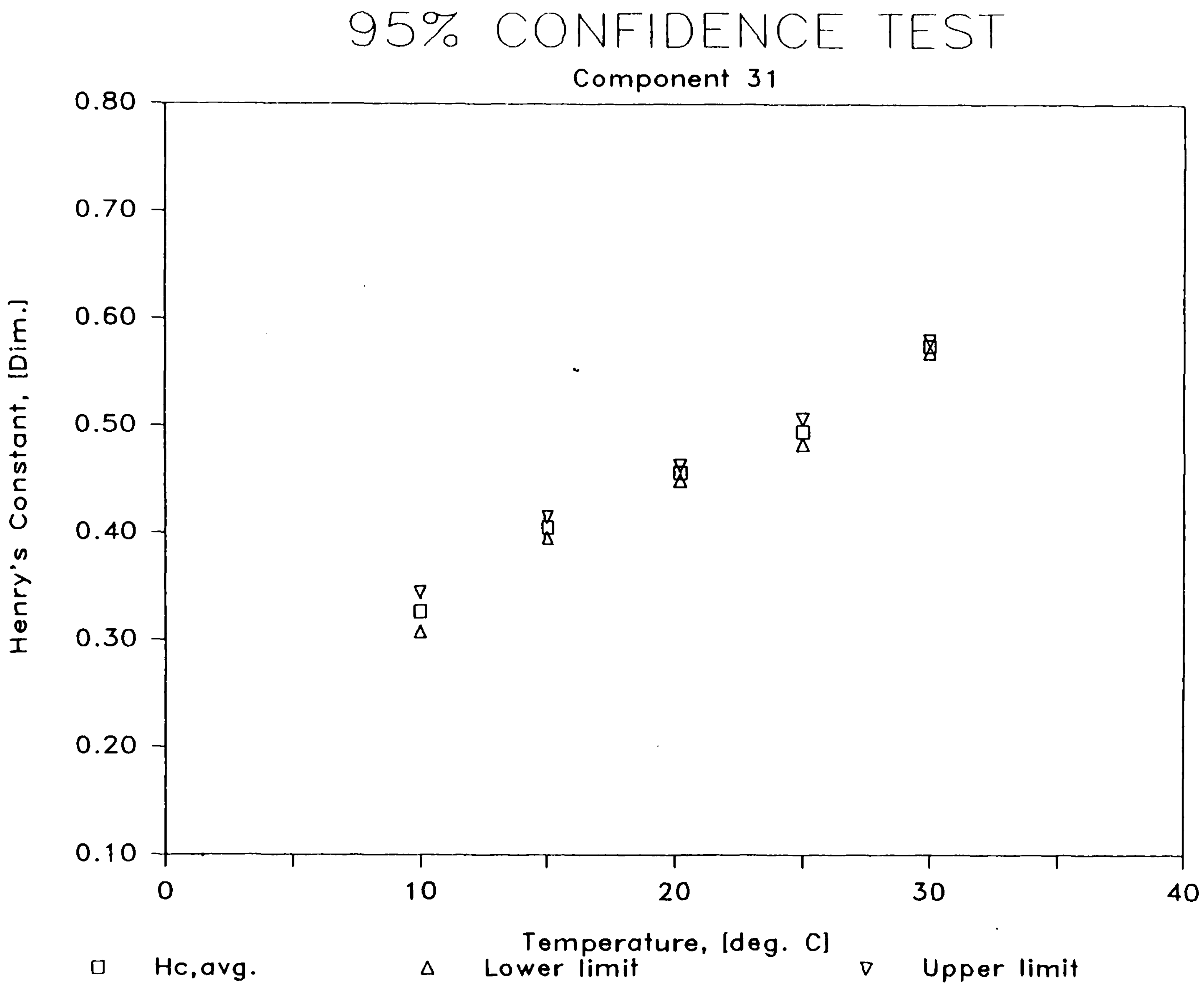
Temperature Regression Parameters:

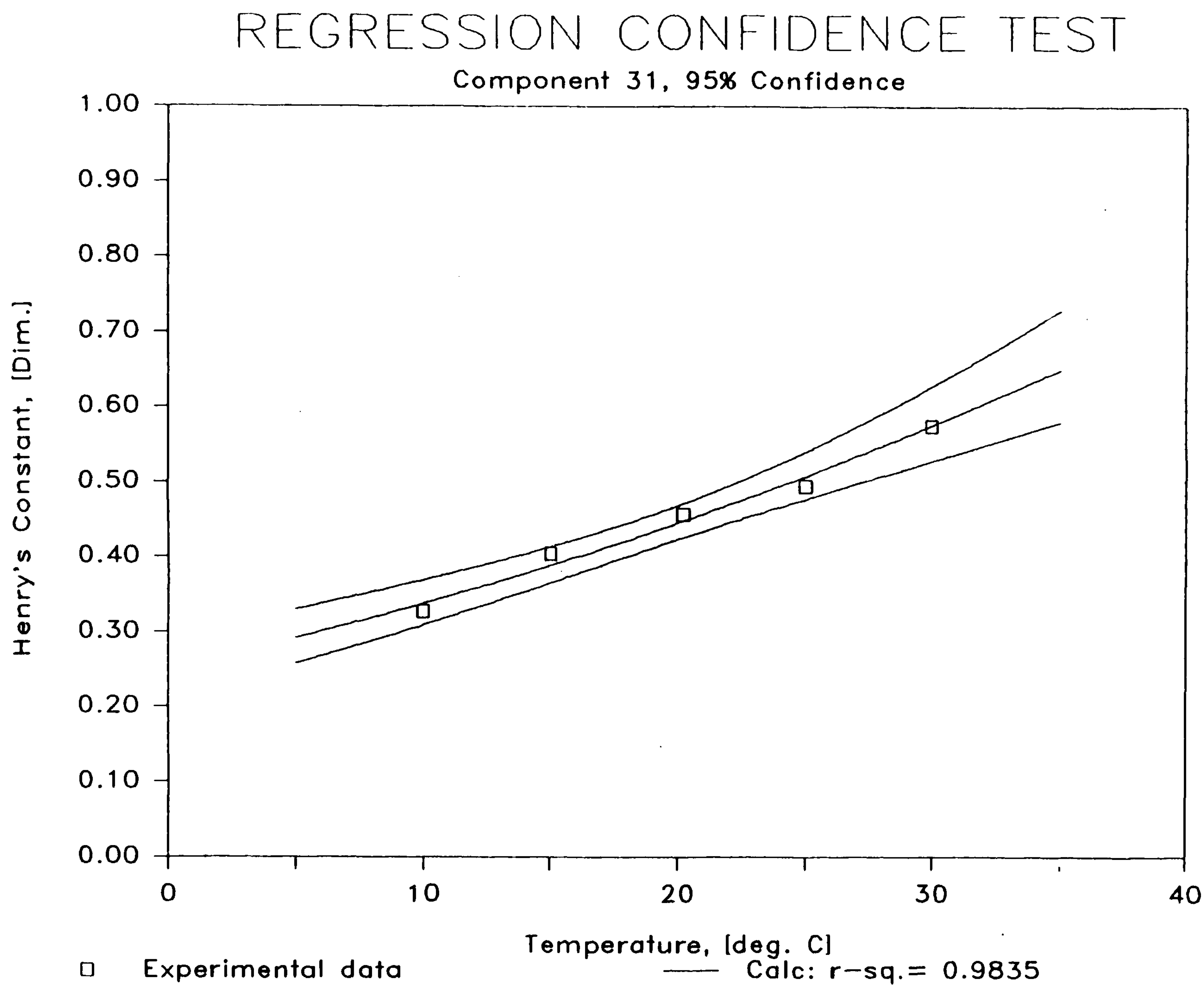
# OF POINTS	=	5
SLOPE	=	-2.6E+03
Y-INTERCEPT	=	4.3E+00
R-SQUARED	=	0.9835

TEMPERATURE REGRESSION PLOT

Component 31




95% CONFIDENCE TEST
Component 31
Henry's Constant, [Dim.]
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 31, 95% Confidence
Henry's Constant, [Dim.]
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9835

Results Summary for Component 32

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	6		6		7	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	8		8		8	
Component ID	32		32		32	
Temperature (C)	10		15		20.2	
Low Vol (ml)	24		24		24	
High Vol (ml)	204		204		204	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.2552	1.0E-25	0.2371	1.0E-25	0.2456	1.0E-25
H, avg:atm-mol/mol	329.1		311.2		328.2	
H, avg: atm-m3/mol	5.93E-03	1	5.61E-03	1	5.91E-03	1
H, avg: kPa-m3/mol	0.6007		0.5681		0.5991	
COV, r [std/mean]	5.28		7.23		21.26	
COV, both replic.	------		------		------	
Observation: (1)	0.2396		0.2363		0.2000	
[atm-m3/m3] (2)	0.2500		0.2584		0.2903	
(3)	0.2600		0.2165		0.2008	
(4)	0.2710		0.2372		0.2914	
Injection: (1)	15413		17300		20556	
[Peak Area] (2)	16250		16442		20607	
(3)	42408		48241		63337	
(4)	41259		45532		49862	

	Temperature 4		Temperature 5	
RUN Number --->	7		7	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	8		8	
Component ID	32		32	
Temperature (C)	25		30	
Low Vol (ml)	24		24	
High Vol (ml)	204		204	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.3411	1.0E-25	0.4151	1.0E-25
H,avg:atm-mol/mol	463.3		573.1	
H,avg: atm-m3/mol	8.35E-03	1	1.03E-02	1
H,avg: kPa-m3/mol	0.8457		1.0463	
COV, r [std/mean]	1.48		4.66	
COV, both replic.	------		------	
Observation: (1)	0.3430		0.3936	
[atm-m3/m3] (2)	0.3353		0.4053	
(3)	0.3470		0.4244	
(4)	0.3392		0.4370	
Injection: (1)	26673		32169	
[Peak Area] (2)	26888		33937	
(3)	57740		63256	
(4)	58662		61954	

Temperature Regression Parameters:

OF POINTS = 5

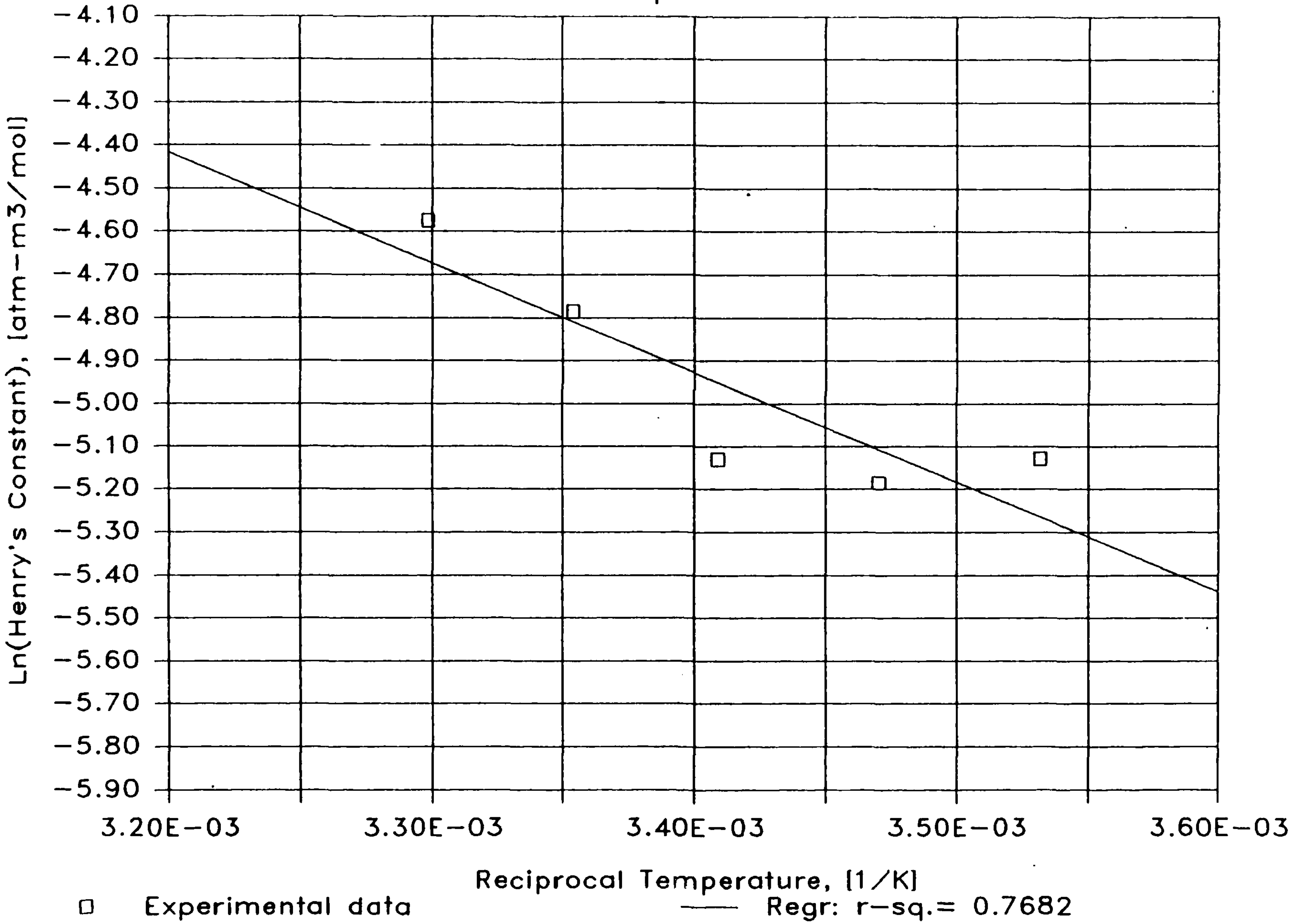
SLOPE = -2.6E+03

Y-INTERCEPT = 3.7E+00

R-SQUARED = 0.7682

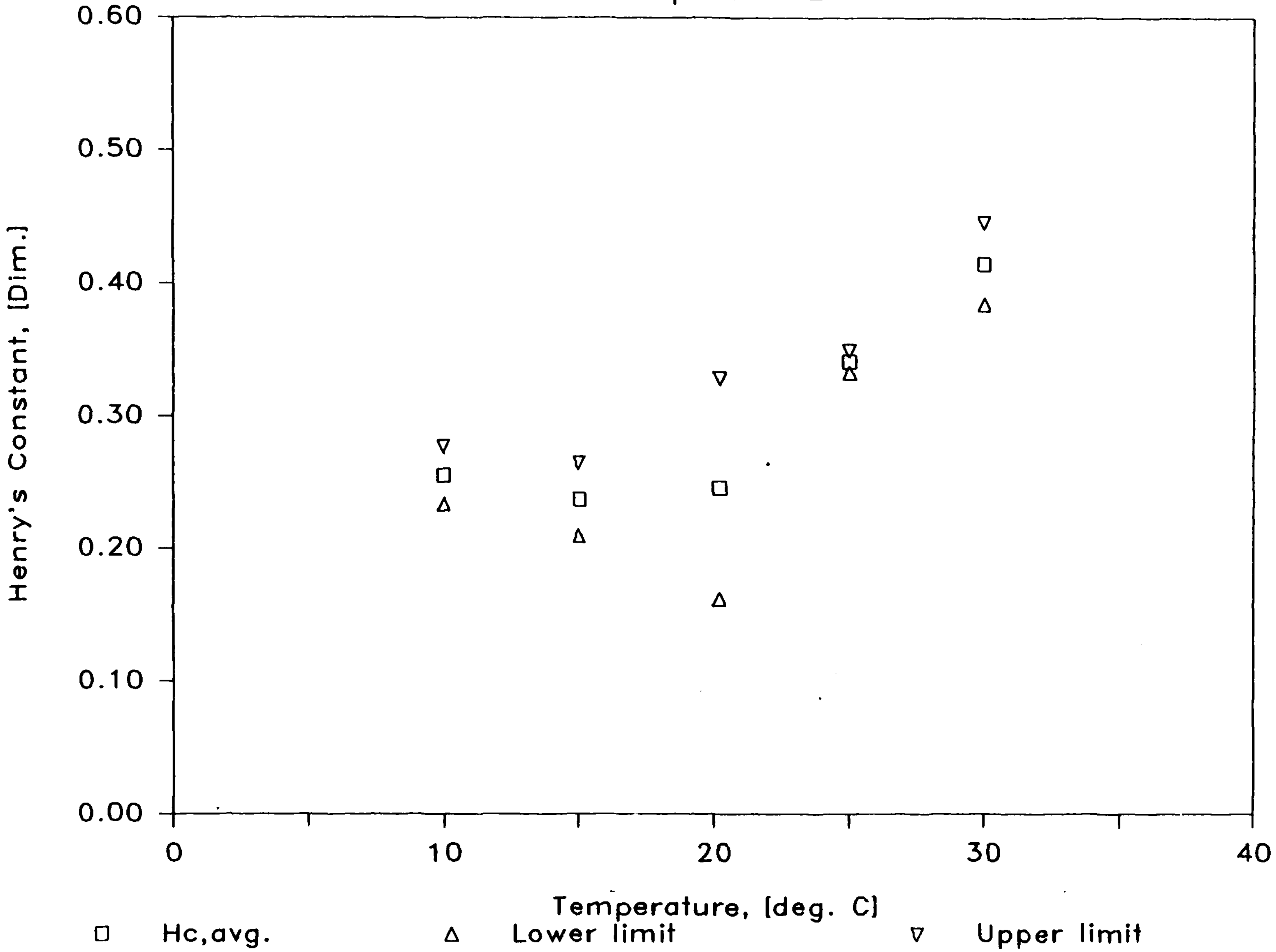
TEMPERATURE REGRESSION PLOT

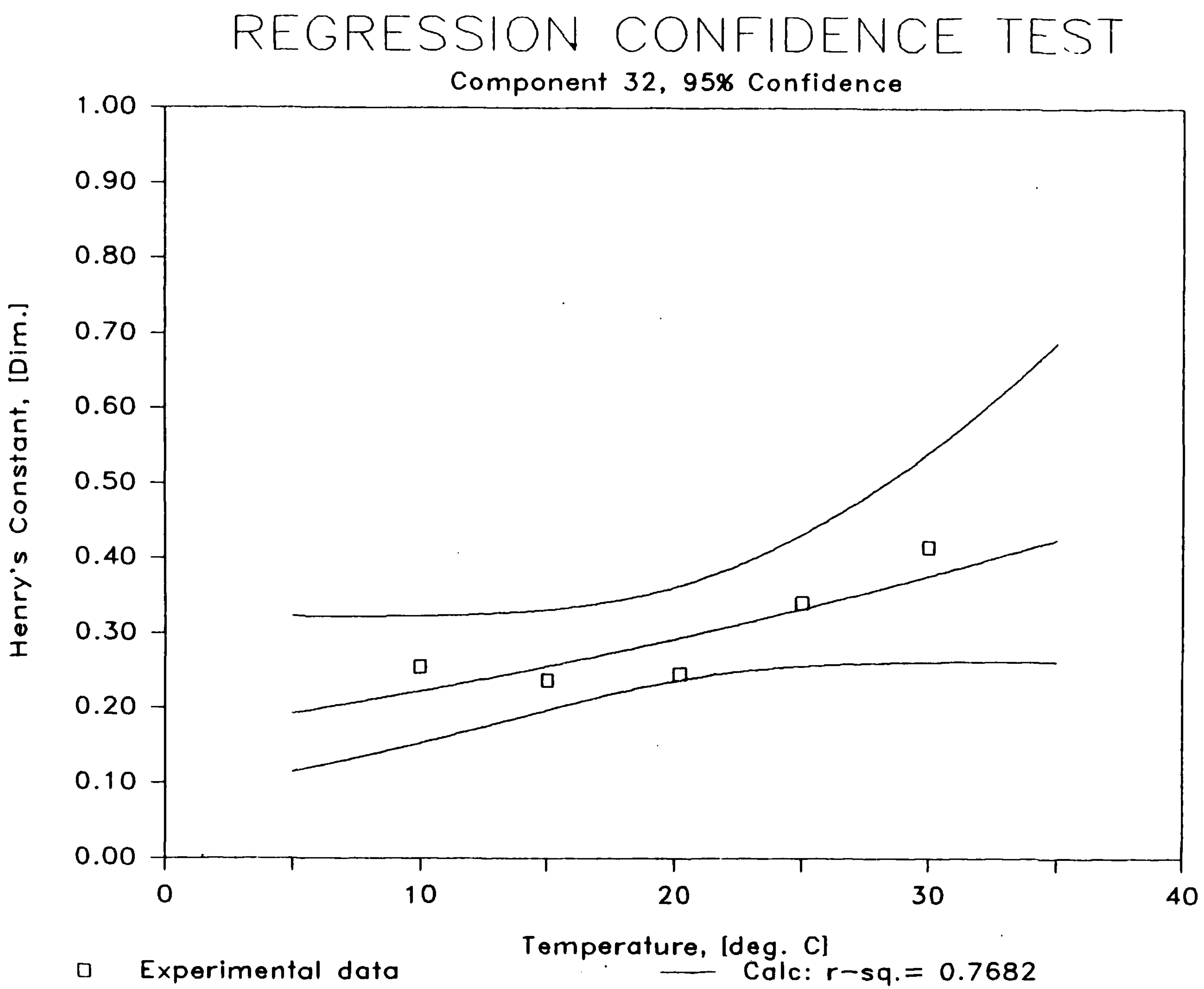
Component 32



95% CONFIDENCE TEST

Component 32





REGRESSION CONFIDENCE TEST
Component 32, 95% Confidence
Henry's Constant, [Dim.]
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.7682

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	64		78		8	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	15		15		15	
Component ID	132		132		132	
Temperature (C)	10		15.2		19.9	
Low Vol (ml)	24		24		24	
High Vol (ml)	204		204		204	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0921	1.0E-25	0.3077	1.0E-25	0.2412	1.0E-25
H, avg:atm-mol/mol	118.7		404.1		321.9	
H, avg: atm-m3/mol	2.14E-03	1	7.28E-03	1	5.80E-03	1
H, avg: kPa-m3/mol	0.2168		0.7376		0.5877	
COV, r [std/mean]	43.00		8.65		4.61	
COV, both replic.	———		———		———	
Observation: (1)	0.1318		0.3003		0.2488	
[atm-m3/m3] (2)	0.1201		0.3402		0.2299	
(3)	0.0622		0.2764		0.2525	
(4)	0.0541		0.3137		0.2335	
Injection: (1)	8663		13347		16237	
[Peak Area] (2)	6225		12625		16395	
(3)	33831		31643		43606	
(4)	35484		29060		45863	

	Temperature 4		Temperature 5	
RUN Number ---)	79		65	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	15		15	
Component ID	132		132	
Temperature (C)	25.15		30	
Low Vol (ml)	24		24	
High Vol (ml)	204		204	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.4235	1.0E-25	0.3595	1.0E-25
H, avg:atm-mol/mol	575.5		496.5	
H, avg: atm-m3/mol	1.04E-02	1	8.94E-03	1
H, avg: kPa-m3/mol	1.0505		0.9063	
COV, r [std/mean]	14.83		21.65	
COV, both replic.	------		------	
Observation: (1)	0.4888		0.3850	
[atm-m3/m3] (2)	0.4649		0.2735	
(3)	0.3798		0.4542	
(4)	0.3607		0.3255	
Injection: (1)	22732		25816	
[Peak Area] (2)	18988		29033	
(3)	38287		51556	
(4)	39698		65164	

ANALYSIS COMPLETED ...

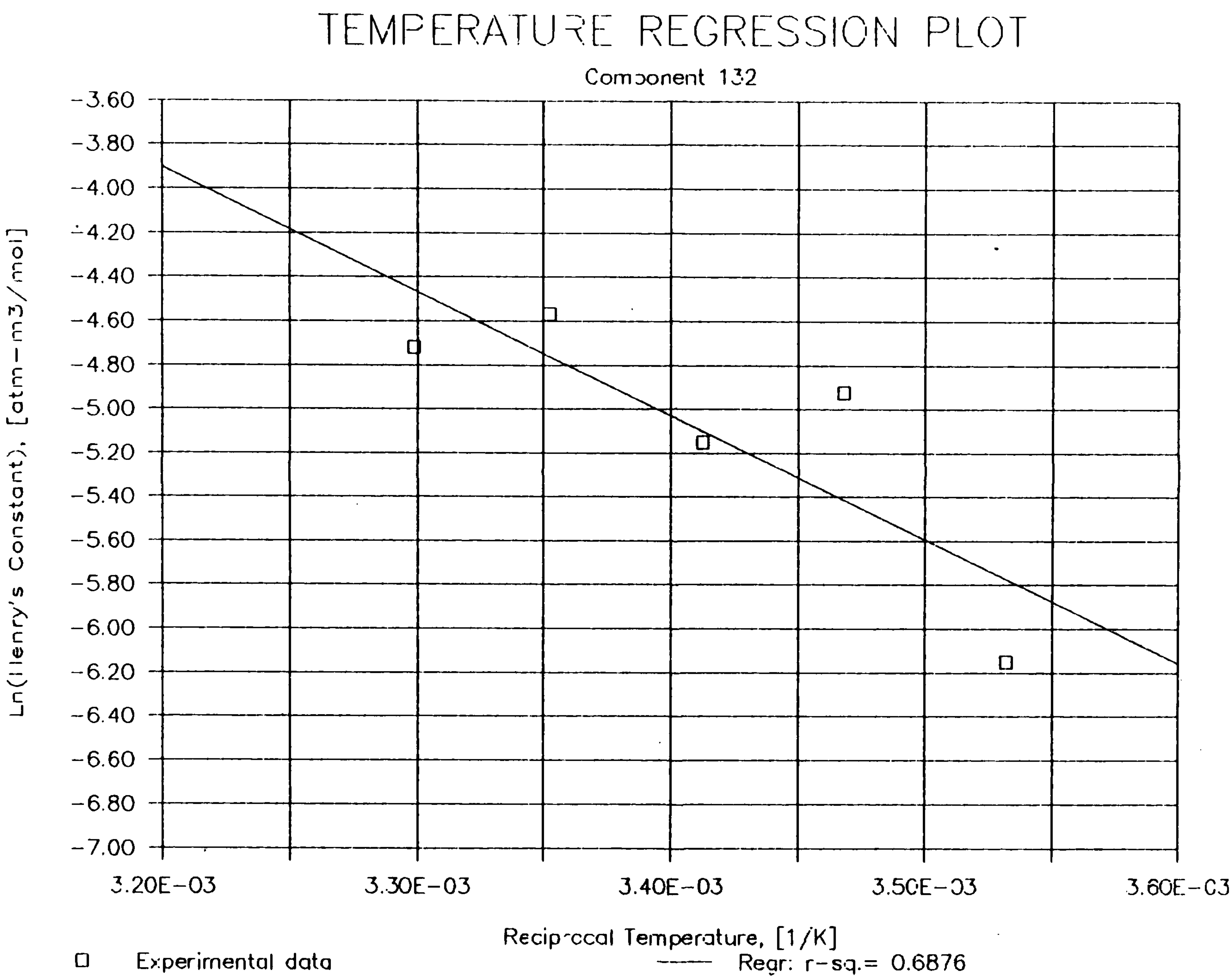
Temperature Regression Parameters:

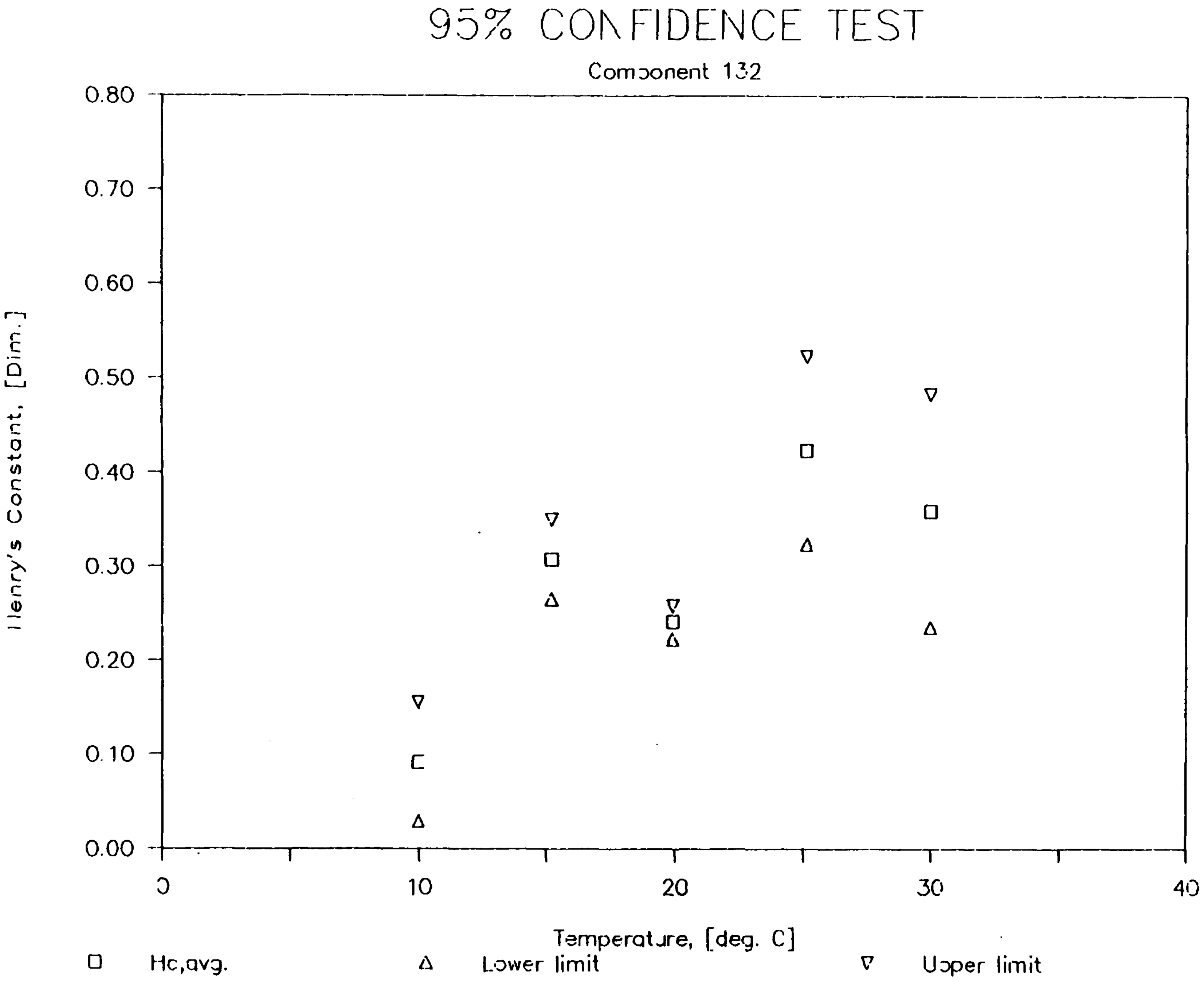
\# OF POINTS = 5

SLOPE = -5.6E+03

Y-INTERCEPT = 1.4E+01

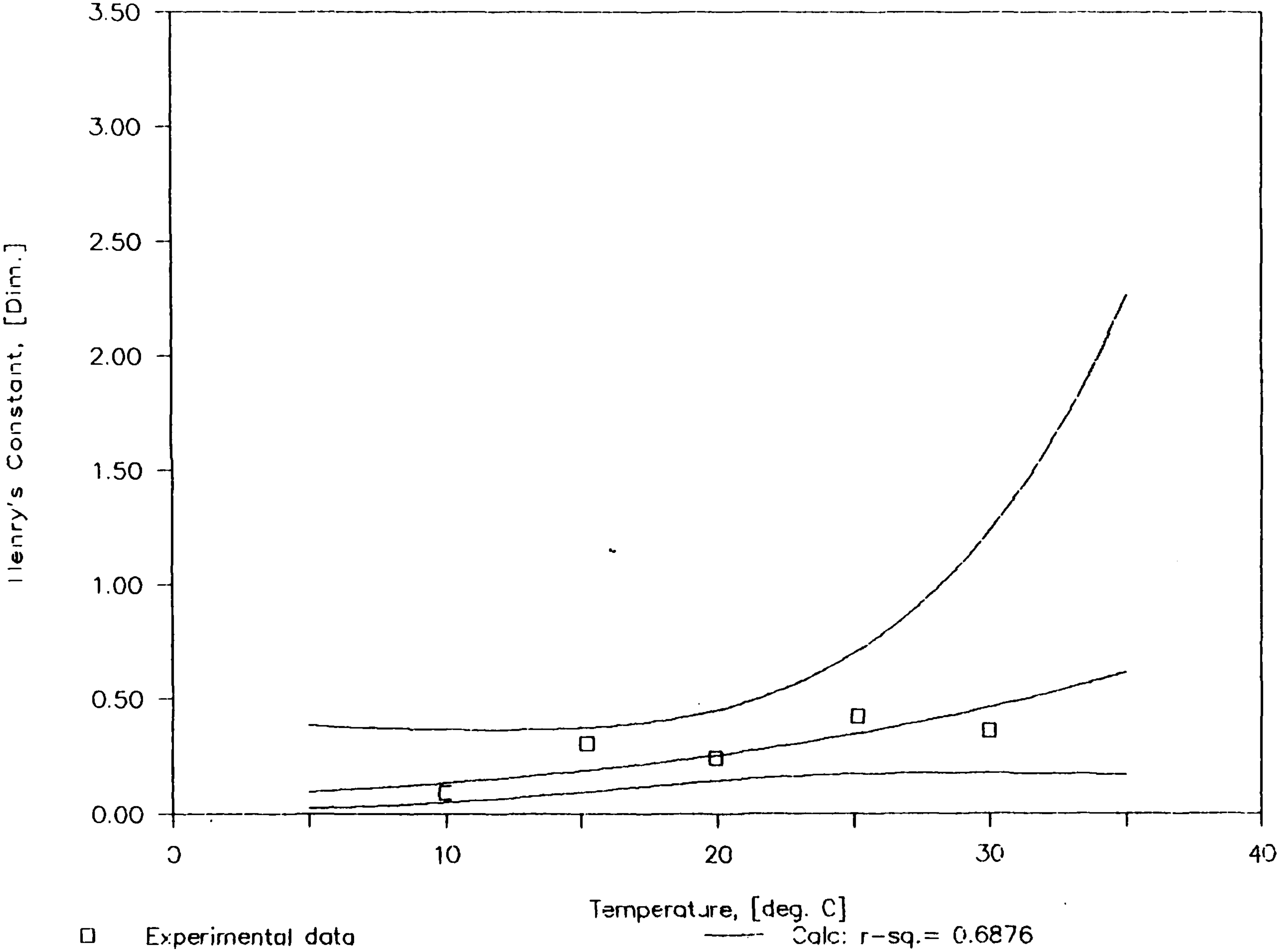
R-SQUARED = 0.6876


TEMPERATURE REGRESSION PLOT
Component 132
Ln(Henry's Constant), [atm-m3/mol]
-3.60
-3.80
-4.00
-4.20
-4.40
-4.60
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
-6.60
-6.80
-7.00
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.6876


95% CONFIDENCE TEST
Component 132
Henry's Constant, [Dim.]
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

REGRESSION CONFIDENCE TEST

Component 132, 95% Confidence



06-Nov-86 Results Summary for Component 33

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	10		10		11	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	8		8		8	
Component ID	33		33		33	
Temperature (C)	10		15		20.2	
Low Vol (ml)	22		22		22	
High Vol (ml)	202		202		202	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.6386	1.0E-25	0.8083	1.0E-25	0.9653	1.0E-25
H, avg:atm-mol/mol	823.6		1060.9		1289.8	
H, avg: atm-m3/mol	1.48E-02	1	1.91E-02	1	2.32E-02	1
H, avg: kPa-m3/mol	1.5035		1.9366		2.3545	
COV, r [std/mean]	1.28		3.90		3.41	
COV, both replic.	----		----		----	
Observation: (1)	0.6336		0.8033		0.9497	
[atm-m3/m3] (2)	0.6300		0.8471		0.9283	
(3)	0.6473		0.7704		1.0029	
(4)	0.6435		0.8124		0.9802	
Injection: (1)	376280		393720		454690	
[Peak Area] (2)	382240		381840		472930	
(3)	525350		461660		471940	
(4)	527600		444080		479800	

	Temperature 4		Temperature 5	
RUN Number —)	11		10	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	8		8	
Component ID	33		33	
Temperature (C)	25		30	
Low Vol (ml)	22		22	
High Vol (ml)	202		202	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	1.2036	1.0E-25	1.5210	1.0E-25
H, avg:atm-mol/mol	1634.5		2100.2	
H, avg: atm-m3/mol	2.94E-02	1	3.78E-02	1
H, avg: kPa-m3/mol	2.9837		3.8338	
COV, r [std/mean]	2.25		5.93	
COV, both replic.	———		———	
Observation: (1)	1.2332		1.4176	
[atm-m3/m3] (2)	1.1881		1.5524	
(3)	1.2188		1.4856	
(4)	1.1743		1.6283	
Injection: (1)	637490		485580	
[Peak Area] (2)	632260		501320	
(3)	549240		379840	
(4)	563790		357150	

Temperature Regression Parameters:

OF POINTS = 5

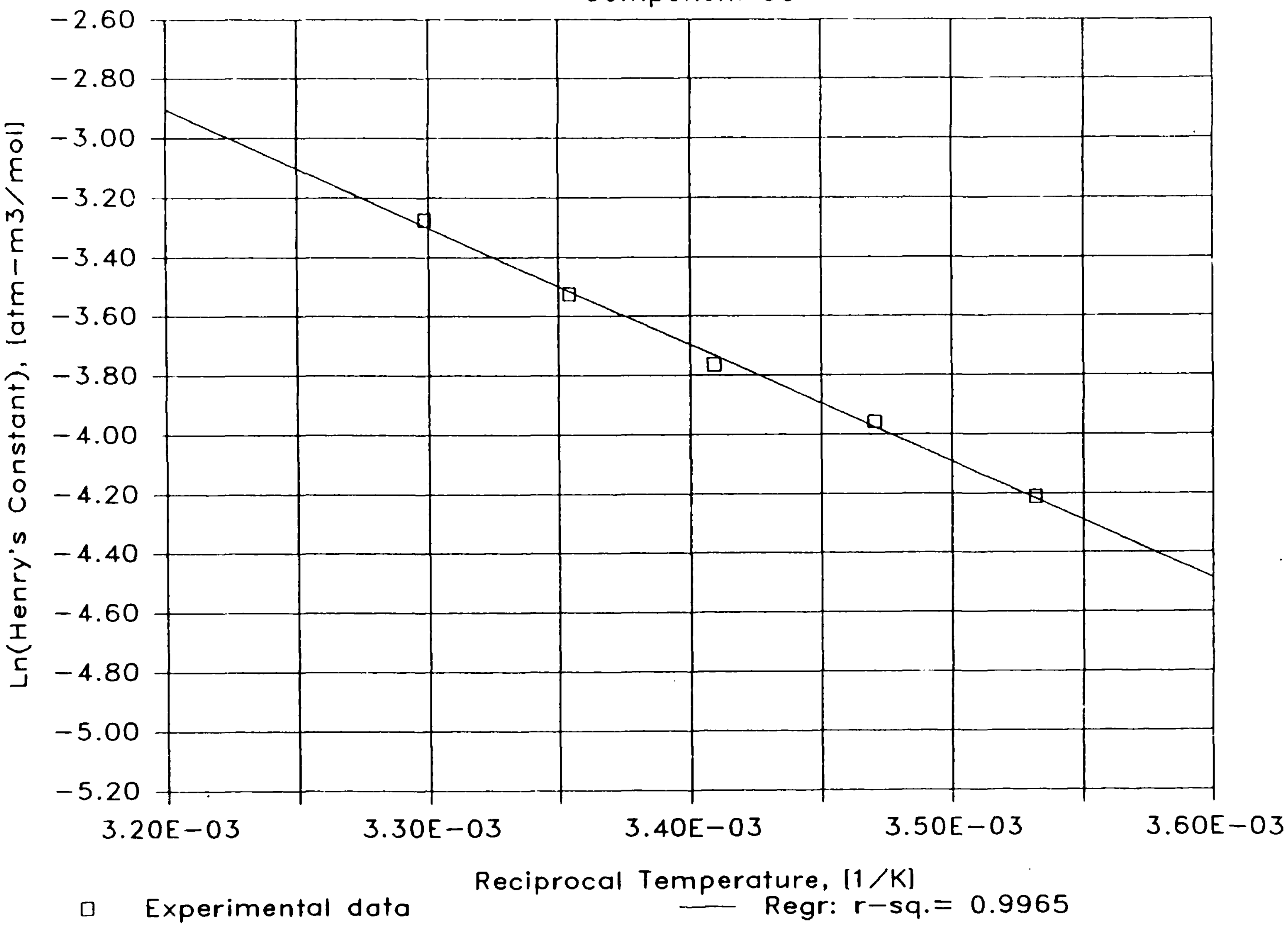
SLOPE = -4.0E+03

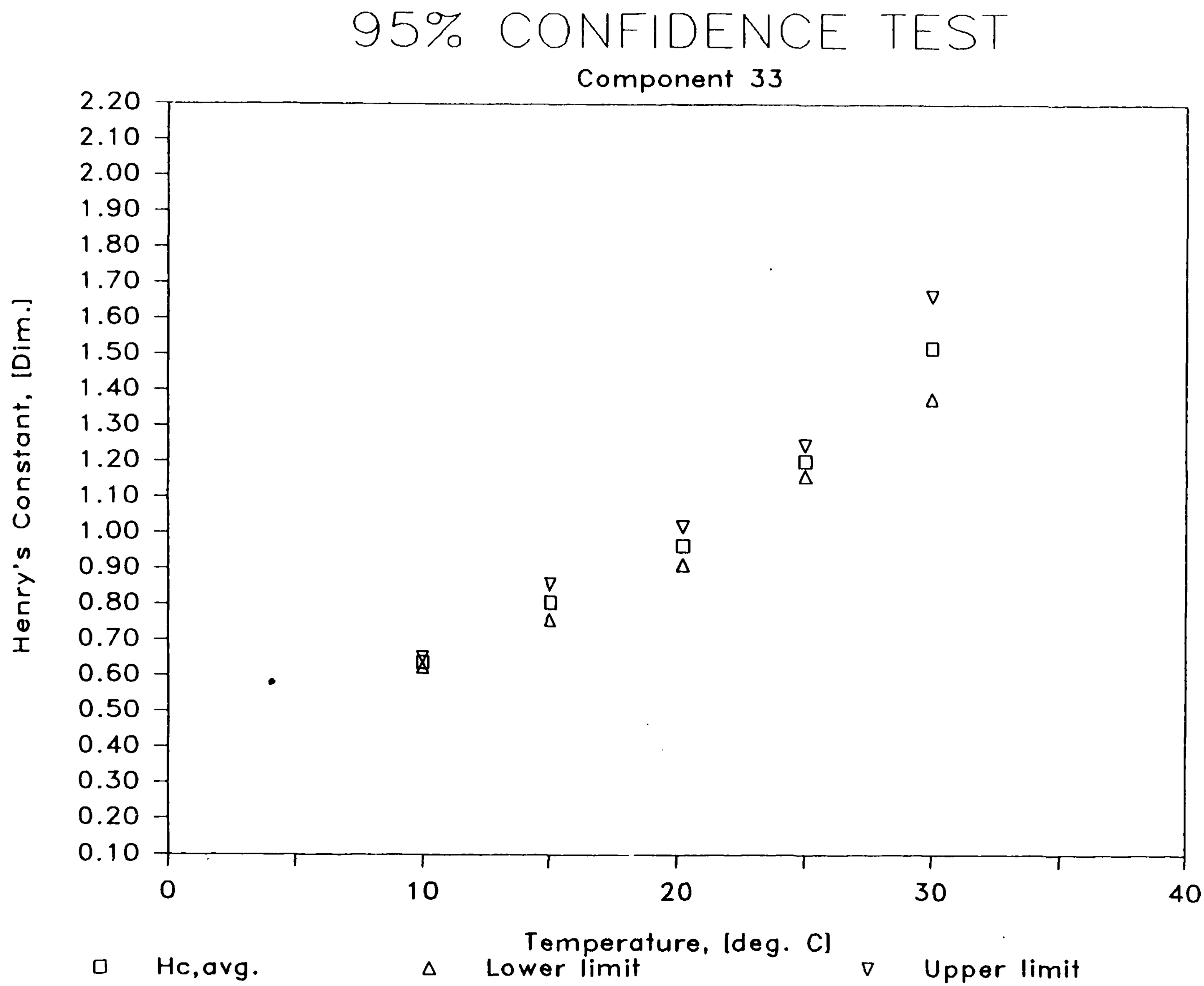
Y-INTERCEPT = 9.7E+00

R-SQUARED = 0.9965

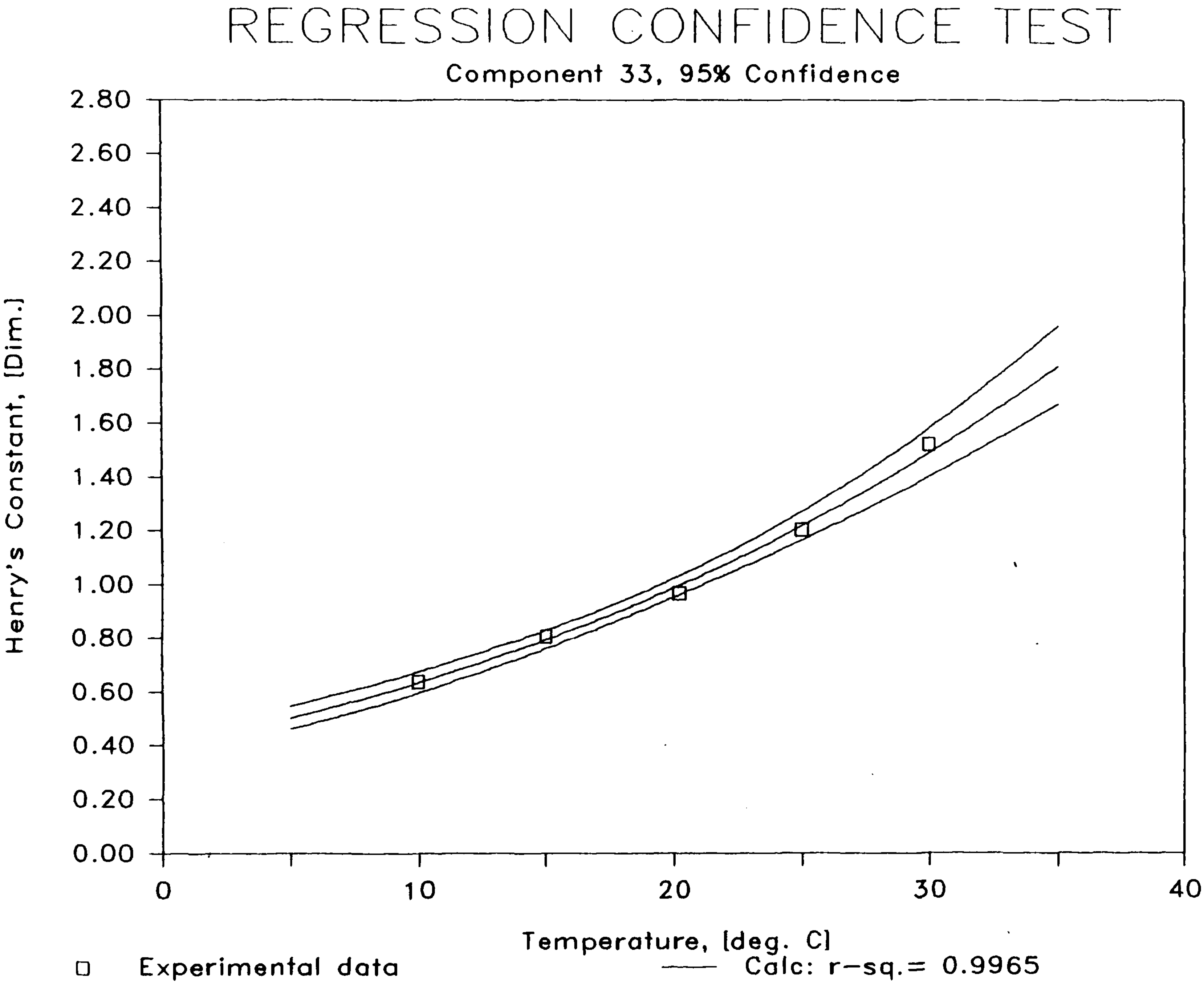
TEMPERATURE REGRESSION PLOT

Component 33





95% CONFIDENCE TEST
Component 33
Henry's Constant, [Dim.]
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 33, 95% Confidence
Henry's Constant, [Dim.]
2.80
2.60
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9965

Results Summary for Component 34

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	6		6		7	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	4		4		4	
Component ID	34		34		34	
Temperature (C)	10		14.9		20.1	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.1733	1.0E-25	0.1945	1.0E-25	0.2374	1.0E-25
H,avg:atm-mol/mol	223.5		255.1		317.1	
H,avg: atm-m3/mol	4.03E-03	1	4.60E-03	1	5.71E-03	1
H,avg: kPa-m3/mol	0.4080		0.4657		0.5788	
COV, r [std/mean]	4.52		1.89		4.81	
COV, both replic.	------		------		------	
Observation: (1)	0.1829		0.1988		0.2284	
[atm-m3/m3] (2)	0.[illegible]45		0.1934		0.2482	
(3)	0.1720		0.1955		0.2266	
(4)	0.1639		0.1901		0.2463	
Injection: (1)	113840		174540		222800	
[Peak Area] (2)	110170		172910		221780	
(3)	352230		515850		608350	
(4)	361220		523870		579170	

	Temperature 4		Temperature 5	
RUN Number --->	7		7	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	4		4	
Component ID	34		34	
Temperature (C)	25		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.2752	1.0E-25	0.3870	1.0E-25
H,avg:atm-mol/mol	373.7		534.3	
H,avg: atm-m3/mol	6.73E-03	1	9.63E-03	1
H,avg: kPa-m3/mol	0.6822		0.9754	
COV, r [std/mean]	2.70		0.48	
COV, both replic.	------		------	
Observation: (1)	0.2672		0.3856	
[atm-m3/m3] (2)	0.2708		0.3852	
(3)	0.2795		0.3888	
(4)	0.2832		0.3884	
Injection: (1)	232930		396380	
[Peak Area] (2)	239480		398590	
(3)	579010		778120	
(4)	574210		778720	

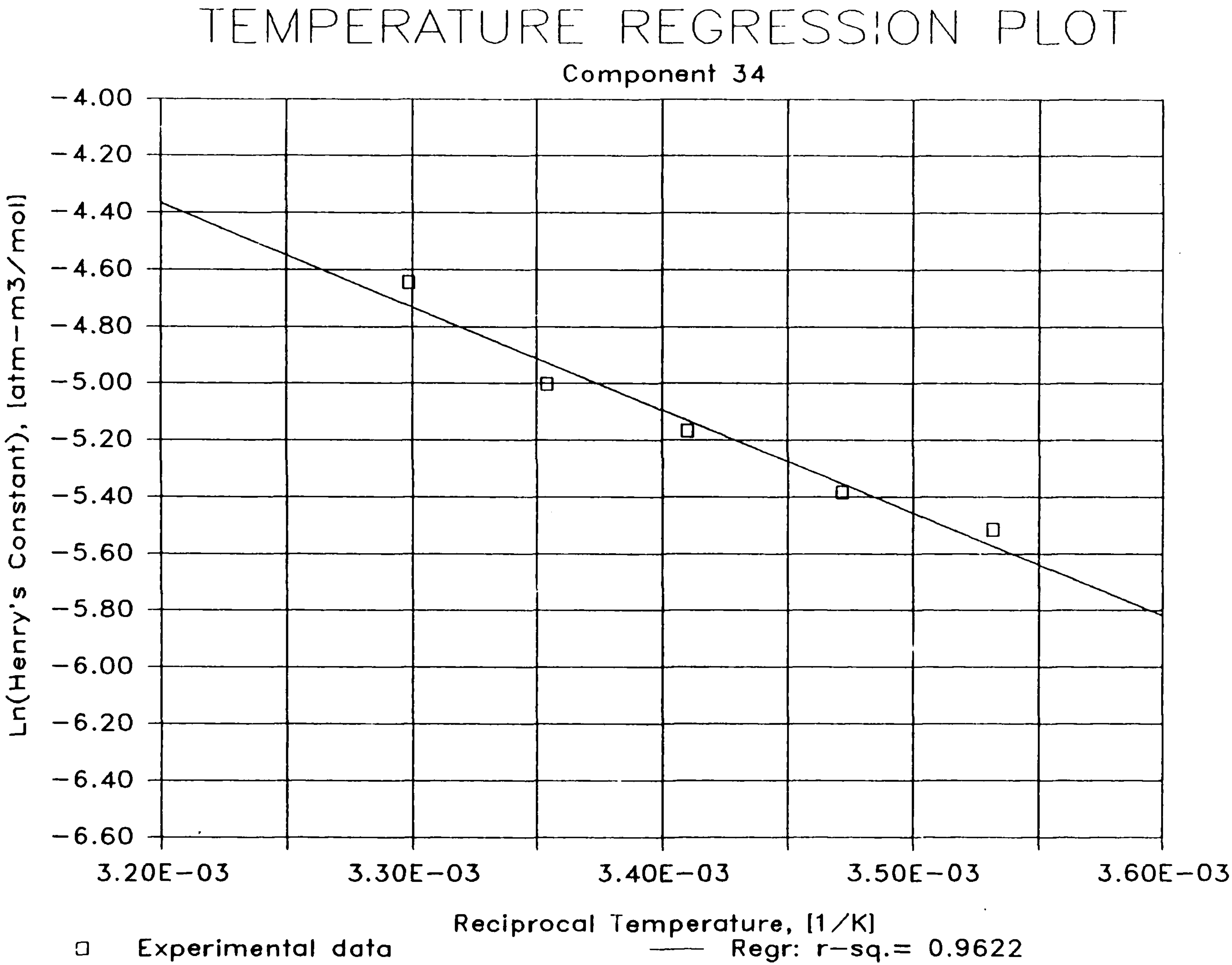
Temperature Regression Parameters:

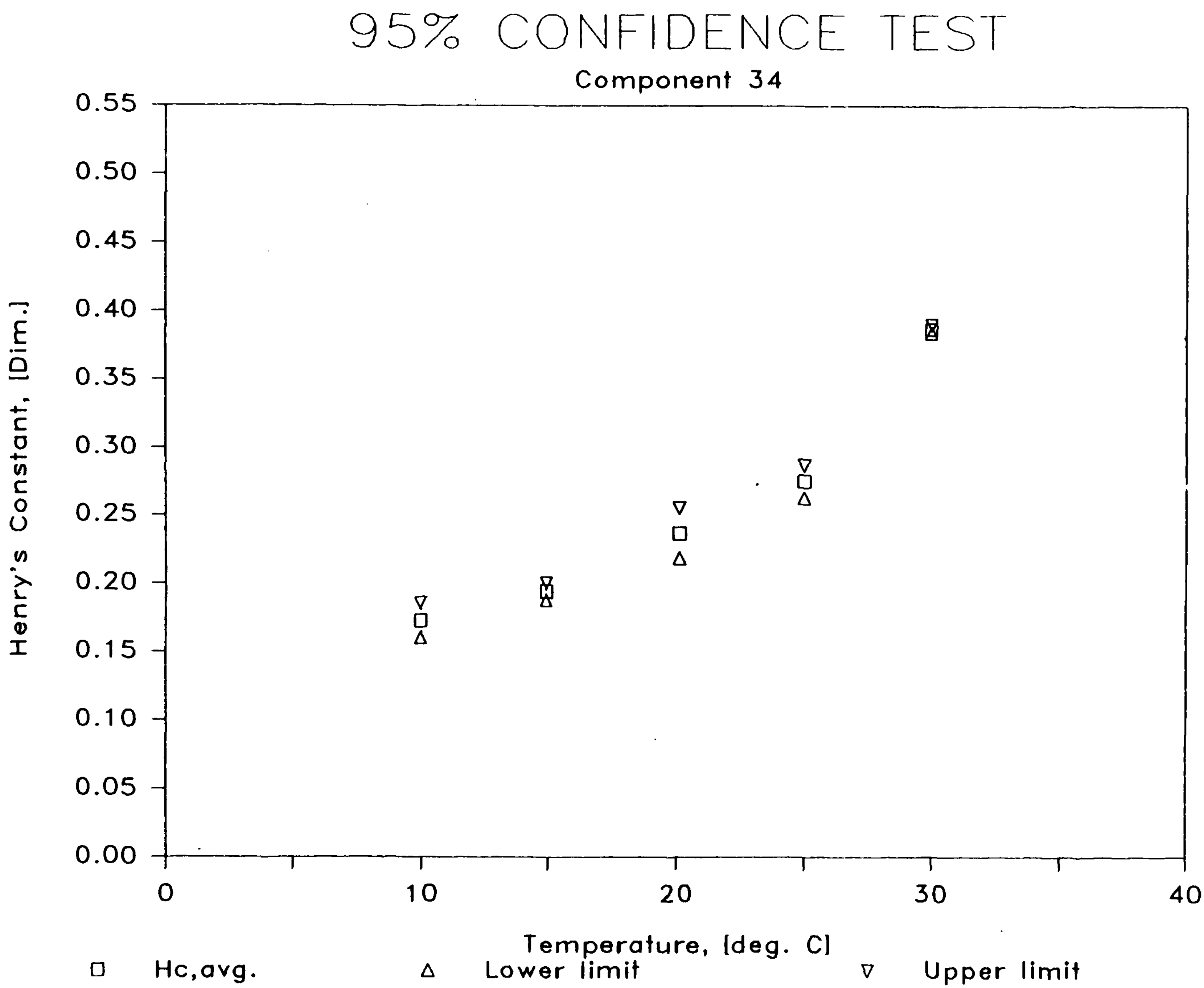
\# OF POINTS = 5

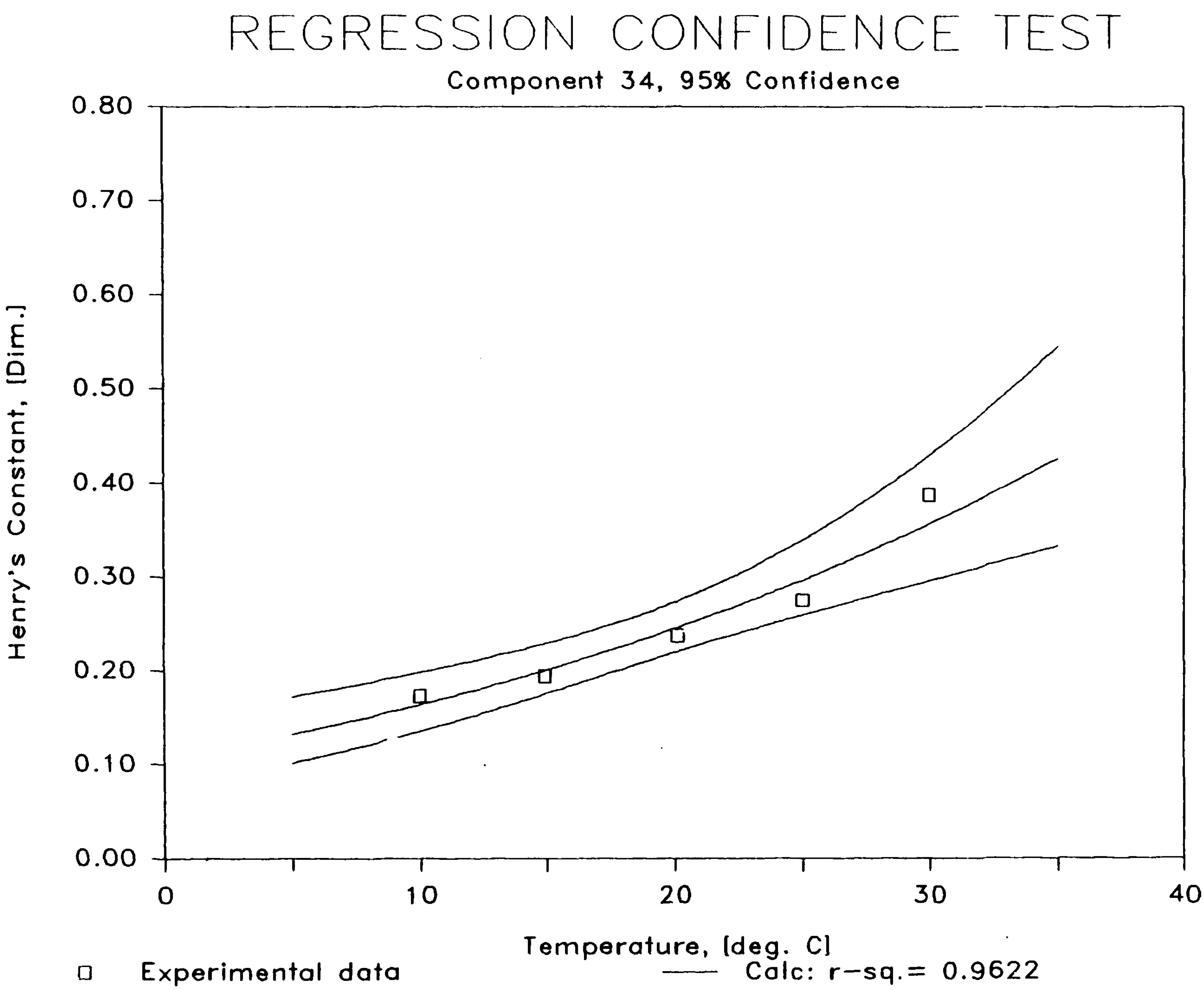
SLOPE = -3.6E+03

Y-INTERCEPT = 7.2E+00

R-SQUARED = 0.9622


TEMPERATURE REGRESSION PLOT
Component 34
Ln(Henry's Constant), [atm-m3/mol]
-4.00
-4.20
-4.40
-4.60
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
-6.60
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9622


95% CONFIDENCE TEST
Component 34
Henry's Constant, [Dim.]
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 34, 95% Confidence
Henry's Constant, [Dim.]
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9622

Results Summary for Component 36

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	7		6		7	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	9		9		9	
Component ID	36		36		36	
Temperature (C)	10		15		20	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.0533	1.0E-25	0.0269	1.0E-25	0.0194	1.0E-25
H,avg:atm-mol/mol	68.7		35.3		25.9	
H,avg: atm-m3/mol	1.24E-03	1	6.35E-04	1	4.66E-04	1
H,avg: kPa-m3/mol	0.1254		0.0644		0.0472	
COV, r [std/mean]	45.73		7.01		12.23	
COV, both replic.	———		———		———	
Observation: (1)	0.0733		0.0291		0.0194	
[atm-m3/m3] (2)	0.0754		0.0276		0.0165	
(3)	0.0314		0.0261		0.0223	
(4)	0.0330		0.0247		0.0194	
Injection: (1)	343770		351950		407640	
[Peak Area] (2)	268070		344730		416580	
(3)	1725500		2302300		2858900	
(4)	1707200		2325100		2921100	

	Temperature 4		Temperature 5	
RUN Number —)	8		7	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	9		9	
Component ID	36		36	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0215	1.0E-25	0.0315	1.0E-25
H,avg:atm-mol/mol	29.3		43.6	
H,avg: atm-m3/mol	5.27E-04	1	7.85E-04	1
H,avg: kPa-m3/mol	0.0534		0.0795	
COV, r [std/mean]	5.30		16.53	
COV, both replic.	———		———	
Observation: (1)	0.0225		0.0370	
[atm-m3/m3] (2)	0.0205		0.0348	
(3)	0.0226		0.0282	
(4)	0.0206		0.0261	
Injection: (1)	493260		884300	
[Peak Area] (2)	493550		833160	
(3)	3380300		5482500	
(4)	3429600		5563600	

Temperature Regression Parameters:

OF POINTS = 5

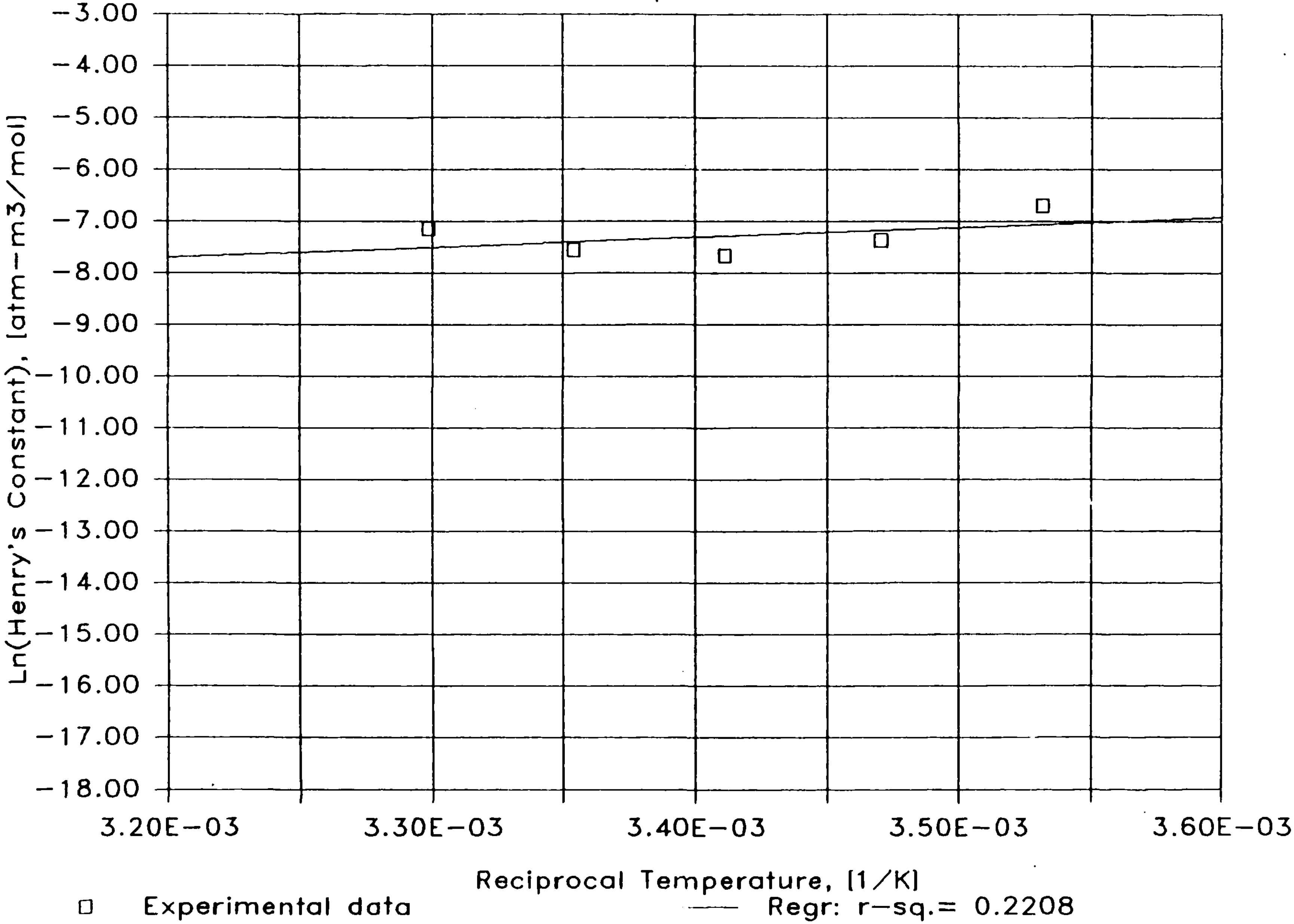
SLOPE = 2.0E+03

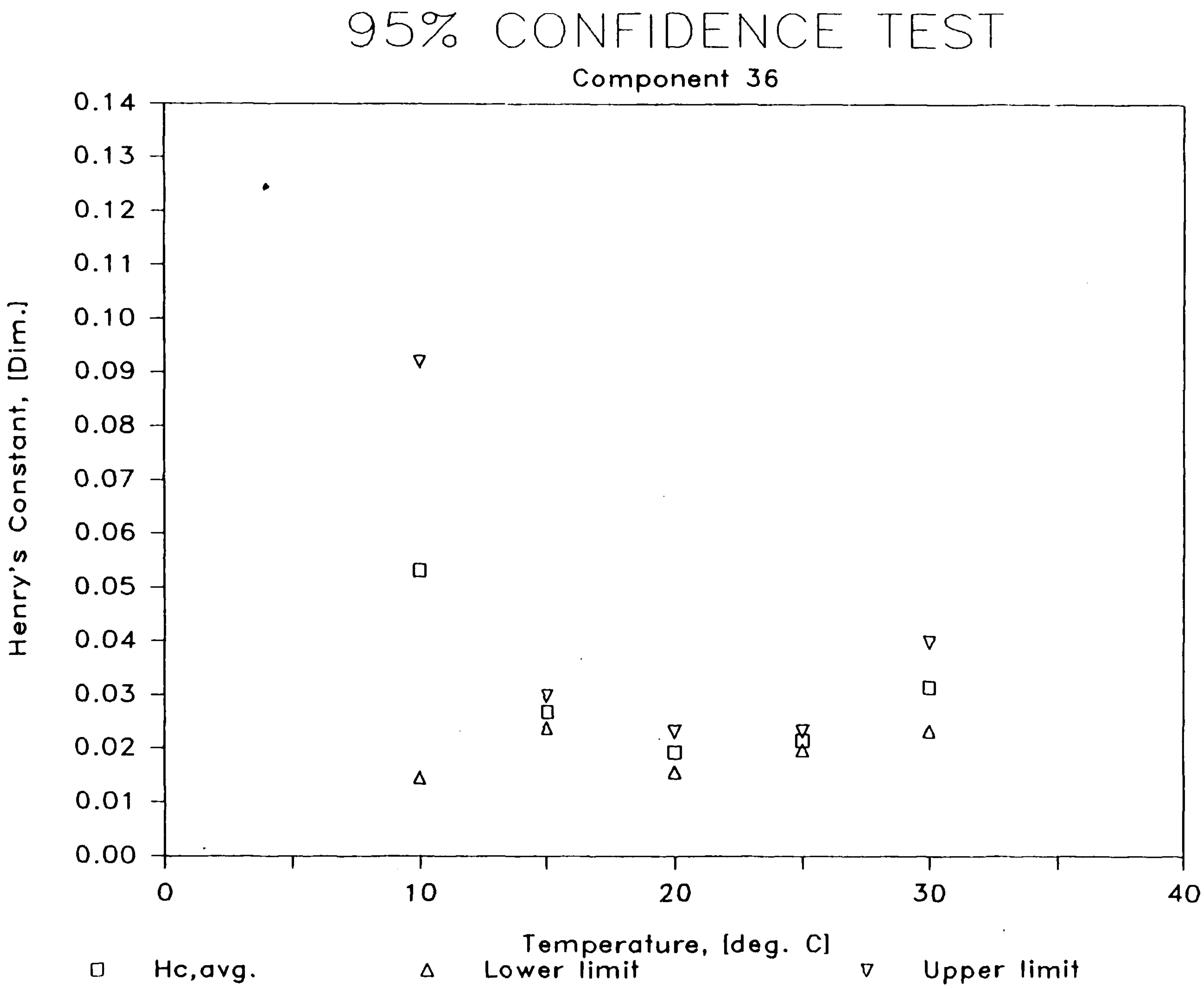
Y-INTERCEPT = -1.4E+01

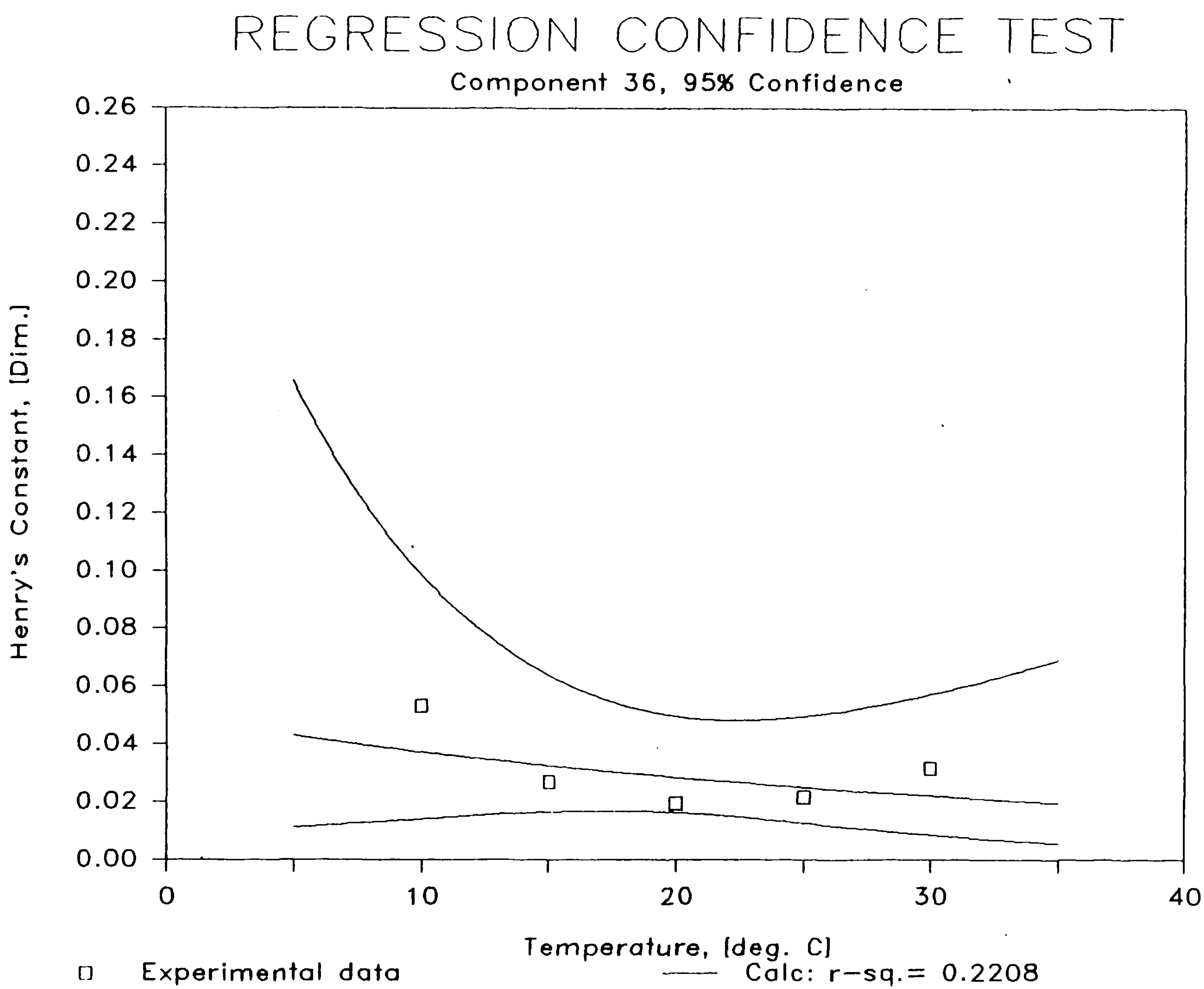
R-SQUARED = 0.2208

TEMPERATURE REGRESSION PLOT

Component 36




95% CONFIDENCE TEST
Component 36
Henry's Constant, [Dim.]
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 36, 95% Confidence
Henry's Constant, [Dim.]
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.2208

04-Nov-86 Results Summary for Component 136

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	6		6		5	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	16		16		16	
Component ID	136		136		136	
Temperature (C)	10		15		20.1	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0130	1.0E-25	0.0202	1.0E-25	0.0252	1.0E-25
H, avg:atm-mol/mol	16.8		26.5		33.6	
H, avg: atm-m3/mol	3.02E-04	1	4.77E-04	1	6.06E-04	1
H, avg: kPa-m3/mol	0.0306		0.0483		0.0614	
COV, r [std/mean]	33.19		49.30		52.61	
COV, both replic.	------		------		------	
Observation: (1)	0.0155		0.0237		0.0383	
[atm-m3/m3] (2)	0.0177		0.0320		0.0349	
(3)	0.0084		0.0088		0.0152	
(4)	0.0104		0.0162		0.0124	
Injection: (1)	92157		78050		111140	
[Peak Area] (2)	87113		69678		94494	
(3)	665330		530380		683640	
(4)	654440		500410		699000	

	Temperature 4		Temperature 5	
RUN Number ---)	7		7	
REPLICATE ---)	No 1	No. 2	No. 1	No. 2
Group No.	16		16	
Component ID	136		136	
Temperature (C)	25.1		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.0267	1.0E-25	0.0320	1.0E-25
H, avg:atm-mol/mol	36.2		44.2	
H, avg: atm-m3/mol	6.53E-04	1	7.96E-04	1
H, avg: kPa-m3/mol	0.0662		0.0806	
COV, r [std/mean]	5.41		7.28	
COV, both replic.	———		———	
Observation: (1)	0.0283		0.0342	
[atm-m3/m3] (2)	0.0259		0.0339	
(3)	0.0275		0.0301	
(4)	0.0251		0.0298	
Injection: (1)	118950		246060	
[Peak Area] (2)	118320		239450	
(3)	782460		1554800	
(4)	795690		1558000	

ANALYSIS COMPLETED ...

Temperature Regression Parameters:

OF POINTS = 5

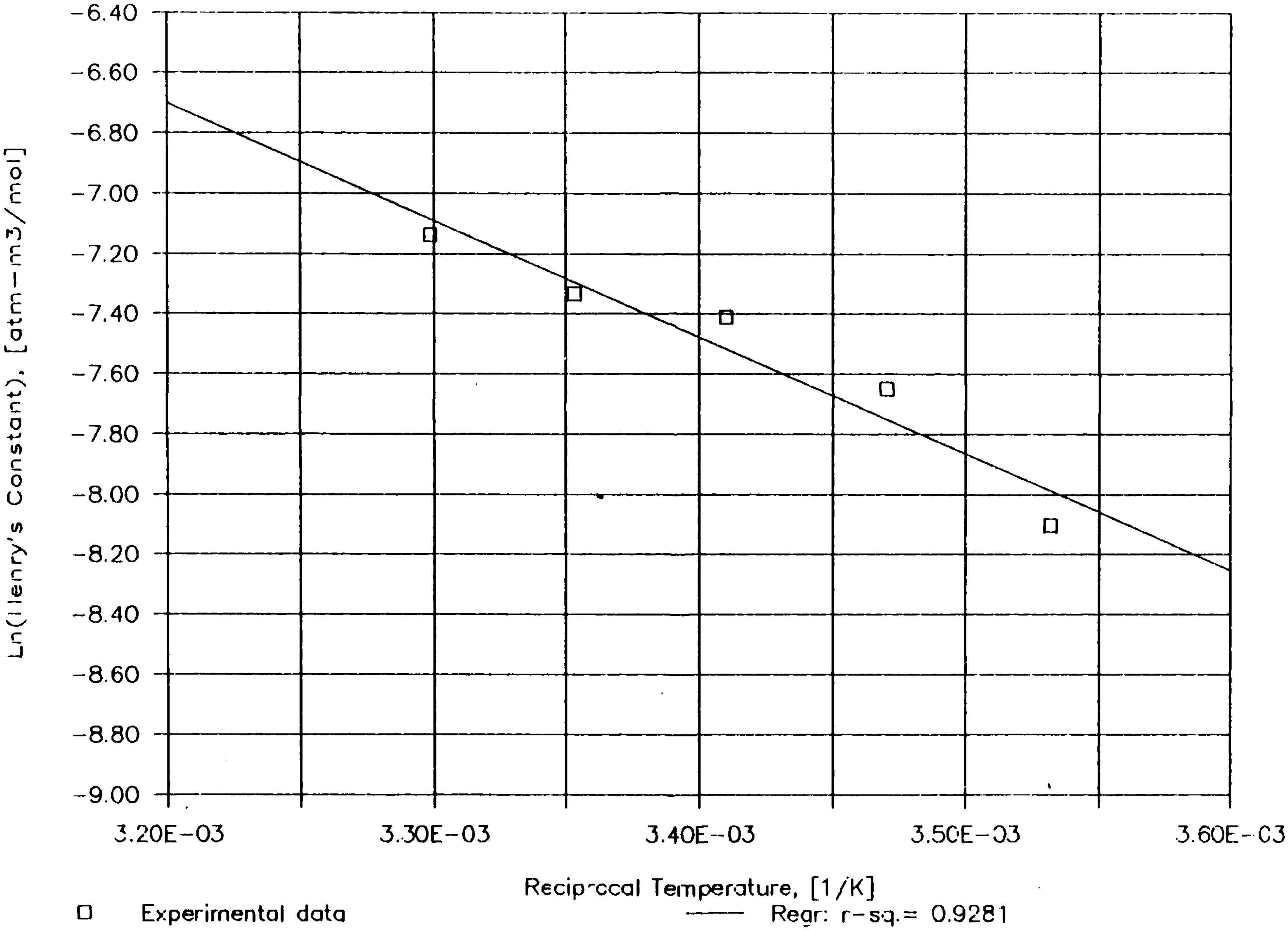
SLOPE = -3.9E+03

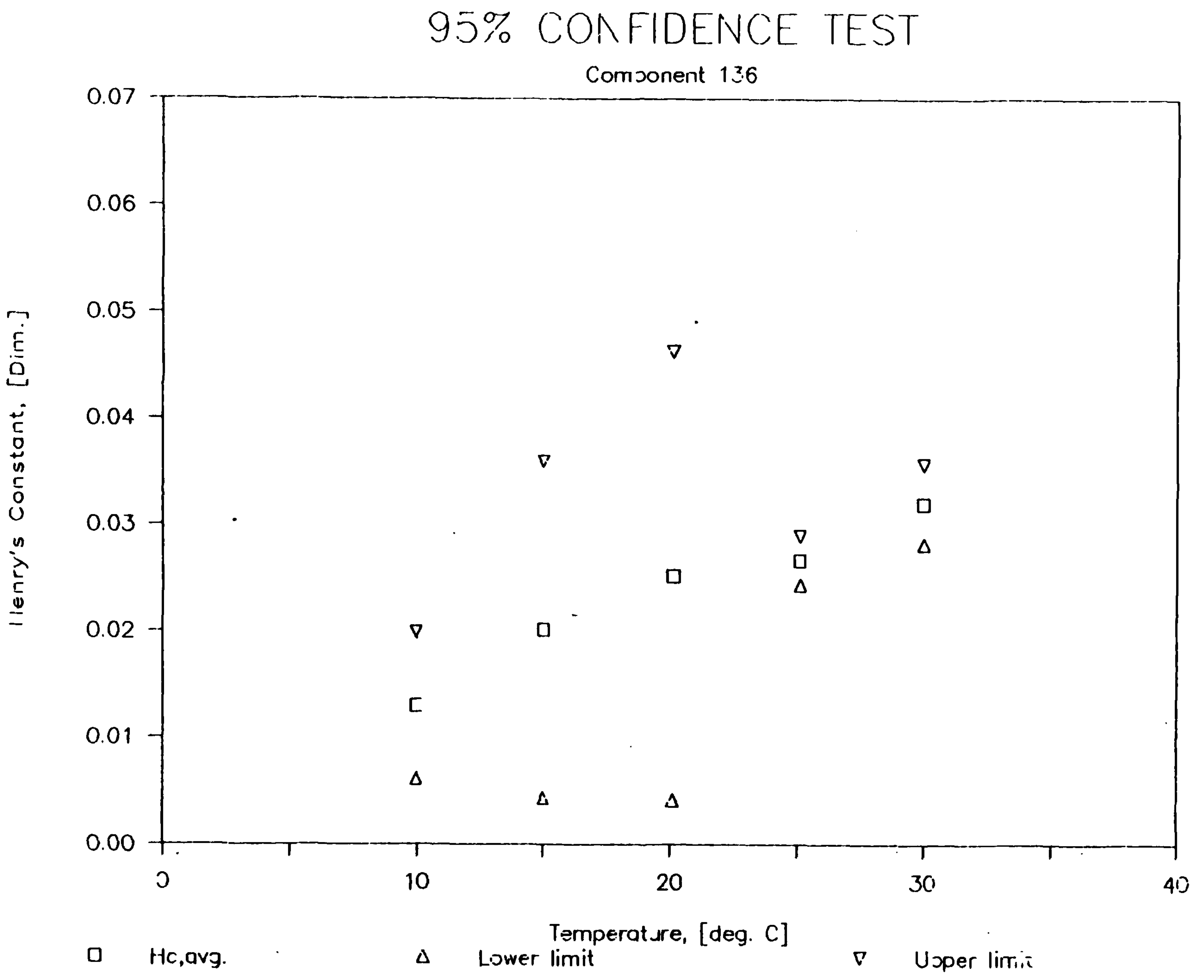
Y-INTERCEPT = 5.7E+00

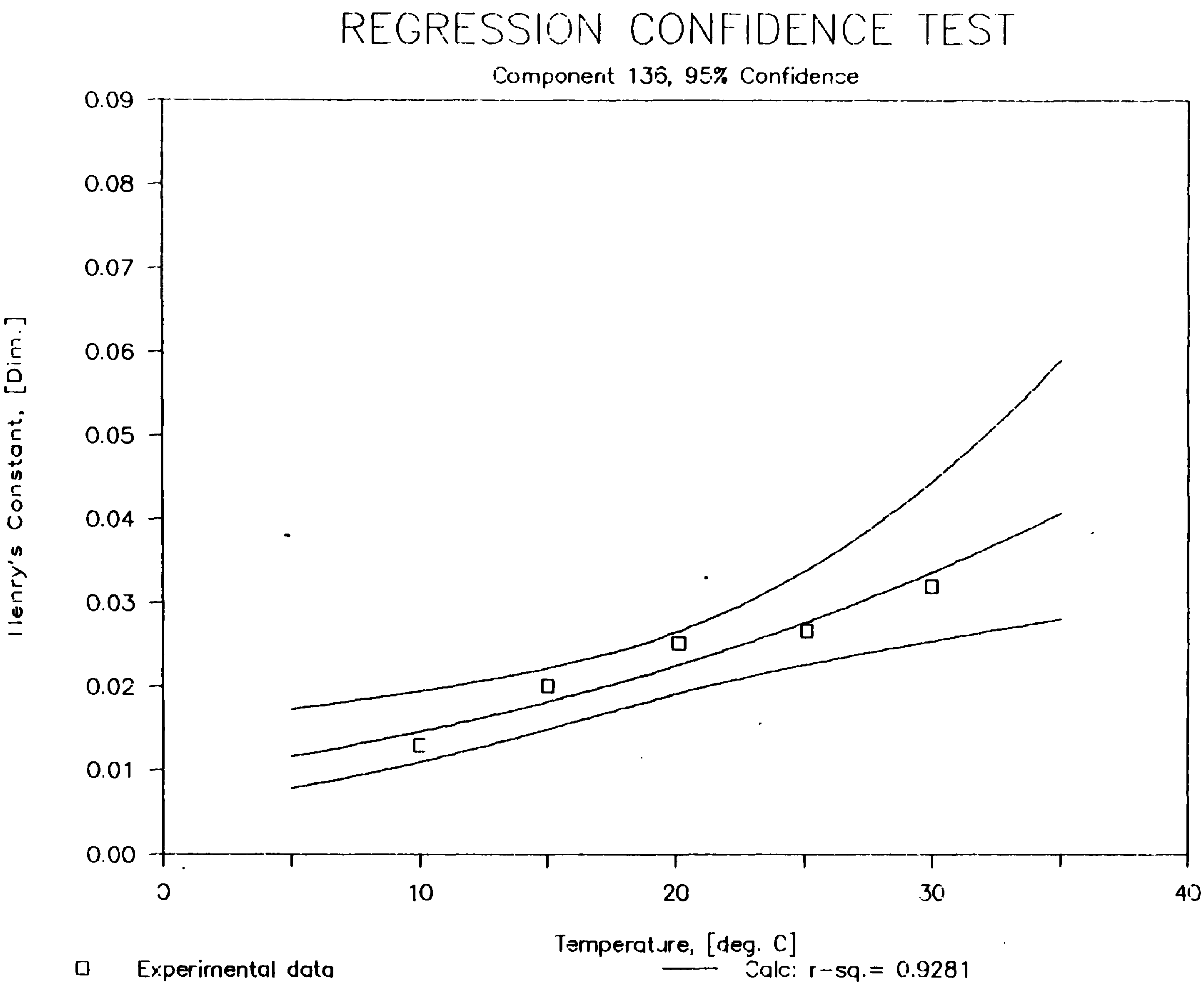
R-SQUARED = 0.9281

TEMPERATURE REGRESSION PLOT

Component 136




95% CONFIDENCE TEST
Component 136
Henry's Constant, [Dim.]
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 136, 95% Confidence
Henry's Constant, [Dim.]
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9281

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	11		10		11	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	9		9		9	
Component ID	37		37		37	
Temperature (C)	10		15		20	
Low Vol (ml)	25		25		25	
High Vol (ml)	205		205		205	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.6617	1.0E-25	0.8583	1.0E-25	0.9048	1.0E-25
H,avg:atm-mol/mol	853.5		1126.5		1208.1	
H,avg: atm-m3/mol	1.54E-02	1	2.03E-02	1	2.18E-02	1
H,avg: kPa-m3/mol	1.5580		2.0564		2.2054	
COV, r [std/mean]	3.41		17.22		3.09	
COV, both replic.	------		------		------	
Observation: (1)	0.6769		0.8978		0.9007	
[atm-m3/m3] (2)	0.6388		0.6926		0.8711	
(3)	0.6849		1.0410		0.9392	
(4)	0.6464		0.8018		0.9082	
Injection: (1)	3238100		2870500		3572000	
[Peak Area] (2)	3266200		3194000		3681700	
(3)	4300400		3103100		3852300	
(4)	4485900		3748700		3947100	

	Temperature 4		Temperature 5	
RUN Number ---)	12		11	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	9		9	
Component ID	37		37	
Temperature (C)	25		30	
Low Vol (ml)	25		25	
High Vol (ml)	205		205	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	1.0571	1.0E-25	1.2767	1.0E-25
H,avg:atm-mol/mol	1435.5		1762.8	
H,avg: atm-m3/mol	2.59E-02	1	3.18E-02	1
H,avg: kPa-m3/mol	2.6205		3.2180	
COV, r [std/mean]	2.67		0.89	
COV, both replic.	------		------	
Observation: (1)	1.0695		1.2895	
[atm-m3/m3] (2)	1.0895		1.2711	
(3)	1.0251		1.2822	
(4)	1.0442		1.2639	
Injection: (1)	5147500		2865300	
[Peak Area] (2)	4993300		2853900	
(3)	4905100		2391500	
(4)	4840500		2415700	

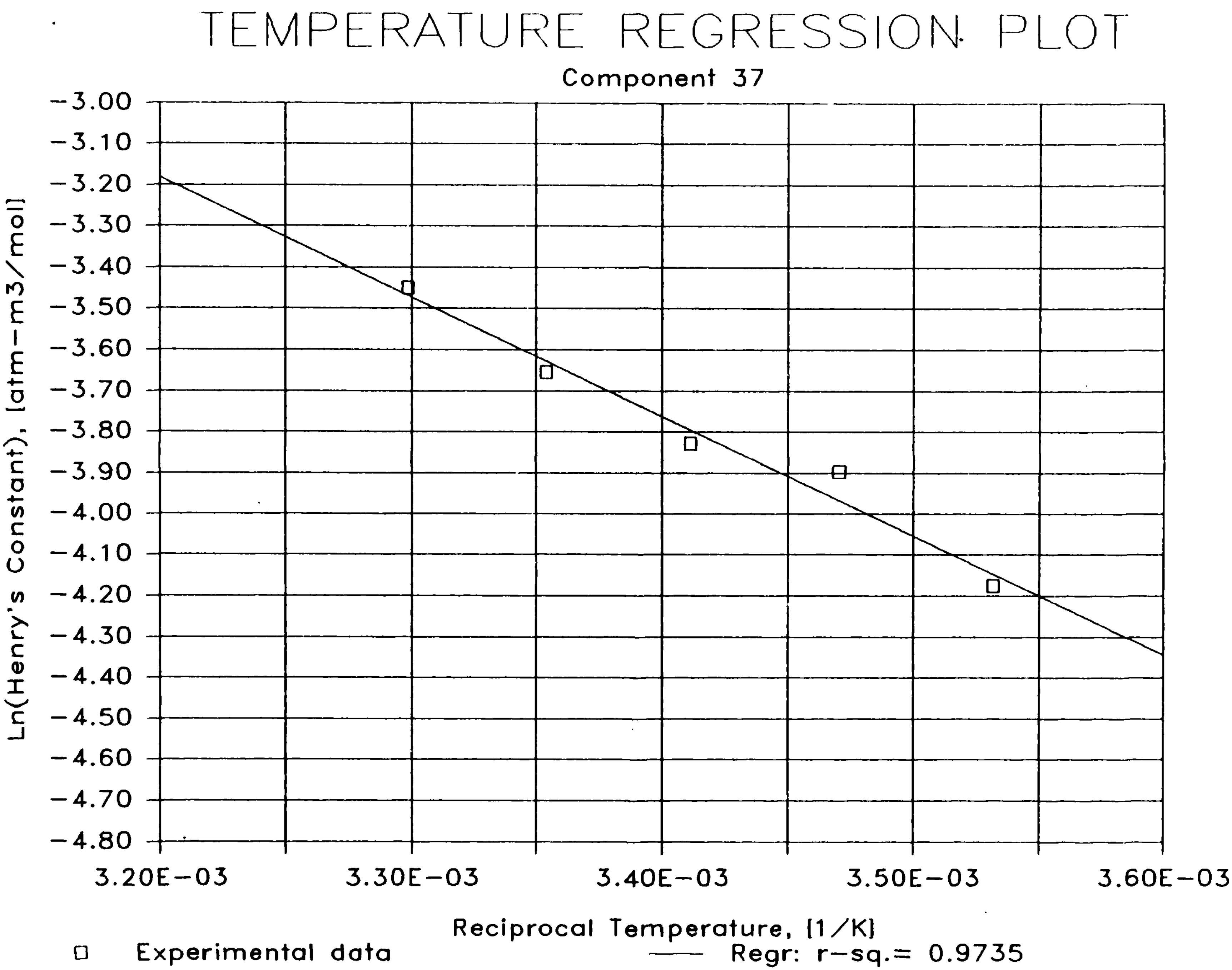
Temperature Regression Parameters:

OF POINTS = 5

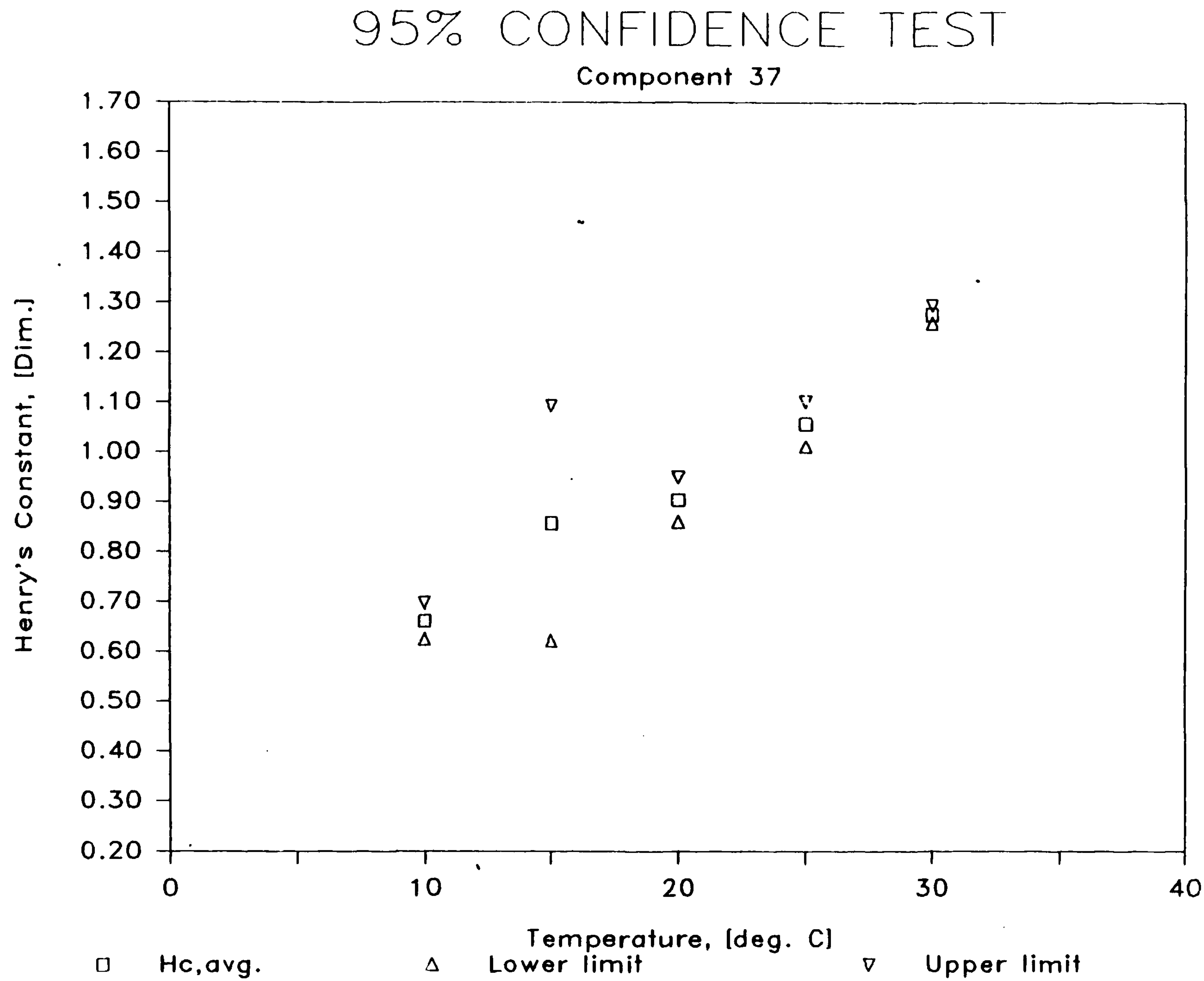
SLOPE = -2.9E+03

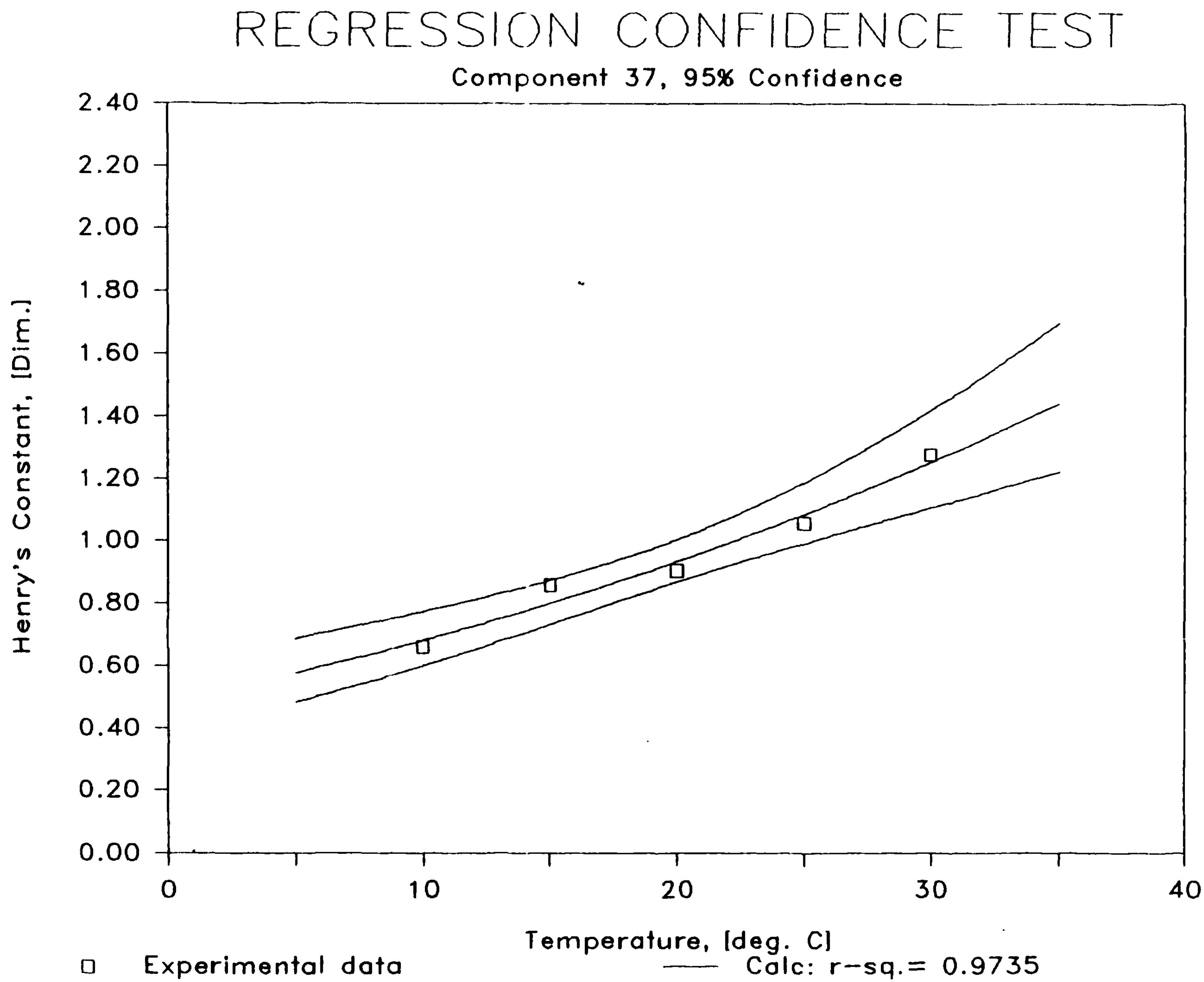
Y-INTERCEPT = 6.1E+00

R-SQUARED = 0.9735



TEMPERATURE REGRESSION PLOT
Component 37
-3.00
-3.10
-3.20
-3.30
-3.40
-3.50
-3.60
-3.70
-3.80
-3.90
-4.00
-4.10
-4.20
-4.30
-4.40
-4.50
-4.60
-4.70
-4.80
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9735


95% CONFIDENCE TEST
Component 37
Henry's Constant, [Dim.]
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 37, 95% Confidence
Henry's Constant, [Dim.]
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r--sq.= 0.9735

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	9		24		39	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	17		17		17	
Component ID	43		43		43	
Temperature (C)	10.1		15.1		19.5	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0142	1.0E-25	0.0084	1.0E-25	0.0305	1.0E-25
H, avg:atm-mol/mol	18.4		11.0		40.7	
H, avg: atm-m3/mol	3.31E-04	1	1.98E-04	1	7.33E-04	1
H, avg: kPa-m3/mol	0.0335		0.0201		0.0743	
COV, r [std/mean]	45.57		53.06		34.56	
COV, both replic.	———		———		———	
Observation: (1)	0.0199		0.0055		0.0387	
[atm-m3/m3] (2)	0.0198		0.0131		0.0405	
(3)	0.0087		0.0038		0.0206	
(4)	0.0086		0.0112		0.0222	
Injection: (1)	25478		34888		60686	
[Peak Area] (2)	22974		34282		52513	
(3)	201340		315460		412400	
(4)	201500		293250		406750	

	Temperature 4		Temperature 5	
RUN Number ---)	25		10	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	17		17	
Component ID	43		43	
Temperature (C)	25.1		30.5	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.0102	1.0E-25	0.0281	1.0E-25
H, avg:atm-mol/mol	13.9		38.8	
H, avg: atm-m3/mol	2.50E-04	1	7.00E-04	1
H, avg: kPa-m3/mol	0.0253		0.0709	
COV, r [std/mean]	86.05		56.56	
COV, both replic.	-----		-----	
Observation: (1)	0.0201		0.0228	
[atm-m3/m3] (2)	0.0147		0.0477	
(3)	0.0054		0.0099	
(4)	0.0007		0.0319	
Injection: (1)	66222		81869	
[Peak Area] (2)	57695		72903	
(3)	522440		631150	
(4)	548100		521520	

ANALYSIS COMPLETED ...

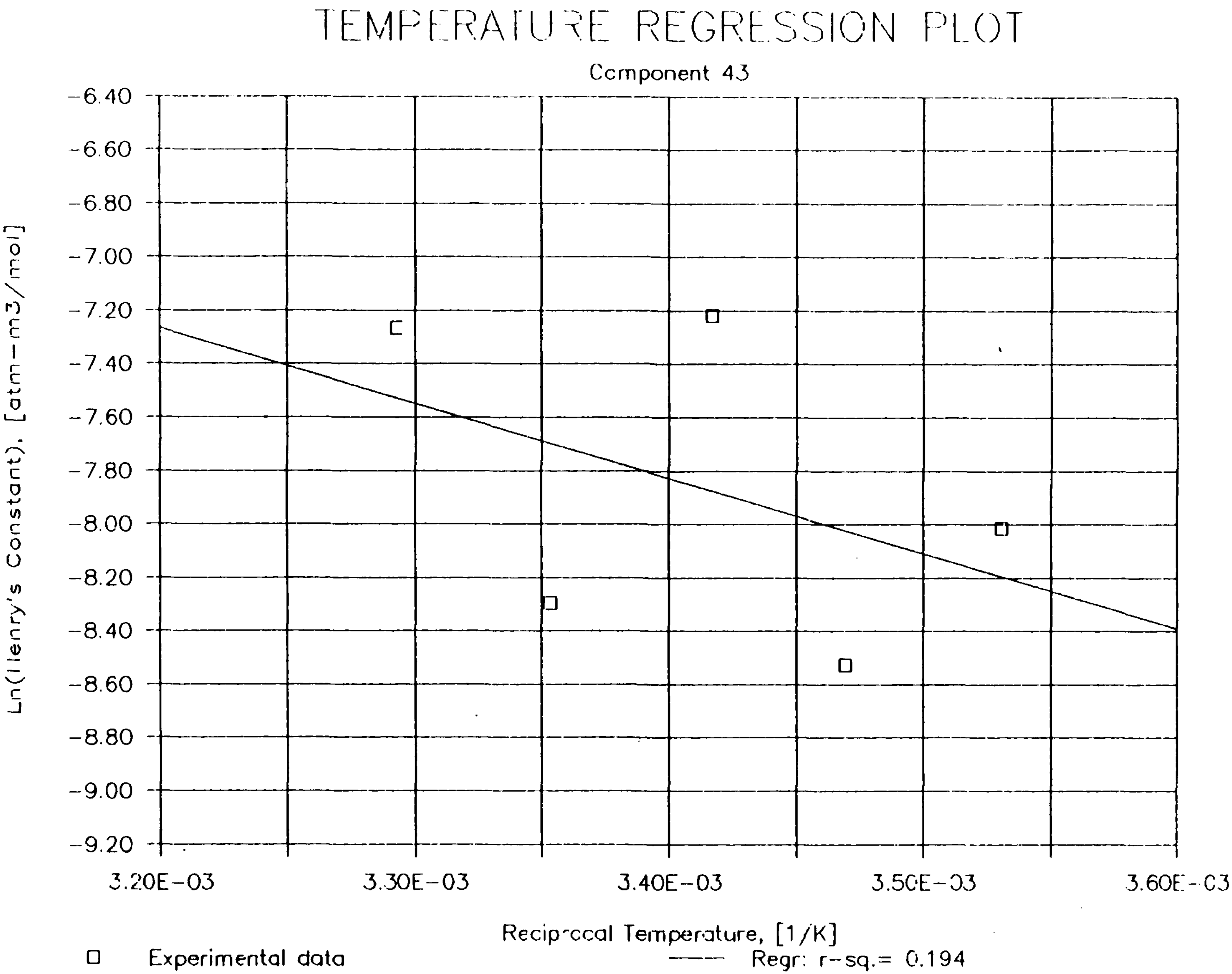
Temperature Regression Parameters:

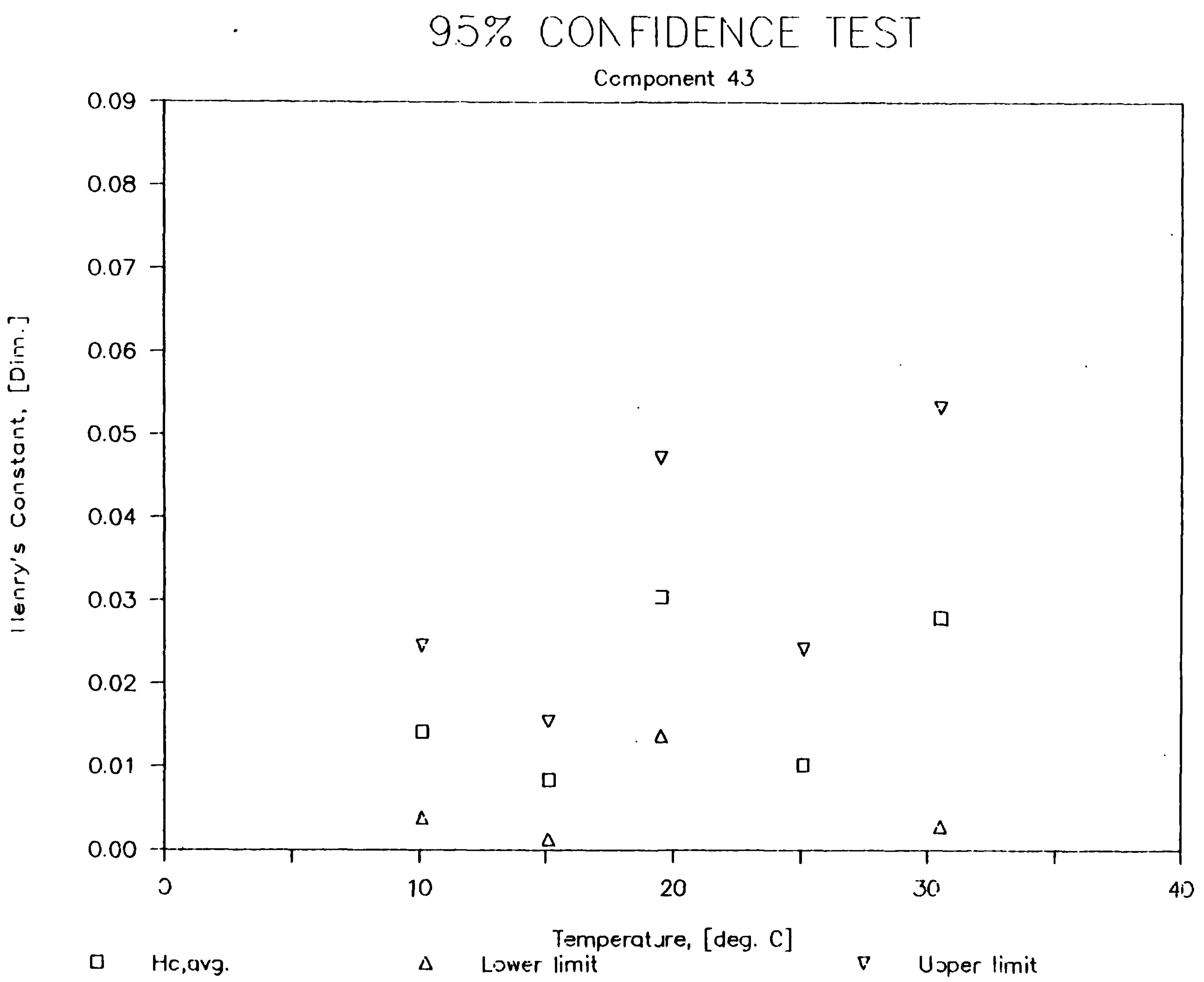
OF POINTS = 5

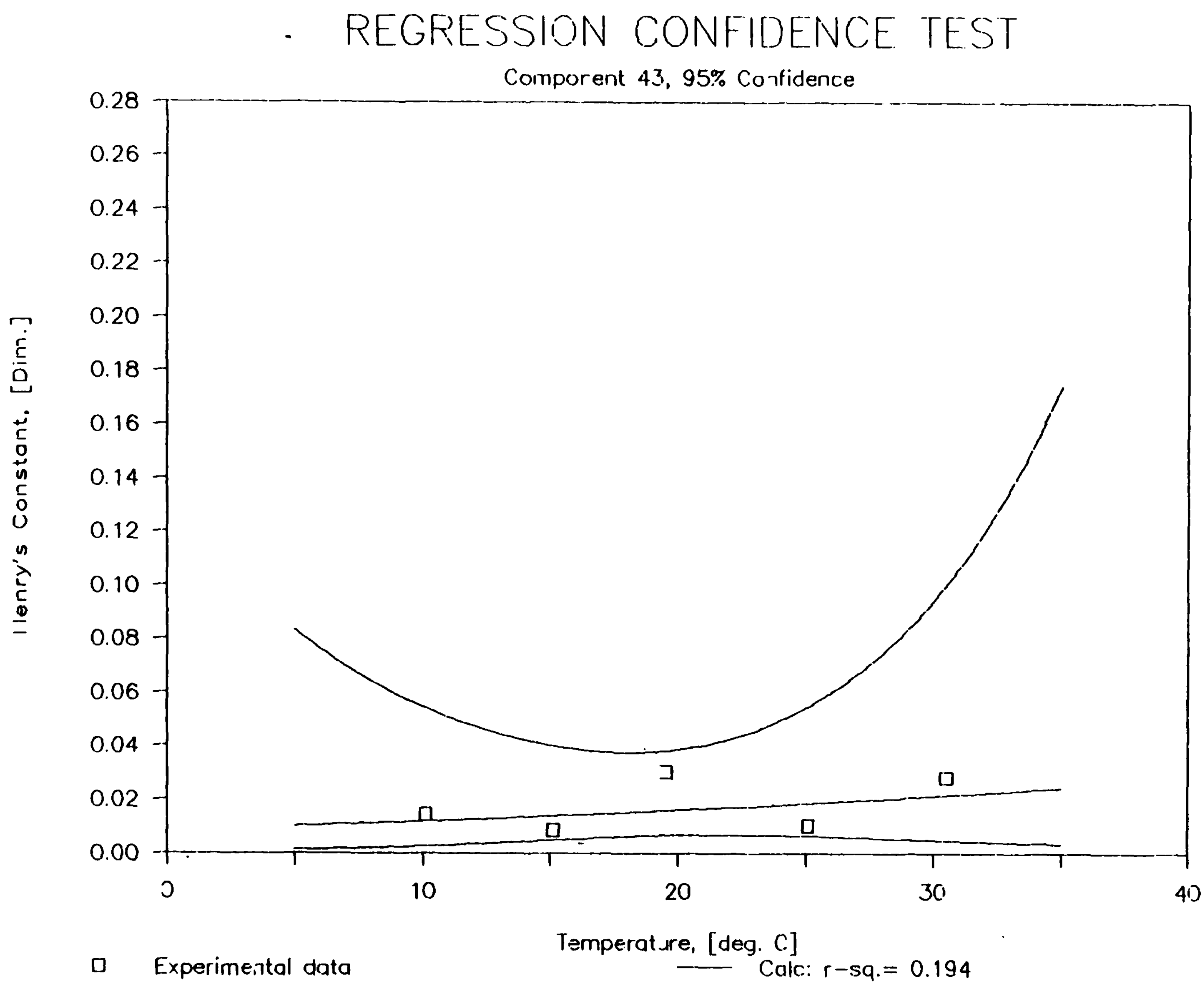
SLOPE = -2.8E+03

Y-INTERCEPT = 1.7E+00

R-SQUARED = 0.1940


TEMPERATURE REGRESSION PLOT
Component 43
Ln(Henry's Constant), [atm-m3/mol]
-6.40
-6.60
-6.80
-7.00
-7.20
-7.40
-7.60
-7.80
-8.00
-8.20
-8.40
-8.60
-8.80
-9.00
-9.20
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.194


95% CONFIDENCE TEST
Component 43
Henry's Constant, [Dim.]
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 43, 95% Confidence
Henry's Constant, [Dim.]
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.194

Results Summary for Component 44

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	14		28		44	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	17		17		17	
Component ID	44		44		44	
Temperature (C)	10.1		15.1		19.5	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.0526	1.0E-25	0.0535	1.0E-25	0.0792	1.0E-25
H,avg:atm-mol/mol	67.9		70.2		105.5	
H,avg: atm-m3/mol	1.22E-03	1	1.26E-03	1	1.90E-03	1
H,avg: kPa-m3/mol	0.1240		0.1281		0.1926	
COV, r [std/mean]	1.12		9.54		6.49	
COV, both replic.	----		----		----	
Observation: (1)	0.0531		0.0540		0.0842	
[atm-m3/m3] (2)	0.0521		0.0597		0.0753	
(3)	0.0532		0.0473		0.0829	
(4)	0.0522		0.0527		0.0742	
Injection: (1)	82750		104390		170130	
[Peak Area] (2)	82819		99727		168970	
(3)	508140		636940		866350	
(4)	511610		613860		910340	

	Temperature 4		Temperature 5	
RUN Number --->	29		15	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	17		17	
Component ID	44		44	
Temperature (C)	25.1		30.15	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.1460	1.0E-25	0.1151	1.0E-25
H, avg:atm-mol/mol	198.4		158.9	
H, avg: atm-m3/mol	3.57E-03	1	2.86E-03	1
H, avg: kPa-m3/mol	0.3621		0.2901	
COV, r [std/mean]	26.57		15.31	
COV, both replic.	------		------	
Observation: (1)	0.1717		0.1047	
[atm-m3/m3] (2)	0.1863		0.0963	
(3)	0.1076		0.1345	
(4)	0.1185		0.1248	
Injection: (1)	233090		184350	
[Peak Area] (2)	179070		210840	
(3)	809300		845020	
(4)	769370		880890	

ANALYSIS COMPLETED ...

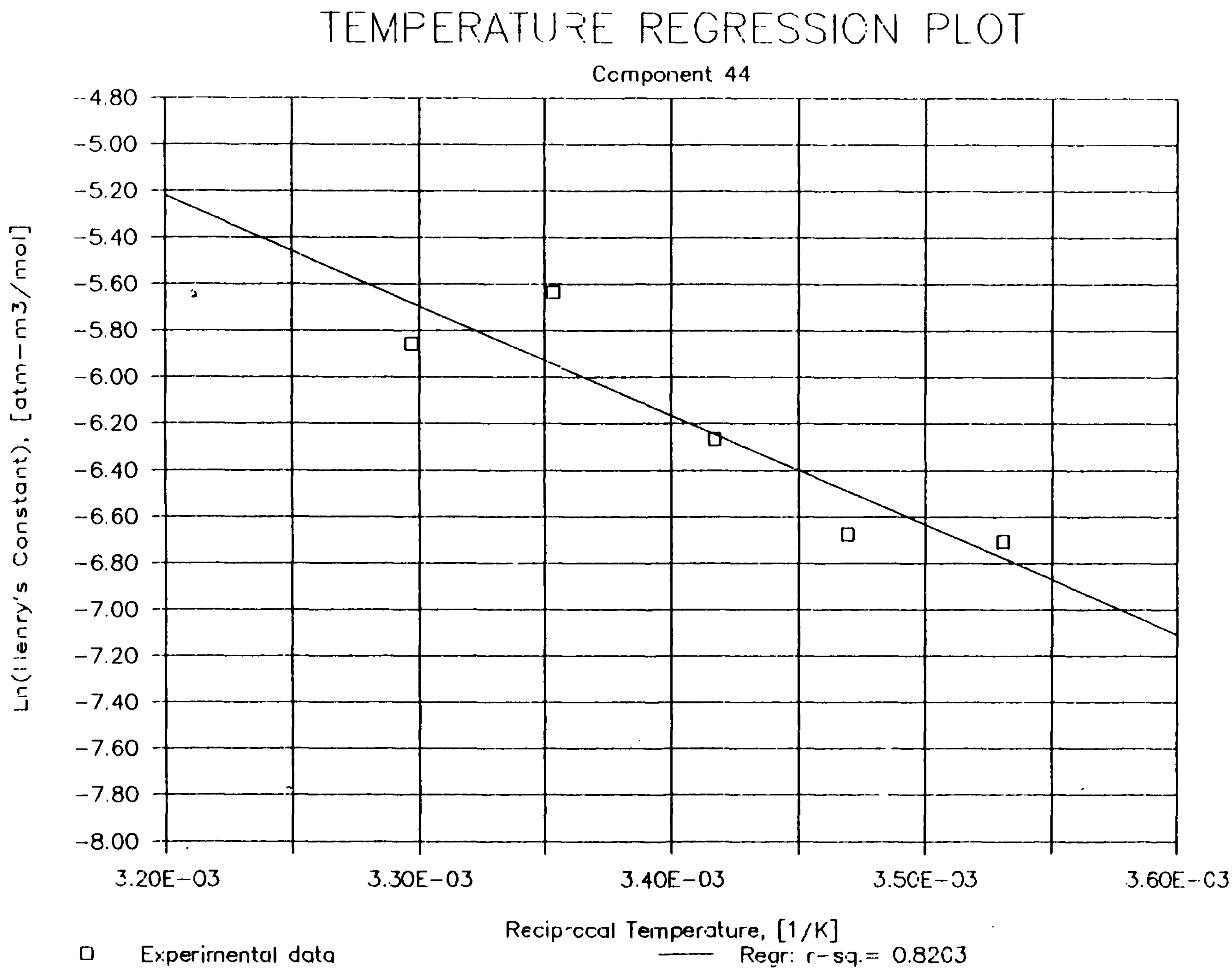
Temperature Regression Parameters:

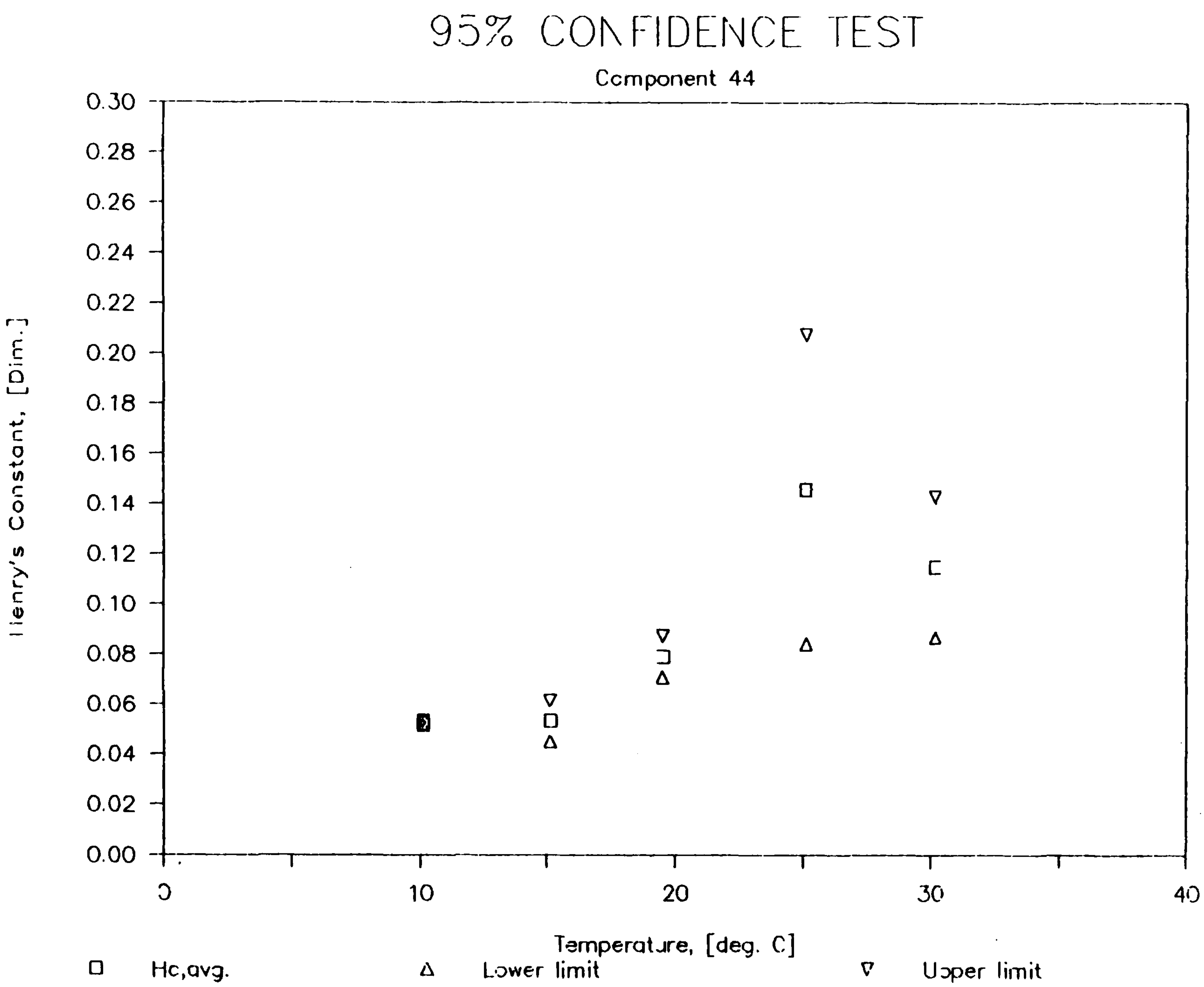
OF POINTS = 5

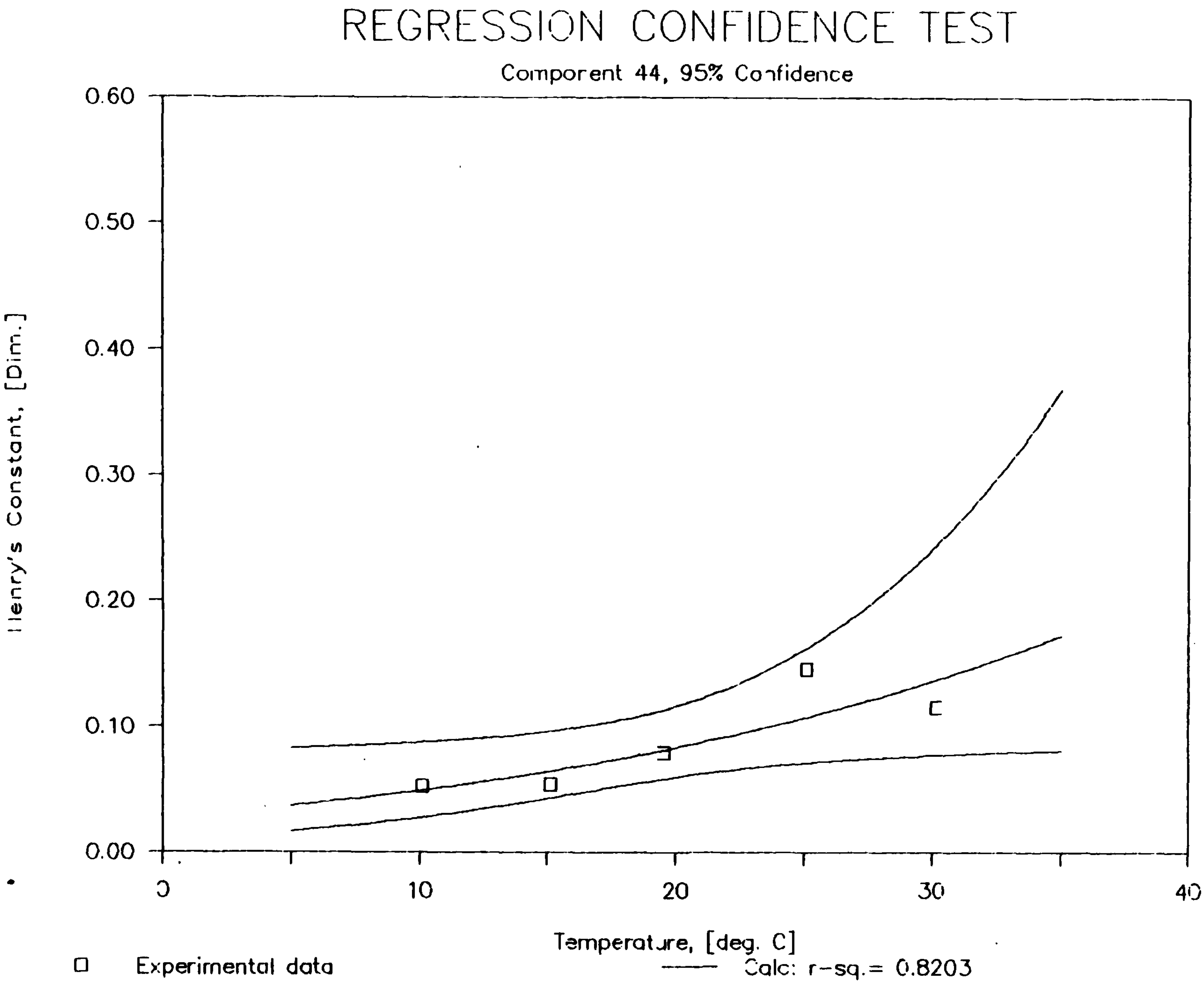
SLOPE = -4.7E+03

Y-INTERCEPT = 9.8E+00

R-SQUARED = 0.8203


TEMPERATURE REGRESSION PLOT
Component 44
Ln(Henry's Constant), [atm-m3/mol]
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
-6.60
-6.80
-7.00
-7.20
-7.40
-7.60
-7.80
-8.00
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.8203


95% CONFIDENCE TEST
Component 44
Henry's Constant, [Dim.]
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 44, 95% Confidence
Henry's Constant, [Dim.]
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.8203

13-Aug-86 Results Summary for Component 45

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	19		33		51	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	17		17		17	
Component ID	45		45		45	
Temperature (C)	10.1		15.1		19.5	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0163	1.0E-25	0.0192	1.0E-25	0.0430	1.0E-25
H, avg:atm-mol/mol	21.0		25.2		57.3	
H, avg: atm-m3/mol	3.78E-04	1	4.55E-04	1	1.03E-03	1
H, avg: kPa-m3/mol	0.0383		0.0461		0.1046	
COV, r [std/mean]	33.91		37.20		6.20	
COV, both replic.	----		----		----	
Observation: (1)	0.0229		0.0272		0.0462	
[atm-m3/m3] (2)	0.0176		0.0229		0.0423	
(3)	0.0147		0.0153		0.0436	
(4)	0.0098		0.0114		0.0398	
Injection: (1)	53259		72470		110860	
[Peak Area] (2)	49525		65405		108820	
(3)	410040		538410		713530	
(4)	429430		558140		733410	

	Temperature 4		Temperature 5	
RUN Number ---)	35		20	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	17		17	
Component ID	45		45	
Temperature (C)	25.1		30.15	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.0483	1.0E-25	0.0612	1.0E-25
H, avg: atm-mol/mol	65.6		84.5	
H, avg: atm-m3/mol	1.18E-03	1	1.52E-03	1
H, avg: kPa-m3/mol	0.1197		0.1542	
COV, r [std/mean]	2.72		4.22	
COV, both replic.	-----		-----	
Observation: (1)	0.0496		0.0595	
[atm-m3/m3] (2)	0.0474		0.0638	
(3)	0.0491		0.0585	
(4)	0.0469		0.0628	
Injection: (1)	127970		158860	
[Peak Area] (2)	127550		157860	
(3)	804470		935680	
(4)	816920		910360	

ANALYSIS COMPLETED ...

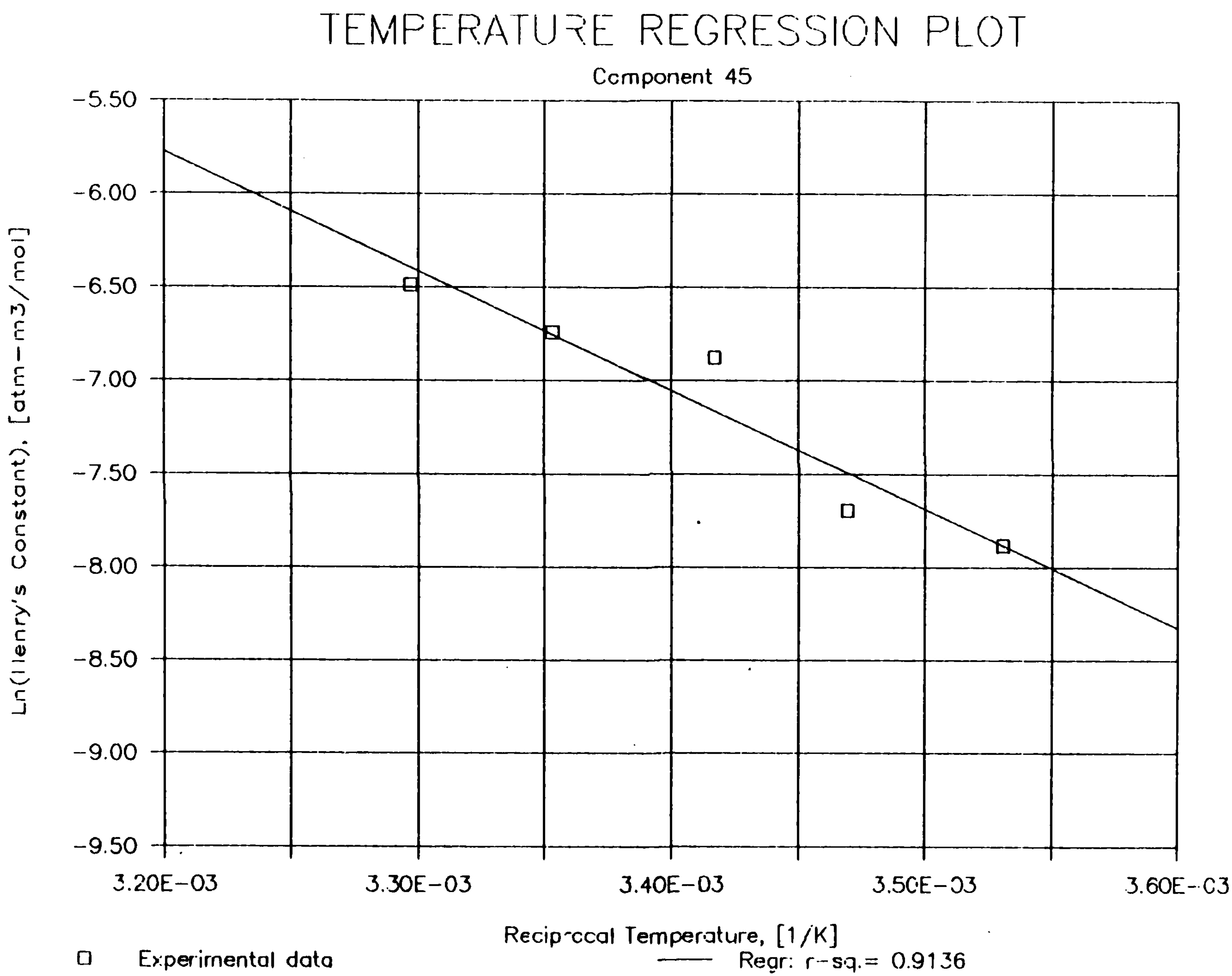
Temperature Regression Parameters:

\# OF POINTS = 5

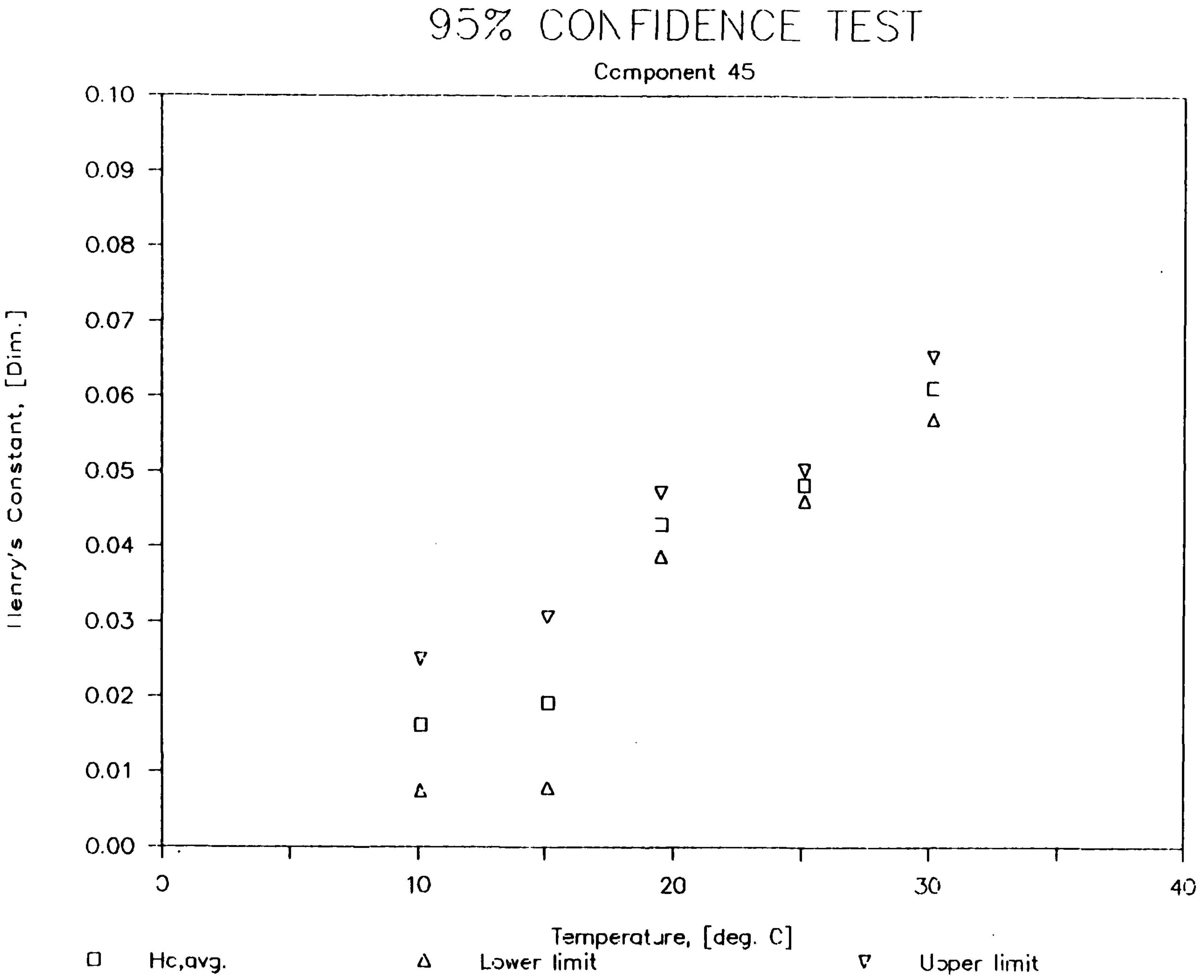
SLOPE = -6.4E+03

Y-INTERCEPT = 1.5E+01

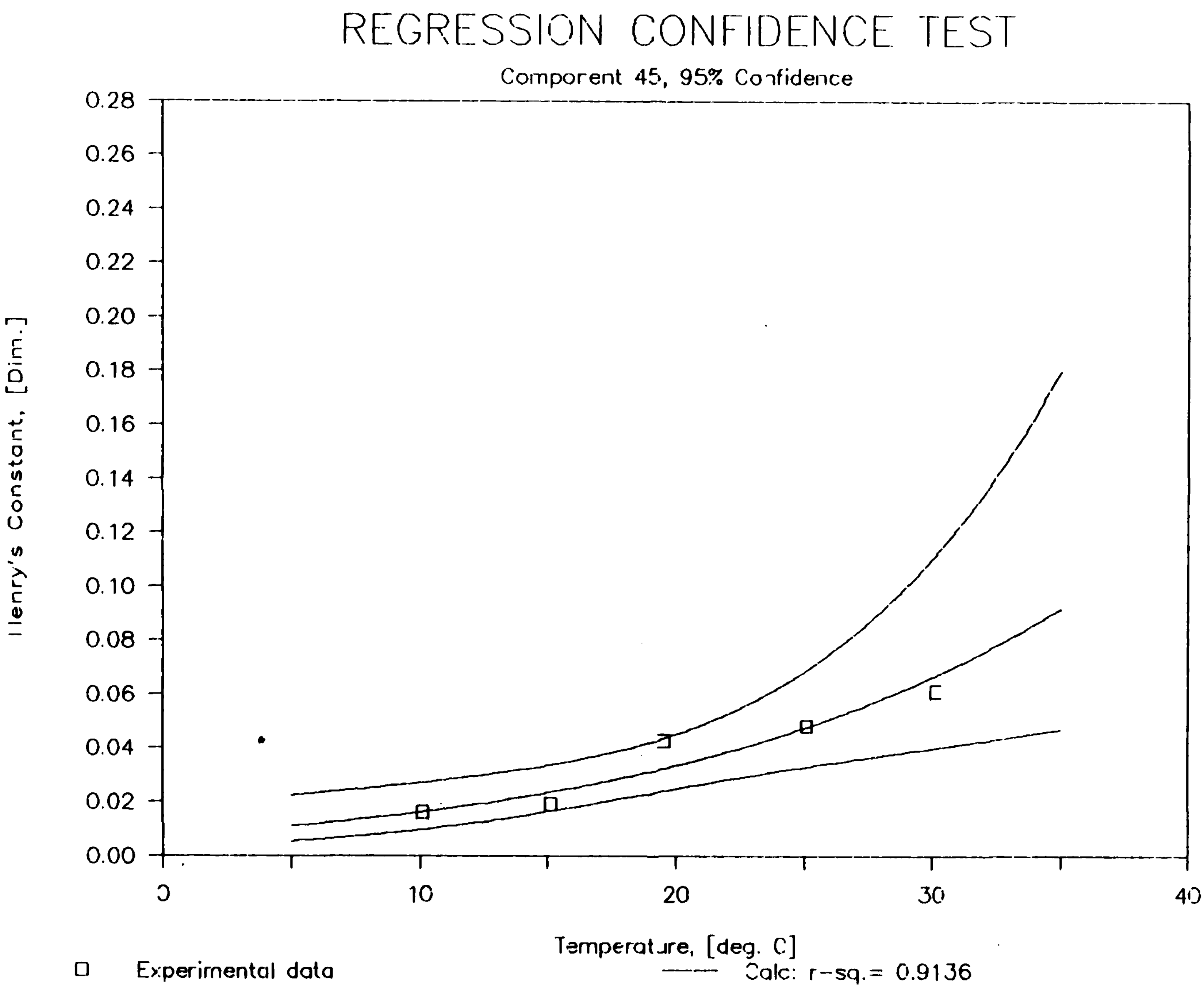
R-SQUARED = 0.9136



TEMPERATURE REGRESSION PLOT
Component 45
-5.50
-6.00
-6.50
-7.00
-7.50
-8.00
-8.50
-9.00
-9.50
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9136



95% CONFIDENCE TEST
Component 45
Henry's Constant, [Dim.]
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 45, 95% Confidence
Henry's Constant, [Dim.]
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9136

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	34		39		5	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	18		18		18	
Component ID	46		46		46	
Temperature (C)	10.7		15		20.2	
Low Vol (ml)	30		30		30	
High Vol (ml)	210		210		210	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0553	1.0E-25	0.0446	1.0E-25	0.0759	1.0E-25
H, avg:atm-mol/mol	71.5		58.5		101.5	
H, avg: atm-m3/mol	1.29E-03	1	1.05E-03	1	1.83E-03	1
H, avg: kPa-m3/mol	0.1305		0.1068		0.1852	
COV, r [std/mean]	39.03		51.33		7.21	
COV, both replic.	------		------		------	
Observation: (1)	0.0678		0.0486		0.0711	
[atm-m3/m3] (2)	0.0788		0.0732		0.0713	
(3)	0.0328		0.0181		0.0806	
(4)	0.0418		0.0385		0.0808	
Injection: (1)	70189		88227		121130	
[Peak Area] (2)	58535		74110		126440	
(3)	332420		459570		564880	
(4)	316050		407560		564380	

	Temperature 4		Temperature 5	
RUN Number --->	40		35	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	18		18	
Component ID	46		46	
Temperature (C)	25.2		30	
Low Vol (ml)	30		30	
High Vol (ml)	210		210	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0786	1.0E-25	0.1195	1.0E-25
H,avg:atm-mol/mol	106.8		164.9	
H,avg: atm-m3/mol	1.92E-03	1	2.97E-03	1
H,avg: kPa-m3/mol	0.1950		0.3011	
COV, r [std/mean]	8.18		21.95	
COV, both replic.	------		------	
Observation: (1)	0.0861		0.1031	
[atm-m3/m3] (2)	0.0759		0.0920	
(3)	0.0812		0.1480	
(4)	0.0712		0.1347	
Injection: (1)	148920		188820	
[Peak Area] (2)	145760		222290	
(3)	649520		767310	
(4)	679310		802970	

ANALYSIS COMPLETED ...

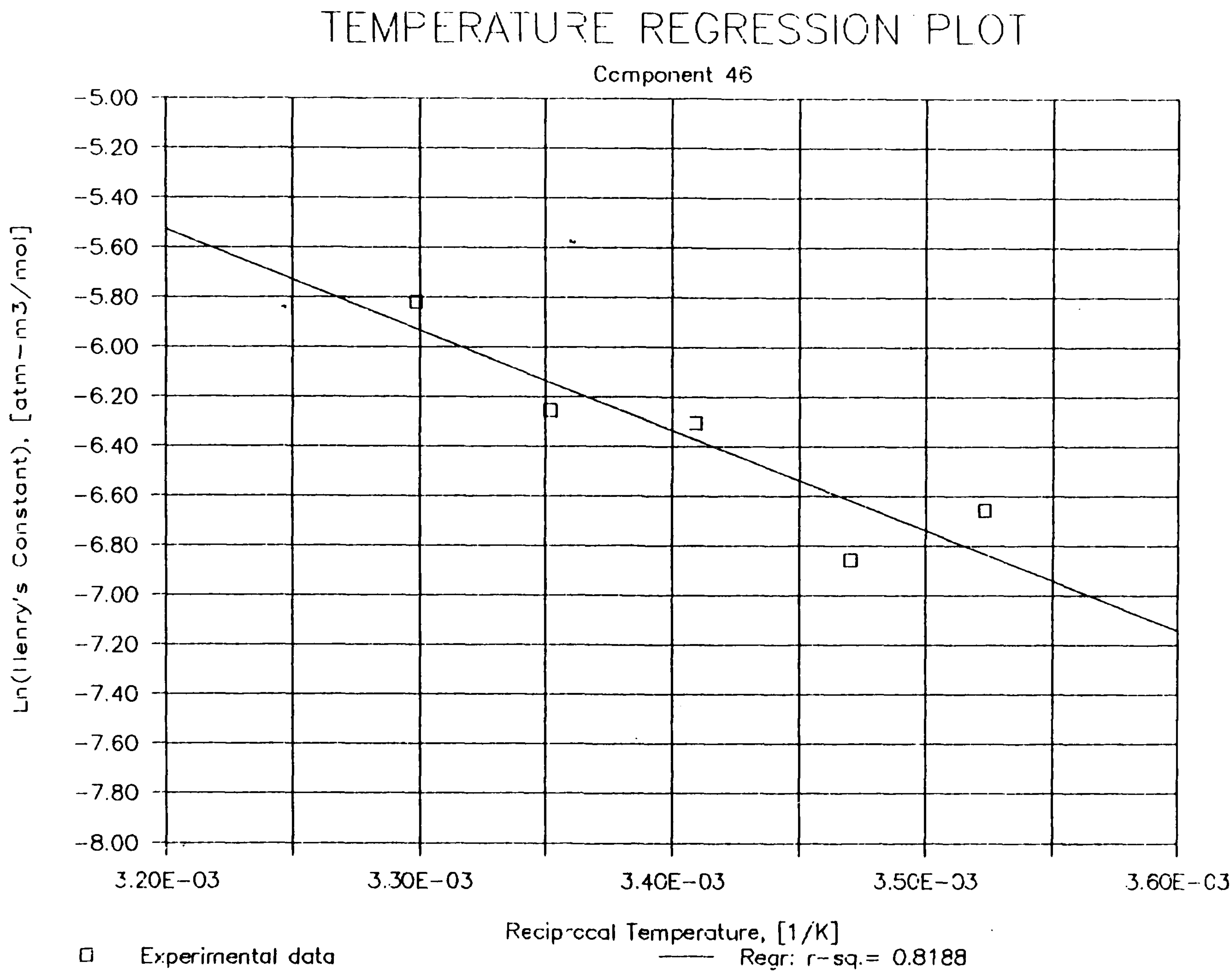
Temperature Regression Parameters:

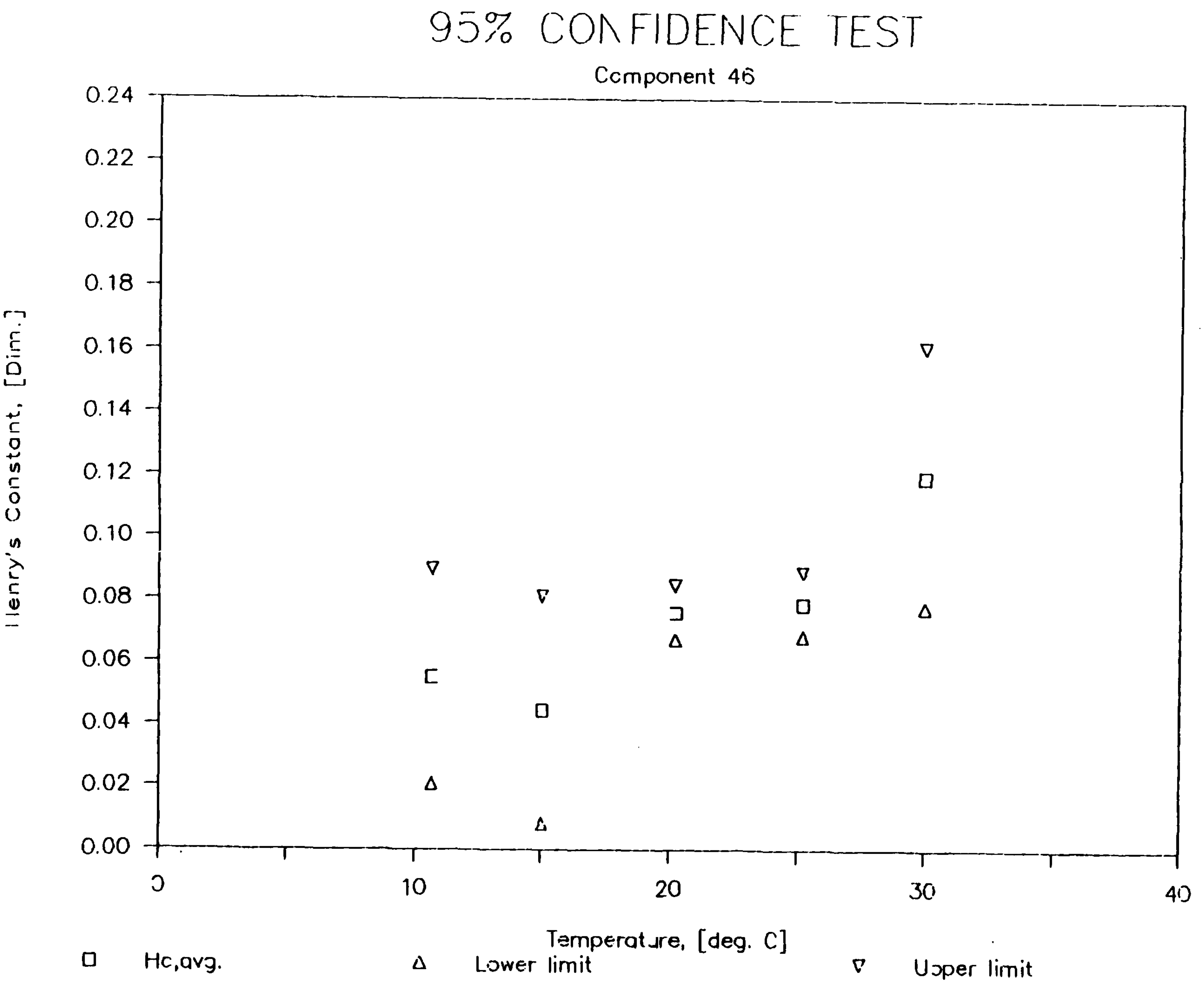
OF POINTS = 5

SLOPE = -4.0E+03

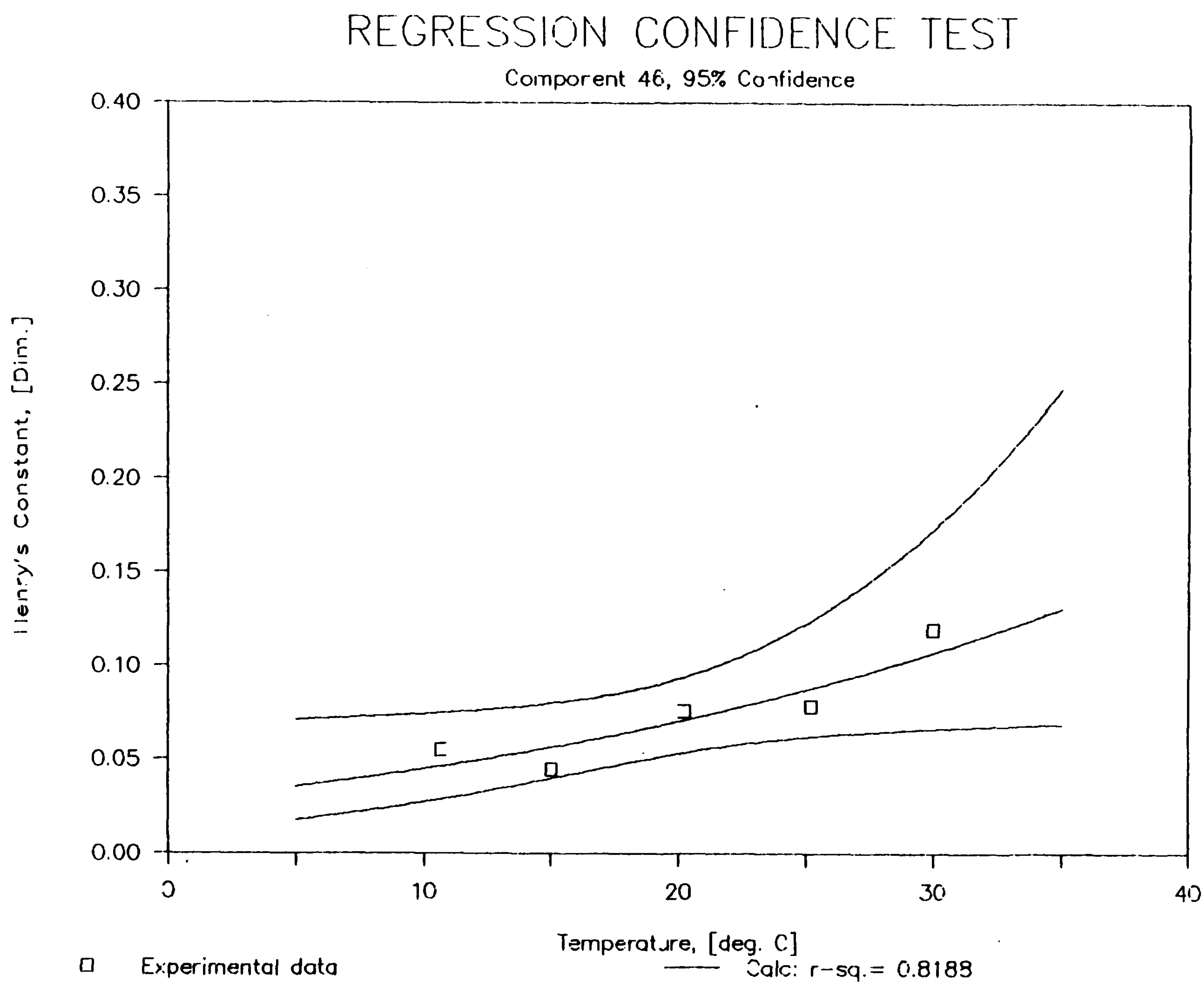
Y-INTERCEPT = 7.4E+00

R-SQUARED = 0.8188


TEMPERATURE REGRESSION PLOT
Component 46
Ln(Henry's Constant), [atm-m3/mol]
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
-6.60
-6.80
-7.00
-7.20
-7.40
-7.60
-7.80
-8.00
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.8188



95% CONFIDENCE TEST
Component 46
Henry's Constant, [Dim.]
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 46, 95% Confidence
Henry's Constant, [Dim.]
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.8188

04-Nov-86 Results Summary for Component 47

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	30		45		25	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	18		18		18	
Component ID	47		47		47	
Temperature (C)	10.7		15		20.2	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.3560	1.0E-25	0.2850	1.0E-25	0.4212	1.0E-25
H, avg:atm-mol/mol	460.3		374.0		562.8	
H, avg: atm-m3/mol	8.29E-03	1	6.74E-03	1	1.01E-02	1
H, avg: kPa-m3/mol	0.8402		0.6827		1.0273	
COV, r [std/mean]	22.72		12.99		19.28	
COV, both replic.	——		——		——	
Observation: (1)	0.2649		0.3205		0.3638	
[atm-m3/m3] (2)	0.3711		0.2561		0.5058	
(3)	0.3300		0.3132		0.3407	
(4)	0.4581		0.2500		0.4746	
Injection: (1)	99857		84114		238920	
[Peak Area] (2)	116350		82765		227980	
(3)	261680		193110		501260	
(4)	206500		225530		394260	

	Temperature 4		Temperature 5	
RUN Number —)	46		31	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	18		18	
Component ID	47		47	
Temperature (C)	25.2		30	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.2015	1.0E-25	0.1508	1.0E-25
H,avg:atm-mol/mol	273.8		208.3	
H,avg: atm-m3/mol	4.93E-03	1	3.75E-03	1
H,avg: kPa-m3/mol	0.4999		0.3802	
COV, r [std/mean]	10.40		8.17	
COV, both replic.	———		———	
Observation: (1)	0.2276		0.1641	
[atm-m3/m3] (2)	0.1979		0.1433	
(3)	0.2040		0.1581	
(4)	0.1766		0.1378	
Injection: (1)	150940		229280	
[Peak Area] (2)	140560		224250	
(3)	437990		818250	
(4)	479570		886390	

ANALYSIS COMPLETED ...

Temperature Regression Parameters:

OF POINTS = 5

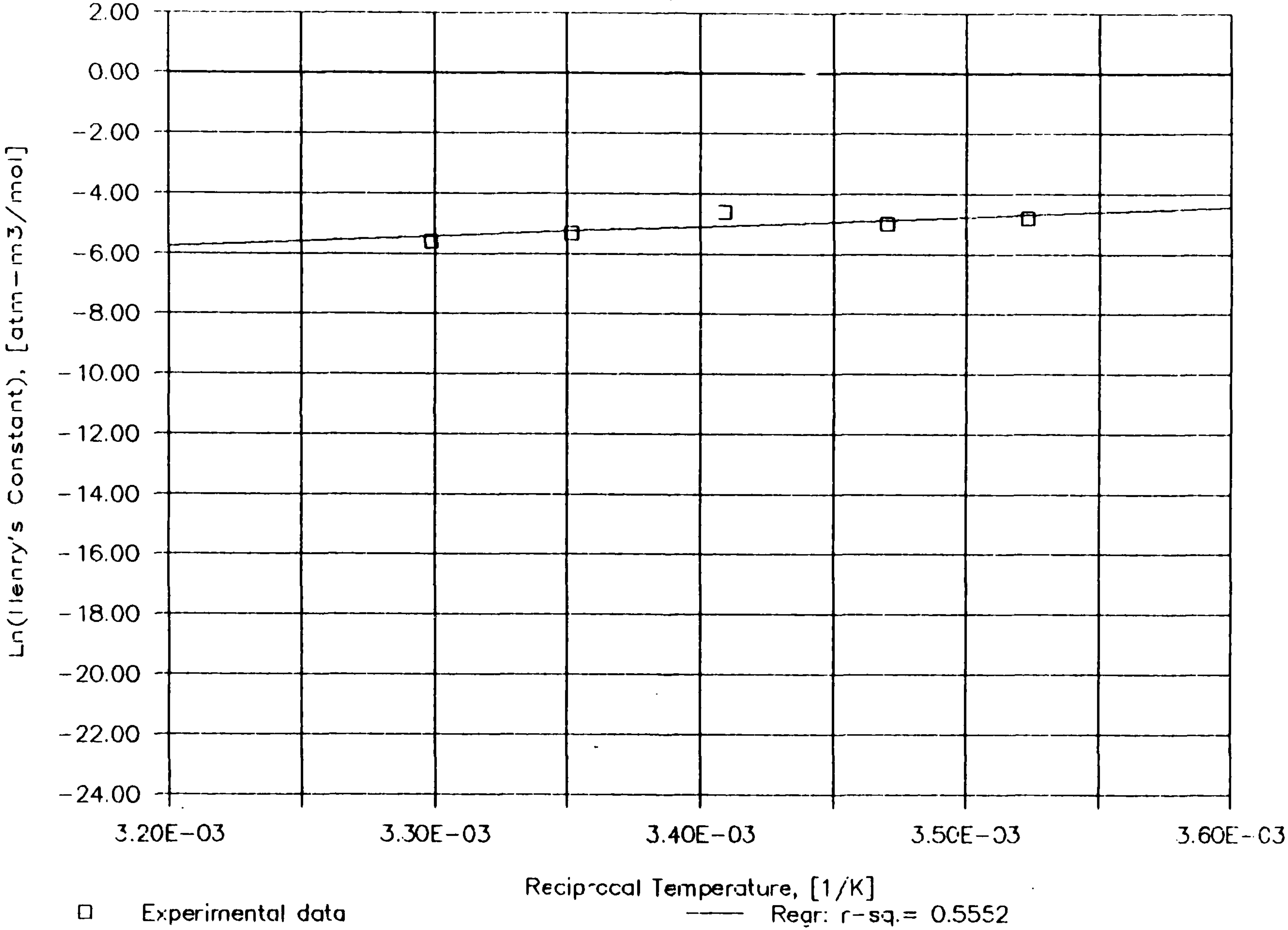
SLOPE = 3.3E+03

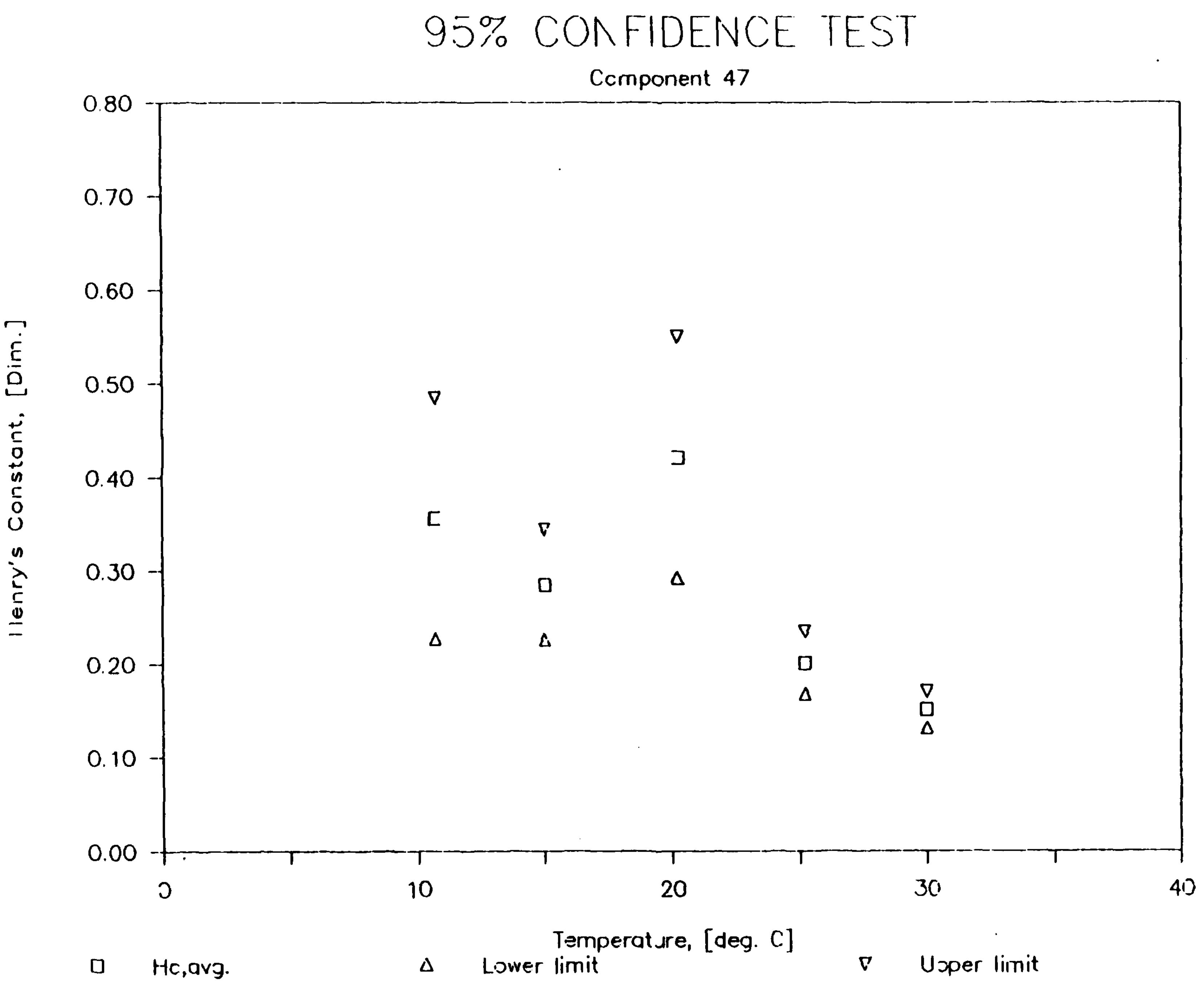
Y-INTERCEPT = -1.6E+01

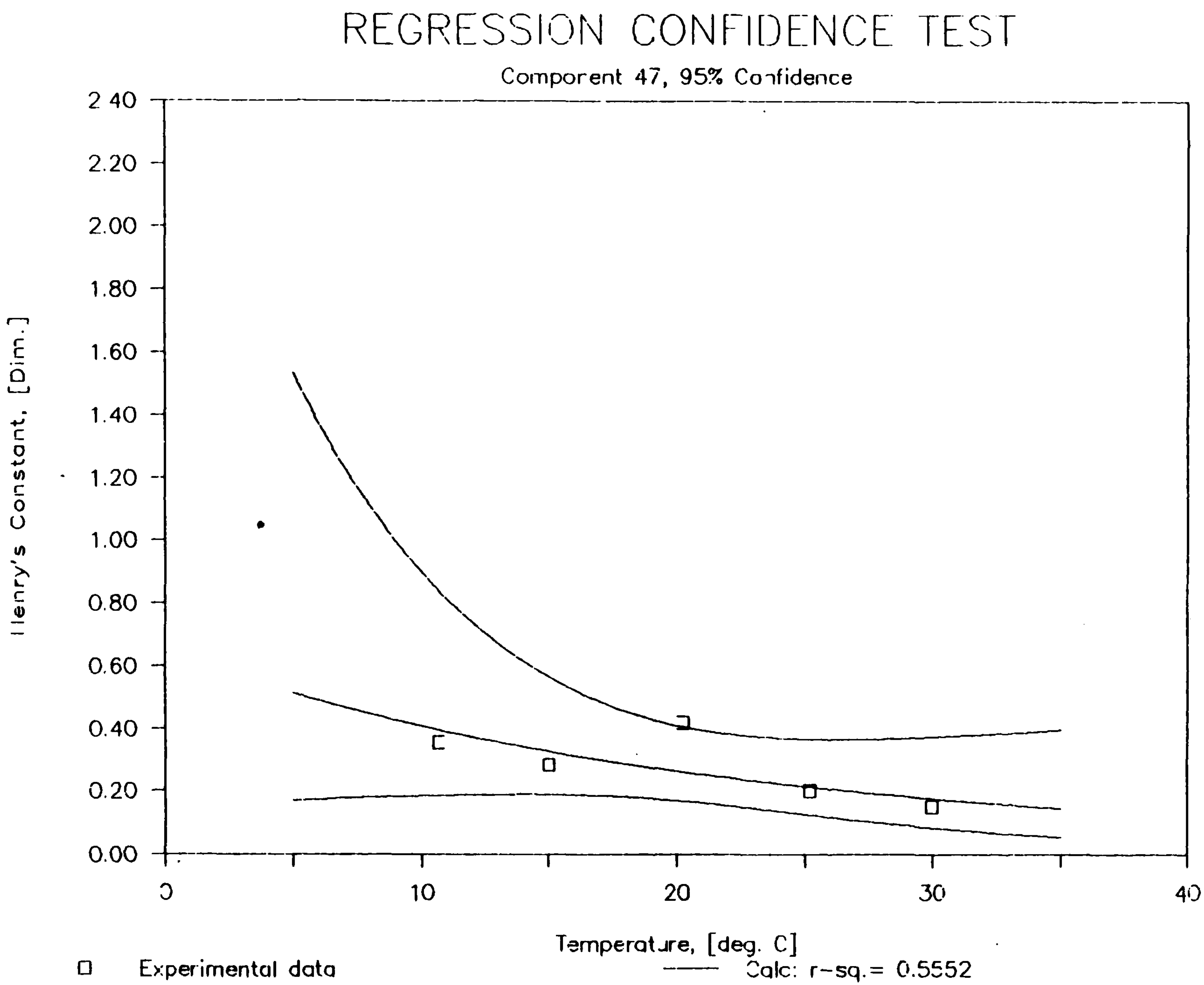
R-SQUARED = 0.5552

TEMPERATURE REGRESSION PLOT

Component 47




95% CONFIDENCE TEST
Component 47
Henry's Constant, [Dim.]
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 47, 95% Confidence
Henry's Constant, [Dim.]
2.40
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.5552

	Temperature 1		Temperature 2		Temperature 3	
RUN Number --)	37		50		62	
REPLICATE --)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	19		19		19	
Component ID	49		49		49	
Temperature (C)	10.2		15		19.9	
Low Vol (ml)	22		22		22	
High Vol (ml)	202		202		202	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.0995	1.0E-25	0.1228	1.0E-25	0.1553	1.0E-25
H,avg:atm-mol/mol	128.5		161.2		207.3	
H,avg: atm-m3/mol	2.31E-03	1	2.90E-03	1	3.73E-03	1
H,avg: kPa-m3/mol	0.2345		0.2942		0.3784	
COV, r [std/mean]	2.35		10.37		2.65	
COV, both replic.	----		----		----	
Observation: (1)	0.1018		0.1290		0.1519	
[atm-m3/m3] (2)	0.1013		0.1372		0.1515	
(3)	0.0978		0.1088		0.1590	
(4)	0.0973		0.1162		0.1586	
Injection: (1)	194170		238570		262000	
[Peak Area] (2)	190410		218180		269060	
(3)	888350		966080		968120	
(4)	890840		933970		969610	

	Temperature 4		Temperature 5	
RUN Number ---)	51		38	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	19		19	
Component ID	49		49	
Temperature (C)	25		30	
Low Vol (ml)	22		22	
High Vol (ml)	202		202	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.1977	1.0E-25	0.2367	1.0E-25
H,avg:atm-mol/mol	268.5		326.8	
H,avg: atm-m3/mol	4.84E-03	1	5.89E-03	1
H,avg: kPa-m3/mol	0.4901		0.5966	
COV, r [std/mean]	3.63		2.04	
COV, both replic.	———		———	
Observation: (1)	0.2023		0.2385	
[atm-m3/m3] (2)	0.1903		0.2311	
(3)	0.2052		0.2423	
(4)	0.1930		0.2349	
Injection: (1)	360240		456690	
[Peak Area] (2)	363500		461530	
(3)	1119500		1276300	
(4)	1163300		1302900	

ANALYSIS COMPLETED ...

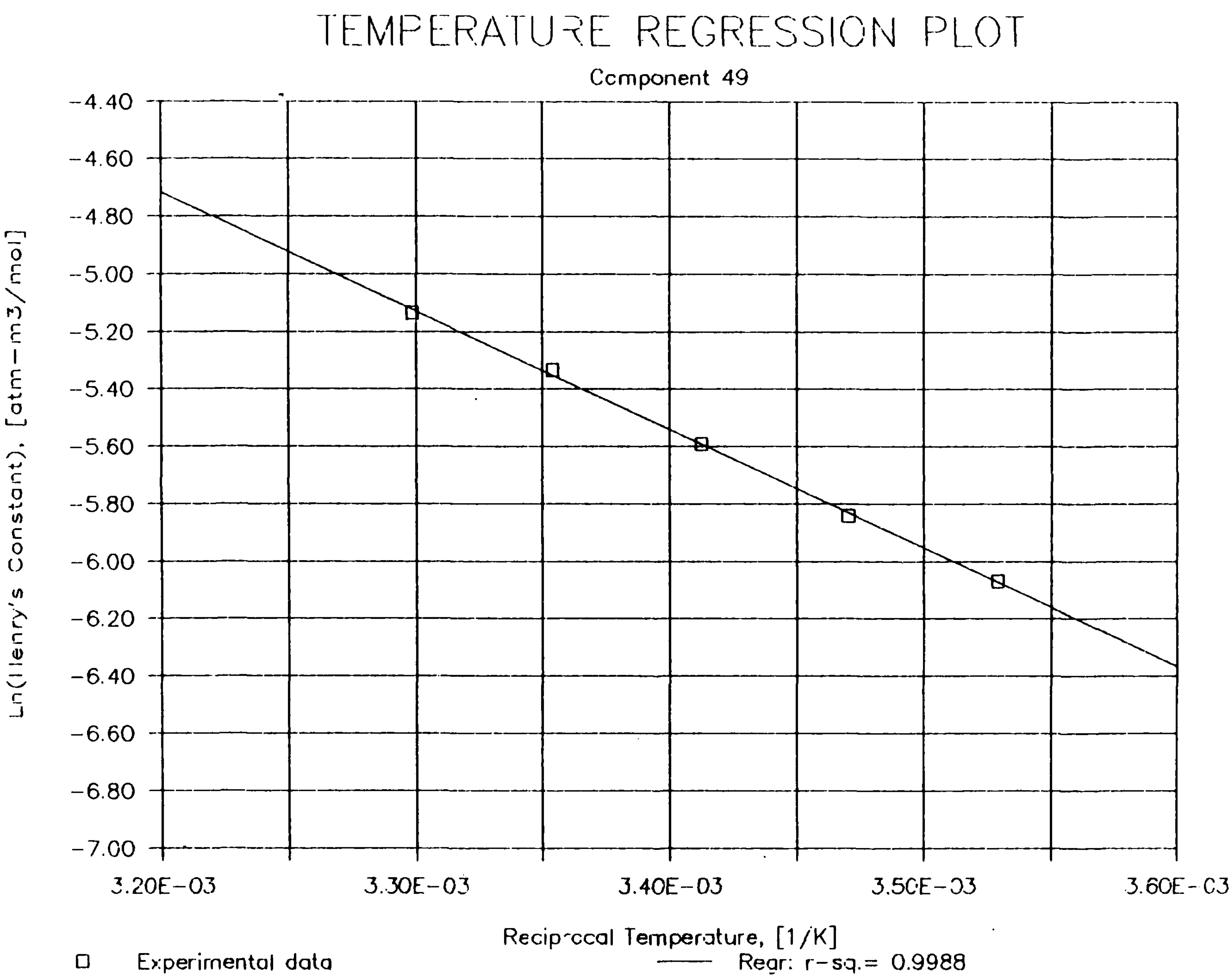
Temperature Regression Parameters:

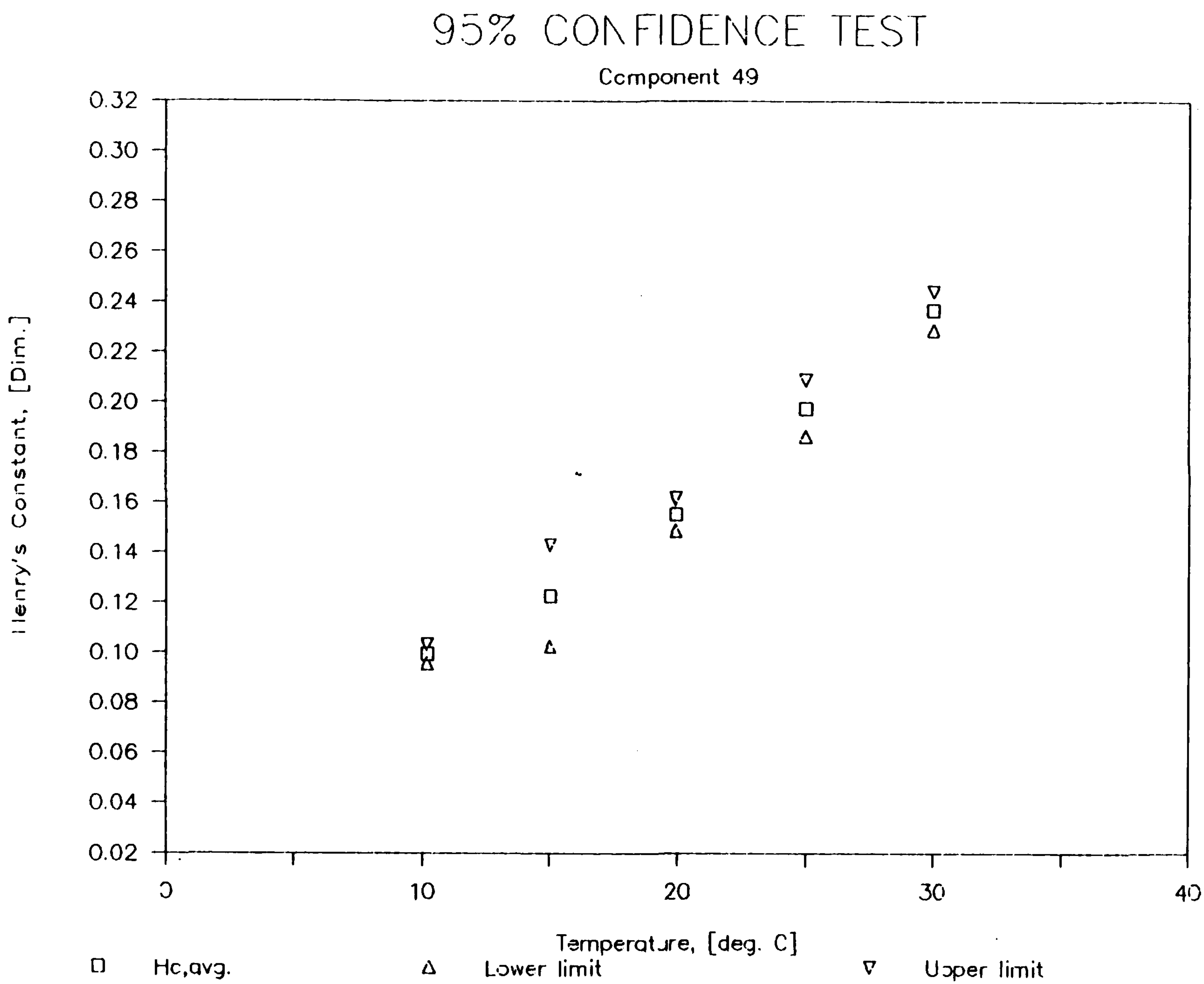
OF POINTS = 5

SLOPE = -4.1E+03

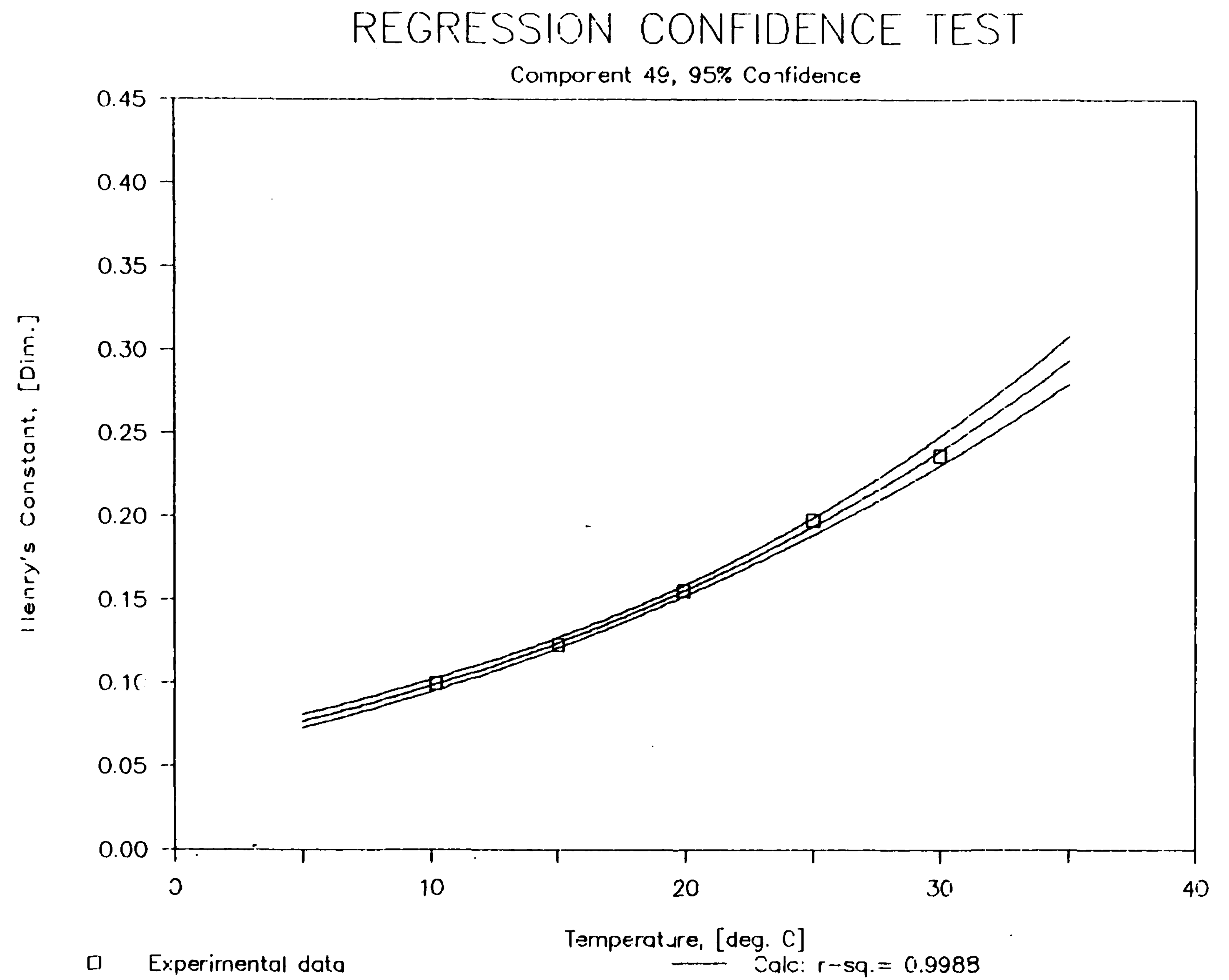
Y-INTERCEPT = 8.5E+00

R-SQUARED = 0.9988


TEMPERATURE REGRESSION PLOT
Component 49
-4.40
-4.60
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
-6.60
-6.80
-7.00
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9988



95% CONFIDENCE TEST
Component 49
Henry's Constant, [Dim.]
0.32
0.30
0.28
0.26
0.24
0.22
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 49, 95% Confidence
Henry's Constant, [Dim.]
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.9988

Results Summary for Component 50

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	41		54		66	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	19		19		19	
Component ID	50		50		50	
Temperature (C)	10.2		15		19.9	
Low Vol (ml)	22		22		22	
High Vol (ml)	202		202		202	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0655	1.0E-25	0.0801	1.0E-25	0.0928	1.0E-25
H, avg:atm-mol/mol	84.5		105.1		123.9	
H, avg: atm-m3/mol	1.52E-03	1	1.89E-03	1	2.23E-03	1
H, avg: kPa-m3/mol	0.1543		0.1919		0.2262	
COV, r [std/mean]	9.04		0.98		4.28	
COV, both replic.	———		———		———	
Observation: (1)	0.0728		0.0792		0.0884	
[atm-m3/m3] (2)	0.0654		0.0805		0.0947	
(3)	0.0654		0.0797		0.0909	
(4)	0.0583		0.0810		0.0973	
Injection: (1)	533510		736390		886230	
[Peak Area] (2)	511030		738240		898130	
(3)	2840100		3783000		4336900	
(4)	2965000		3756800		4200100	

	Temperature 4		Temperature 5	
RUN Number ---)	55		42	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	19		19	
Component ID	50		50	
Temperature (C)	25		30	
Low Vol (ml)	22		22	
High Vol (ml)	202		202	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.1538	1.0E-25	0.1400	1.0E-25
H,avg:atm-mol/mol	208.9		193.4	
H,avg: atm-m3/mol	3.76E-03	1	3.48E-03	1
H,avg: kPa-m3/mol	0.3813		0.3530	
COV, r [std/mean]	3.32		2.37	
COV, both replic.	------		------	
Observation: (1)	0.1530		0.1440	
[atm-m3/m3] (2)	0.1476		0.1392	
(3)	0.1600		0.1409	
(4)	0.1545		0.1361	
Injection: (1)	1251600		1163700	
[Peak Area] (2)	1284900		1149400	
(3)	4606400		4433100	
(4)	4701400		4519900	

ANALYSIS COMPLETED ...

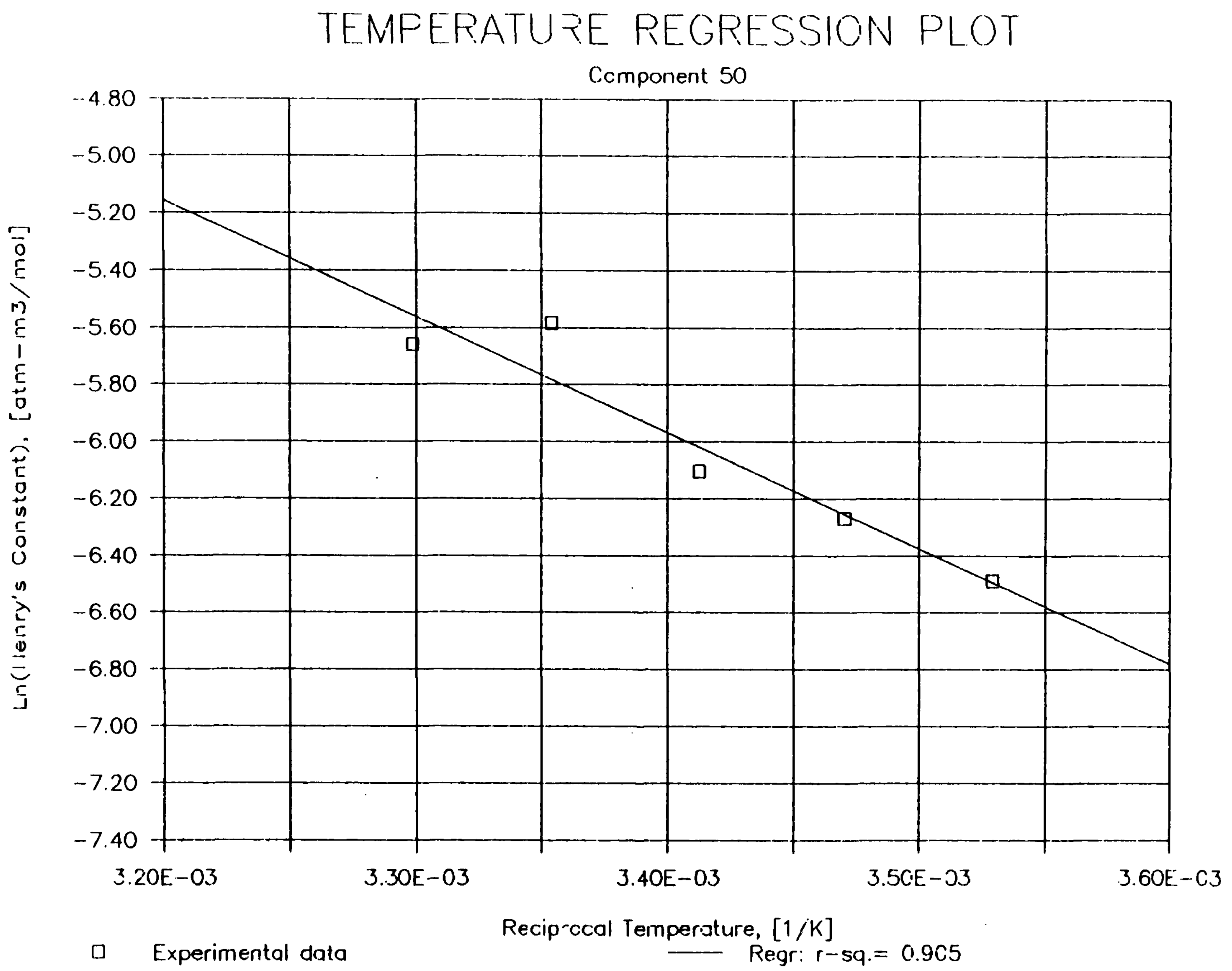
Temperature Regression Parameters:

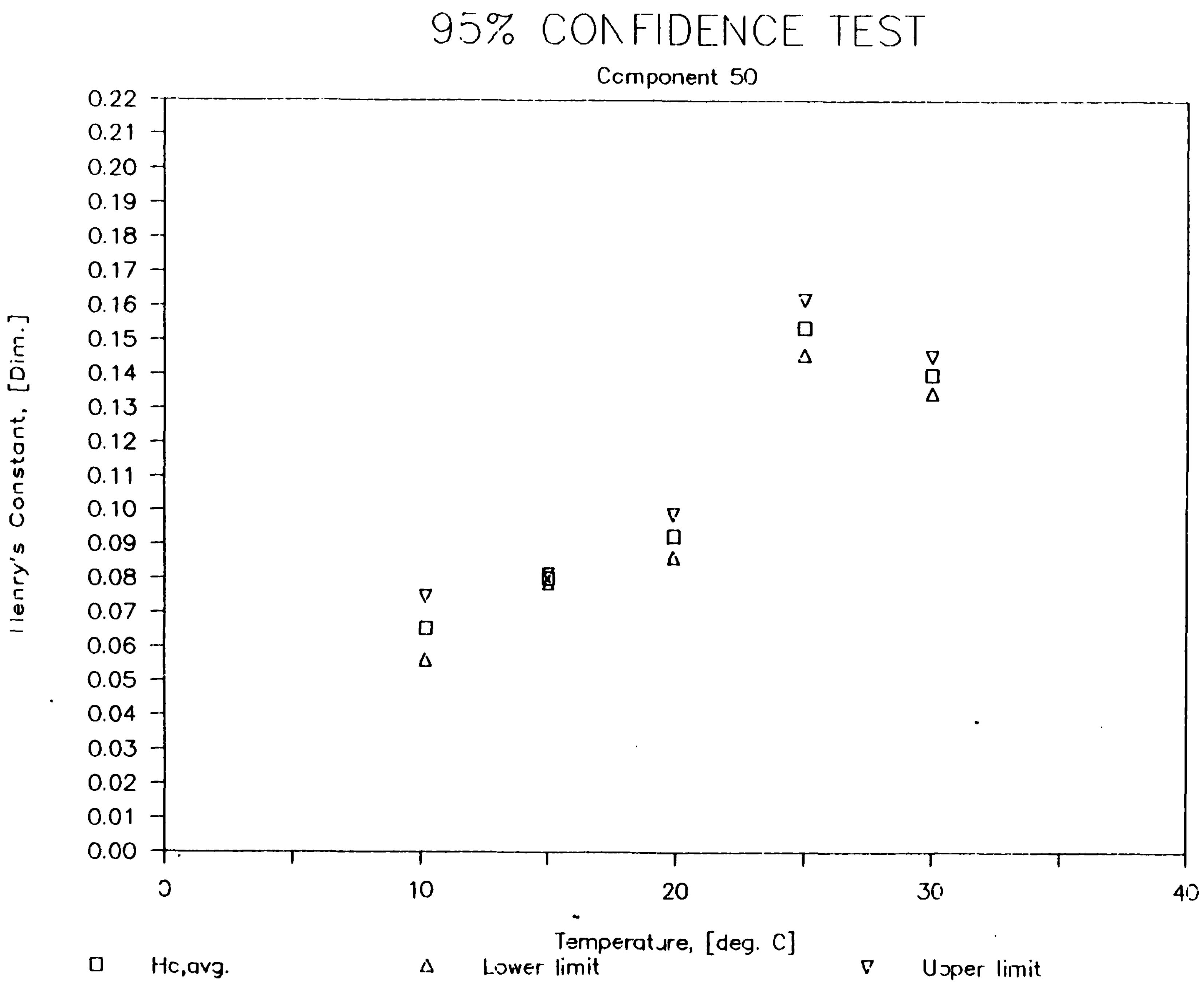
OF POINTS = 5

SLOPE = -4.1E+03

Y-INTERCEPT = 7.9E+00

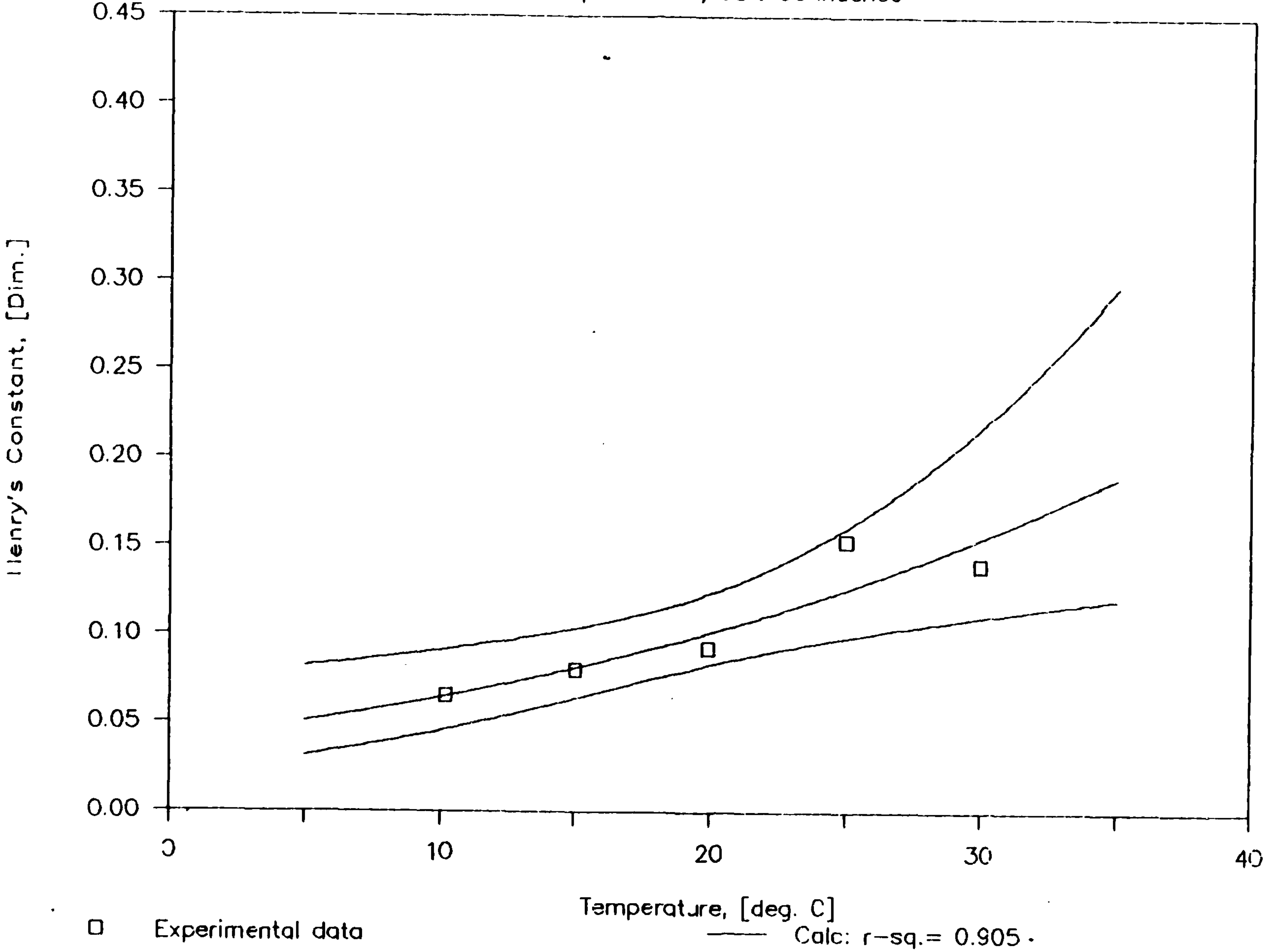
R-SQUARED = 0.9050


TEMPERATURE REGRESSION PLOT
Component 50
-4.80
-5.00
-5.20
-5.40
-5.60
-5.80
-6.00
-6.20
-6.40
-6.60
-6.80
-7.00
-7.20
-7.40
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.905


95% CONFIDENCE TEST
Component 50
Henry's Constant, [Dim.]
0.22
0.21
0.20
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

REGRESSION CONFIDENCE TEST

Component 50, 95% Confidence



Results Summary for Component 51

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	46		58		71	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	19		19		19	
Component ID	51		51		51	
Temperature (C)	10.2		15		19.9	
Low Vol (ml)	22		22		22	
High Vol (ml)	202		202		202	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	6.6092	1.0E-25	9.1000	1.0E-25	10.1702	1.0E-25
H, avg: atm-mol/mol	8529.9		11943.5		13575.1	
H, avg: atm-m3/mol	1.54E-01	1	2.15E-01	1	2.45E-01	1
H, avg: kPa-m3/mol	15.5712		21.8026		24.7809	
COV, r [std/mean]	5.63		8.21		7.40	
COV, both replic.	———		———		———	
Observation: (1)	6.2345		8.5849		9.7805	
[atm-m3/m3] (2)	6.3524		9.8822		9.3493	
(3)	6.8564		8.3488		11.0394	
(4)	6.9936		9.5841		10.5115	
Injection: (1)	3602800		3672000		2731900	
[Peak Area] (2)	3734300		3639300		2825800	
(3)	1251100		1139200		814570	
(4)	1242100		1091600		825500	

	Temperature 4		Temperature 5	
RUN Number ---)	59		47	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	19		19	
Component ID	51		51	
Temperature (C)	25		30	
Low Vol (ml)	22		22	
High Vol (ml)	202		202	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	13.0355	1.0E-25	12.9085	1.0E-25
H, avg:atm-mol/mol	17702.5		17824.0	
H, avg: atm-m3/mol	3.19E-01	1	3.21E-01	1
H, avg: kPa-m3/mol	32.3154		32.5372	
COV, r [std/mean]	5.60		3.00	
COV, both replic.	------		------	
Observation: (1)	12.2717		12.5670	
[atm-m3/m3] (2)	12.5795		12.5789	
(3)	13.4640		13.2374	
(4)	13.8266		13.2505	
Injection: (1)	4235400		4664300	
[Peak Area] (2)	4330400		4722500	
(3)	1188100		1300800	
(4)	1180900		1300500	

ANALYSIS COMPLETED ...

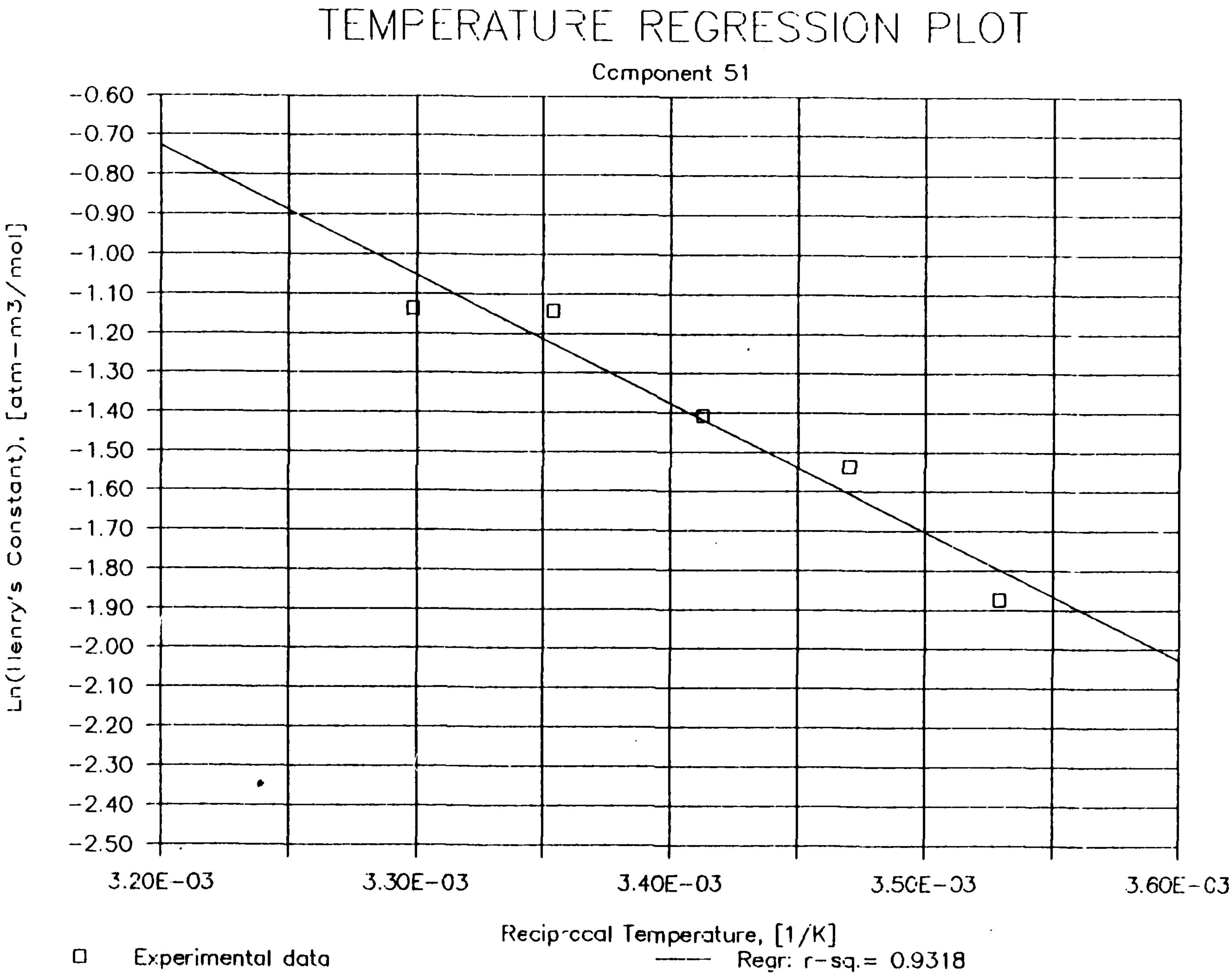
Temperature Regression Parameters:

OF POINTS = 5

SLOPE = -3.2E+03

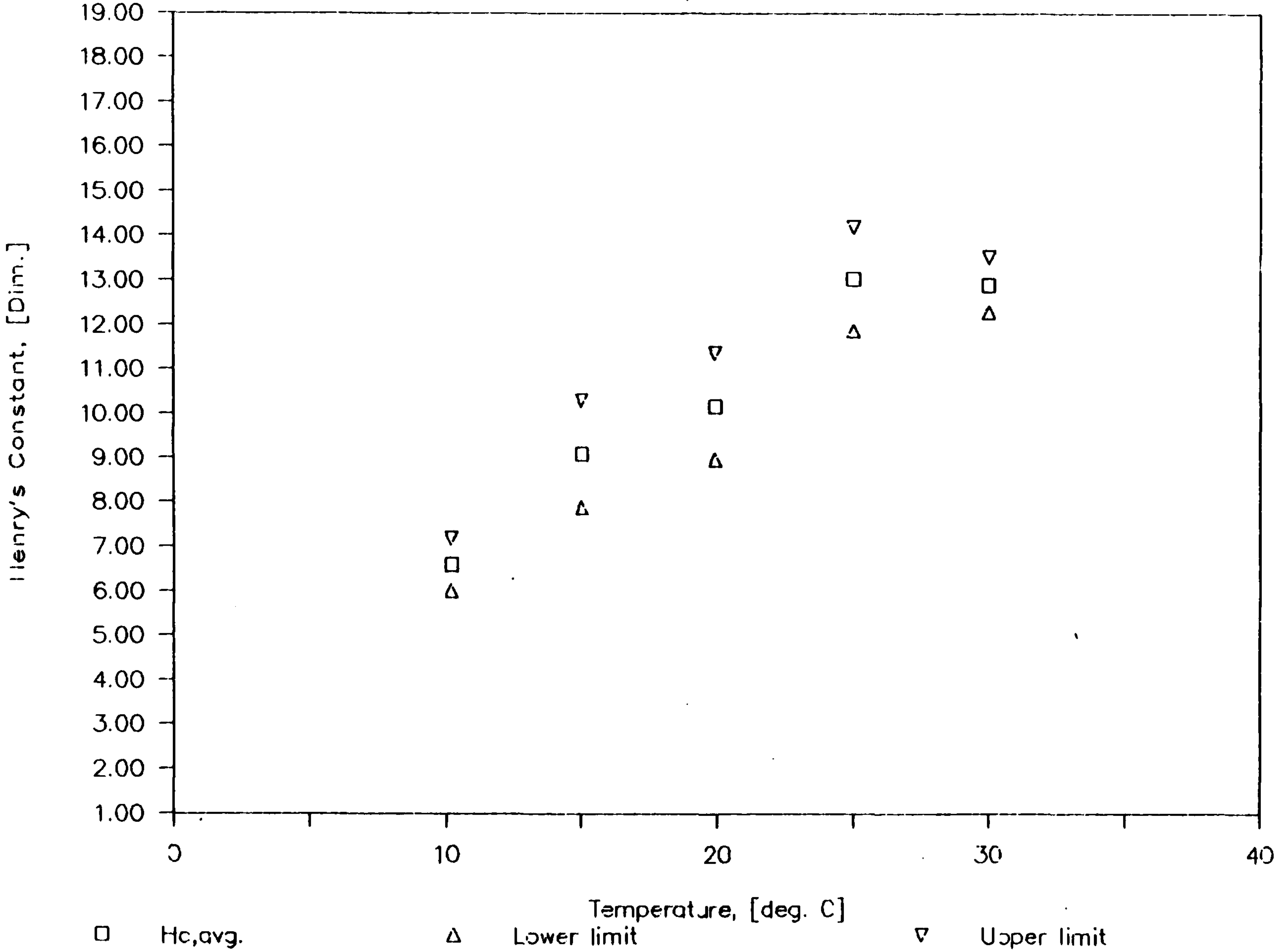
Y-INTERCEPT = 9.6E+00

R-SQUARED = 0.9318


TEMPERATURE REGRESSION PLOT
Component 51
Ln(Henry's Constant), [atm-m3/mol]
-0.60
-0.70
-0.80
-0.90
-1.00
-1.10
-1.20
-1.30
-1.40
-1.50
-1.60
-1.70
-1.80
-1.90
-2.00
-2.10
-2.20
-2.30
-2.40
-2.50
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9318

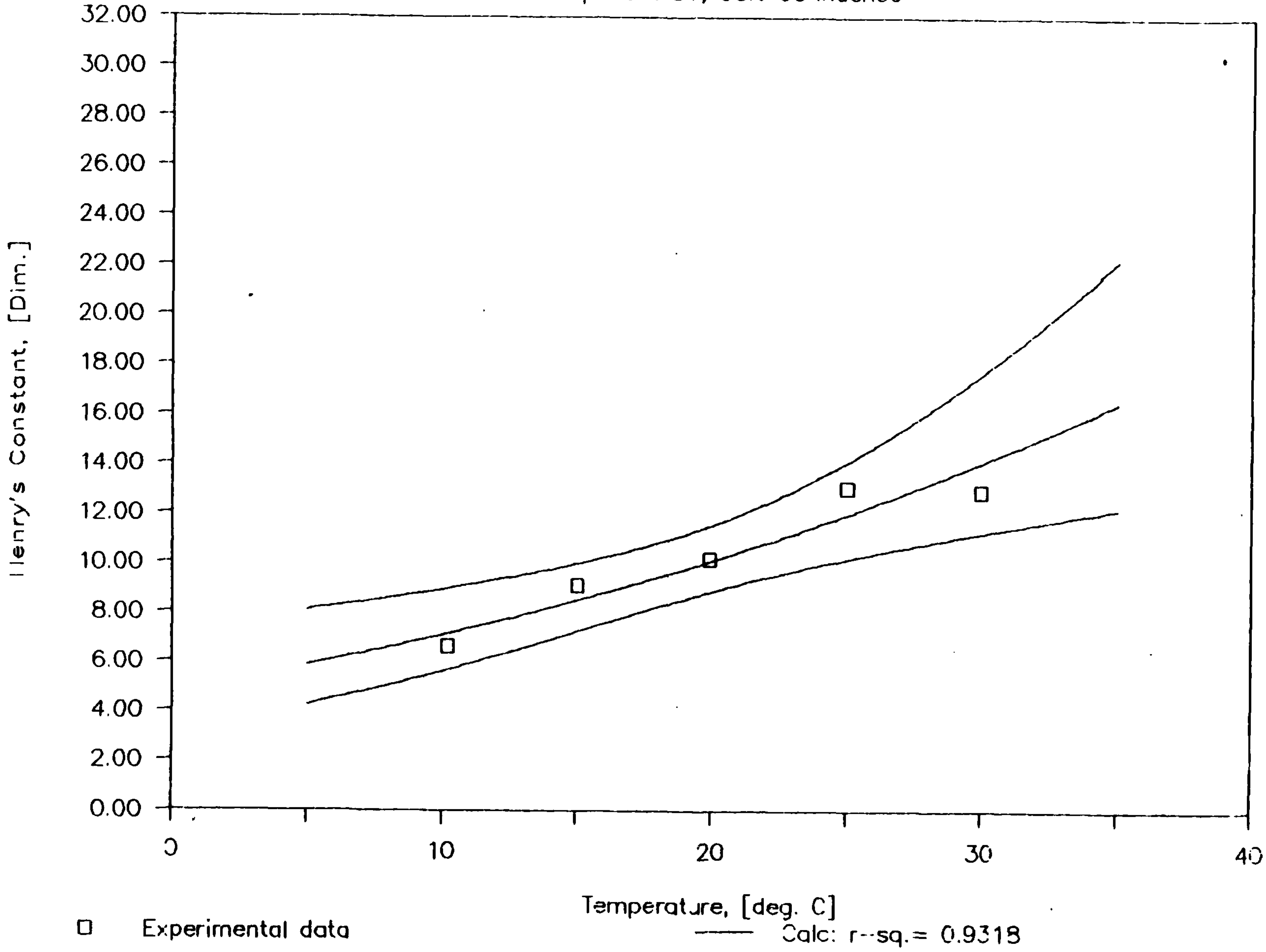
95% CONFIDENCE TEST

Component 51



REGRESSION CONFIDENCE TEST

Comporent 51, 95% Confidence



	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	1		13		25	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	20		20		20	
Component ID	52		52		52	
Temperature (C)	10.1		15.1		19.6	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0067	1.0E-25	0.0096	1.0E-25	0.0103	1.0E-25
H, avg:atm-mol/mol	8.7		12.6		13.7	
H, avg: atm-m3/mol	1.56E-04	1	2.27E-04	1	2.47E-04	1
H, avg: kPa-m3/mol	0.0158		0.0230		0.0250	
COV, r [std/mean]	119.86		41.57		27.74	
COV, both replic.	----		----		----	
Observation: (1)	-0.0001		0.0140		0.0113	
[atm-m3/m3] (2)	-0.0004		0.0073		0.0070	
(3)	0.0138		0.0118		0.0136	
(4)	0.0136		0.0053		0.0092	
Injection: (1)	27861		41436		53756	
[Peak Area] (2)	32000		40597		54941	
(3)	267080		345340		459360	
(4)	267710		367900		479000	

	Temperature 4		Temperature 5	
RUN Number —)	14		2	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2
Group No.	20		20	
Component ID	52		52	
Temperature (C)	25		30	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0100	1.0E-25	0.0118	1.0E-25
H,avg:atm-mol/mol	13.6		16.3	
H,avg: atm-m3/mol	2.45E-04	1	2.93E-04	1
H,avg: kPa-m3/mol	0.0248		0.0297	
COV, r [std/mean]	1.12		32.58	
COV, both replic.	———		———	
Observation: (1)	0.0101		0.0126	
[atm-m3/m3] (2)	0.0099		0.0165	
(3)	0.0101		0.0072	
(4)	0.0099		0.0109	
Injection: (1)	75644		107330	
[Peak Area] (2)	75648		101930	
(3)	653760		906060	
(4)	654980		874460	

ANALYSIS COMPLETED ...

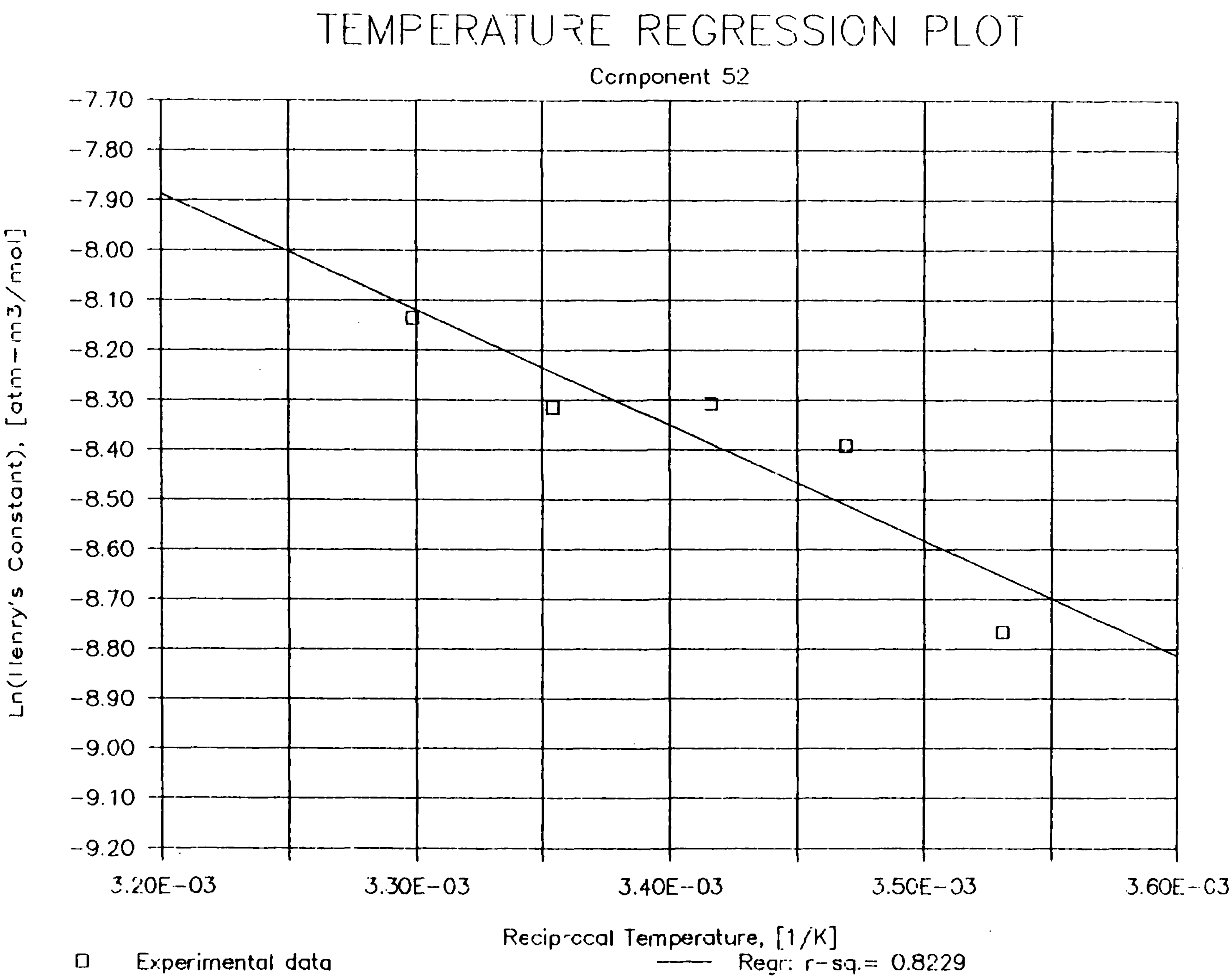
Temperature Regression Parameters:

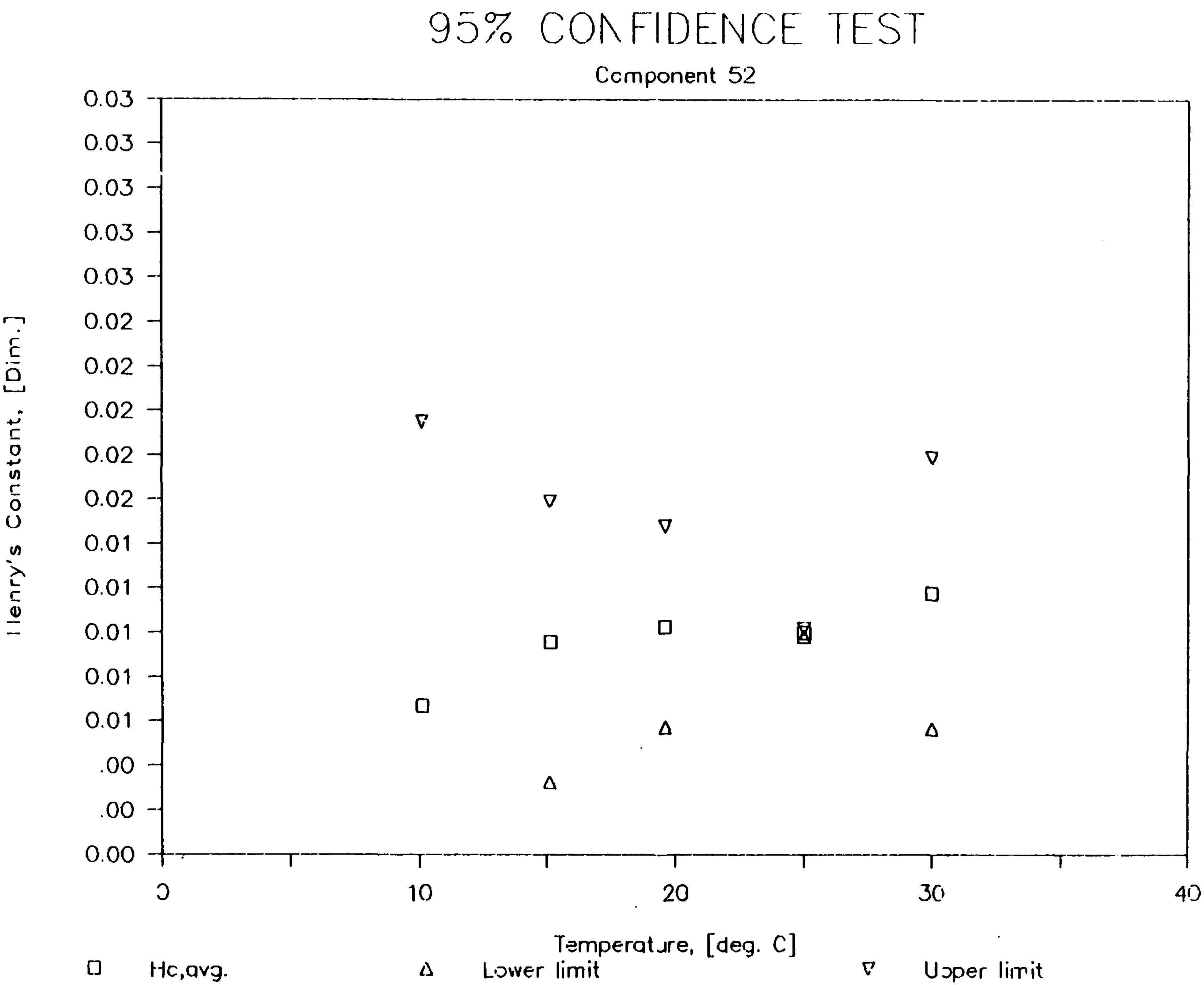
OF POINTS = 5

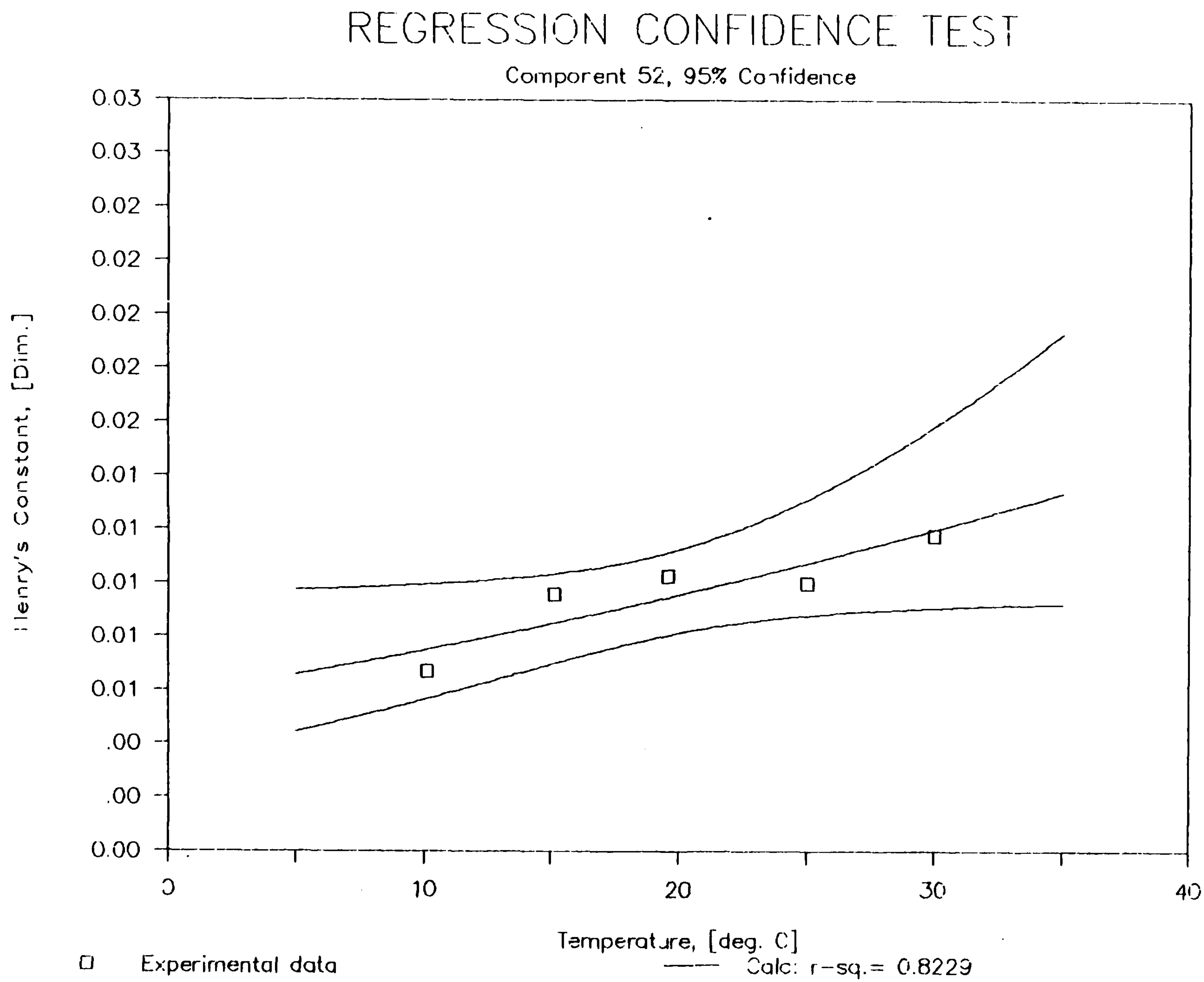
SLOPE = -2.3E+03

Y-INTERCEPT = -4.8E-01

R-SQUARED = 0.8229


TEMPERATURE REGRESSION PLOT
Component 52
Ln(Henry's Constant), [atm-m3/mol]
-7.70
-7.80
-7.90
-8.00
-8.10
-8.20
-8.30
-8.40
-8.50
-8.60
-8.70
-8.80
-8.90
-9.00
-9.10
-9.20
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.8229


95% CONFIDENCE TEST
Component 52
Henry's Constant, [Dim.]
0.03
0.03
0.03
0.03
0.03
0.02
0.02
0.02
0.02
0.02
0.01
0.01
0.01
0.01
0.01
.00
.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 52, 95% Confidence
Henry's Constant, [Dim.]
0.03
0.03
0.02
0.02
0.02
0.02
0.02
0.01
0.01
0.01
0.01
0.01
.00
.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.8229

	Temperature 1		Temperature 2		Temperature 3	
RUN Number —)	2		17		52	
REPLICATE —)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	20		20		20	
Component ID	152		152		152	
Temperature (C)	10.5		15.1		20.2	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	0.0120	1.0E-25	0.0166	1.0E-25	0.0077	1.0E-25
H, avg:atm-mol/mol	15.5		21.8		10.3	
H, avg: atm-m3/mol	2.79E-04	1	3.92E-04	1	1.86E-04	1
H, avg: kPa-m3/mol	0.0282		0.0397		0.0188	
COV, r [std/mean]	35.50		21.40		6.32	
COV, both replic.	———		———		———	
Observation: (1)	0.0161		0.0143		0.0080	
[atm-m3/m3] (2)	0.0151		0.0129		0.0072	
(3)	0.0088		0.0203		0.0082	
(4)	0.0078		0.0188		0.0074	
Injection: (1)	33042		43700		49633	
[Peak Area] (2)	30852		46110		49719	
(3)	269990		363080		437630	
(4)	272570		367890		441190	

	Temperature 4		Temperature 5	
RUN Number ---)	17		3	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	20		20	
Component ID	152		152	
Temperature (C)	25.2		30	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H, avg: atm-m3/m3	0.0053	1.0E-25	0.0044	1.0E-25
H, avg:atm-mol/mol	7.2		6.1	
H, avg: atm-m3/mol	1.30E-04	1	1.10E-04	1
H, avg: kPa-m3/mol	0.0131		0.0112	
COV, r [std/mean]	81.79		19.78	
COV, both replic.	------		------	
Observation: (1)	0.0098		0.0055	
[atm-m3/m3] (2)	0.0082		0.0047	
(3)	0.0024		0.0041	
(4)	0.0009		0.0034	
Injection: (1)	78786		100440	
[Peak Area] (2)	73177		99088	
(3)	683190		908580	
(4)	693890		915260	

ANALYSIS COMPLETED ...

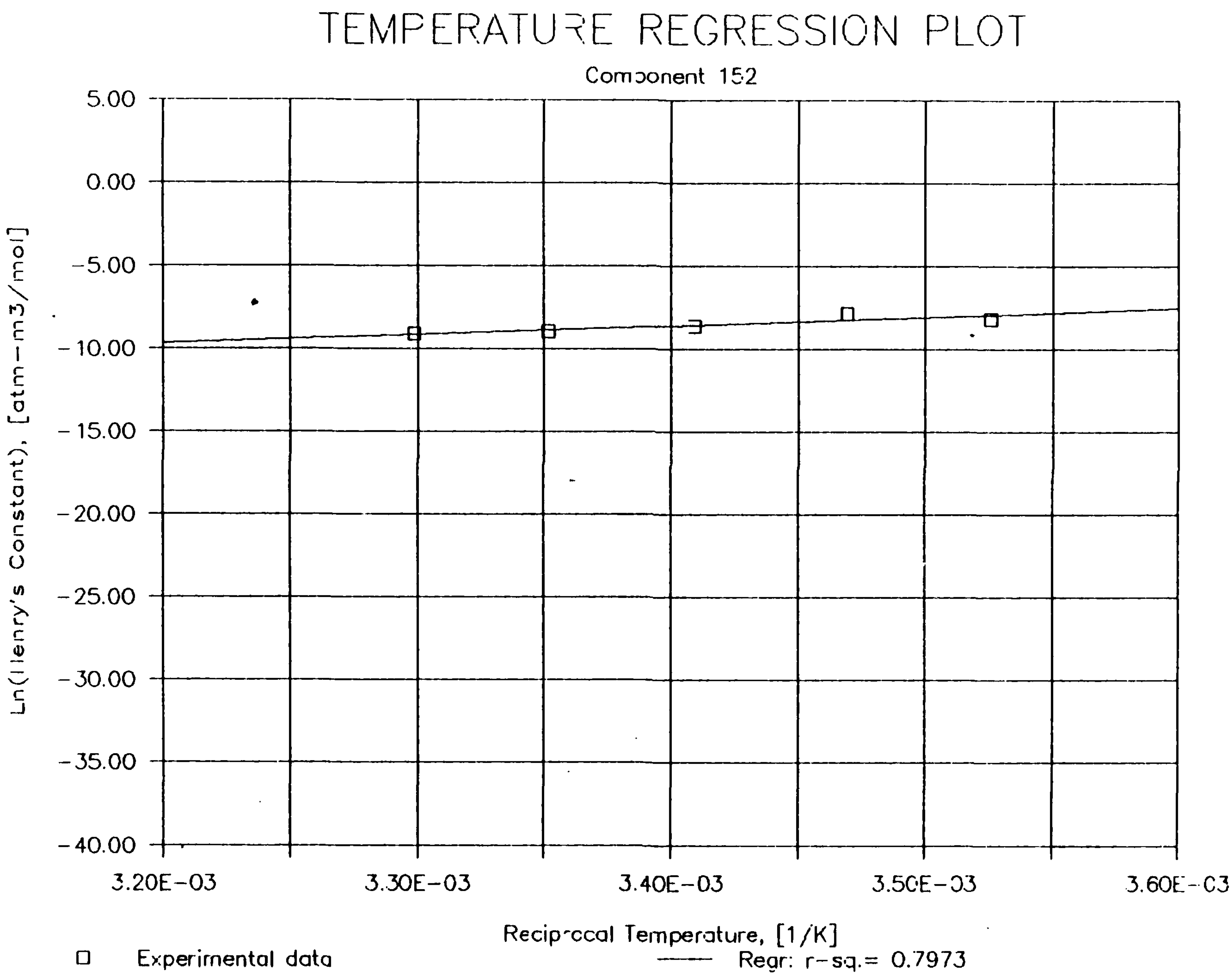
Temperature Regression Parameters:

OF POINTS = 5

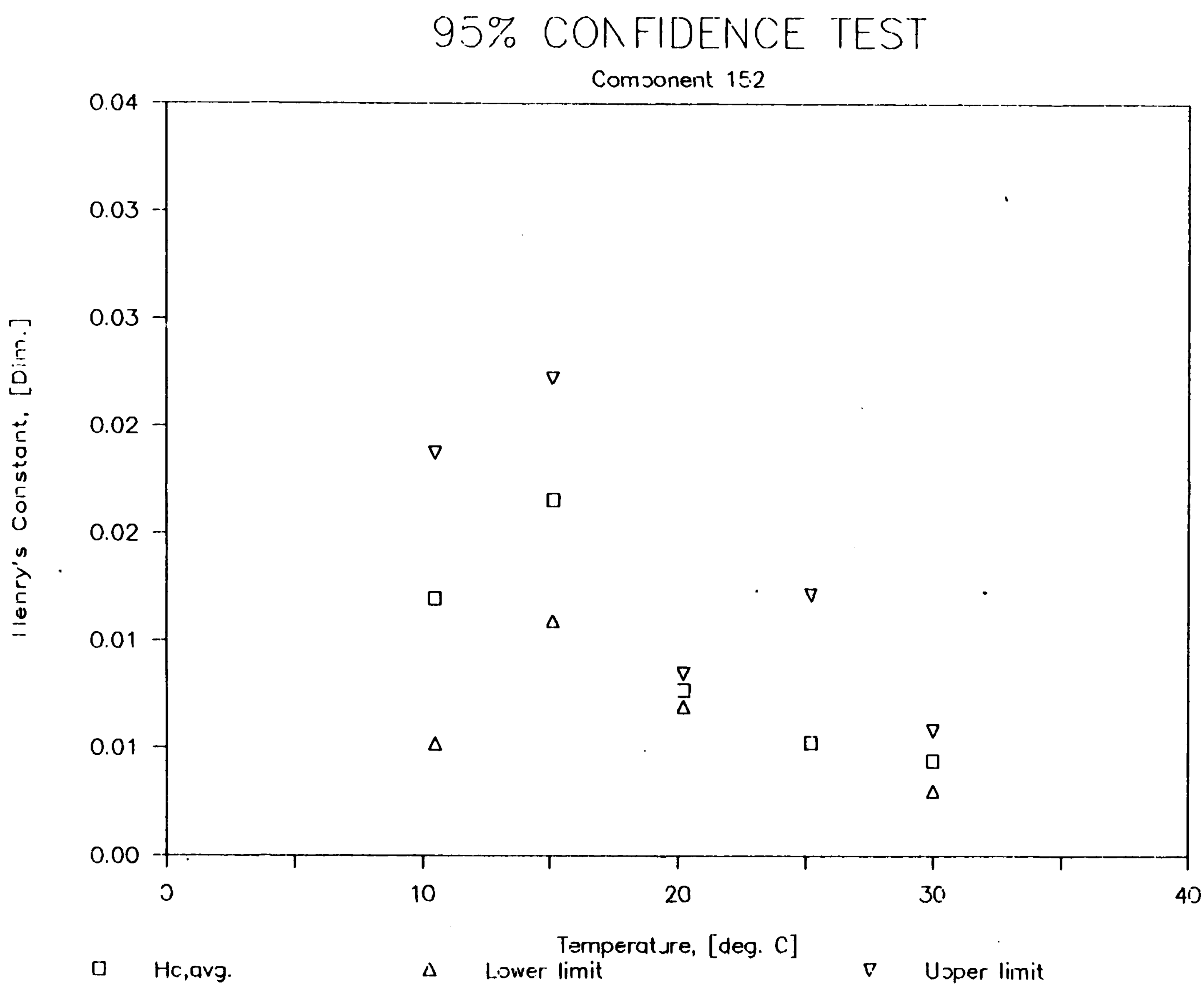
SLOPE = 5.2E+03

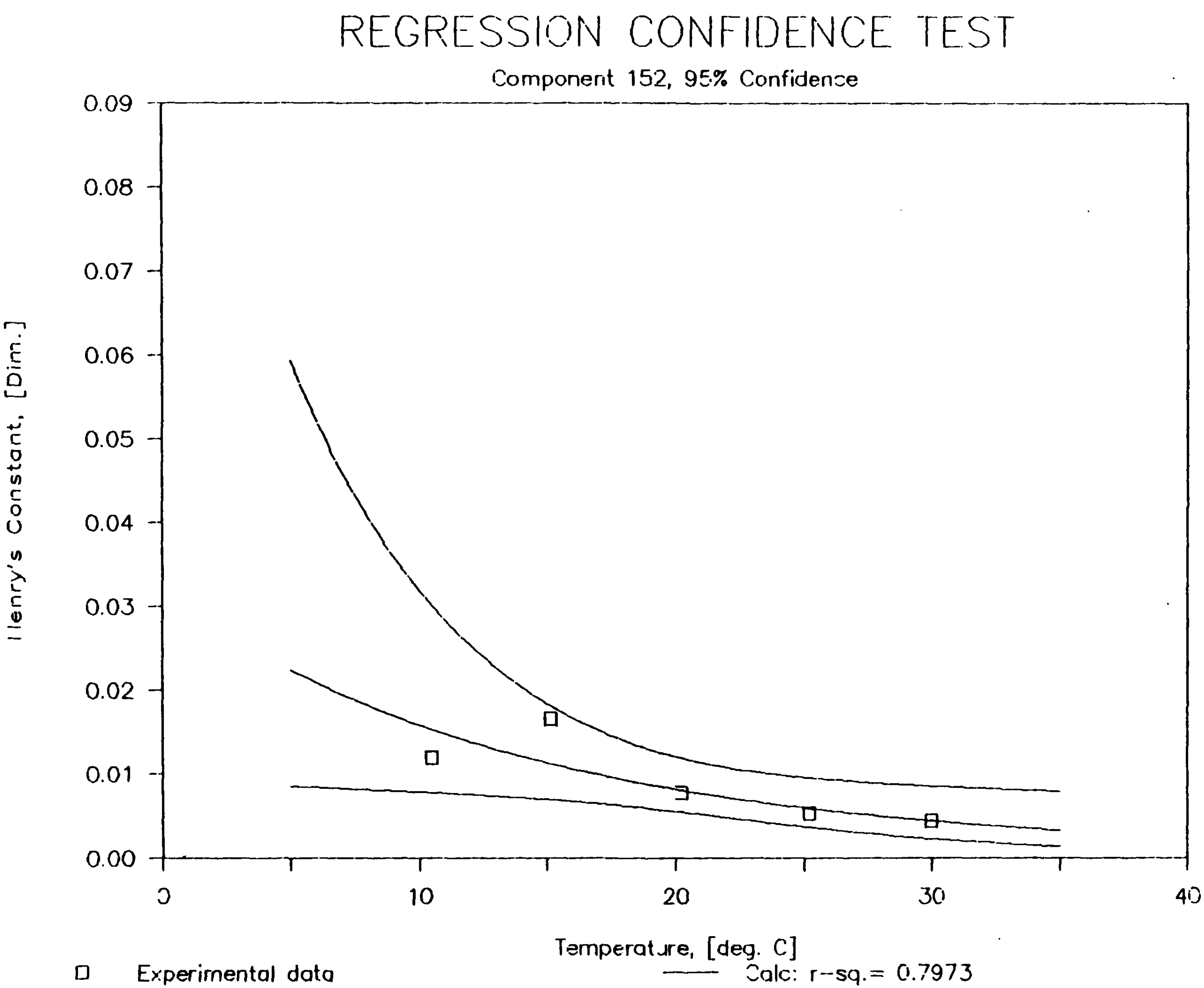
Y-INTERCEPT = -2.6E+01

R-SQUARED = 0.7973



TEMPERATURE REGRESSION PLOT
Component 152
5.00
0.00
-5.00
-10.00
-15.00
-20.00
-25.00
-30.00
-35.00
-40.00
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.7973


95% CONFIDENCE TEST
Component 152
Henry's Constant, [Dim.]
0.04
0.03
0.03
0.02
0.02
0.01
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 152, 95% Confidence
Henry's Constant, [Dim.]
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.7973

04-Nov-86 Results Summary for Component 53

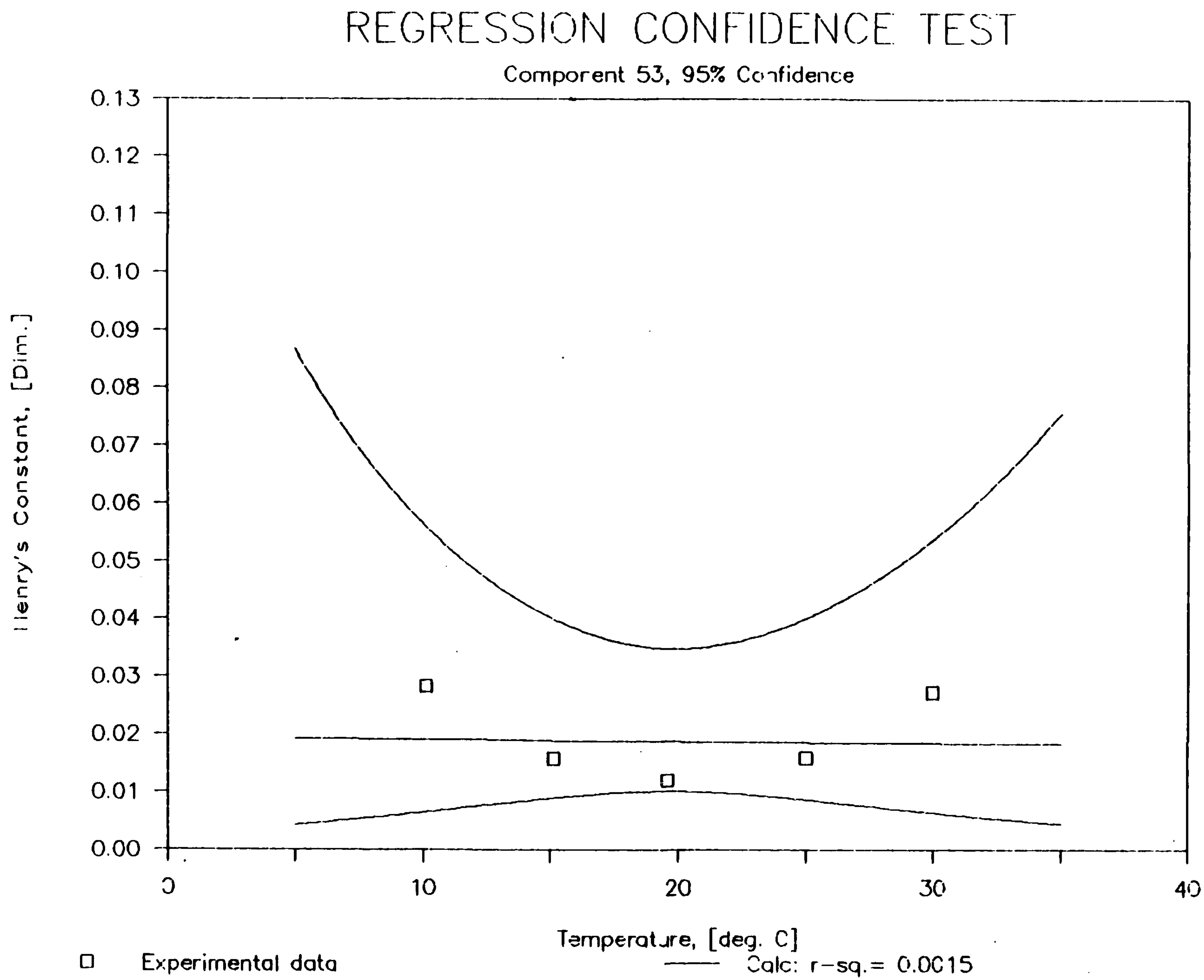
	Temperature 1		Temperature 2		Temperature 3	
RUN Number --->	5		17		28	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	20		20		20	
Component ID	53		53		53	
Temperature (C)	10.1		15.1		19.6	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.0283	1.0E-25	0.0157	1.0E-25	0.0119	1.0E-25
H,avg:atm-mol/mol	36.6		20.7		15.9	
H,avg: atm-m3/mol	6.59E-04	1	3.72E-04	1	2.87E-04	1
H,avg: kPa-m3/mol	0.0667		0.0377		0.0291	
COV, r [std/mean]	28.47		2.80		35.36	
COV, both replic.	------		------		------	
Observation: (1)	0.0332		0.0162		0.0112	
[atm-m3/m3] (2)	0.0370		0.0155		0.0171	
(3)	0.0199		0.0160		0.0069	
(4)	0.0232		0.0153		0.0125	
Injection: (1)	59140		70407		105580	
[Peak Area] (2)	53007		70262		101240	
(3)	418840		574850		902890	
(4)	407100		578660		854970	

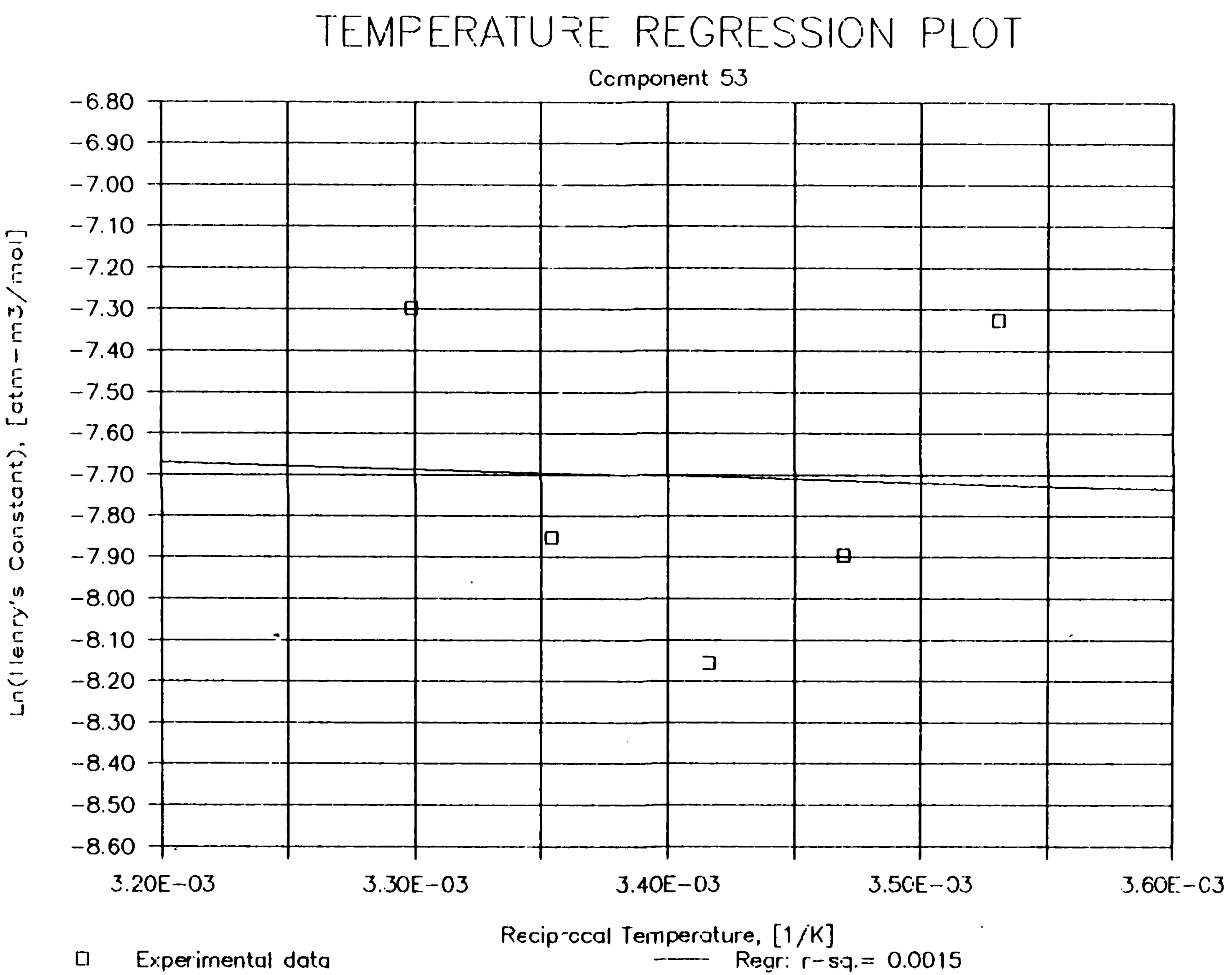
	Temperature 4		Temperature 5	
RUN Number --->	18		6	
REPLICATE --->	No. 1	No. 2	No. 1	No. 2
Group No.	20		20	
Component ID	53		53	
Temperature (C)	25		30	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0159	1.0E-25	0.0272	1.0E-25
H,avg:atm-mol/mol	21.6		37.6	
H,avg: atm-m3/mol	3.89E-04	1	6.78E-04	1
H,avg: kPa-m3/mol	0.0394		0.0687	
COV, r [std/mean]	36.14		11.55	
COV, both replic.	----		----	
Observation: (1)	0.0174		0.0237	
[atm-m3/m3] (2)	0.0092		0.0287	
(3)	0.0229		0.0257	
(4)	0.0142		0.0308	
Injection: (1)	128050		200340	
[Peak Area] (2)	134300		203720	
(3)	1034700		1532400	
(4)	1116900		1470500	

ANALYSIS COMPLETED ...

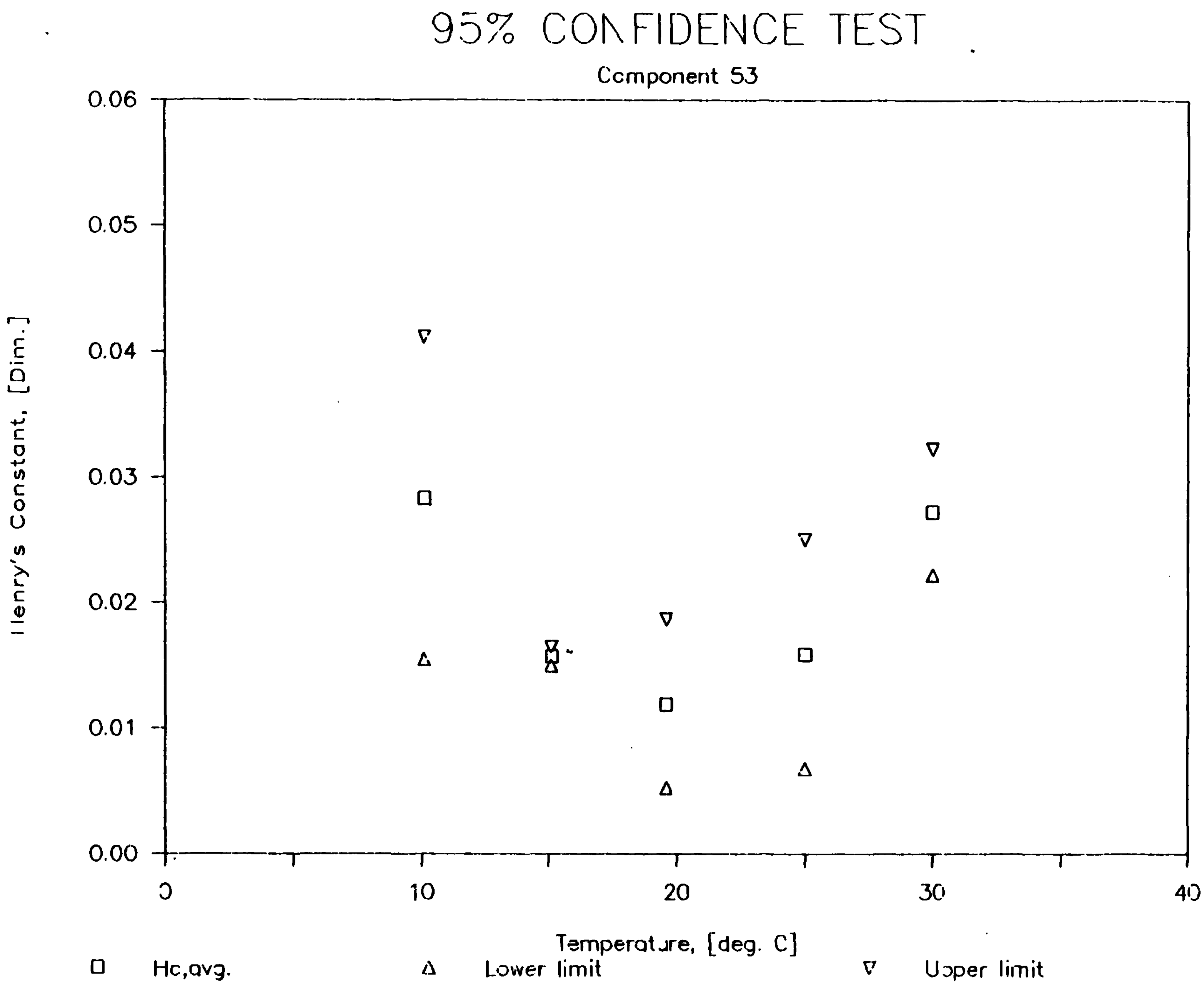
Temperature Regression Parameters:

# OF POINTS	=	5
SLOPE	=	-1.6E+02
Y-INTERCEPT	=	-7.2E+00
R-SQUARED	=	0.0015


REGRESSION CONFIDENCE TEST
Component 53, 95% Confidence
Henry's Constant, [Dim.]
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.0015



TEMPERATURE REGRESSION PLOT
Component 53
Ln(Henry's Constant), [atm-m3/mol]
-6.80
-6.90
-7.00
-7.10
-7.20
-7.30
-7.40
-7.50
-7.60
-7.70
-7.80
-7.90
-8.00
-8.10
-8.20
-8.30
-8.40
-8.50
-8.60
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.0015


95% CONFIDENCE TEST
Component 53
Henry's Constant, [Dim.]
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit

Results Summary for Component 153

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	7		24		33	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	20		20		20	
Component ID	153		153		153	
Temperature (C)	10.5		15.1		20.1	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.0053	1.0E-25	0.0048	1.0E-25	0.0043	1.0E-25
H,avg:atm-mol/mol	6.8		6.3		5.8	
H,avg: atm-m3/mol	1.23E-04	1	1.14E-04	1	1.04E-04	1
H,avg: kPa-m3/mol	0.0125		0.0116		0.0105	
COV, r [std/mean]	60.64		18.25		18.49	
COV, both replic.	------		------		------	
Observation: (1)	0.0076		0.0047		0.0048	
[atm-m3/m3] (2)	0.0085		0.0038		0.0035	
(3)	0.0021		0.0059		0.0052	
(4)	0.0030		0.0050		0.0039	
Injection: (1)	83452		111840		161020	
[Peak Area] (2)	78971		113230		161670	
(3)	739210		1019700		1466500	
(4)	732630		1029200		1486400	

	Temperature 4		Temperature 5	
RUN Number ---)	25		8	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	20		20	
Component ID	153		153	
Temperature (C)	25.2		30	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0079	1.0E-25	0.0063	1.0E-25
H,avg:atm-mol/mol	10.7		8.7	
H,avg: atm-m3/mol	1.93E-04	1	1.57E-04	1
H,avg: kPa-m3/mol	0.0196		0.0159	
COV, r [std/mean]	19.09		28.96	
COV, both replic.	-----		-----	
Observation: (1)	0.0085		0.0080	
[atm-m3/m3] (2)	0.0062		0.0077	
(3)	0.0096		0.0049	
(4)	0.0073		0.0046	
Injection: (1)	231040		319490	
[Peak Area] (2)	233660		309630	
(3)	2028300		2816900	
(4)	2075400		2825900	

ANALYSIS COMPLETED ...

Temperature Regression Parameters:

OF POINTS = 5

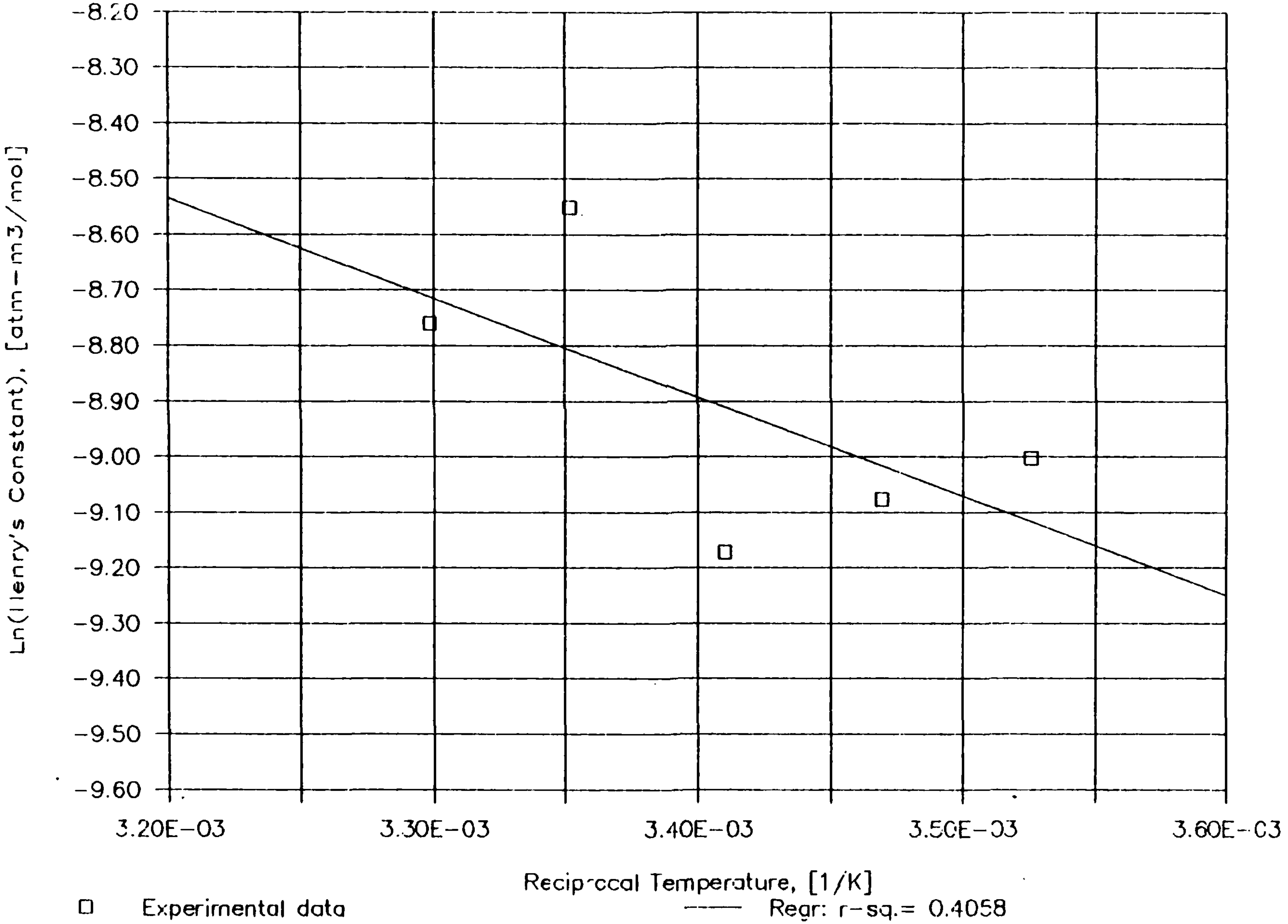
SLOPE = -1.8E+03

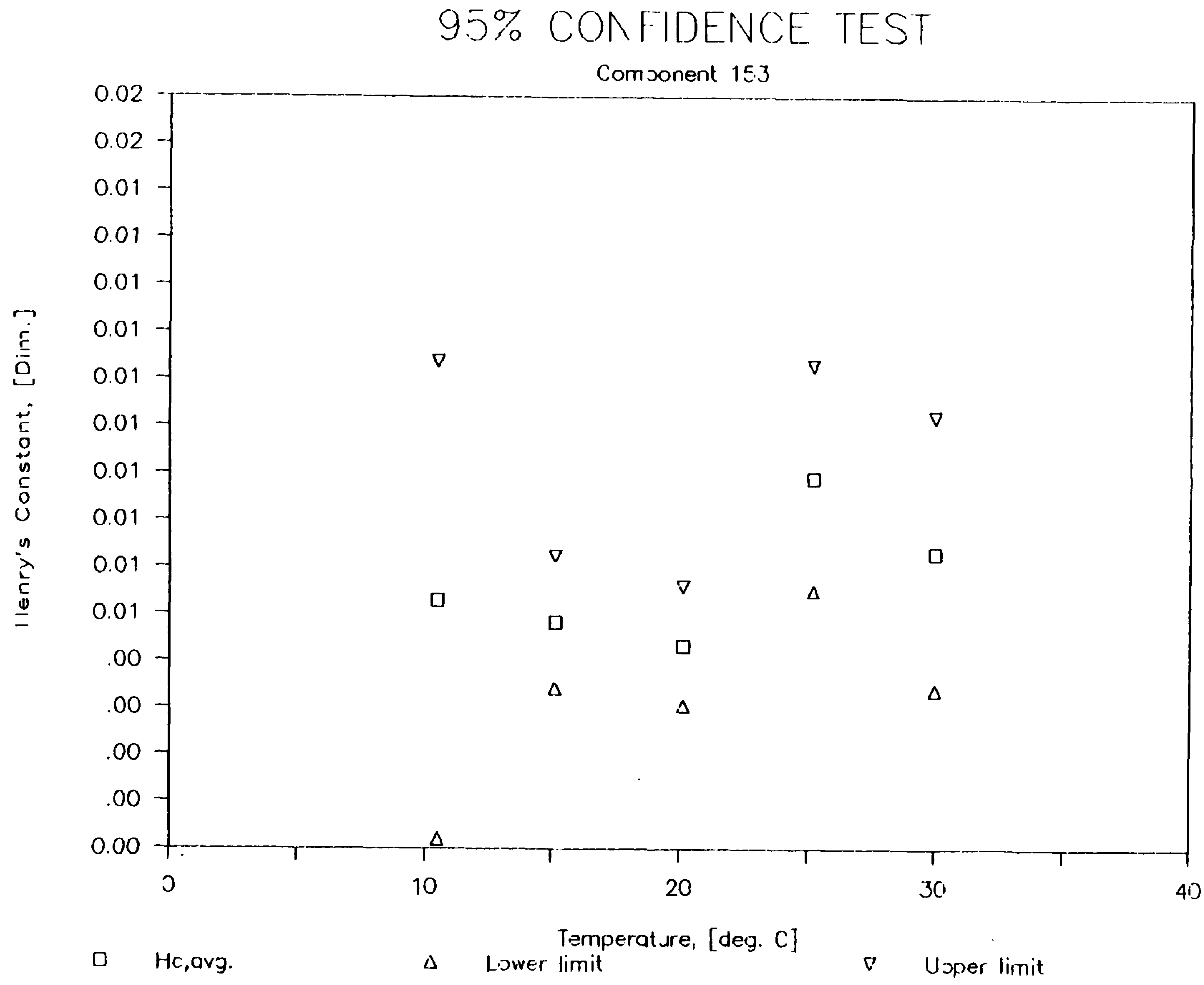
Y-INTERCEPT = -2.8E+00

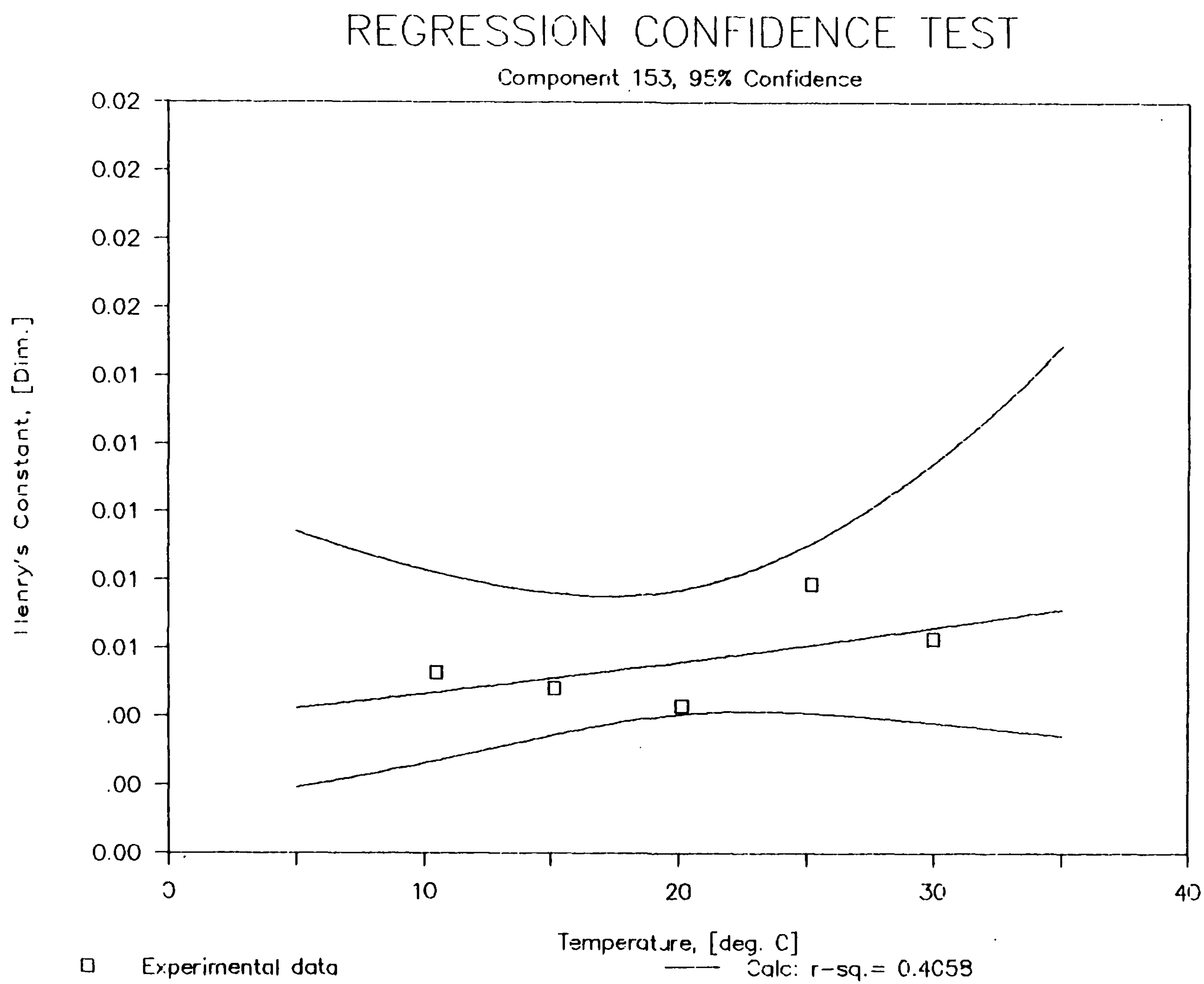
R-SQUARED = 0.4058

TEMPERATURE REGRESSION PLOT

Component 153




95% CONFIDENCE TEST
Component 153
Henry's Constant, [Dim.]
0.02
0.02
0.01
0.01
0.01
0.01
0.01
0.01
0.01
0.01
0.01
0.01
.00
.00
.00
.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit


REGRESSION CONFIDENCE TEST
Component 153, 95% Confidence
Henry's Constant, [Dim.]
0.02
0.02
0.02
0.02
0.01
0.01
0.01
0.01
0.01
.00
.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.4058

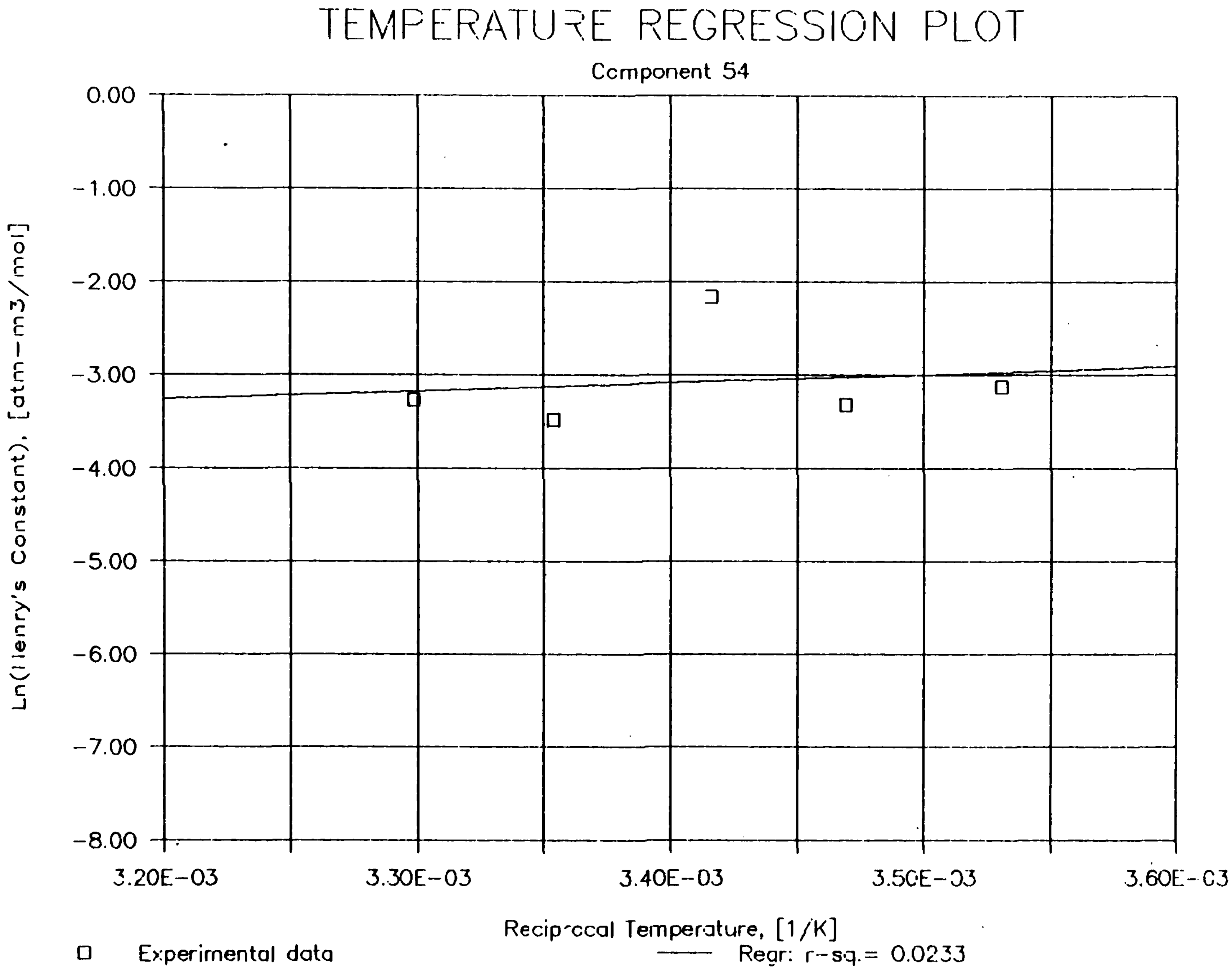
	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	9		21		33	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	20		20		20	
Component ID	54		54		54	
Temperature (C)	10.1		15.1		19.6	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	1.8980	1.0E-25	1.5346	1.0E-25	4.8118	1.0E-25
H,avg:atm-mol/mol	2448.7		2014.9		6416.2	
H,avg: atm-m3/mol	4.41E-02	1	3.63E-02	1	1.16E-01	1
H,avg: kPa-m3/mol	4.4700		3.6781		11.7125	
COV, r [std/mean]	33.20		16.07		32.33	
COV, both replic.	------		------		------	
Observation: (1)	2.3451		1.8051		6.7888	
[atm-m3/m3] (2)	2.5324		1.6763		5.2461	
(3)	1.3124		1.3750		3.9636	
(4)	1.4019		1.2822		3.2486	
Injection: (1)	55588		22968		49104	
[Peak Area] (2)	38139		19154		39079	
(3)	31469		15305		16631	
(4)	30072		16062		18401	

	Temperature 4		Temperature 5	
RUN Number ---)	22		10	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	20		20	
Component ID	54		54	
Temperature (C)	25		30	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	1.2640	1.0E-25	1.5326	1.0E-25
H,avg:atm-mol/mol	1716.6		2116.2	
H,avg: atm-m3/mol	3.09E-02	1	3.81E-02	1
H,avg: kPa-m3/mol	3.1336		3.8631	
COV, r [std/mean]	16.03		15.85	
COV, both replic.	———		———	
Observation: (1)	1.5094		1.8225	
[atm-m3/m3] (2)	1.1723		1.6266	
(3)	1.3335		1.4128	
(4)	1.0409		1.2685	
Injection: (1)	21149		48750	
[Peak Area] (2)	19435		41163	
(3)	15860		32285	
(4)	18883		34777	

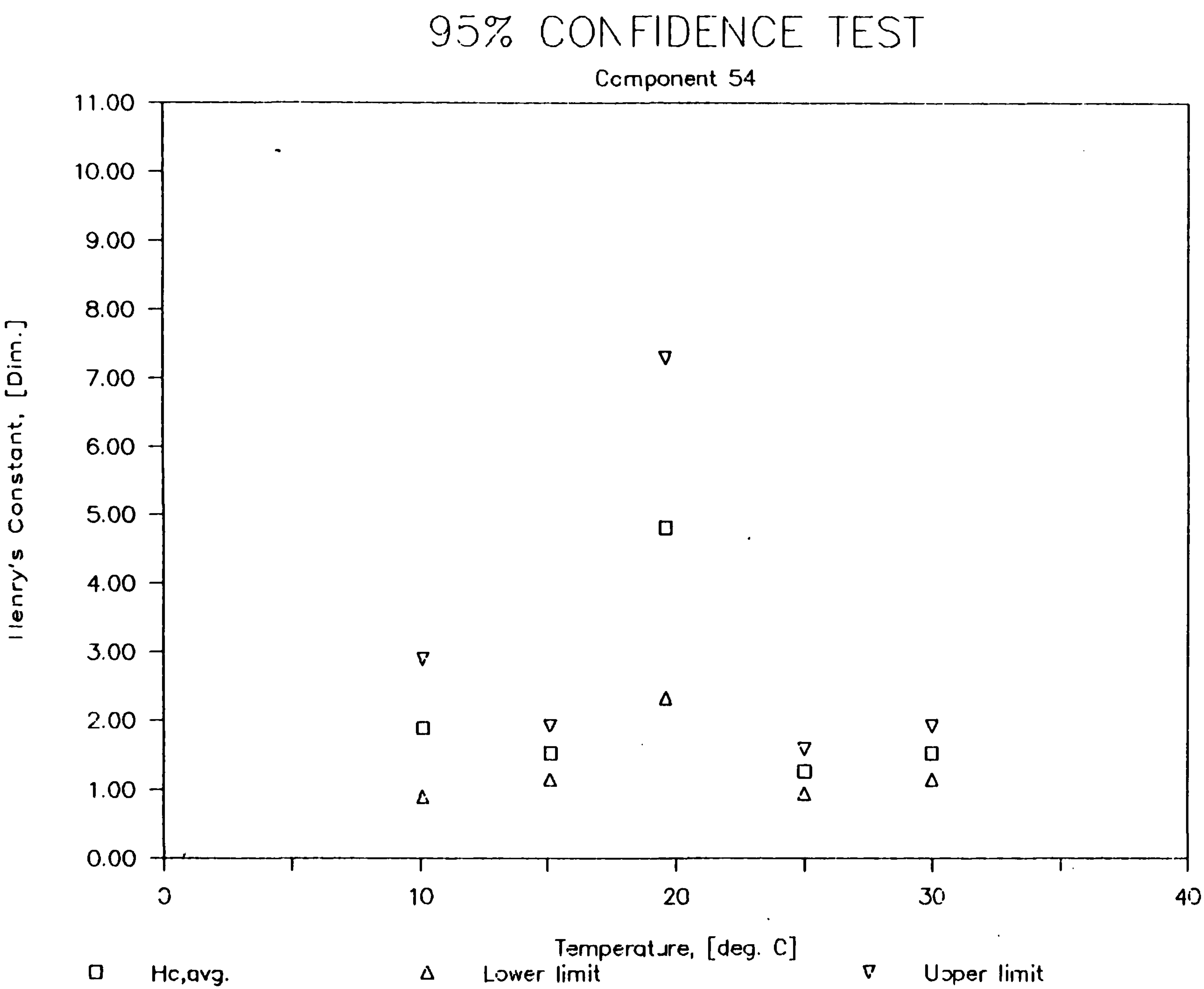
ANALYSIS COMPLETED ...

Temperature Regression Parameters:

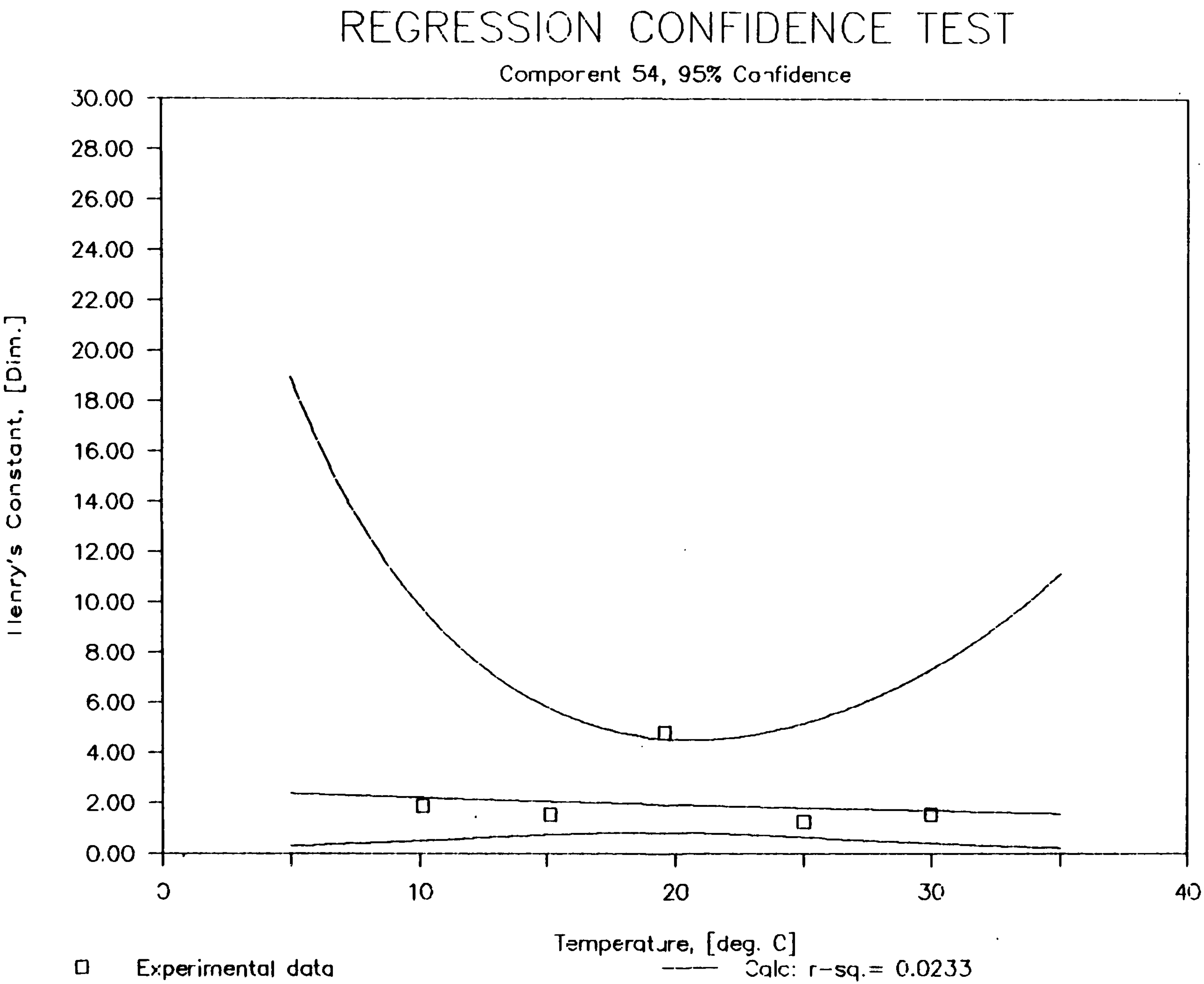
# OF POINTS	=	5
SLOPE	=	8.7E+02
Y-INTERCEPT	=	-6.1E+00
R-SQUARED	=	0.0233



TEMPERATURE REGRESSION PLOT
Component 54
0.00
-1.00
-2.00
-3.00
-4.00
-5.00
-6.00
-7.00
-8.00
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.0233



95% CONFIDENCE TEST
Component 54
Henry's Constant, [Dim.]
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 54, 95% Confidence
Henry's Constant, [Dim.]
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.0233

04-Nov-86 Results Summary for Component 55

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	2		10		2	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	21		21		21	
Component ID	55		55		55	
Temperature (C)	10.1		15.1		20.2	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H,avg: atm-m3/m3	0.0537	1.0E-25	0.0067	1.0E-25	0.0299	1.0E-25
H,avg:atm-mol/mol	69.2		8.8		40.0	
H,avg: atm-m3/mol	1.25E-03	1	1.58E-04	1	7.20E-04	1
H,avg: kPa-m3/mol	0.1264		0.0160		0.0730	
COV, r [std/mean]	75.96		347.46		28.41	
COV, both replic.	------		------		------	
Observation: (1)	0.0770		0.0293		0.0247	
[atm-m3/m3] (2)	0.0986		0.0242		0.0209	
(3)	0.0129		-0.0117		0.0391	
(4)	0.0261		-0.0150		0.0349	
Injection: (1)	4672		4779		6407	
[Peak Area] (2)	2943		3194		7174	
(3)	24768		34922		48590	
(4)	22065		36418		50179	

	Temperature 4		Temperature 5	
RUN Number ---)	11		3	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	21		21	
Component ID	55		55	
Temperature (C)	25.2		30	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	0.0051	1.0E-25	0.0006	1.0E-25
H,avg:atm-mol/mol	7.0		0.8	
H,avg: atm-m3/mol	1.26E-04	1	1.38E-05	1
H,avg: kPa-m3/mol	0.0127		0.0014	
COV, r [std/mean]	92.84		697.60	
COV, both replic.	------		------	
Observations (1)	0.0108		0.0045	
[atm-m3/m3] (2)	0.0034		-0.0021	
(3)	0.0067		0.0031	
(4)	-0.0004		-0.0034	
Injection: (1)	8564		10942	
[Peak Area] (2)	8230		10785	
(3)	73520		99903	
(4)	79100		107090	

ANALYSIS COMPLETED ...

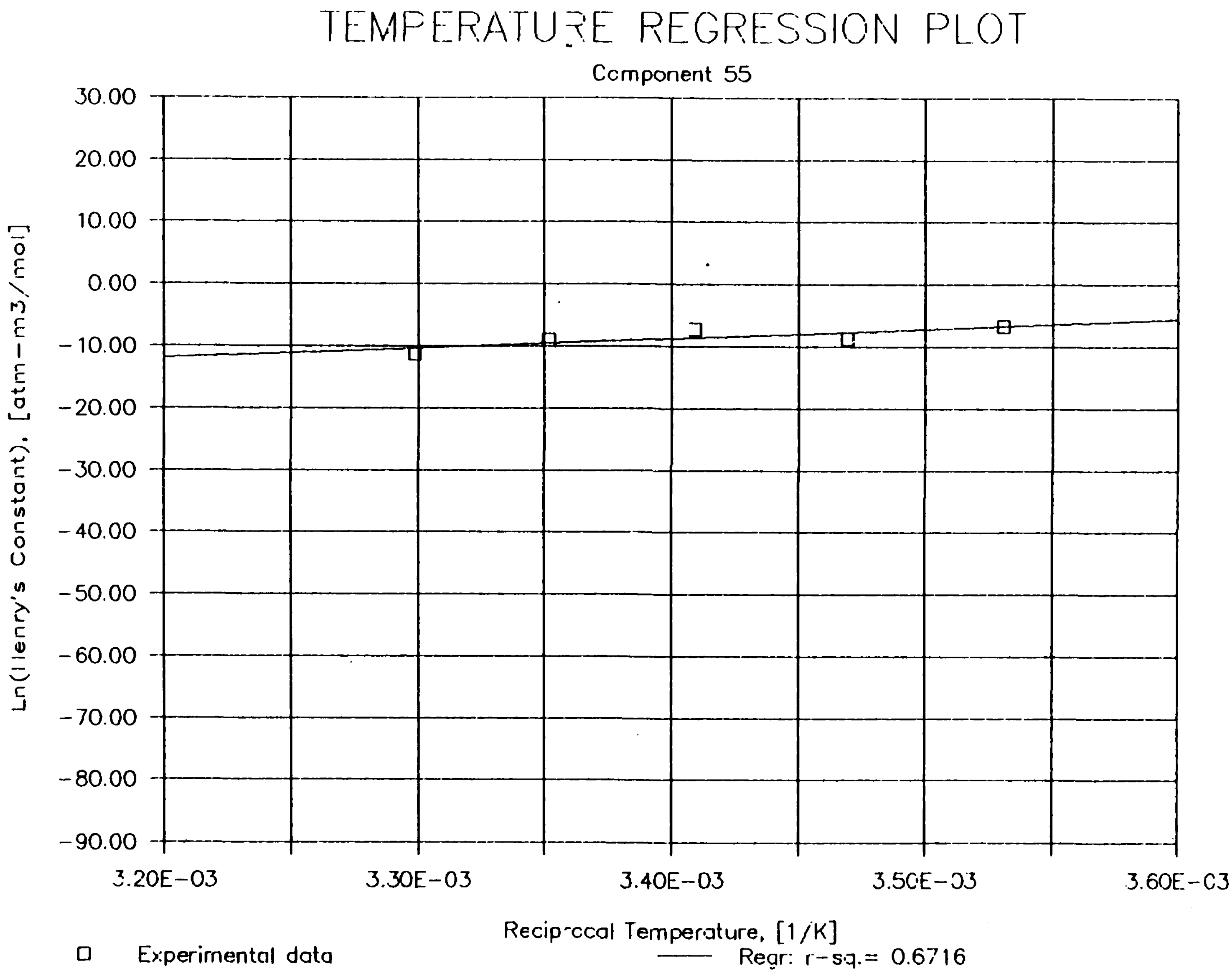
Temperature Regression Parameters:

OF POINTS = 5

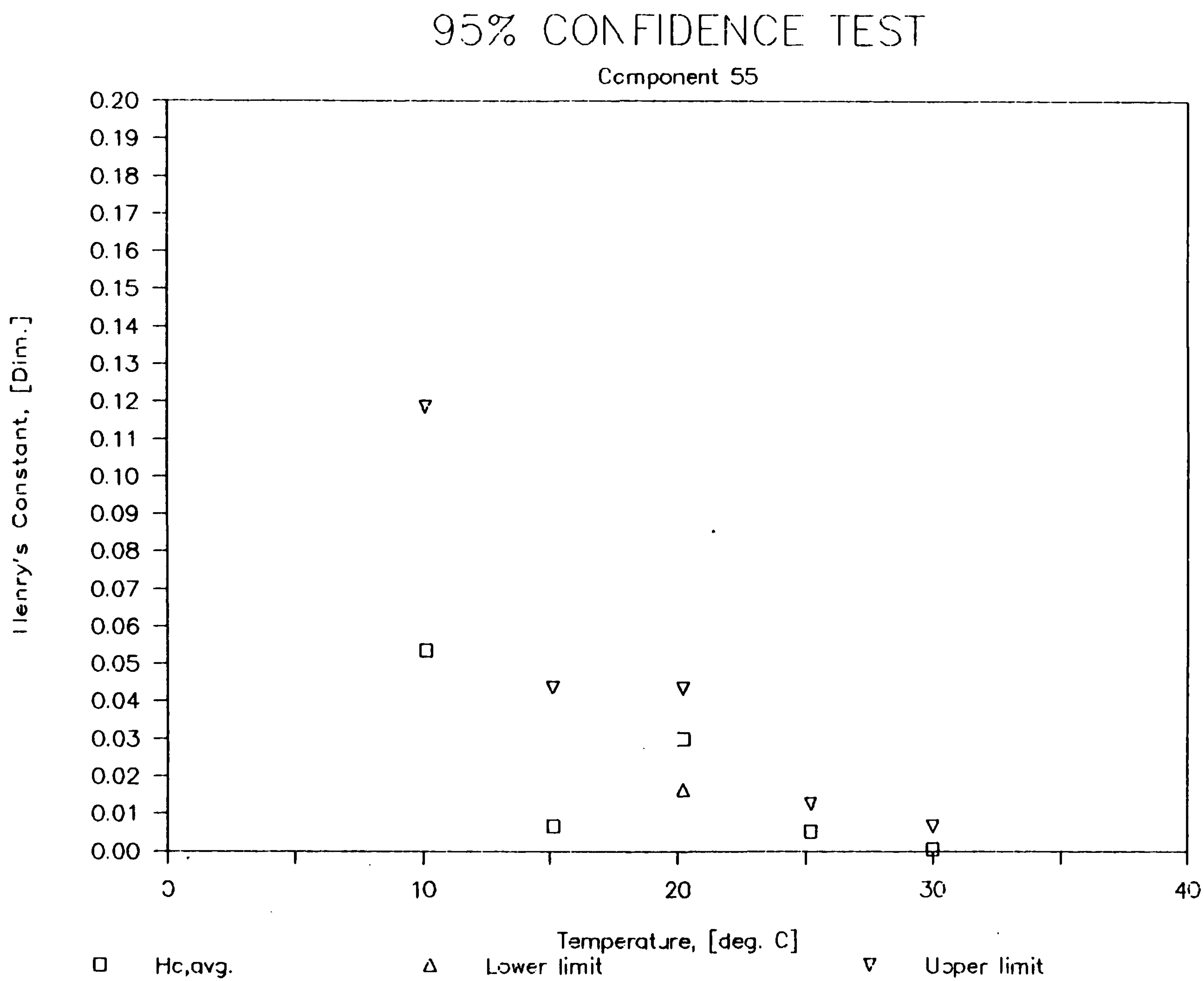
SLOPE = 1.6E+04

Y-INTERCEPT = -6.2E+01

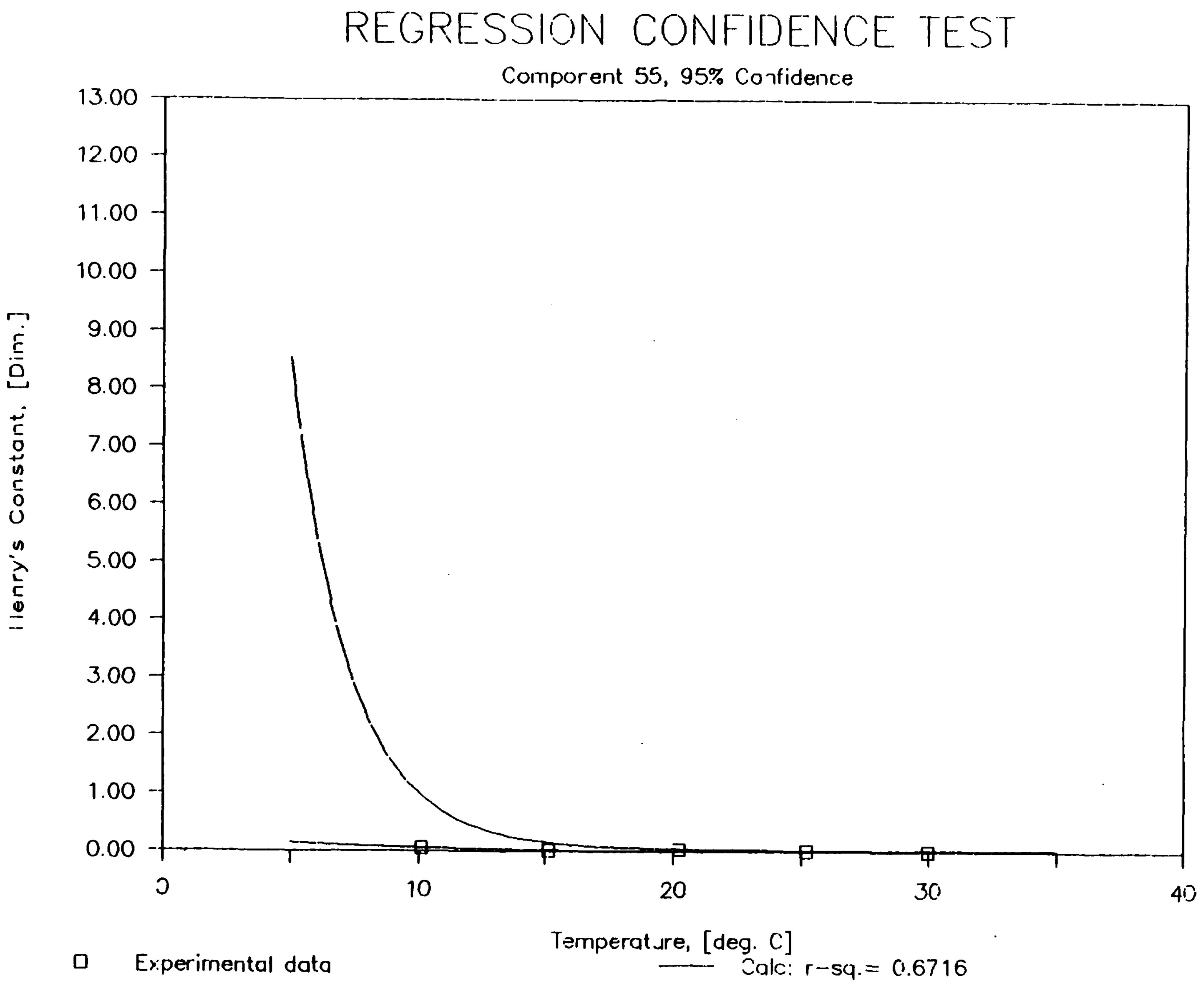
R-SQUARED = 0.6716



TEMPERATURE REGRESSION PLOT
Component 55
30.00
20.00
10.00
0.00
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
Ln(Henry's Constant), [atm-m3/mol]
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.6716



95% CONFIDENCE TEST
Component 55
Henry's Constant, [Dim.]
0.20
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
10
20
30
40
Temperature, [deg. C]
Hc,avg.
Lower limit
Upper limit



REGRESSION CONFIDENCE TEST
Component 55, 95% Confidence
Henry's Constant, [Dim.]
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0
10
20
30
40
Temperature, [deg. C]
Experimental data
Calc: r-sq.= 0.6716

Results Summary for Component 56

	Temperature 1		Temperature 2		Temperature 3	
RUN Number ---)	6		13		5	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2	No. 1	No. 2
Group No.	21		21		21	
Component ID	56		56		56	
Temperature (C)	10.1		15.1		20.2	
Low Vol (ml)	21		21		21	
High Vol (ml)	201		201		201	
System Vol (ml)	250		250		250	
H, avg: atm-m3/m3	2.3040	1.0E-25	2.8738	1.0E-25	3.3397	1.0E-25
H, avg:atm-mol/mol	2972.5		3773.1		4462.3	
H, avg: atm-m3/mol	5.36E-02	1	6.80E-02	1	8.04E-02	1
H, avg: kPa-m3/mol	5.4263		6.8878		8.1459	
COV, r [std/mean]	6.47		0.57		1.07	
COV, both replic.	------		------		------	
Observation: (1)	2.1279		2.8547		3.3816	
[atm-m3/m3] (2)	2.2743		2.8682		3.3523	
(3)	2.3245		2.8793		3.3267	
(4)	2.4893		2.8931		3.2981	
Injection: (1)	172000		209970		223910	
[Peak Area] (2)	181510		210980		222000	
(3)	103300		106080		103230	
(4)	99185		105800		103700	

	Temperature 4		Temperature 5	
RUN Number ---)	15		7	
REPLICATE ---)	No. 1	No. 2	No. 1	No. 2
Group No.	21		21	
Component ID	56		56	
Temperature (C)	25.2		30	
Low Vol (ml)	21		21	
High Vol (ml)	201		201	
System Vol (ml)	250		250	
H,avg: atm-m3/m3	4.1373	1.0E-25	4.8951	1.0E-25
H,avg:atm-mol/mol	5622.4		6759.1	
H,avg: atm-m3/mol	1.01E-01	1	1.22E-01	1
H,avg: kPa-m3/mol	10.2635		12.3386	
COV, r [std/mean]	1.75		3.86	
COV, both replic.	-------		-------	
Observation: (1)	4.1419		5.1031	
[atm-m3/m3] (2)	4.2265		4.7861	
(3)	4.0495		4.9993	
(4)	4.1314		4.6919	
Injection: (1)	261770		274740	
[Peak Area] (2)	258960		272320	
(3)	109070		104170	
(4)	108030		107120	

ANALYSIS COMPLETED ...

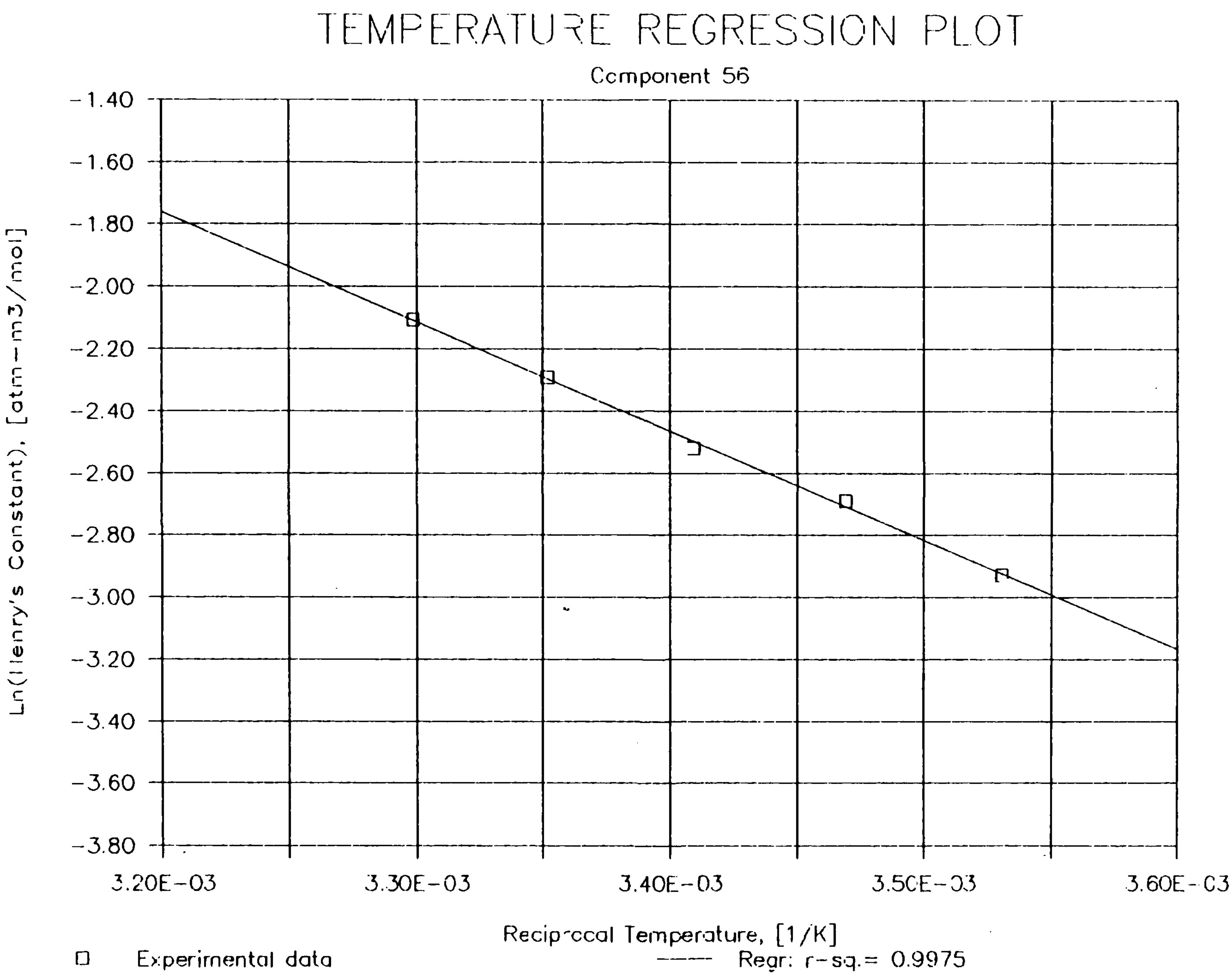
Temperature Regression Parameters:

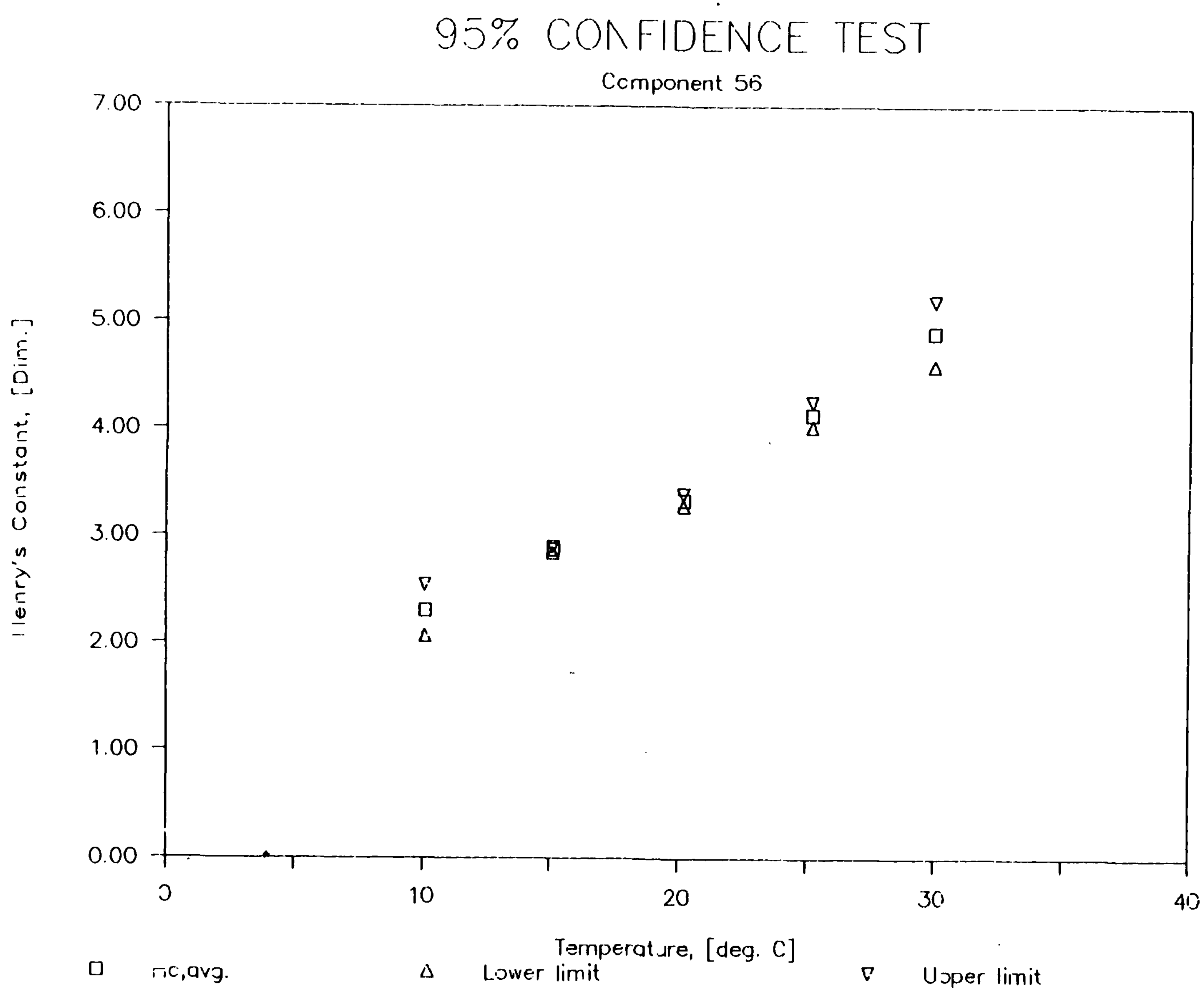
OF POINTS = 5

SLOPE = -3.5E+03

Y-INTERCEPT = 9.5E+00

R-SQUARED = 0.9975


TEMPERATURE REGRESSION PLOT
Component 56
Ln(Henry's Constant), [atm-m3/mol]
-1.40
-1.60
-1.80
-2.00
-2.20
-2.40
-2.60
-2.80
-3.00
-3.20
-3.40
-3.60
-3.80
3.20E-03
3.30E-03
3.40E-03
3.50E-03
3.60E-03
Reciprocal Temperature, [1/K]
Experimental data
Regr: r-sq.= 0.9975


95% CONFIDENCE TEST
Component 56
Henry's Constant, [Dim.]
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0
10
20
30
40
Temperature, [deg. C]
□ Hc,avg.
△ Lower limit
▽ Upper limit

REGRESSION CONFIDENCE TEST

Component 56, 95% Confidence