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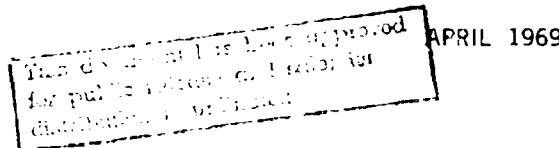
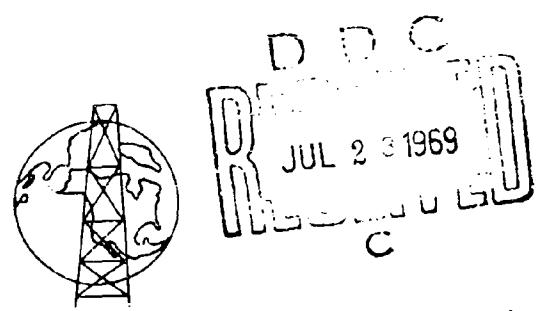
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AN ANALYSIS OF CARBON DIOXIDE IN THE ARCTIC
ATMOSPHERE NEAR BARROW, ALASKA

1961 TO 1967

by

JOHN J. KELLEY, JR.



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Final Report

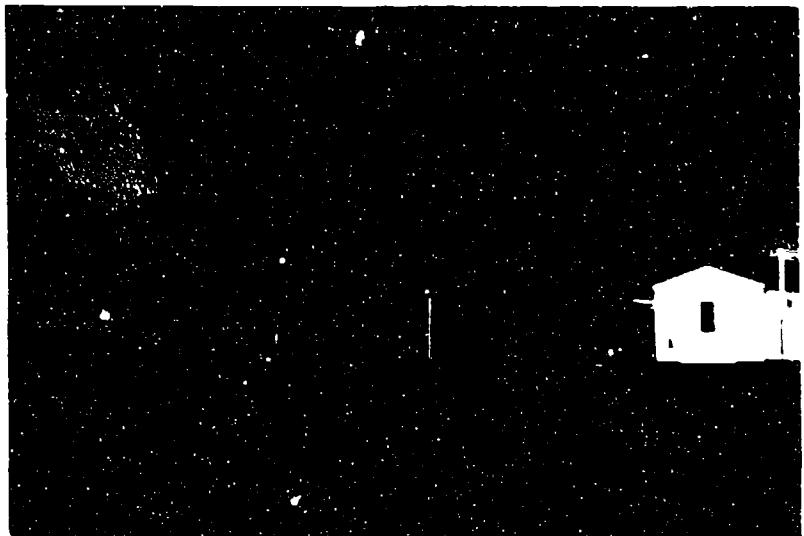
by

John J. Kelley, Jr.

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The North Meadow Lake Research Field
Station near Barrow, Alaska, August 1965.

ABSTRACT

The results of the measurements of carbon dioxide in air at Barrow, Alaska, are presented. Reference gas comparison data are tabulated, and methods of calculations are discussed. The average daily concentrations of atmospheric carbon dioxide are tabulated for the period 10 July 1961 to 15 September 1967. The diurnal variations of carbon dioxide during this period are also presented.

TABLE OF CONTENTS

	Page
List of Figures	i
List of Tables	iii
Preface	1
I Introduction	2
II Reference Gas Comparisons	2
III Recorder Scale Factors	5
A. Definition	5
B. Standard Computation for Three Mutually Compared Tanks	5
C. Determination of Index Differences	6
D. Weighted Average Recorder Scale Factors	7
IV Summary of Recorder Scale Factors	7
V Index Values of Reference Gases	8
VI Combined Scripps and Barrow Index Values of Working Reference Gases	8
VII Comparison of Scripps and Barrow Index Values of Working Reference Gases	9
VIII Index Values of Air	10
A. Computation of Index Values	10
B. Manometric Concentration Scale	11

	Page
IX Monthly Average Index of Carbon Dioxide	12
X Monthly Average Index of Carbon Dioxide, Manometric Concentration Scale	12
XI Twelve Month Running Mean Concentration of Carbon Dioxide	12
XII Values of Table 9 and 9a Referred to a Constant Datum	13
XIII The Diurnal Variation of CO ₂	14
Tables	15
References	163
Appendix 1	164
Appendix 2	166

LIST OF FIGURES

- Figure 1 Map of Point Barrow vicinity showing the atmospheric chemistry site near the ocean beach and the North Meadow Lake field station.
- Figure 2 Mutual Comparison Method for Tank Standardization.
- Figure 3 Recorder Scale Factors (RSF's) Adjusted to Standard Barometric Pressure Versus Calendar Dates, Period 1-11, Arctic Ocean Beach Site.
- Figure 4 Recorder Scale Factors (RSF's) Adjusted to Standard Barometric Pressure Versus Calendar Dates, Period 13-14, Arctic Ocean Beach Site.
- Figure 5 Recorder Scale Factors (RSF's) Adjusted to Standard Barometric Pressure Versus Calendar Dates, Period 15, Arctic Ocean Beach Site.
- Figure 6 Recorder Scale Factors (RSF's) Adjusted to Standard Barometric Pressure Versus Calendar Dates, Period 1-4, North Meadow Lake.
- Figure 7 Recorder Scale Factors (RSF's) Adjusted to Standard Barometric Pressure Versus Calendar Dates, Period 4-10, North Meadow Lake.

- Figure 8 Recorder Scale Factors (RSF's) Adjusted to Standard Barometric Pressure Versus Calendar Dates, Period 10-17, North Meadow Lake.
- Figure 9 Differences Between Index Values (ppm) Obtained from Measurements at Barrow and Scripps, 1961-1963.
- Figure 10 Differences Between Index Values (ppm) Obtained from Measurements at North Meadow Lake and Scripps, 1965-1967.
- Figure 11 Daily Average Concentration of CO₂ 1961-1963.
- Figure 12 Daily Average Concentration of CO₂ 1965-1967.
- Figure 13 Twelve-Month Running Mean of the Concentration of Atmospheric CO₂ Near Barrow, Alaska.
- Figure 14 Monthly Average Concentration of CO₂ Near Barrow, Alaska Referred to a Constant Datum (January 1960).
- Figure 15 Average Diurnal Variation of CO₂ Near Barrow, Alaska, 1961-1967.

LIST OF TABLES

Table 1	Reference Gas Comparisons - Barrow
Table 1a	Reference Gas Comparisons - University of Washington
Table 2	Recorder Scale Factors - Barrow, Alaska
Table 2a	Recorder Scale Factors - University of Washington
Table 3	Summary of Recorder Scale Factors, 1961-1963
Table 3a	Summary of Recorder Scale Factors - Mutual Comparison Method, 1962-1963
Table 3b	Summary of Recorder Scale Factors - Mutual Comparison Method, 1965-1967
Table 3c	Summary of Recorder Scale Factors - Sliding Recorder Scale Factors, Barrow Alaska Carbon Dioxide Project
Table 4	Index Values of Working Reference Gases
Table 5	Combined Scripps and Barrow Index Values of Working Reference Gases
Table 6	Comparison of Scripps and Barrow Index Values of Working Reference Gases
Table 7	Indices of Air With Continuous Analyzer, 1961-1963
Table 7a	Indices of Air With Continuous Analyzer, 1965-1967
Table 8	Monthly Index of Carbon Dioxide (ppm) at Barrow, Alaska, 1961-1963

- Table 8a Monthly Index of Carbon Dioxide (ppm) at Barrow,
Alaska, 1965-1967
- Table 9 Monthly Index of Carbon Dioxide (ppm) at Barrow,
Alaska - Manometric Concentration Scale, 1961-1963
- Table 9a Monthly Index of Carbon Dioxide (ppm) at Barrow,
Alaska - Manometric Concentration Scale, 1965-1967
- Table 10 Twelve Month Running Mean Concentration of
Atmospheric Carbon Dioxide at Barrow, Alaska
- Table 11 Values of Tables 9, 9a Referred to a Constant Datum
(January 1960)
- Table 12 Diurnal Variation of Carbon Dioxide, Barrow, Alaska
1961-1963
- Table 12a Diurnal Variation of Carbon Dioxide, Barrow, Alaska,
1965-1967
- Table 12b Average Diurnal Variation of Carbon Dioxide,
1961-1967

PREFACE

This report presents a summary of measurements of the concentration of carbon dioxide near Barrow, Alaska, and at the North Meadow Lake field station of the Arctic Research Laboratory, Barrow, Alaska.

This work was supported under a contract from the Office of Naval Research (ONR 477(24)) with the Department of Atmospheric Sciences, University of Washington. The analytical program was conducted cooperatively with Dr. C. D. Keeling's (The Scripps Institution of Oceanography, La Jolla, California) atmospheric carbon dioxide program at Mauna Loa, Hawaii, and the South Pole Station, Antarctica.

The carbon dioxide program at Barrow was initiated and maintained from July 1961 to August 1962 by J. J. Kelliny, Jr. Operation of the carbon dioxide analyzer was continued by J. Unger from September 1962 to March 1963, and from April 1963 to October 1963 by L. Stroschein.

The carbon dioxide program at the North Meadow Lake field station was maintained by D. Weaver from January 1963 to September 1965, by E. Smith from September 1965 to September 1966, and by W. Kowald from October 1966 to the conclusion of the program in September 1967.

The Director of the Arctic Research Laboratory, Dr. M. C. Brewer and his staff, have provided invaluable assistance to the project.

I. INTRODUCTION

This report presents the final results of a program to measure the concentration of carbon dioxide in the atmosphere at Barrow, Alaska from July 1961 to October 1963, and at the North Meadow Lake field station of the Arctic Research Laboratory, Barrow, Alaska from January 1965 to September 1967. The location of each site is shown in Figure 1. Daily average values of the concentration of CO_2 in the surface air are computed from data derived from original strip chart records of a continuous recording infrared gas analyzer installed at the station. All relevant data and computations for the years 1961 through 1967 are contained in this report. The experimental method is described in a Technical Report by Kelley (1964). Interpretation of the data will be published in a scientific journal.

All data in this report are final values. The procedure for computation follows that used at the Scripps Institution of Oceanography, La Jolla, California as described in Research Reports I through VIII*.

II. REFERENCE GAS COMPARISONS - TABLE 1, 1a

This table lists, in chronological order, both the observed scale differences which were used to calibrate the gas analyzer, and their conversion into index values proportional to CO_2 concentration. The

*Copies of these reports may be obtained from Dr. Charles D. Keeling, S.I.O., La Jolla, California.

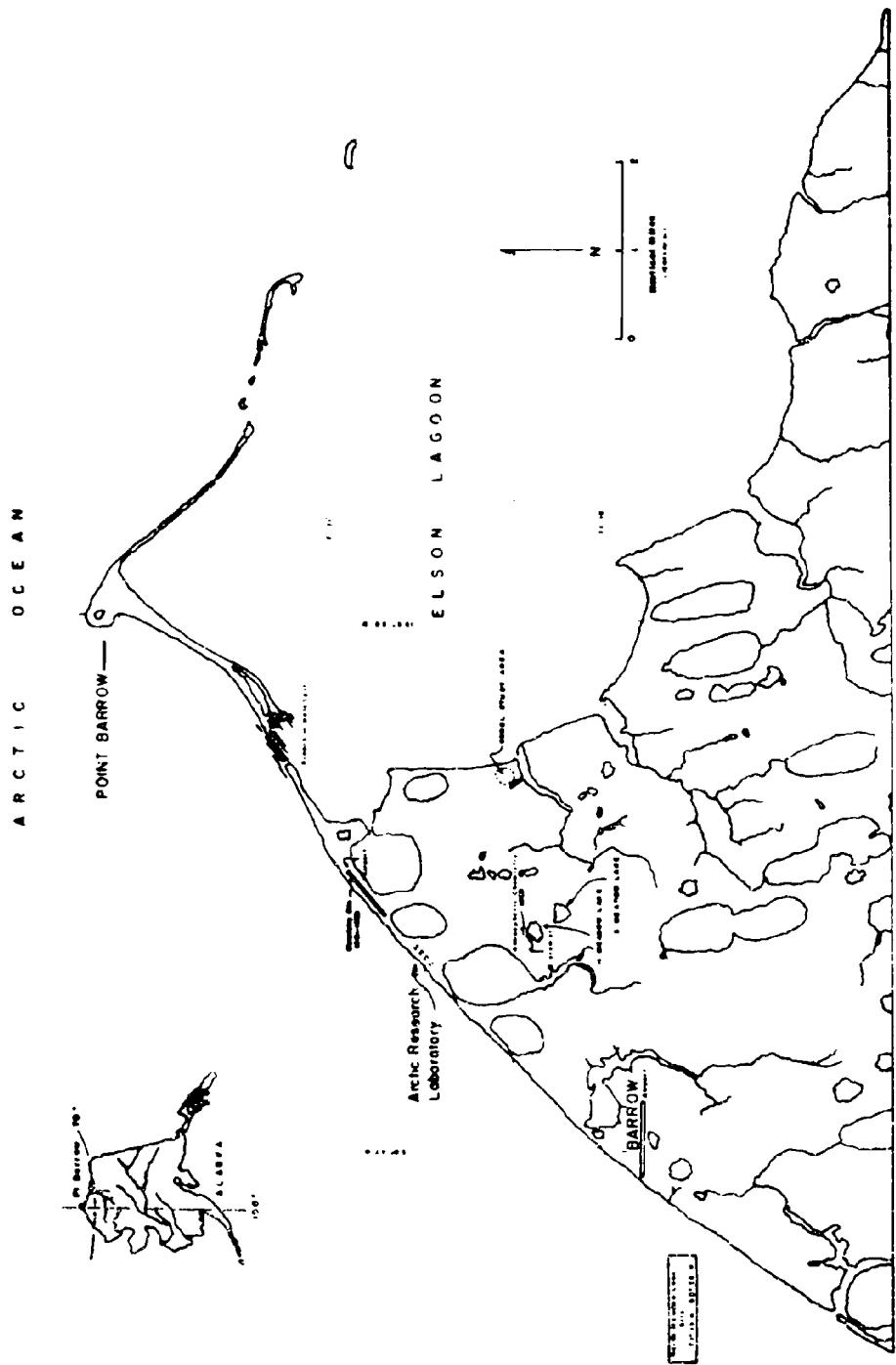


Figure 1 Map of Point Barrow vicinity showing the atmospheric chemistry site near the ocean beach and the North Meadow Lake field station.

calibrations of the analyzer consisted of repeated comparisons of pairs of specially prepared gas mixtures of CO₂ in nitrogen obtained from the Scripps Institution of Oceanography. These reference gas mixtures were stored in stainless steel cylinders called "tanks."

Under normal operating conditions ten comparisons were obtained by alternately passing one gas of the pair, and then the other, through the infrared analyzer for five minutes at the same flow rate employed in the air measurements (normally 0.5 liters per minute). As soon as one series of ten comparisons was run, one or both tanks were replaced and another pair of tanks compared. This process was repeated, as a rule, three times during the life of a "working reference" tank: at the beginning of use, when the gas pressure was half depleted, and at 400 p.s.i., before return of the cylinder to Scripps for final calibration. The scale difference between two successive traces, in recorder chart coordinates, was read with a straightedge scale (30 divisions to the inch) by drawing parallel straight lines through each of the traces belonging to the reference gases. The succession of individual scale differences for each tank pair was entered on data sheets. The calibrations described served to establish the recorder sensitivity of the infrared gas analyzer. They were also used to determine the index values of reference gases known as "working references," used in connection with air measurements. The general method used by the Scripps Institution for tank standardization (Figure 2) was modified somewhat at Barrow during the period covered by the report. Initially, two reference gases were compared with air every 30 minutes. From 1962 to the end of the program in 1967, three reference gases were employed. Two of the reference gases were used

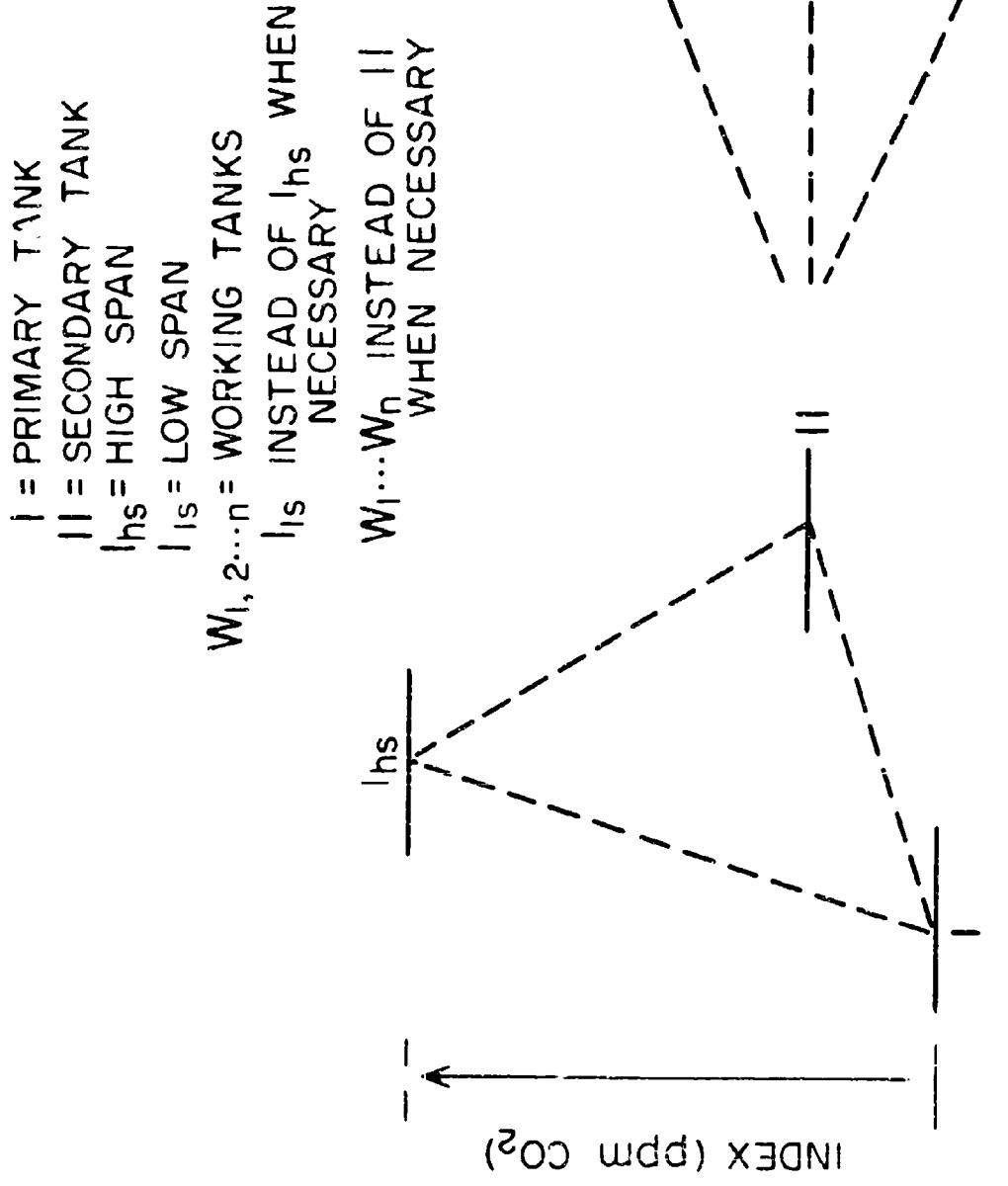


Figure 2 Mutual Comparison Method for Tank Standardization.

as comparison standards. The third reference gas was ranked as a "working reference" and compared with air every 30 minutes. The "working reference" was compared directly to the comparison standards, primary and span (high or low), in the absence of a suitable secondary reference at Barrow.

In Table 1, tanks related to each calibration run are identified by tank numbers. They are listed in columns 1 and 2. Column 1 lists the number of the standard tank; column 2 lists the number of the tank with which it is compared. The average observed scale difference for each tank pair is listed in column 3. A positive number indicates that the compared tank, for that particular comparison, has a higher scale reading, and consequently a higher CO₂ concentration than the standard; a negative number indicates the reverse. The number of comparisons (not always 10) which entered into each average scale difference is listed in column 4.

The recorder sensitivity, determined by comparisons of the primary and secondary standards, is expressed by a "recorder scale factor" listed in column 5. The computed index differences, each with the same sign as the corresponding scale difference, and the index value of the compared tank, in terms of a prescribed, or "assigned" value of the standard tank, are listed in columns 6 and 7.

Weighted average recorder scale factors, column 5, are copied from column 7 of table 2. Index differences, column 6, were computed by the formula given in Section III-D.

The computed index values, column 7, are the algebraic sums of the index values of the standard tanks listed in column 1 and the index differences of column 6. The index values of the standard tanks are those listed in column 7 of Table 6. In the case of the primary tanks designated as I and I_{hs} or I_{LS} in Figure 2, they depend solely on the measurements made at Scripps.

The data listed in Table 1 are for the period 2 January 1965 to 18 September 1967 at the North Meadow Lake field station. The data in Table 1a are for the period 1 April 1964 to 14 June 1967 at the University of Washington. The data for reference gas comparisons at the Arctic Ocean beach site from 6 January 1962 to 21 August 1963 are given in Report 2 (Kelley, 1966).

The scale differences entered in column 3 of Table 1 and 1a are copied from original entries on the reference gas data sheets.

III.RECORDER SCALE FACTORS - TABLE 2, 2a

A. Definition

The Recorder Scale Factor, RSF, is defined as the index difference between two reference gases divided by the number of scale divisions (30 div. to the inch) between the recorder chart traces for each reference gas recorded in units. Ten divisions on the scale were equal to one unit. The index of a reference gas tank is defined as a provisional CO_2 concentration, or mixing ratio, in ppm based on the initial analysis of the tank.

B. Standard Computation for Three Mutually Compared Tanks

Columns 1 through 4, except values with asterisks explained below, and the last entry in column 4 for each calibration day, list selected data

copied directly from the corresponding columns of Table 1. These data are employed, as shown below, to obtain daily RSF's.

The following format has been adapted from the Scripps (SIO Reports 1-8) scheme for tank standardizations, where the standard tank index values have been assigned the symbols A and B, and the compared tank, without such assignment, the symbol X:

<u>Standard Tank No.</u>	<u>Compared Tank No.</u>	<u>Observed Scale Difference</u>	<u>No. of Comparisons</u>
A	X	[X] - [A]	a
B	X	[X] - [B]	b
A	B	[Y]*	(a or b)*

$$[Y] = ([X] - [A]) - ([X] - [B]) = ([B] - [A])$$

The asterisk on [Y] indicates the calculated value, and the brackets indicate index values. The number of comparisons assigned to [Y] is "a" or "b", whichever is smaller. The observed scale differences were taken from the averages of the individual chart scale differences (Table 1).

The observed comparisons and calculated values of any group of three tanks, A, B, and X are set off in the table by boxes.

C. Determination of Index Differences

Index differences shown in Tables 2 and 2a, column 5, were obtained from index values of the standard tanks as follows:

<u>Tank Numbers</u>	<u>Index Values</u>	<u>Difference</u>
11589 vs 18206	314.59 - 310.70	3.89
11589 vs 18207	314.59 - 312.78	1.81
18206 vs 18208	314.59 - 312.40	2.19
11589 vs 10071	-314.59 + 339.00	24.41

The index values of separate tanks are obtained from Table 4.

D. Weighted Average Recorder Scale Factors

Column 6 presents RSF's computed according to the definition given in section III-A. Column 7 presents the weighted average values of the recorder scale factors for each calibration day. The index differences in column 6 of Table 1 are computed by the formula:

Computed Index = (Observed Scale Difference)(Weighted Average RSF)
Difference

IV. SUMMARY OF RECORDER SCALE FACTORS - TABLES 3, 3a, 3b, 3c

Values of RSF's are assembled in chronological order in column 5 of Table 3 for Periods 1 through 11, 10 July 1961 to 16 December 1961. A graph for the data from Period 1 through Period 11 is shown in Figure 3. During these periods, breaks in continuity were extreme due to the development of a method for determining a standard operating method for infrared analysis at the Arctic Ocean beach site. Each break is characterized by a change in the span control on the infrared analyzer. Therefore, discrete periods of relatively constant recorder scale factors are created between span changes.

During periods 12 to 15, from 6 January 1962 to 21 August 1963, (Table 3a) a constant recorder span setting was used and a mutual comparison method of tank standardization was set up. These data are shown in Figures 4 and 5.

Table 3b presents a summary of recorder scale factors for the period 2 January 1965 to 18 September 1967 at the North Meadow Lake field station.

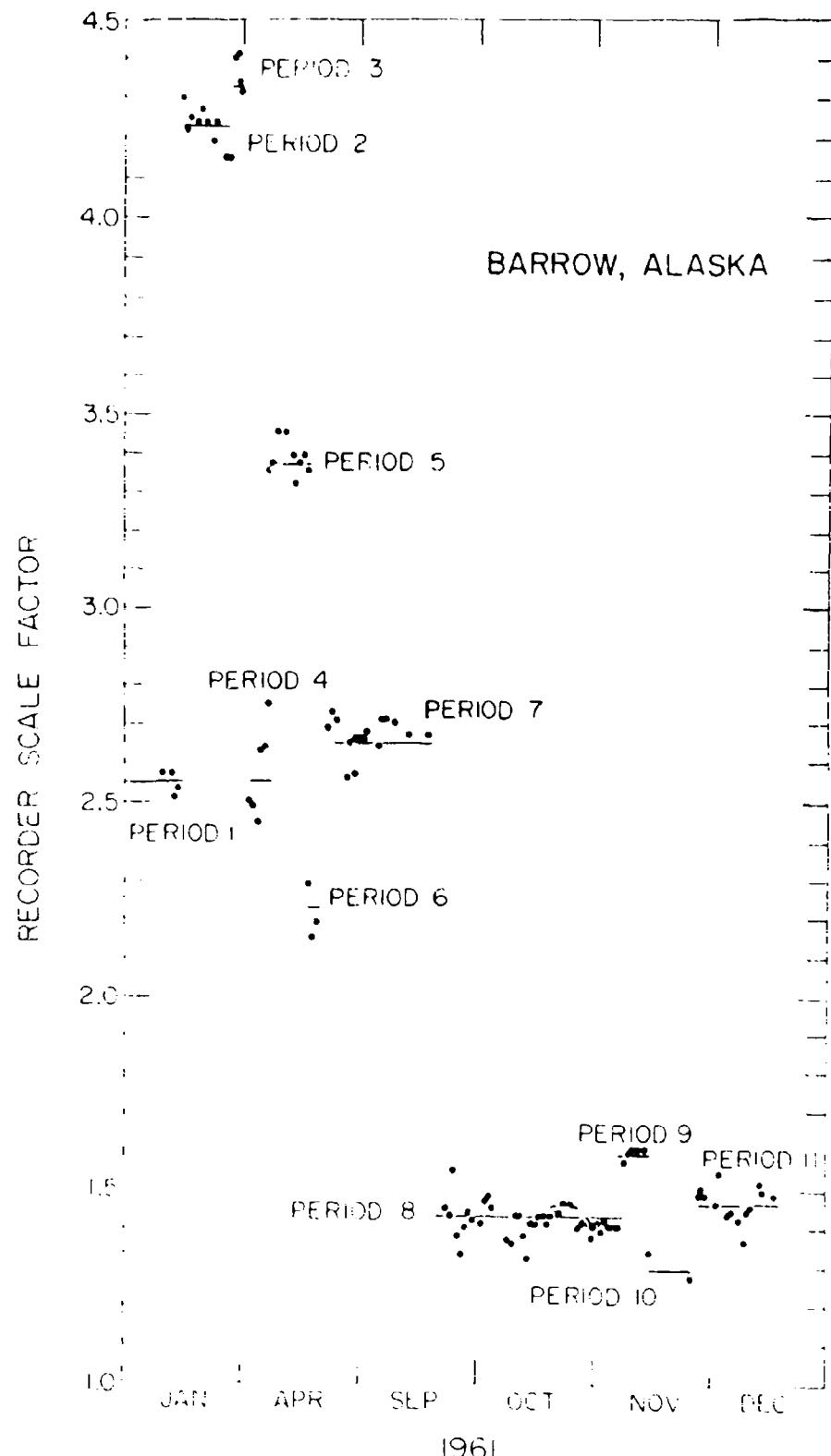


Figure 3 Recorder Scale Factors (RSF's) Adjusted to Standard Barometric Pressure Versus Calendar Dates, Period 1-11, Arctic Ocean Beach Site.

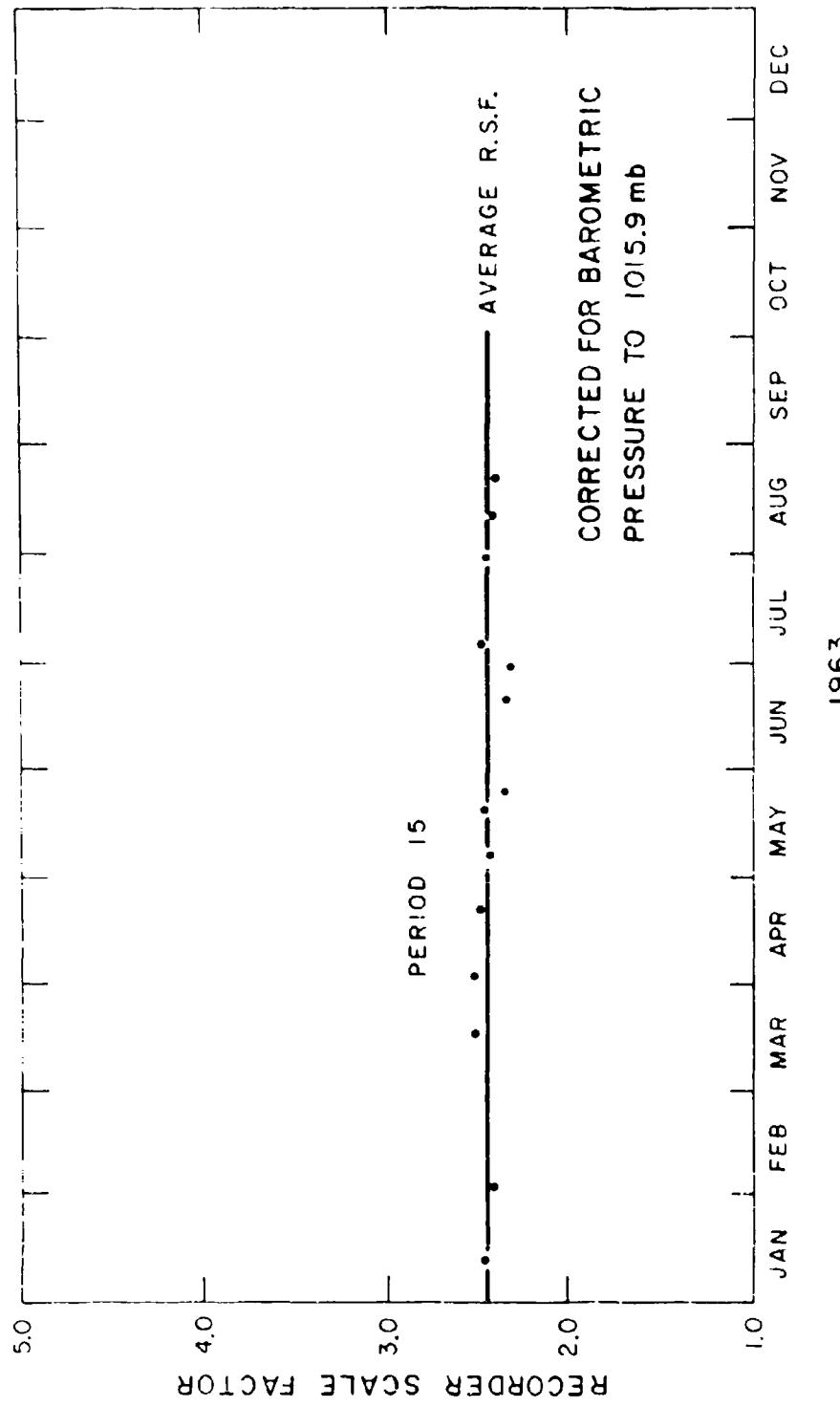


Figure 5: Recorder Scale Factors (Period 15) Adjusted to Standard Barometric Pressure for the Calendar Dates, Period 15, Direct Readings.

The data are derived by means of the mutual comparison method. Discontinuities in the recorder scale factors occurred at various times during the period of analysis at North Meadow Lake. Table 3c provides daily recorder scale factors for the periods where discontinuities occur. The data in Table 3c were produced by drawing a line between the end point of the average RSF curve for one period to the starting point of the average RSF curve of the next period. Daily RSF's were recorded and defined as sliding recorder scale factors. The recorder scale factors adjusted for pressure barometric for the period 2 January 1965 to 18 September 1967 are shown in Figures 6, 7, and 8.

All recorder scale factors were adjusted to a standard barometric pressure of 30.00 inches of mercury (1015.9 mb). The following formula was used:

Adjusted Recorder (Weighted Average RSF) (Observed Barometric Pressure)
Scale Factor 30.00 inches of mercury

V. INDEX VALUES OF REFERENCE GASES - TABLE 4

This table presents the index values of all reference gases used in the Arctic field program and at the University of Washington. All of the analyses were performed at the Scripps Institution of Oceanography.

VI. COMBINED SCRIPPS AND BARROW INDEX VALUES
OF WORKING REFERENCE GASES - TABLE 5

This table summarizes the index values of all working reference gases used at the North Meadow Lake field station from 1965 to 1967. The data for working reference gases for 1961 to 1963 are given in Report 2, Table 7 (Kelley, 1966).

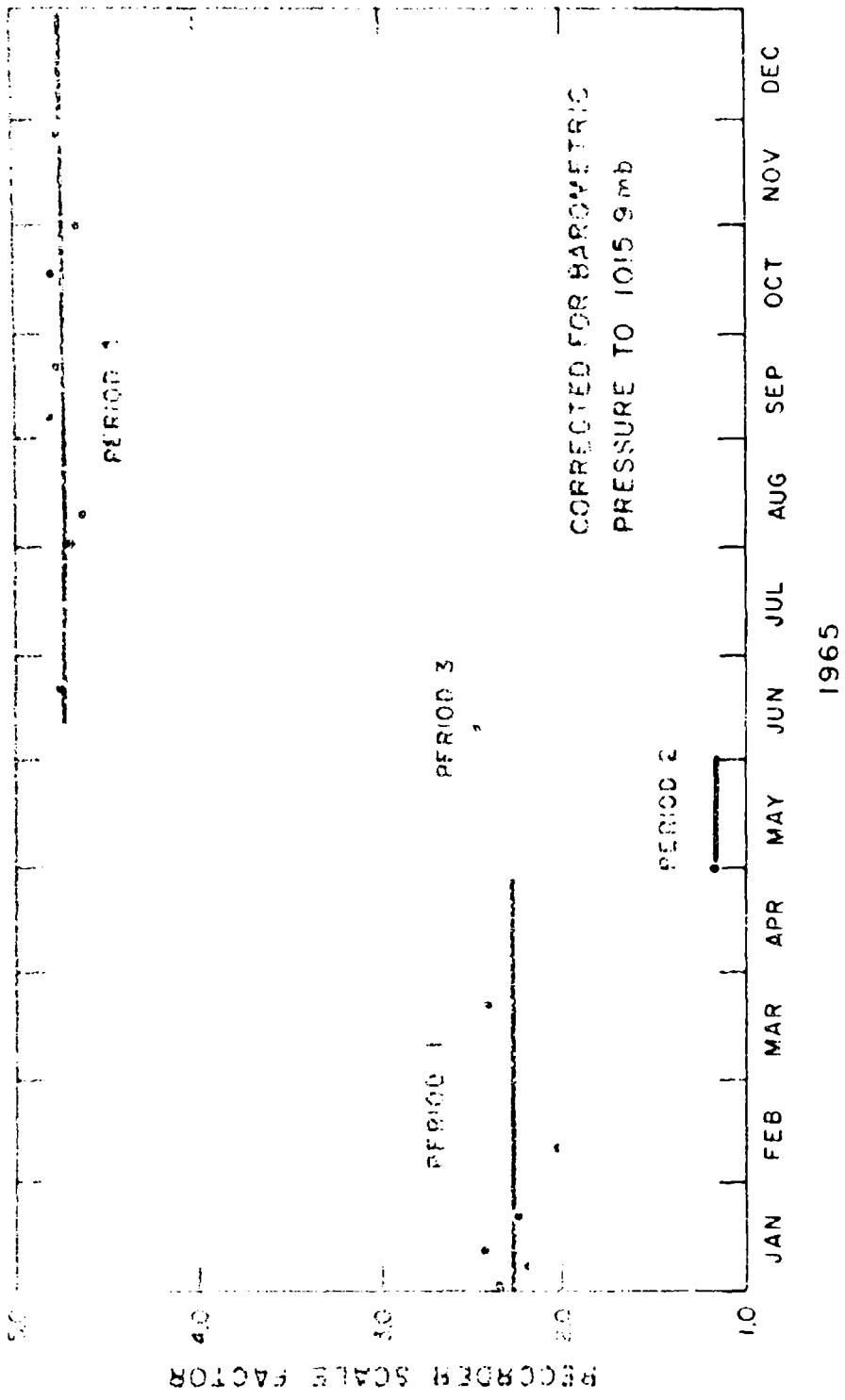


Figure 6 Recorder Scale Factors (RSF's) Adjusted to Standard Barometric Pressure Versus Calendar Dates. Period 1-4, North Meadow Lake.

Entries in columns 2 and 3 are the numbers of comparisons and weighted average index values based on measurements at Scripps prior to and after use. These data are taken from Table 4.

Entries in columns 4 and 5 are the numbers of comparisons and weighted average index values based on measurements at the North Meadow Lake field station near Barrow, Alaska.

Entries in columns 6 and 7 list the total number of comparisons and weighted average index values based on all measurements at Scripps and at Barrow.

VII. COMPARISON OF SCRIPPS AND BARROW INDEX
VALUES OF WORKING REFERENCE CASES - TABLE 6.

This table presents the results of all analysis of Barrow reference tanks used in the daily comparison with air during 1965 to 1967. This comparison for the years 1961 to 1963 is given in Report 2, Table 8 (Hellev, 1966). The table compares the results of the analyses made at the Scripps Institution of Oceanography with those made at Barrow. The total number of indices and comparisons shown in columns 2 and 3 are taken from the columns headed cumulative runs and cumulative index of Table 4. The number of comparisons and reference tank indices in columns 4 and 5 are copied from columns 4 and 5 of Table 5. Entries in column 6 are the differences between index values in parts per million by volume CO_2 obtained from measurements at Barrow and Scripps, and represent the index departure from Scripps values. These data are plotted in Figure 9 for the period 1961-1963, and Figure 10 for the period 1965-1967.

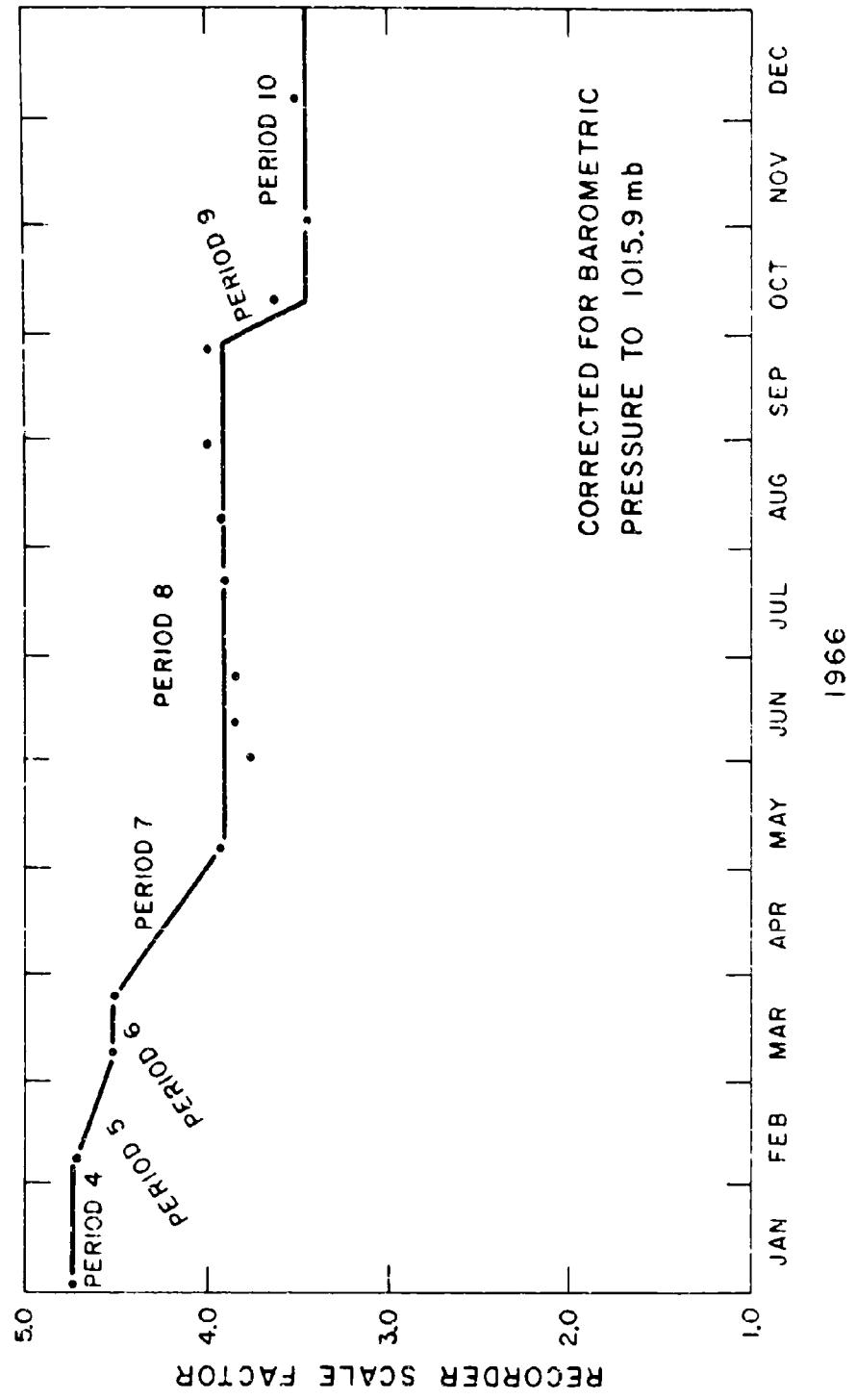


Figure 7 Recorder Scale Factors (RSF's) Adjusted to Standard
Barometric Pressure Versus Calendar Dates, Period
4-10, North Meadow Lake.

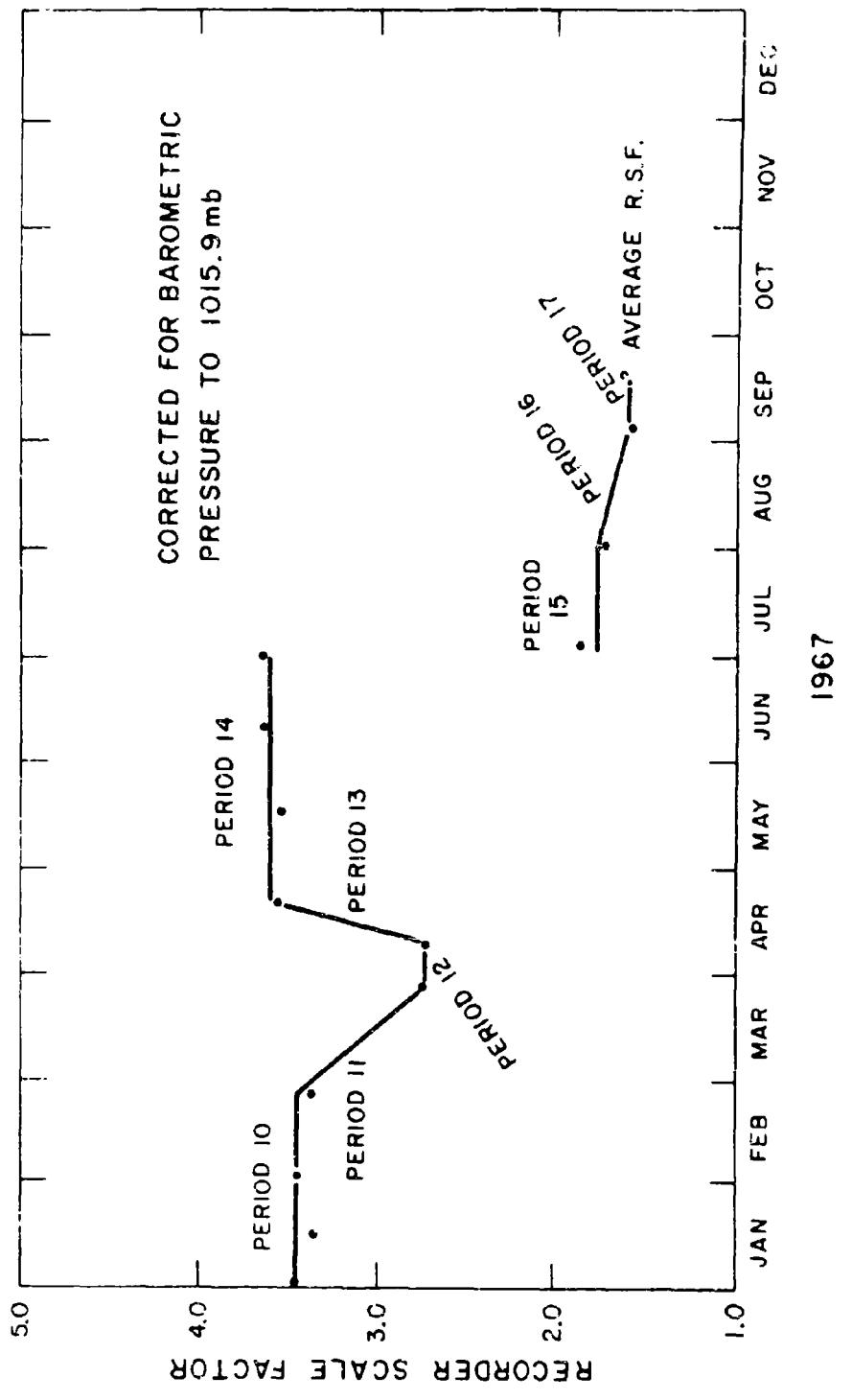


Figure 8
Recorder Scale Factors (RSF's) Adjusted to
Standard Barometric Pressure Versus Calendar
Dates, Period 10-17, North Meadow Lake.

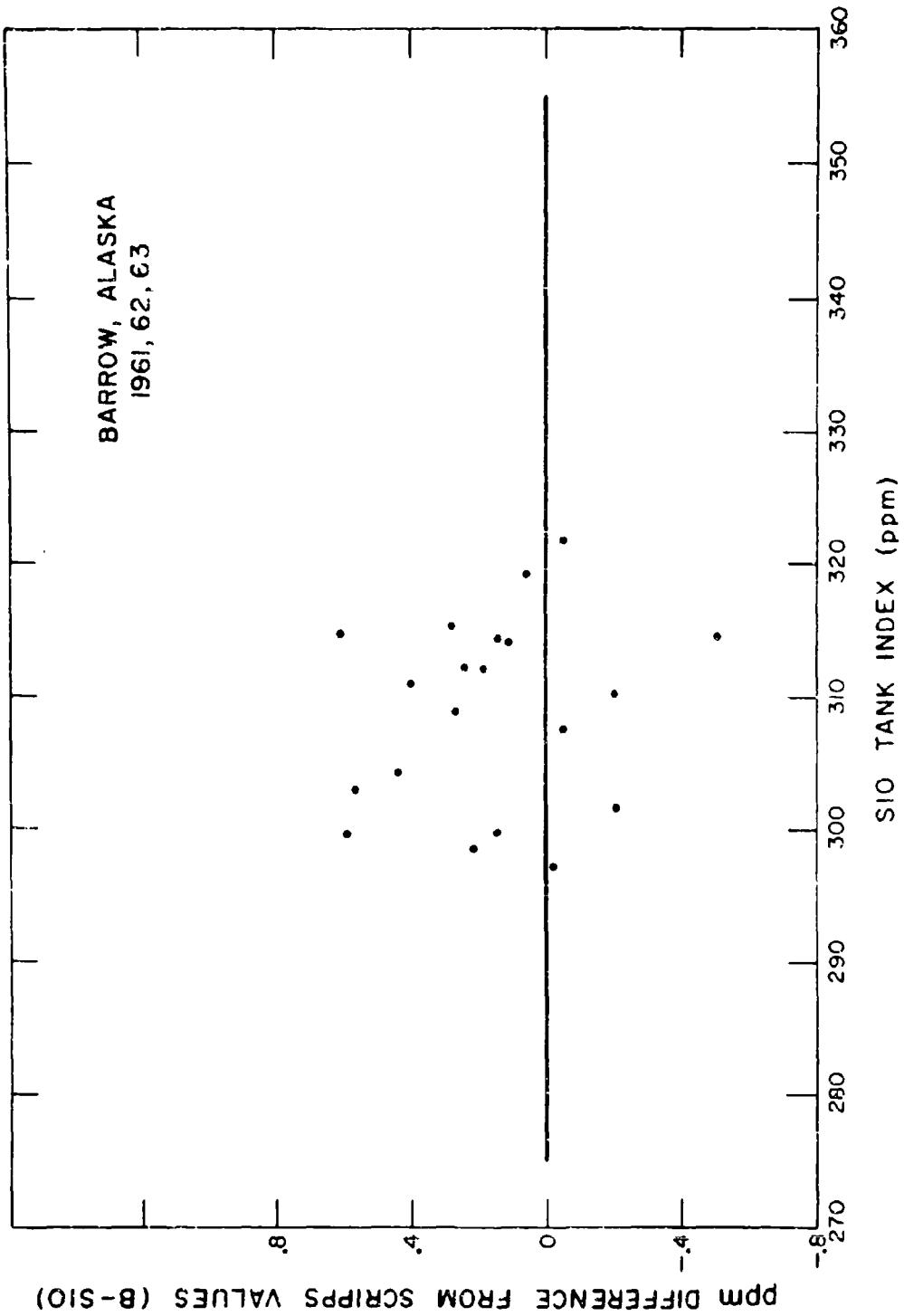


Figure 9 Differences Between Index Values (ppm) Obtained from Measurements at Barrow and Scripps, 1961-1963.

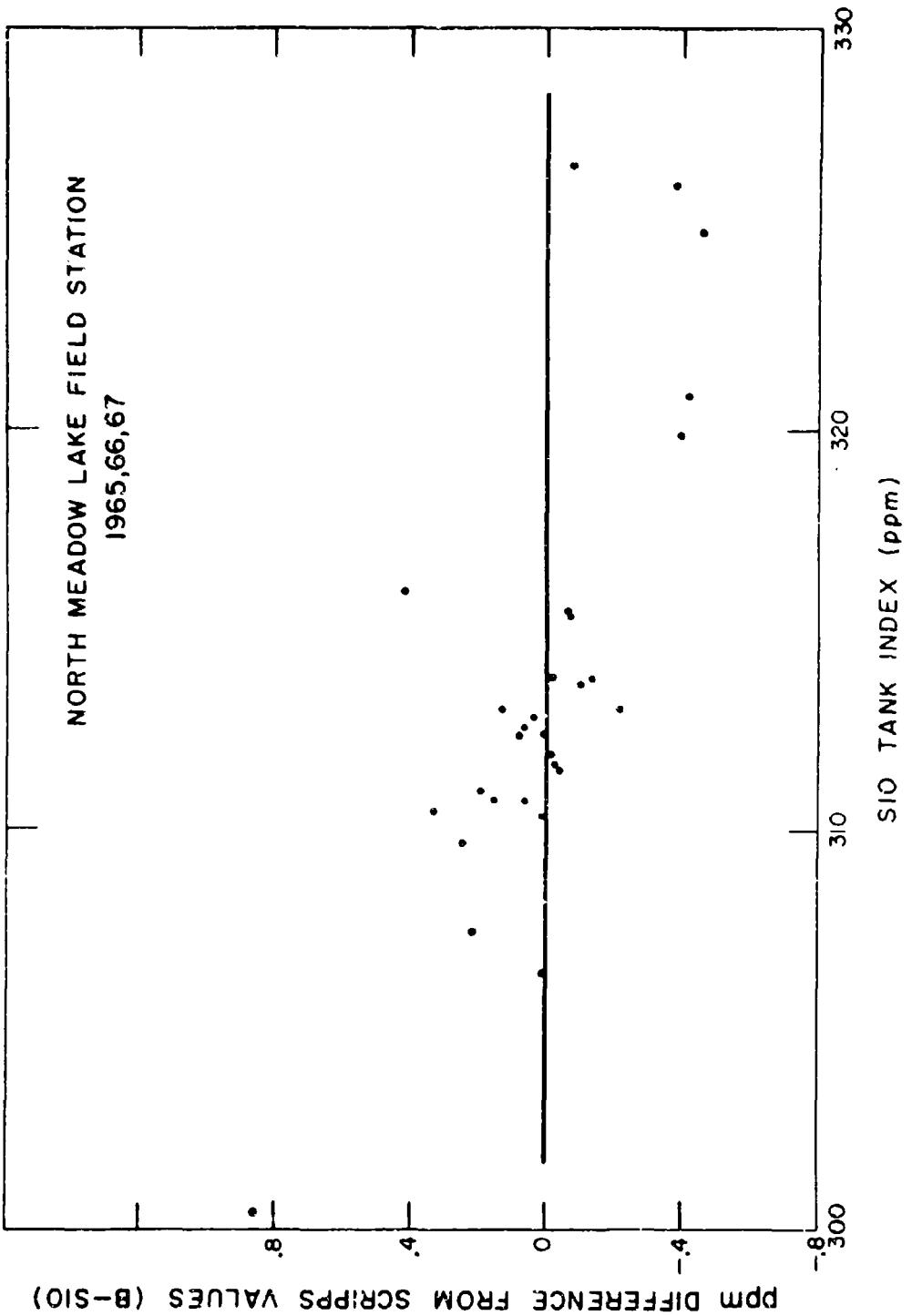


Figure 10 Differences Between Index Values (ppm) Obtained from Measurements at North Meadow Lake and Scripps, 1965-1967.

VIII. INDEX VALUES OF AIR - TABLE 7, 7a

A. Computation of Index Values

These tables contain all daily CO₂ values at the Arctic Ocean beach site and the North Meadow Lake field station for the period 1961-1967. Column 1 lists the calendar date of the analysis. Column 2 shows the observed daily average scale difference between the air trace and the working reference gas trace. Column 3 lists the total number of comparisons for the day. A full day consists of forty-eight half-hour comparisons. Column 4 records the average barometric pressure for the day. These values are obtained from the original carbon dioxide daily data sheets. All of the data for the years 1961 to 1963, Table 7, were processed manually. All of the data from 1965 to the termination of the program in 1967 were precessed with the aid of an IBM 7094 computer. The Fortran 4 format is given in Appendix 2.

The observed scale difference in column 2 was adjusted to a standard barometric pressure of 30.00 inches of mercury (1015.9 mb) by the formula:

$$\text{Adjusted Scale Difference} = \frac{\text{Observed Scale Difference}}{\text{Average pressure for the day}} \times \frac{30.00 \text{ inches of Hg}}{}$$

and this adjusted scale difference is recorded in column 5.

Column 6 lists the RSF's to be used in converting scale differences to index units. These are based on values listed in Tables 3, 3a, 3b, and 3c which have been adjusted to standard atmospheric pressure.

The computed index difference in column 7 is obtained by:

$$\text{Computed Index Difference} = \text{RSF} \times \text{Adjusted Scale Difference}$$

The working reference tank used in the comparison with air is listed in column 8, its index in column 9. These data are taken from Table 5. The daily average index values in column 10 are the algebraic sums of the entries in columns 7 and 9.

In several instances reference tank changes were made during the day. In these cases the daily index was computed by first computing an air index for all of the observations with one tank in use, and doing the same for the data taken with the replacement tank. These data are reported separately in column 10. The daily index is taken as the average of the two separate index values.

B. Manometric Concentration Scale

Throughout this report, the CO₂ data have been reported in terms of an index scale. It was established provisionally at Scripps in 1959 that the true concentration in parts per million by volume is related to the index scale by:

$$\text{Manometric Concentration} = (C - 311.51) \cdot 1.2186 + 311.51$$

where C is the index value.

This equation is based on the absolute calibration of primary and span reference gases by means of a mercury manometer. It is possible that future manometric calibrations may result in further adjustment of the index scale. The intercept value (311.51) is believed to be correct within 1 ppm; the slope value (1.2186) within 0.03.

This equation has been used to report atmospheric CO₂ concentrations in the reports and journal contributions listed in Appendix 1.

Column 11 lists the manometric concentration of the index values reported in column 10 in ppm CO₂ by volume dry air. The data are shown graphically in Figure 11 for the period 1961-1963, and Figure 12 for the period 1965-1967.

IX. MONTHLY AVERAGE INDEX OF CARBON DIOXIDE - TABLE 8, 8a

This table presents the monthly average index of atmospheric CO₂ at Barrow, Alaska for the years 1961-1963 (Table 8), and 1965-1967 (Table 8a). Columns 2, 5, and 8 list the number of days for which air index values are quoted in Tables 7 and 7a. Columns 3, 6, and 9 list the monthly carbon dioxide index values.

X. MONTHLY AVERAGE INDEX OF CARBON DIOXIDE, MANOMETRIC CONCENTRATION SCALE - TABLE 9, 9a

The data in Tables 9 and 9a are the manometric indices in ppm CO₂ for index values quoted in Tables 8 and 8a.

The averages of the monthly values for each year are given in columns 3, 6, and 9.

XI. TWELVE MONTH RUNNING MEAN CONCENTRATION OF CARBON DIOXIDE - TABLE 10

A twelve-month running mean concentration of CO₂ was calculated to smooth out the seasonal variation in CO₂. Concentrations for CO₂ are presented for the period 1962 to 1967. Means are plotted in Figure 13 versus the sixth month of the appropriate 12-month interval. Least squares regression lines were fitted to the data for the periods 1962-1963 and 1965-1967. Equations for each regression line were determined as

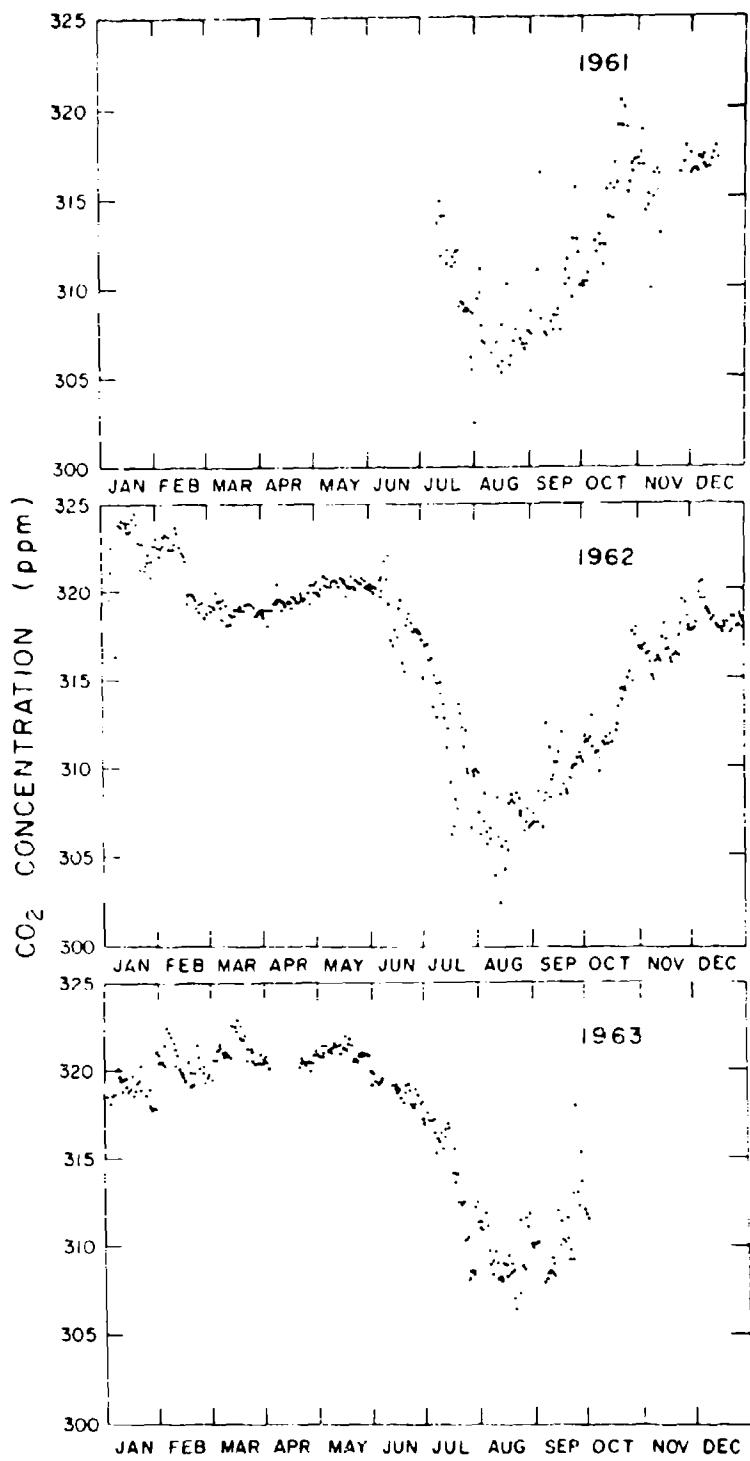


Figure 11 Daily Average Concentration of CO_2 1961-1963.

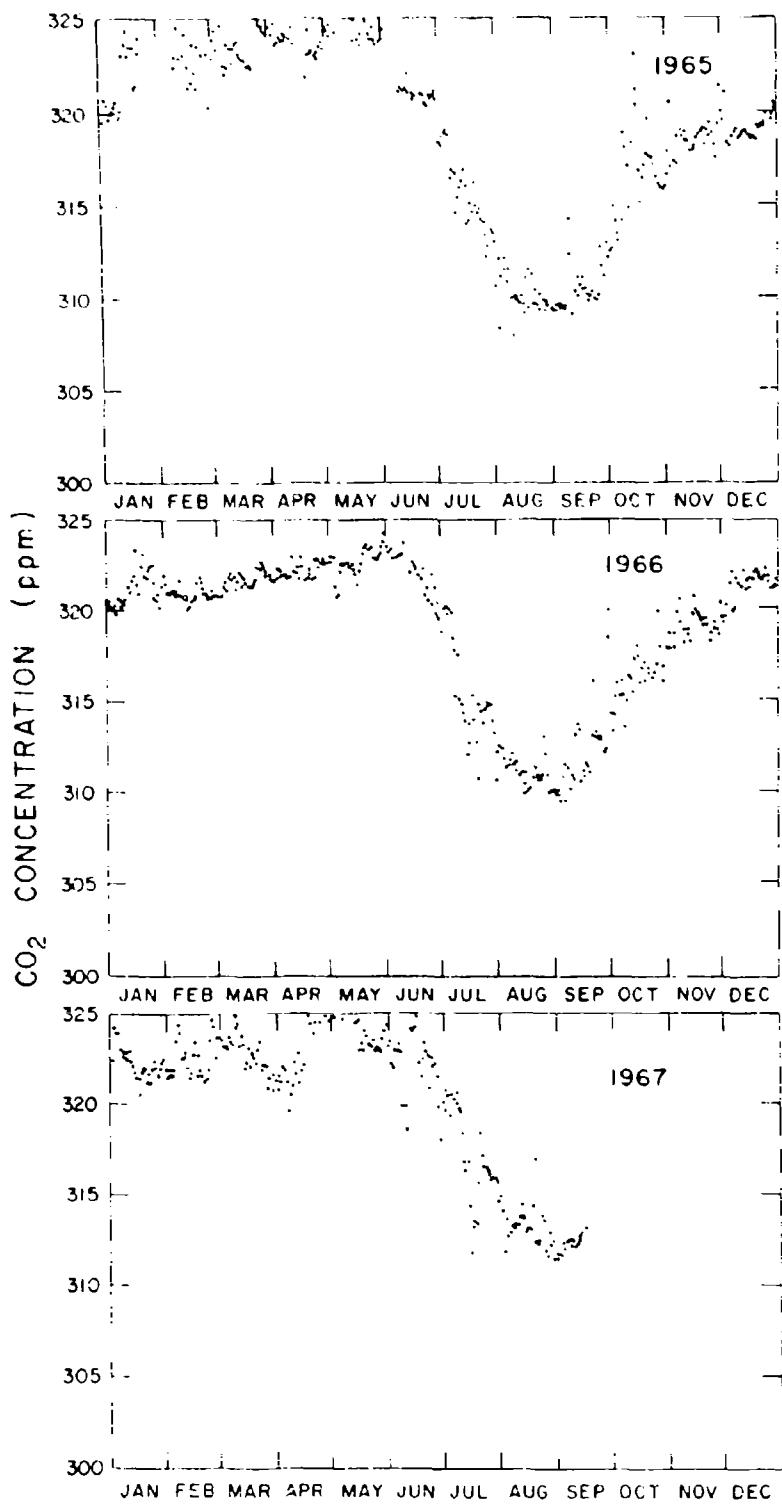


Figure 12 Daily Average Concentration of CO₂ 1965-1967.

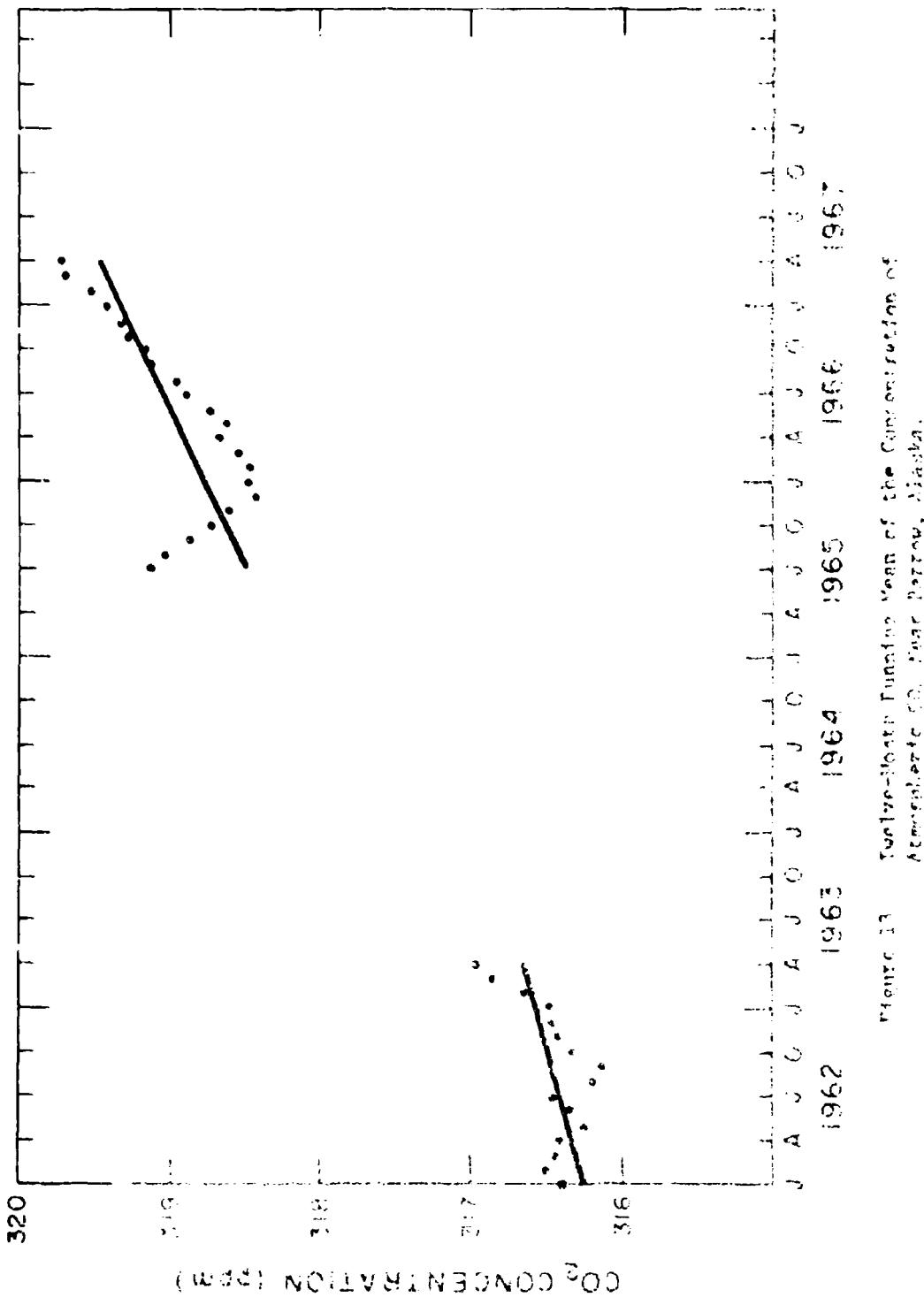


Figure 12. Two-year running mean of the concentration of atmospheric CO_2 , near Barrow, Alaska.

followed:

1962-1963

$$C_{CO_2} = 314.37 + 0.0269 M$$

1965-1967

$$C_{CO_2} = 318.50 + 0.0459 M$$

where: C_{CO_2} is the concentration of CO_2 in ppm, and M is the corresponding number of months taken in sequence from the first month, $M = 0$.

The straight line for the period 1962-1963 indicates a rate of increase of CO_2 in the Arctic atmosphere of 0.026 ppm per month. The straight line for the period 1965-1967 indicates a rate of increase of CO_2 of 0.0459 ppm per month. The weighted average of the two rates of increase in CO_2 in the Arctic atmosphere is 0.038 ppm per month or 0.46 ppm per year.

XII. VALUES OF TABLE 9 AND 9a REFERRED TO
A CONSTANT DATUM - TABLE II

This table lists monthly average concentrations from Tables 9 and 9a referred to a datum of January 1960 on the assumption that the concentrations of CO_2 in the atmosphere over the Barrow area increased at a rate of 0.06 ppm per month. The 0.06 ppm per month rate of increase is based on the observations at Mauna Loa by Pales and Keeling (1965) in the Antarctic by Brown and Keeling (1965), and by the rate given in this report for the Arctic.

Composite averages appear in column 5. Column 6 lists the departure of these averages from the annual mean value of 314.69. The monthly average concentration of CO_2 near Barrow, Alaska referred to a constant datum (1960) is shown in Figure 14.

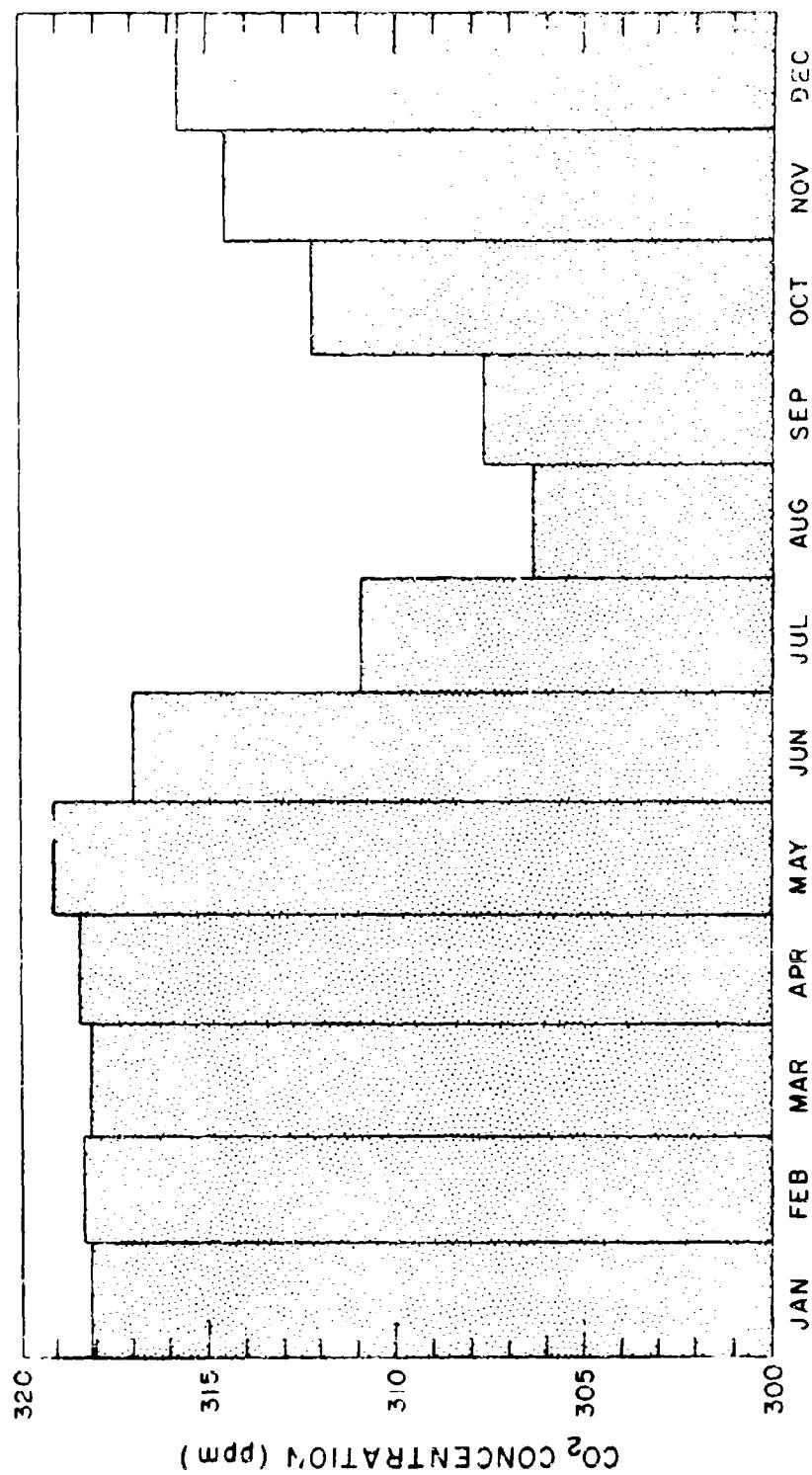


Figure 14 Monthly Average Concentration of CO_2 , Near Barrow,
Alaska Referred to a Constant Datum (January 1960).

XIII. THE DIURNAL VARIATION OF CO₂ - TABLE 12, 12a, 13c

The diurnal variation of CO₂ was calculated from the half-hourly observations recorded on the original carbon dioxide data sheets. The diurnal variations are based on hourly air indices by finding the average index for each hour of the day for each month.

Figure 15 and Table 12c show the average diurnal variation of CO₂ for each month based on the data for CO₂ from 1961 to 1967.

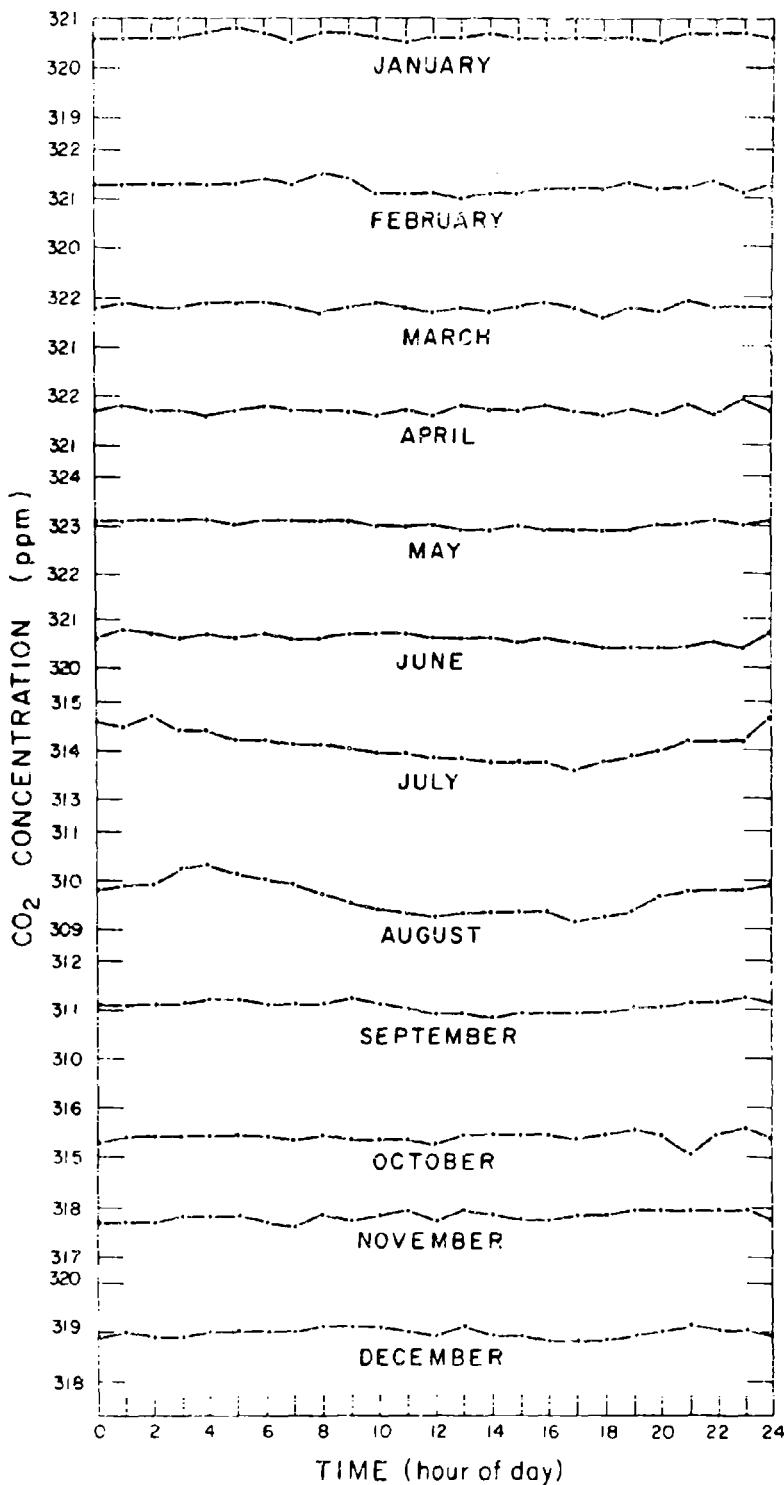


Figure 15 Average Diurnal Variation of CO_2 Near Barrow, Alaska,
1961-1967.

TABLE 1 : REFERENCE GAS COMPARISONS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Comparisons	Recorder Scale Factor	Computed Index Diff.	Computed Index	S10 Index	Date of Analysis
	2	3	4	5	6	7	8	9	
11589	18207	- 0.77	10	2.32	- 1.79	312.80	312.78	January 2, 1965	
11589	18206	- 1.66	10		- 3.85	310.74	310.70		
18206	18207	0.93	10		2.16	312.86	312.78		
11589	18207	- 0.84	10	2.15	- 1.81	312.78	312.78	January 8, 1965	
11589	18206	- 1.77	10		- 3.81	310.78	310.70		
18206	18207	1.02	10		2.19	312.89	312.78		
11589	18207	- 0.76	11	2.41	- 1.83	312.76	312.78	January 13, 1965	
11589	11097	- 0.35	9		- 0.84	313.75	313.82		
11097	18207	- 0.39	9		- 0.94	312.88	312.78		
11589	18207	- 0.81	4	2.27	- 1.84	312.75	312.78	January 21, 1965	
11589	11097	- 0.30	5		- 0.68	313.91	313.82		
11097	18207	- 0.49	5		- 1.11	312.71	312.78		
11589	11635	- 1.85	10	2.02	- 3.74	310.85	310.79	February 11, 1965	
11589	18208	- 1.03	10		- 2.08	312.51	312.40		
18208	11633	- 0.71	9		- 1.43	310.97	310.79		
11589	11633	- 1.58	9	2.38	- 3.76	310.83	310.79	March 23, 1965	
11589	18308	- 0.96	10		- 2.28	312.31	312.40		
18208	11633	- 0.70	9		- 1.67	310.73	310.79		
11589	10071	- 4.93	10	4.99	- 4.64	309.95	309.65	June 7, 1965	
11589	11111	- 0.93	10		- 26.64	310.16	309.65		
10071	11111	- 5.78	10	4.98					
11111	10066	0.42	10		5.73	315.38	315.42		
11111	10072	1.15	10		3.09	312.74	312.76		
11111	18207	0.62	10		1.54	311.19	310.79		
11111	11623	0.31	10		2.84	312.49	312.40		
11111	18208	0.57	10		- 3.34	306.31	306.46		
11111	11669	- 0.67	10						

TABLE 1 : REFERENCE GAS COMPARISONS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	SI0 Index		Date of Analysis
11589	10071	9.74	10	2.49	- 1.27	308.38	307.42		June 8, 1965
11111	10073	- 0.51	10		- 4.88	309.71	309.65		
11589	11111	- 1.96	10		- 29.43	309.57	309.65		
10071	11111	- 11.82	10						
11589	10071	5.15	10	4.75	- 4.75	309.84	309.65		June 21, 1965
11589	11111	- 1.00	10		- 29.17	309.83	309.65		
10071	11111	- 6.14	10		5.56	315.21	315.42		
11111	10072	1.17	10		2.04	311.69	311.73		
11111	10066	0.43	10						
11589	10071	5.18	10	4.75					August 2, 1965
11589	11111	- 1.03	10		- 4.89	309.70	309.65		
10071	11111	- 6.13	10		- 29.12	309.88	309.65		
11111	10066	0.44	10		2.09	311.74	311.73		
11111	10072	1.23	10		5.84	315.49	315.42		
11111	18207	0.69	10		3.28	312.93	312.78		
11111	11633	0.30	10		1.43	311.08	310.79		
11111	18208	0.62	10		2.95	312.60	312.40		
11589	10071	5.14	10	4.74					August 10, 1965
11589	11111	- 0.92	10		- 4.36	310.23	309.65		
10071	11111	- 6.09	10		- 28.87	310.13	309.65		
11111	10066	0.43	10		2.04	311.69	311.73		
11111	11669	- 0.69	10		- 3.27	306.38	306.46		
11111	10073	- 0.47	10		- 2.23	307.42	307.42		
11111	R30000ML	7.32	10		34.70	344.35	345.16		
11589	10071	5.06	11	4.81					September 8, 19
11589	11111	- 0.96	10		- 4.62	309.97	309.65		
10071	11111	- 6.06	10		- 29.16	309.84	309.65		
11111	10073	- 0.47	10		- 2.26	307.39	307.42		

TABLE 1 : REFERENCE GAS COMPARISONS
BAKERON, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index	Computed Index Diff.	S10 Index	S10 Index	Date of Analysis
11589	10071	5.12	10	4.74	-	- 4.65	309.94	309.65	September 21, 1965
11589	11111	- 0.98	10	-	-	- 29.20	309.80	309.65	
10071	11111	- 6.16	10	-	-	- 2.28	307.37	307.42	
11111	10073	- 0.48	10	-	-	- 3.18	306.47	306.46	
11111	11669	- 0.67	10	-	-	- 4.47	310.12	309.65	
11111	11111	- 0.97	10	-	-	- 28.77	310.23	309.65	
11589	11111	- 6.24	10	-	-	- 8.44	301.21	300.41	
10071	11111	- 1.83	10	-	-	- 3.09	306.56	306.46	
11111	10076	- 0.67	10	-	-	-	-	-	November 26, 1965
11111	11669	-	-	-	-	-	-	-	
11589	10071	5.02	10	4.84	-	- 4.31	310.28	309.65	
11589	11111	- 0.89	10	-	-	- 30.20	308.80	309.65	
10071	11111	- 6.24	10	-	-	- 8.32	301.33	300.41	
11111	10076	- 1.72	10	-	-	-	-	-	January 3, 1966
11589	10071	5.34	10	4.74	-	- 4.79	309.80	309.65	
11589	11111	- 1.01	10	-	-	- 28.39	310.61	309.65	
10071	11111	- 5.99	10	-	-	- 10.67	320.32	319.93	
11111	10063	2.25	10	-	-	-	-	-	February 8, 1966
11589	10071	5.10	10	4.78	-	- 4.73	309.86	309.65	
11589	11111	- 0.99	10	-	-	- 29.16	309.84	309.65	
10071	11111	- 6.10	10	-	-	- 14.82	324.47	324.92	
11111	10068	3.10	10	-	-	-	-	-	March 9, 1966
11589	10071	5.45	10	4.45	-	- 4.72	309.87	309.65	
11589	11111	- 1.06	10	-	-	- 29.33	309.67	309.65	
10071	11111	- 6.59	10	-	-	- 16.83	326.47	326.65	
11111	4274	3.78	10	-	-	-	-	-	March 24, 1966
11589	10071	5.47	10	4.51	-	- 5.01	309.58	309.65	
11589	11111	- 1.11	10	-	-	- 29.18	309.82	309.65	
10071	11111	- 6.47	10	-	-	- 17.05	326.70	326.65	
11111	4274	3.78	10	-	-	-	-	-	

TABLE 1 : REFERENCE GAS COMPARISONS
BARRON, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	SIO Index	Date of Analysis	
11589	10071	6.05	10	3.96	-	- 4.51	310.08	May 7, 1966	309.65
11589	11111	- 1.14	10	-	- 29.42	309.58	309.65		
10071	11111	- 7.43	10	-	9.11	318.76	319.93		
11111	10063	2.30	10	-	9.70	319.35	320.83		
11111	10067	2.45	10	-	11.33	320.98	320.83		
11111	10067	2.86	10	-	11.29	320.94	320.83		
11111	10067	2.85	10	-	1.98	311.63	311.68		
11111	10075	0.50	10	-	2.02	311.67	311.68		
11111	10075	0.51	10	-	-	-	-	June 2, 1966	
11589	10071	6.54	10	3.75	- 3.41	311.18	310.97		
11589	10072	- 0.91	10	-	- 27.71	311.29	310.97		
10071	10072	- 7.39	10	-	4.20	315.17	315.29		
- 10072	10073	1.12	10	-	-	-	-		
- 18	11589	10071	6.30	10	3.67	- 3.10	311.49	June 12, 1966	310.97
- 1	11589	10072	- 0.80	10	-	- 27.52	311.48		310.97
10071	10072	- 7.11	10	-	4.41	315.38	315.29		
10072	10073	1.14	10	-	-	-	-		
11589	10071	6.24	10	3.91	- 3.25	311.34	310.97		
11589	10072	- 0.83	10	-	- 27.68	311.32	310.97		
10071	10072	- 7.08	10	-	4.18	315.15	315.29		
10072	10073	1.07	10	-	1.41	312.38	312.48		
11097	11097	0.36	10	-	-	-	-		
10072	10072	-	-	-	-	-	-		
11589	10071	6.26	10	3.87	- 3.17	311.42	310.97	July 23, 1966	310.97
11589	10072	- 0.82	10	-	- 27.79	311.21	310.97		
10071	10072	- 7.18	10	-	1.55	312.52	312.48		
10072	11097	0.40	10	-	- 1.20	309.77	309.65		
11111	11111	- 0.31	10	-	-	-	-		

TABLE 1 : REFERENCE GAS COMPARISONS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	SIO Index		Date of Analysis
11589	10071	6.20	10	3.92	- 3.21	311.38	310.97		August 8, 1966
11589	10072	- 0.82	10		- 27.71	311.29	310.97		
10071	10072	- 7.07	10		1.61	312.58	312.48		
10072	11097	0.41	10		1.49	312.46	312.58		
10072	10066	0.38	10		14.74	325.71	326.00		
10072	11082	3.76	10						August 30, 1966
11589	10071	6.05	10	4.03	- 3.79	310.80	310.97		
11589	10072	- 0.94	10		- 28.29	310.71	310.97		
10071	10072	- 7.02	10		1.85	312.82	312.58		
10072	10066	0.46	10						September 26, 1966
11589	10071	5.95	10	4.04	- 3.64	310.95	310.97		
11589	10072	- 0.90	10		- 28.48	310.52	310.97		
10071	10072	- 7.05	10		1.70	312.67	312.58		
10072	10066	0.42	10		15.68	326.65	326.00		
10072	11082	3.88	10						October 10, 1966
11589	10071	6.70	10	3.60	- 3.28	311.31	310.97		
11589	10072	- 0.91	10		- 27.97	311.03	310.97		
10071	10072	- 7.77	10		2.63	313.60	313.65		
10072	6060	0.73	9						November 3, 1966
15589	10071	7.17	10	3.40	- 3.09	311.50	310.97		
11589	10072	- 0.91	10		- 27.51	311.49	310.97		
10071	10072	- 8.09	10		2.55	313.52	313.65		
10072	6060	0.75	10						December 6, 1966
11589	10071	7.02	10	3.46	- 3.22	311.37	310.97		
11589	10072	- 0.93	10		- 27.71	311.29	310.97		
10071	10072	- 8.01	10		2.66	313.63	313.76		
10072	11633	0.77	10		14.50	325.47	326.00		
10072	11082	6.19	10						

TABLE 1 : REFERENCE GAS COMPARISONS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	Computed Index	SIO Index	Date of Analysis
11589	10071	6.98	10	3.47	- 3.30	311.29	311.03	310.97	January 2, 1967
11589	10072	- 0.95	10		- 27.97	311.56	311.30	310.97	
10071	10072	- 8.06	10		14.23	325.20	326.00	326.00	
10072	11082	4.10	10						
11589	10071	7.28	10	3.35	- 3.05	311.54	311.50	310.97	January 16, 1967
11589	10072	- 0.91	10		- 27.44	311.56	311.30	310.97	
10071	10072	- 8.19	10		14.10	325.07	326.00	326.00	
10072	11082	4.21	10		- 0.60	310.37	310.36	310.36	
10072	10076	- 0.18	10						
11589	10071	7.13	10	3.44	- 3.44	311.15	311.10	310.97	February 2, 1967
11589	10072	- 1.00	10		- 27.76	311.24	311.19	310.97	
10071	10072	- 8.07	10		- 0.55	310.42	310.36	310.36	
10072	10076	- 0.16	10						
11589	10071	7.17	10	3.37	- 3.98	310.61	310.56	310.97	February 25, 1967
11589	10072	- 1.18	10		- 28.61	310.39	310.34	310.97	
10071	10072	- 8.49	10		- 0.64	310.33	310.28	310.36	
10072	10076	- 0.19	10		2.16	313.13	313.07	313.07	
10072	10063	0.64	10						
11589	10071	8.76	10	2.78	- 3.31	311.28	311.23	310.97	March 27, 1967
11589	10072	- 1.19	10		- 27.86	311.14	311.09	310.97	
10071	10072	- 10.02	10		1.61	312.58	312.53	313.07	
10072	10063	0.58	10						
11589	10071	8.98	10	2.75	- 2.97	311.62	311.57	310.97	April 8, 1967
11589	10072	- 1.08	10		- 27.20	311.80	311.75	310.97	
10071	10072	- 9.89	10		1.90	312.87	312.82	313.07	
10072	10063	0.69	10		0.85	311.82	311.83	311.83	
10072	10067	0.31	10						

TABLE 1 : REFERENCE GAS COMPARISONS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	Calculated Index	FIC Index	Final analyzed
11589	10071	6.68	10	3.57	- 3.03	311.56	310.97	310.97	April 26, 1967
11589	10072	- 0.85	10		- 26.02	310.98	310.97	310.97	
10071	10072	- 7.85	10		0.75	311.72	311.83	311.83	
10072	10067	0.21	10						May 17, 1967
11589	10071	6.66	10	3.57	- 3.21	311.37	310.97	310.97	
11589	10072	- 0.90	10		- 27.02	311.98	310.97	310.97	
10071	10072	- 7.57	10		0.82	311.79	311.83	311.83	
10072	10067	0.23	10		2.00	312.97	313.06	313.06	
10072	10068	0.56	10						June 8, 1967
11589	10071	6.72	10	3.62	- 3.40	311.15	310.97	310.97	
11589	10072	- 0.94	10		- 27.87	312.43	310.97	310.97	
10071	10072	- 7.70	10		2.46	313.63	313.66	313.66	
10072	10068	0.68	10						
11589	10071	6.78	10	3.63	- 28.22	311.67	310.97	310.97	July 1, 1967
10071	10072	- 7.75	10		- 3.36	312.51	310.97	310.97	
11589	10072	- 1.07	10		5.17	313.94	313.97	313.97	
10072	30454	1.48	10						
11589	10071	6.44	10	3.76	- 3.50	311.68	310.97	310.97	July 26, 1967
11589	10072	- 0.93	10		- 28.12	310.65	310.97	310.97	
10071	10072	- 7.48	10		5.37	317.87	315.97	315.97	
10072	30454	1.43	8						
11589	10071	7.04	10	3.45	- 3.82	310.79	310.97	310.97	
11589	10072	- 1.10	10		- 28.32	310.59	310.97	310.97	
10071	10072	- 8.21	8		6.45	310.57	310.95	310.95	
10072	10075	0.00	10		5.51	315.22	315.97	315.97	
10072	30454	1.54	10						

TABLE I : REFERENCE GAS COMPARISONS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Co'd:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index		310 Index	Date of Analysis
11589	10071	7.64	10	3.21	- 3.63	310.96		310.97	September 4, 1967
11589	10072	- 1.13	10		- 27.99	311.01		310.97	
10071	10072	- .72	10		- 0.51	310.46		310.45	
10072	10075	- 0.16	10						
11589	10071	7.43	10	3.24	- 3.47	311.12		310.97	September 18, 1967
11589	10072	- 1.07	10		- 28.29	310.71		310.97	
10071	10072	- 8.73	10		0.00	310.97		310.45	
10072	10075	0.00	10						

TABLE 1a: REFERENCE GAS COMPARISONS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Cell:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	SIO Index	Date of Analysis	
11111	11669	- 1.83	10	1.79		3.28	306.37	April 1, 1964	
11111	10064	- 10.96	5		- 19.62	290.02	289.22		
10064	11669	9.21	10		16.49	305.71	306.46		
18206	18207	1.20	10	1.79	2.15	312.85	312.78	June 22, 1964	
18206	18208	1.04	9		1.86	312.56	312.40		
18208	18207	0.32	10		0.57	312.97	312.78		
18206	18207	1.19	10	1.78	2.12	312.82	312.78	June 24, 1964	
18206	11097	1.72	13		3.06	313.76	313.82		
11097	18207	- 0.60	12		- 1.07	312.75	312.78		
18206	18207	1.38	10	1.18	1.63	312.33	312.78	June 26, 1964	
18206	7344	0.37	10		0.44	311.14	311.11		
7344	18207	1.05	10		1.24	312.35	312.78		
18206	10075	0.61	10	1.65	1.01	311.71	311.68	June 29, 1964	
18206	18207	1.25	10		2.06	312.76	312.78		
18207	10075	- 0.67	11		- 1.11	311.67	311.68		
18206	10072	3.03	11	1.53	4.64	315.34	315.42	June 30, 1964	
18206	18207	1.23	11		1.88	312.58	312.78		
18207	10072	1.91	10		2.92	312.70	315.42		
11589	18207	- 1.09	11	1.67	- 1.82	312.77	312.78	July 1, 1964	
11589	18206	- 2.32	11		- 3.87	310.72	310.70		
18206	18207	1.26	7		2.10	312.80	312.78		
18206	10066	0.69	10	1.59	1.10	311.80	311.73	July 2, 1964	
18206	18207	1.26	10		2.00	312.70	312.78		
18207	10066	- 0.65	10		- 1.03	311.75	311.73		
10071	10064	- 27.88	11	1.76	- 49.07	289.93	289.22	March 16, 1965	
10071	11111	- 16.57	11		- 29.16	309.84	309.65		
11111	10064	- 10.99	12		- 19.34	290.31	289.22		

TABLE 1a : REFERENCE GAS COMPARISONS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	SIO Index	Date of Analysis	
11111	10073	- 1.42	10	1.78	- 2.53	307.12	307.42	March 17, 1965	
11111	11097	2.34	10		4.17	313.82	313.82		
11097	10073	- 3.76	10		- 6.69	307.13	307.42		
11111	10072	3.26	10	1.87	6.10	315.75	315.42	March 29, 1965	
11111	10064	- 11.13	10		- 20.81	288.84	289.22		
10064	10072	13.98	10		26.14	314.36	315.42		
11111	11097	2.26	6	1.86	4.20	313.85	313.82	March 30, 1965	
11111	10064	- 11.12	6		- 20.68	288.97	289.22		
10064	11097	13.11	6		24.38	313.67	313.82		
11111	10066	1.14	10	1.87	2.13	311.78	311.73	March 30, 1965	
11111	10064	- 10.97	6		- 20.51	289.14	289.22		
10064	10066	12.04	10		22.51	311.73	311.73		
11111	10073	- 1.32	10	1.89	- 2.49	307.16	307.42	March 31, 1965	
11111	10064	- 10.86	5		- 20.53	289.12	289.22		
10064	10073	9.48	10		17.92	307.14	307.42		
10070	10065	20.62	10	1.78				October 19, 1965	
10070	10064	- 13.88	10		- 24.71	290.24	289.22		
10065	10064	6.23	10		- 11.09	289.73	289.22		
10064	10073	9.71	10		17.22	306.50	307.42		
10064	11097	13.37	10		23.80	313.02	313.82		
10064	10066	12.18	10		21.68	310.90	311.73		
10064	10072	14.21	10		25.29	314.51	315.42		
10064	18207	12.68	10		22.57	311.79	312.78		
10064	11633	11.67	10		20.77	309.99	310.79		
10064	18208	12.48	10		22.21	311.63	312.40		
10064	10076	6.18	10		11.60	300.22	300.41		
10064	10067	17.36	10		30.90	320.12	320.83		
10064	10063	16.98	10		30.22	319.44	319.93		
10064	10075	12.14	10		21.61	310.83	311.68		

TABLE 1-a: REFERENCE GAS COMPARISONS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	SIO Index	Date of Analysis	
10070	10065	- 19.28	10	1.88	-	25.42	289.53	289.22	November 12, 1965
10070	10064	- 13.52	10		10.98	289.62	289.22		
10.65	10064	5.84	10		16.92	306.14	306.46		
10064	11669	9.00	10		22.13	311.35	311.68		
10064	10075	11.77	10						
10070	10065	20.15	10	1.81	-	25.76	289.19	289.22	March 28, 1966
10070	10064	- 14.23	10		10.59	289.23	289.22		
10065	10064	5.85	10		11.48	300.70	300.41		
10064	10076	6.34	10		21.77	310.99	311.68		
10064	10075	12.03	10		21.74	310.96	310.97		
10064	10072	12.01	10		25.94	315.16	315.29		
13064	10073	14.33	10		22.93	312.15	312.48		
10064	11097	12.67	10		23.15	312.37	312.58		
10064	10066	12.79	10		24.22	313.44	313.76		
10064	11633	13.38	10		27.17	316.39	315.96		
10054	11669	15.01	10						
10070	10065	19.95	10	1.82	-	25.37	289.58	289.22	April 21, 1966
10070	10064	- 13.94	10		10.92	289.56	289.22		
10065	10064	6.00	10						
10070	10065	18.53	10	1.96	-	25.19	289.16	289.22	June 13, 1966
10070	10064	- 12.85	10		11.27	289.91	289.22		
10065	10064	5.75	10		24.07	313.29	313.76		
10064	11633	12.28	10		26.28	315.50	315.96		
10064	11669	13.41	10						
10070	10065	- 19.95	10	1.82	-	25.32	289.63	289.22	September 13, 1966
10070	10064	- 13.91	10		10.94	289.58	289.22		
10065	10064	6.01	10		22.84	312.06	312.48		
10064	11097	12.55	10		25.63	314.85	315.29		
10064	10073	14.08	10		24.06	313.28	313.65		
10064	6060	13.22	10		23.70	312.92	313.76		
10064	11633	13.02	10		26.19	315.61	315.96		
10064	11669	14.39	10						

TABLE 1a : REFERENCE GAS COMPARISONS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	SIG Index	Date of Analysis	
10070	10065	- 19.66	10	1.85	- 25.44	289.51	289.22	October 20, 1966	
10070	10064	- 13.75	10		10.86	289.50	289.22		
10065	10064	5.87	10		21.74	310.96	311.10		
10064	30000AL	11.75	10		23.90	313.12	312.58		
10064	10066	12.92	10		20.18	309.40	309.65		
10064	11111	10.01	10						
10070	10065	- 19.65	10	1.85	- 25.40	289.55	289.22	December 22, 1966	
10070	10064	- 13.73	10		10.97	289.61	289.22		
10065	10064	5.93	10		23.62	312.84	313.06		
10064	10068	12.77	10		23.55	312.77	313.07		
10064	10063	12.73	10						
10064	10076	11.18	10		20.68	309.90	310.36		
10064	10067	11.84	10		21.90	311.12	311.83		
10064	10075	11.20	10		20.72	309.94	310.45		
10070	10065	- 19.60	10	1.85	- 25.42	289.53	289.22	March 10, 1967	
10070	10064	- 13.74	10		10.95	289.59	289.22		
10065	10064	5.92	10		21.40	310.62	311.10		
10064	H3000	11.57	10						
10064	30454	13.98	10		25.86	315.03	315.97		
10064	30468	15.51	10		28.69	317.91	318.44		
10064	30363	12.09	10		22.37	311.59	312.50		
10064	30318	14.35	10		26.55	315.77	316.56		
10064	30467	21.95	10		23.96	313.18	313.95		
10064	30474	13.74	10		25.42	314.64	315.34		
10064	30407	11.96	10		22.13	311.35	311.89		
10064	30459	15.76	10		29.16	318.38	318.66		
10064	6985	28.18	10		52.13	341.35	341.02		

TABLE I: REFERENCE GAS COMPARISONS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Comparisons	Recorder Scale Factor	Computed Index	Computed Index Diff.	S10 Index	Date of Analysis	
10070	10065	- 19.59	10	1.84	- 25.39	289.56	289.22	April 21, 1967	
10070	10064	- 13.80	10		11.02	289.66	289.22		
10065	10064	5.99	10		30.64	319.86	320.15		
10064	82MC	16.65	10						
10070	10065	- 19.40	8	1.87	- 25.45	289.50	289.22	May 4, 1967	
10070	10064	- 12.61	8		10.85	289.49	289.22		
10065	10064	5.80	8		32.80	322.02	—*		
10064	10314	17.54	7						
10064	20547	- 47	8		- 7.24	281.96	—*		
10070	10125	2-	8		43.42	358.37	—*		
10070	10065	- 19.75	6	1.84				June 14, 1967	
10070	10064	- 13.83	10		- 25.45	289.50	289.22		
10065	10064	5.93	8		10.91	289.55	289.22		
10064	10063	12.60	8		23.18	312.40	313.07		
10064	10076	11.20	10		20.61	309.83	310.36		
10064	82MC	15.05	10		27.69	316.91	320.15		

* Botany - Forestry Department, University of Washington

TABLE Ia : REFERENCE GAS COMPARISONS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Scale Factor	Computed Index Diff.	Computed Index	310 Index	310 Index	Date of Analysis
Composite:									
10071	10065	10071	10072	10	1.89	33.25	344.22	341.62	December 22, 1967
10072	6985	17.59	10	10	4.82	315.79	315.34		
10072	30474	2.55	10	10	6.77	317.74	320.15		
10072	82MC	3.58	10	10	0.81	311.78	311.43		
10072	43MC	0.43	10	10	9.66	320.63	320.39		
10072	11633	5.11	10	10	8.60	319.57	319.19		
10072	11669	4.55	10	10	6.14	317.11	316.56		
10072	30313	3.25	10	10	5.41	316.38	315.97		
10072	30454	2.86	10	10	8.33	319.30	318.66		
10072	30459	4.41	10	10	1.66	312.63	312.50		
10072	30363	0.88	10	10	3.23	314.20	313.95		
10072	30467	1.71	10	10	8.22	319.19	318.44		
10072	30468	4.35	10	10	3.42	314.39	314.59		
10072	11589	1.81	10	10	1.00	311.97	311.89		
10072	30407	0.53	10	10	5.82	316.79	316.71		
10072	10066	3.08	10	10	0.95	311.92	311.83		
10072	10067	0.50	10	10	6.50	317.47	317.34		
10072	10073	3.44	10	10	4.20	315.17	314.97		
10072	11097	2.22	10	10	0.40	311.37	310.45		
10072	10075	0.21	10	10	7.35	318.32	317.92		
10072	11111	3.89	10						

TABLE 2 : RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wtd. Avg.	Date of Analysis
11589	18206	18206	1.66	10	3.89	2.343		January 2, 1965
11589	18207	18207	0.77	10				
18206	18207		0.93*	10				
11589	18206	18206	1.70*	10*	3.89	2.288		
				20				
11589	18206	18206	1.77	10	3.89	2.198		January 8, 1965
11589	18207	18207	0.84	10				
18206	18207		1.02*	10				
11589	18206	18206	1.86*	10*	3.89	2.091		
				20				
-								
11589	18207	18207	0.76	11	1.81	2.382		January 13, 1965
11589	11097	11097	0.35	9				
18207	11097		0.39	9*				
11589	18207	18207	0.74*	9	1.81	2.446		
				20				
11589	18207	18207	0.81	4	1.81	2.235		January 21, 1965
11589	11097	11097	0.30	5				
18207	11097		0.49	5*				
11589	18207	18207	0.79*	5	1.81	2.291		
				9				
11589	18208	18208	1.03	9	2.19	2.126		February 11, 1965
11589	11633	11633	1.85	10				
18208	11633		- 0.71*	10*				
11589	18206	18206	1.14	10	2.19	1.921		
				13				

* See Text

TABLE 2 : RECORDER SCALE FACTORS
RAFFIN, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Std. Avr.	Date of Analysis
	111589	18208	0.96	10	2.19	2.281		March 23, 1965
	111589	11633	1.58	9				
	18208	11633	- 0.70	9				
	111589	18208	0.88*	9	2.19	2.489	2.380	
				19				
	111589	10071	4.93	10	24.41	4.951		June 7, 1965
	111589	11111	- 0.93	10				
	10071	11111	5.78	10				
	111589	10071	4.85*	10	24.41	5.033	4.992	
				20				
	111589	10071	9.74	10	24.41	2.506		June 8, 1965
	111589	11111	- 1.96	10				
	10071	11111	11.82	10				
	111589	10071	9.86*	10	24.41	2.476	2.491	
				20				
	111589	10071	5.15	10	24.41	4.740		June 21, 1965
	111589	11111	- 1.00	10				
	11071	11111	6.15	10				
	111589	10071	5.14*	10	24.41	4.749	4.745	
				20				
	111589	10071	5.18	10	24.41	4.712		August 2, 1965
	111589	11111	- 1.03	10				
	10071	11111	6.13	10				
	111589	10071	5.10*	10	24.41	4.736	4.749	
				20				

* See Text

TABLE 2 : RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wgtd. A78.	Date of Analysis
	11589	10071	5.14	10	24.41	4.749		August 10, 1965
	11589	11111	- 0.92	10				
	10071	11111	6.09*	10*				
	11589	10071	5.17*	10*				
				20	24.41	4.721		
						4.735		
								September 8, 1965
	11589	10071	5.06	11	24.41	4.824		
	11589	11111	- 0.96	10				
	10071	11111	6.06	10*				
	11589	10071	5.10*	10*				
				21	24.41	4.786		
						4.806		
								September 21, 1965
	11589	10071	5.12	10	24.41	4.768		
	11589	11111	- 0.98	10				
	10071	11111	6.16*	10*				
	11589	10071	5.18*	10*				
				20	24.41	4.712		
						4.740		
								October 18, 1965
	11589	10071	5.11	10	24.41	4.777		
	11589	11111	- 0.90	10				
	10071	11111	6.06*	10*				
	11589	10071	5.16*	10*				
				20	24.41	4.731		
						4.754		
								November 1, 1965
	11589	10071	5.32	10	24.41	4.588		
	11589	11111	- 0.97	10				
	10071	11111	6.24*	10*				
	11589	10071	5.27*	10*				
				20	24.41	4.632		
						4.610		

- 31 -

See Text

TABLE 2 : RECORDER SCALE FACTORS
BARRON, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wtd. Avg.	Date of Analysis
	11589	10071	5.02	10	24.41	4.863		November 26, 1965
	11589	11111	- 0.89	10				
	10071	11111	5.95*	10*				
	11589	10071	5.06*	10	24.41	4.824		
				20			4.844	
								January 3, 1966
	11589	10071	5.34	10	24.41	4.571		
	11589	11111	- 1.01	10				
	10071	11111	5.99*	10*				
	11589	10071	4.98*	10	24.41	4.902		
				20			4.737	
								February 8, 1966
	11589	10071	5.10	10	24.41	4.786		
	11589	11111	- 0.99	10				
	10071	11111	6.10*	10				
	11589	10071	5.11*	10*	24.41	4.777		
				20			4.782	
								March 9, 1966
	11589	10071	5.45	10	24.41	4.479		
	11589	11111	1.06	10				
	10071	11111	6.59*	10*				
	11589	10071	5.53*	10	24.41	4.414		
				20			4.447	
								March 24, 1966
	11589	10071	5.47	10	24.41	4.463		
	11589	11111	1.11	10				
	10071	11111	6.47	10*				
	11589	10071	5.36*	10	24.41	4.554		
				20			4.509	

* See Text

TABLE 2 : RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOX. E PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wtd. Avg.	Date of Analysis
11589	10071		6.05	10	24.41	4.035		May 7, 1966
11589	11111		1.14	10				
10071	11111		7.43	10*				
11589	10071		6.29*	10	24.41	3.881	3.958	May 7, 1966
11589	10071		6.54	10	24.41	3.732		June 2, 1966
11589	10072		0.91	10				
10071	10072		7.39	10*				
11589	10071		6.48*	10	24.41	3.767		
11589	10071		6.30	10	24.41	3.875		June 12, 1966
11589	10072		0.80	10				
10071	10072		7.11	10				
11589	10071		6.31*	10*	24.41	3.868		
11589	10071		6.24	10	24.41	3.872		
11589	10072		0.83	10				
10071	10072		7.08	10				
11589	10071		6.25*	10*	24.41	3.906	3.909	June 24, 1955
11589	10071		6.26	10	24.41	3.899		July 23, 1966
11589	10072		- 0.82	10				
10071	10072		- 7.18	10				
11589	10071		6.26*	10*	24.41	3.838	3.869	

* See Text

TABLE 2 : RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wgtd. Avg.	Date of Analysis
	11589	10071	6.20	10	24.41	3.937		August 8, 1966
	11589	10072	- 0.82	10				
	10071	10072	- 7.07	10	24.41	3.906		
	11589	10071	6.25*	10				
				20		3.922		
	11589	10071	6.05	10	24.41	4.035		August 30, 1966
	11589	10072	- 0.94	10				
	10071	10072	- 7.02	0				
	11589	10071	6.08*	10	24.41	4.015		
				20		4.025		
	11589	10071	5.95	10	24.41	4.103		September 26, 1966
	11589	10072	- 0.90	10				
	10071	10072	- 7.05*	10	24.41	3.969		
	11589	10071	6.15*	10				
				20		4.036		
	11589	10071	6.70	10	24.41	3.643		October 10, 1966
	11589	10072	- 0.91	10				
	10071	10072	- 7.77	10				
	11589	10071	6.86*	10	24.41	3.558		
				20		3.601		
	11589	10071	7.17	10	24.41	3.404		November 3, 1966
	11589	10072	- 0.91	10				
	10071	10072	- 8.09	10	24.41	3.400		
	11589	10071	7.18*	10				
				20		3.402		

* See Text

TABLE 2 : RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set.	Scale Factor Wtd. Avg.	Date of Analysis
11589	10071	16071	7.02	10	24.41	3.477		December 6, 1966
11589	10072	-	0.93	10				
10071	10072	-	8.01	10				
11589	10071	7.08*		10*	24.41	3.448		
				20		3.463		
11589	10071	6.98		10	24.41	3.497		January 2, 1967
11589	10072	-	0.95	10				
10071	10072	-	8.06	10				
11589	10071	7.11*		10*	24.41	3.433		
				20		3.465		
11589	10071	7.28		10	24.41	3.353		January 16, 1967
11589	10072	-	0.91	10				
10071	10072	-	8.19	10				
11589	10071	7.28*		10*	24.41	3.353		
				20		3.353		
11589	10071	7.13		10	24.41	3.424		February 2, 1967
11589	10072	-	1.00	10				
10071	10072	-	8.07	10				
11589	10071	7.07*		10*	24.41	3.453		
				20		3.439		
11589	10071	7.17		10	24.41	3.404		February 25, 1967
11589	10072	-	1.18	10				
10071	10072	-	8.49	10				
11589	10071	7.31*		10*	24.41	3.339		
				20		3.372		

TABLE 2 : RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wgtd. Avg.	Date of Analysis	
11589	10071	8.76	10	24.41	2.787	March 27, 1967		
11589	10072	-1.19	10					
10071	10072	-10.02	10*					
11589	10071	8.83*	10	24.41	2.764			
			20					
11589	10071	8.98	10	24.41	2.718	April 8, 1967		
11589	10072	-1.08	10					
10071	10072	-9.89	10*					
11589	10071	8.81*	10	24.41	2.771			
			20					
11589	10071	6.68	10	24.41	3.654	April 20, 1967		
11589	10072	-0.85	10					
10071	10072	-7.85	10*					
11589	10071	7.09*	10	24.41	3.487			
			20					
11589	10071	6.66	10	24.41	3.487	May 17, 1967		
11589	10072	-0.90	10					
10071	10072	-7.57	10*					
11589	10071	6.67*	10	24.41	3.660			
			20					
11589	10071	6.72	10	24.41	3.632	June 9, 1967		
11589	10072	-0.94	10					
10071	10072	-7.70*	10*					
11589	10071	6.76	10	24.41	3.611			
			20					

* See Text

TABLE 2 : RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wgtd. Avg.	Date of Analysis	
11589	10071	6.78	10	24.41	3.600	July 1, 1967		
11589	10072	- 1.07	10					
10071	10072	- 7.75*	10*	24.41	3.654			
11589	10071	6.68	10					
			20					
				3.627				
11589	10071	6.44	10	24.41	3.790	July 20, 1967		
11589	10072	- 0.93	10					
10071	10072	- 7.48*	10*	24.41	3.727			
11589	10071	6.55	10					
			20					
				3.759				
11589	10071	7.04	10	24.41	3.467	August 1, 1967		
11589	10072	- 1.10	10					
10071	10072	- 8.21*	8	24.41	3.433			
11589	10071	7.11*	10*					
			18					
				3.450				
11589	10071	7.64	10	24.41	3.195	September 4, 1967		
11589	10072	- 1.13	10					
10071	10072	- 8.72*	10*	24.41	3.216			
11589	10071	7.59	10					
			20					
				3.206				
11589	10071	7.43	10	24.41	3.285	September 18, 1967		
11589	10072	- 1.07	10					
10071	10072	- 8.73*	10*	24.41	3.187			
11589	10071	7.66	10					
			20					
				3.236				

* See Text

TABLE 2a : RECORDER SCALE FACTORS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wgt'd. Avg.	Date of Analysis	
18206	18208	1.04	9	1.70	1.635		June 22, 1964	
18206	18207	1.20	10					
18208	18207	- 0.32*	10					
18206	18208	0.88*	10*					
			19					
18206	11097	1.72	13				June 24, 1964	
18206	18207	1.19	10					
11097	18207	0.60	12					
18206	11097	1.79*	10*					
			23					
18206	7344	0.37	10				June 26, 1964	
18206	18207	1.38	10					
7344	18207	- 1.05*	10					
18206	7344	0.33*	10					
			20					
18206	10075	0.61	10				June 26, 1964	
18206	18207	1.25	10					
10075	18207	- 0.67	11*					
18206	10075	0.58*	10					
			20					
18206	10072	3.03	11				June 29, 1964	
18206	18207	1.23	11					
10072	18207	1.91	10*					
18206	10072	3.14*	10					
			21					

* See Text

TABLE 2a: RECORDER SCALE FACTORS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wgted. Avg.	Date of Analysis
	11589	18206	2.32	11	3.89	1.677		July 1, 1964
	11589	18207	1.09	11				
	18206	18207	1.26*	7				
	11589	18206	2.35*	7				
				18				
	18206	10066	0.69	10	1.03	1.493		July 2, 1964
	18206	18207	1.26	10				
	10066	18207	- 0.35*	10*				
	18206	10066	0.61	10	1.03	1.689		
				20				
	10071	11111	16.57	11	29.35	1.771		March 16, 1965
	10071	10064	27.88	11				
	11111	10064	- 10.99	12				
	10071	11111	16.89*	11*	29.35	1.738		
				22				
	11111	11097	2.34	10	4.17	1.782		March 17, 1965
	11111	10073	- 1.42	10				
	11097	10073	3.76	10				
	11111	11097	2.34*	10*	4.17	1.782		
				20				
	11111	10064	11.13	10	20.43	1.836		March 29, 1965
	11111	10072	- 3.25	10				
	10064	10072	13.98	10				
	11111	10064	10.72*	10*	20.43	1.906		
				20				
						1.871		

* See Text

TABLE 2a: RECORDER SCALE FACTORS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wtd. Avg.	Date of Analysis	
11111	10064	11.12	6	20.43	1.837	March 30, 1965		
11111	11097	- 2.26	6					
10064	11097	13.11	6					
11111	10064	10.85*	6*	20.43	1.883	March 30, 1965		
			12					
11111	10064	10.97	6	20.43	1.862	March 30, 1965		
11111	10066	- 1.14	10					
10064	10066	12.04	10*					
11111	10064	10.90*	10	20.43	1.874	March 30, 1965		
			16					
11111	10064	10.86	5	20.43	1.881	March 31, 1965		
11111	10073	1.32	10					
10064	10073	9.48	10					
11111	10064	10.80*	10*	20.43	1.892	March 31, 1965		
			15					
11111	10064	10.96	5	20.43	1.864	March 31, 1965		
11111	11669	1.83	10					
10064	11669	9.21*	10*					
11111	10064	11.04	10	20.43	1.851	October 19, 1965		
			15					
10070	10065	20.62	10	36.31	1.761	October 19, 1965		
10070	10064	13.88	10					
10065	10064	6.23	10					
10070	10065	20.11*	10*	36.31	1.806	October 19, 1965		
			20					

* See Text

TABLE 2a: RECORDER SCALE FACTORS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Cc1:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wgt'd. Avg.	Date of Analysis
10070	10065		19.28	10	36.31	1.883		November 12, 1965
10070	10064		13.52	10				
10065	10064		5.84	10*				
10070	10065		19.36*	10*				
			20					
10070	10065		20.15	10	36.31	1.802		March 28, 1966
10070	10064		14.23	10				
10065	10064		5.85	10				
10070	10065		20.08*	10*				
			20					
10070	10065		19.95	10	36.31	1.820		April 27, 1966
10070	10064		13.94	10				
10065	10064		6.00	10				
10070	10065		19.94*	10*				
			20					
10070	10065		- 18.53	10	36.31	1.960		June 13, 1966
10070	10064		- 12.85	10				
10065	10064		5.75	10				
10070	10065		- 18.60*	10*				
			20					
10070	10065		- 19.95	10	36.31	1.820		September 12, 1966
10070	10064		- 13.91	10				
10065	10064		6.01	10				
10070	10065		- 19.92*	10*				
			20					

- 41 -

* See Text

TABLE 2a: RECORDER SCALE FACTORS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wt'd. Avg.	Date of Analysis
10070	10065	- 19.66	10	36.31	1.847	October 20, 1966		
10070	10064	- 13.76	10					
10065	10064	5.87	10					
10070	10065	- 19.63*	10*	36.31	1.850			
			20					
10070	10065	- 19.65	10	36.31	1.848	December 22, 1966		
10070	10064	- 13.73	10					
10065	10064	5.93	10					
10070	10065	- 19.66*	10*	36.31	1.847			
			20					
10070	10065	- 19.60	10	36.31	1.853	March 10, 1967		
10070	10064	- 13.74	10					
10065	10064	5.92	10					
10070	10065	- 19.66*	10*	36.31	1.847			
			20					
10070	10065	- 19.59	10	36.31	1.853	April 21, 1967		
10070	10064	- 13.80	10					
10065	10064	5.99	10					
10070	10065	- 19.79*	10*	36.31	1.835			
			20					
10070	10065	- 19.40	8	36.31	1.872	May 4, 1967		
10070	10064	- 13.61	8					
10065	10064	5.80	8					
10070	10065	19.41*	8*	36.31	1.871			
			16					

* See Text

TABLE 2A: RECORDER SCALE FACTORS AT THE UNIVERSITY OF WASHINGTON
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Index Diff.	Recorder Single Set	Scale Factor Wt'd. Avg.	Date of Analysis
10070	10065	- 19.75	6	36.31	1.838	June 13, 1967		
10070	10065	- 13.63	10					
10065	10064	5.93	8					
10070	10065	- 19.76*	8*					
			14	36.31	1.838			
10070	10065	- 19.03	10	36.31	1.908			
10070	10071	13.03	10	24.05	1.846			
10070	10072	2.09	10	3.98	1.904			
					1.886			

December 22, 1967

* See Text

TABLE 3 : SUMMATION OF RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

TABLE 3 : SUMMARY OF RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1 Standard Tank No.	2 Compared Tank No.	3 Observed Scale Diff.	4 No. of Compar- isons	5 Recorder Single Set	6 Scale Factor Bar. Press. (inches)	7 Adjusted Recorder Scale Factor	8 Date of Analysis
Period 4	10069	10065	6.11 6.12	34 21	2.48 2.47	29.73 29.75	2.46 2.45	August 2, 1961
			6.20 5.75	2 13	2.44 2.63	29.84 29.96	2.43 2.62	3 4
	10077	12.36 11.87	4 10	2.65 2.76	30.10 30.07	2.66 2.77	5 6	
					Weighted Average R. S. F. (Adjusted) for Period 4 = 2.53			
Period 5	10069	10077	9.75 9.70 9.53 9.56 9.70 9.87 9.80 9.75 9.80	2 1 6 5 3 21 17 12 1	3.36 3.38 3.44 3.43 3.38 3.32 3.34 3.36 3.34	30.07 30.06 29.91 29.83 29.90 29.97 29.73 29.75 29.90	3.37 3.39 3.43 3.41 3.37 3.32 3.31 3.35 3.33	August 7, 1961 8 9 11 13 14 15 16 17
					Weighted Average R. S. F. (Adjusted) for Period 5 = 3.29			
Period 6	10069	6074	5.84 6.23 6.13	11 6 7	2.28 2.14 2.17	29.90 29.86 29.69	2.27 2.13 2.15	August 17, 1961 18 19
					Weighted Average R. S. F. (Adjusted) for Period 6 = 2.20			

TABLE 3 : SUMMARY OF RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Comparisons	Recorder Single Set	Scale Factor Bar. Press. (inches)	Adjusted Recorder Scale Factor	Date of Analysis
Period 7	10069	6074	5.00	5	2.66	29.74	2.64	August 22, 1961
			4.90	7	2.72	29.90	2.71	23
			4.91	7	2.71	30.02	2.71	24
			5.24	8	2.54	29.80	2.52	27
			5.05	10	2.64	29.89	2.63	28
			5.20	41	2.56	29.82	2.54	29
			5.05	2	2.64	29.72	2.61	30
			5.05	1	2.64	29.72	2.61	31
			5.04	9	2.64	29.80	2.62	September 1
			5.00	2	2.66	29.80	2.64	2
			5.14	28	2.59	29.47	2.54	5
			5.00	32	2.66	29.44	2.61	6
			5.00	7	2.66	29.44	2.61	7
			5.01	8	2.66	29.50	2.61	9
			5.00	7	2.66	29.84	2.64	13
			5.21	7	2.55	29.76	2.53	16
			5.00	4	2.66	29.89	2.65	18
							Weighted Average R. S. F. (Adjusted) for Period 7 = 2.59	
Period 8	6074	3755	3.81	5	1.45	29.89	1.44	September 22, 1961
			3.95	1	1.40	29.43	1.37	23
			3.60	2	1.53	29.60	1.51	24
			4.00	5	1.38	30.00	1.38	25
			4.15	1	1.33	30.05	1.33	26
			3.98	5	1.39	29.80	1.38	27
			3.85	1	1.43	29.80	1.42	28
			3.89	4	1.42	30.04	1.42	29

TABLE 3 : SUMMARY OF RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Compar- isons	Recorder Single Set	Recorder Scale Factor Bar. Press. (inches)	Adjusted Recorder Scale Factor	Date of Analysis
Period 8	6074	3755	3.95	1	1.40	29.83	1.39	November 1, 1961
			3.97	2	1.39	29.91	1.39	2
			3.90	2	1.41	29.86	1.40	3
			3.97	2	1.39	29.82	1.38	4
			3.93	2	1.40	30.05	1.40	5
			3.90	2	1.41	30.20	1.42	6
					Weighted Average R. S. F. (Adjusted) for Period 8 = 1.41			
Period 9	6074	3756	1.10	3	1.57	29.96	1.57	November 8, 1961
			1.10	3	1.57	29.66	1.55	9
			1.10	2	1.57	29.44	1.54	10
			1.10	1	1.57	29.43	1.54	11
			1.10	3	1.57	29.34	1.54	12
					Weighted Average R. S. F. (Adjusted) for Period 9 = 1.55			
Period 10	6074	3756	1.32	16	1.31	29.45	1.29	November 14, 1961
			1.35	26	1.28	30.11	1.28	25
					Weighted Average R. S. F. (Adjusted) for Period 10 = 1.28			
Period 11	6074	3756	1.17	5	1.48	29.93	1.48	November 27, 1961
			1.17	7	1.48	29.60	1.46	28
			1.18	2	1.47	29.78	1.46	29

TABLE 3 : SUMMARY OF RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Comparisons	Recorder Scale Factor Single Bar. Press. Set	Adjusted Recorder Scale Factor	Date of Analysis	8
								7
Period 8	6074	3755	3.89	7	1.42	30.14	October 1, 1961	
			3.79	11	1.46	29.76		1.45
			3.79	13	1.46	29.61		1.44
			3.82	8	1.44	29.79		1.43
			4.00	3	1.38	30.19		1.39
			4.00	2	1.38	30.33		1.40
			3.84	4	1.44	30.16		1.45
			3.86	8	1.43	30.08		1.43
			4.00	1	1.38	30.07		1.38
			4.17	2	1.32	29.94		1.32
			3.90	2	1.41	29.90		1.40
			3.90	1	1.41	29.91		1.41
			3.90	2	1.41	29.61		1.39
			3.90	2	1.41	29.65		1.39
			3.90	1	1.41	30.00		1.41
			3.90	2	1.41	29.55		1.39
			3.85	3	1.43	29.57		1.41
			3.90	2	1.41	29.32		1.38
			3.86	2	1.43	29.36		1.40
			3.84	7	1.44	29.67		1.42
			3.85	1	1.43	29.54		1.41
			4.00	2	1.38	29.65		1.36
			3.93	2	1.40	29.78		1.39
			3.90	2	1.41	29.75		1.40
			3.93	2	1.40	29.85		1.39
			4.00	2	1.38	30.18		1.39
			3.93	2	1.40	29.96		1.40

TABLE 3 : SUMMARY OF RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8
	Standard Tank No.	Compared Tank No.	Observed Scale Diff.	No. of Comparisons	Recorder Scale Factor		Adjusted Recorder Scale Factor	Date of Analysis
					Single Set	Bar. Press. (inches)		
Period 11	6074	3756	1.20	4	1.44	29.62	1.42	December 1, 1961
			1.14	5	1.52	29.68	1.50	
			1.22	10	1.42	29.82	1.41	
			1.20	2	1.44	30.01	1.44	
			1.20	4	1.44	30.43	1.46	
			1.25	4	1.38	30.46	1.40	
			1.20	3	1.44	30.00	1.44	
			1.20	1	1.44	29.81	1.43	
			1.15	3	1.50	29.87	1.49	
			1.15	2	1.50	30.23	1.51	
			1.15	1	1.50	30.44	1.52	
								16

Weighted Average R. S. F. (Adjusted) for Period 11 = 1.45

TABLE 3a: SUMMARY OF RECORDER SCALE FACTORS - MUTUAL COMPARISON METHOD
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7
	Standard Tank No.	Compared Tank No.	No. of Comparisons	Scale Factor Wgtd. Average	Barometric Pressure (inches)	Adjusted Recorder Scale Factor	Date of Analysis
Period 12	10063	3756	18	1.62	30.29	1.63	January 6, 1962
			17	1.61	30.51	1.64	
					Weighted Average = 1.63		
Period 13	10063	10071	34	2.44	30.59	2.49	January 17, 1962
		10073	10	2.49	30.13	2.50	March 24
		10071	15	2.49	29.90	2.48	26
		10068	16	2.53	29.70	2.50	28
		10068	20	2.51	30.25	2.53	April 29
		6078	19	2.53	30.25	2.55	29
		6078	19	2.51	29.84	2.49	May 19
		6078	20	2.51	29.94	2.50	26
		10068	19	2.47	30.18	2.48	28
		3757	20	2.57	29.61	2.54	June 5
		3757	20	2.54	30.00	2.54	23
		3757	20	2.50	29.87	2.49	July 7
		2427	20	2.60	29.74	2.58	10
		2427	20	2.50	29.89	2.49	20
		2427	20	2.55	29.98	2.55	August 11
		2426	20	2.49	29.98	2.49	11
		3756	20	2.49	30.01	2.49	21
		3756	20	2.50	30.01	2.50	September 7
		7351	10	2.49	29.98	2.49	October 4
		7351	10	2.53	30.01	2.53	9
		7351	10	2.55	29.97	2.55	17
		7351	10	2.56	29.96	2.55	19
					Weighted Average = 2.51		

TABLE 3a : SUMMARY OF RECORDER SCALE FACTORS - MUTUAL COMPARISON METHOD
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1 Standard Tank No.	2 Compared Tank No.	3 No. of Compar- isons	4 Scale Factor Wgt'd. Average	5 Barometric Pressure (inches)	6 Adjusted Recorder Scale Factor	7 Date of Analysis
Period 14 10063	7351	10	2.48	30.01	2.48	November 13, 1962	
	7351	10	2.49	29.99	2.47	28	
	7351	10	2.46	30.05	2.46	December 7	
				Weighted Average = 2.48			
Period 15 10063	10072	20	2.46	30.04	2.46	January 12, 1963	
	4278	16	2.43	30.06	2.43	February 1	
	4286	19	2.53	29.77	2.51	March 16	
	4286	20	2.49	30.33	2.52	April	
	7362	20	2.47	30.34	2.50	20	
	7362	20	2.49	29.51	2.45	May 6	
	7362	20	2.46	29.99	2.46	18	
	4284	20	2.37	29.99	2.37	19	
	4284	20	2.33	30.06	2.33	18	
	4284	20	2.33	29.93	2.32	29	
	4272	20	2.44	29.96	2.44	July 5	
	3757	20	2.43	30.00	2.43	6	
	18204	20	2.43	30.03	2.43	29	
	18204	19	2.41	30.10	2.42	10	
	18204	19	2.40	29.97	2.40	21	
				Weighted Average = 2.43			

TABLE 3b : SUMMARY OF RECORDER SCALE FACTORS - MUTUAL COMPARISON METHOD
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7
	Standard Tank No.	Compared Tank No.	No. of Comparisons	Scale Factor Weighted Average	Barometric Pressure (inches)	Adjusted Recorder Scale Factor	Date of Analysis
Period 1	11589	18206	20	2.32	1037.5	2.37	January 2, 1965
	11589	18206	20	2.16	1041.6	2.20	8
	11589	18207	20	2.41	1020.0	2.42	13
	11589	18207	9	2.27	1014.5	2.26	21
	11589	18208	9	2.02	1026.0	2.04	February 11
	11589	18208	19	2.38	1024.3	2.40	March 23
					Weighted Average R. S. F. for Period = 2.28		
					Average R. S. F. for Period = (1.16)*		
- Period 2							
Period 3	11589	10071	20	2.49	1015.7	2.50	June 8
Period 4	11589	10071	20	4.75	1018.2	4.76	June 21
	11589	10071	20	4.75	1004.4	4.70	August 2
	11589	10071	20	4.74	996.2	4.64	August 10
	11589	10071	21	4.81	1017.9	4.82	September 8
	11589	10071	20	4.74	1026.8	4.79	21
	11589	10071	20	4.75	1003.9	4.70	October 18
	11589	10071	20	4.61	1031.3	4.68	November 1
	11589	10071	20	4.84	997.2	4.76	26
	11589	10071	20	4.74	1015.8	4.74	January 3, 1966
	11589	10071	20	4.78	1002.7	4.72	February 8
					Weighted Average P. S. F. for Period = 4.75		

* Recorder Scale Factor in parenthesis was used in the reduction of air data because of recorder scale change.

TABLE 3b : SUMMARY OF RECORDER SCALE FACTORS - MUTUAL COMPARISON METHOD
BAFFIN, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7
	Standard Tank No.	Compared Tank No.	No. of Compar- isons	Scale Factor Weighted Average	Barometric Pressure, (inches)	Adjusted Recorder Scale Factor	Date of Analysis
Period 6	11589 11589	10071 10071	20 20	4.45 4.51	1032.2 1019.8	4.52 4.53	March 9, 1966 24
					Weighted Average R.S.P. for Period = 4.52		
Period 8	11589 11589 11589 11589 11589 11589 11589 11589 11589	10071 10071 10071 10071 10071 10071 10071 10071 10071	20 20 20 20 20 20 20 20 20	3.96 3.75 3.87 3.91 3.87 3.92 4.03 4.04	1014.5 1019.6 1010.7 998.5 1023.7 1021.7 1015.7 1007.6	3.95 3.76 3.85 3.84 3.90 3.94 4.02 4.00	May June June July August August September September 26
					Weighted Average R.S.F. for Period = 3.91		
Period 10	11589 11589 11589 11589 11589 11589 11589 11589	10071 10071 10071 10071 10071 10071 10071 10071	20 20 20 20 20 20 20 20	3.60 3.40 3.46 3.47 3.35 3.44 3.37	1017.1 1028.9 1024.0 1014.8 1022.3 1022.4 1018.8	3.61 3.45 3.50 3.46 3.37 3.46 3.38	October November December January February February September 25
					Weighted Average R.S.F. for Period = 3.46		

TABLE 3b: SUMMARY OF RECORDER SCALE FACTORS - MUTUAL COMPARISON METHOD
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7
	Standard Tank No.	Compared Tank No.	No. of Compar- isons	Scale Factor Weighted Average	Barometric Pressure (inches)	Adjusted Recorder Scale Factor	Date of Analysis
Period 12 11589							
11589	10071	10071	20	2.78	1015.5	2.78	March 27, 1967
11589							
10071	10071	20	2.75	1018.9	2.75	April 8	
Weighted Average R. S. F. for Period = 2.76							
Period 14 11589							
11589	10071	20	3.57	1011.3	3.56	April 20	
11589	10071	20	3.57	1008.2	3.55	May 17	
11589	10071	20	3.62	1020.0	3.64	June 9	
11589	10071	20	3.63	1021.2	3.65	July 1	
Weighted Average R. S. F. for Period = 3.60							
Period 15* 11589							
11589	10071	20	3.76	996.9	3.69	July 20	
11589	10071	18	3.45	1014.6	3.45	August 1	
Weighted Average R. S. F. for Period = 3.56 (1.78)*							
Period 17* 11589							
11589	10071	20	3.21	1000.5	3.19	September 4	
11589	10071	20	3.24	1011.2	3.22	September 18	
Weighted Average R. S. F. for Period = 3.20 (1.60)*							

* Recorder Scale Factor in parenthesis was used in the reduction of air data because of recorder scale change.

TABLE 3c: SUMMARY OF RECORDER SCALE FACTORS - SLIDING RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Period	Frequency	Rate	Recorder Scale Factor	
			1	2
1	4, 7444			
2	17		4.71	
3	11		4.71	
4	12		4.70	
5	13		4.69	
6	14		4.69	
7	15		4.68	
8	16		4.67	
9	17		4.66	
10	18		4.66	
11	19		4.65	
12	20		4.64	
13	21		4.64	
14	22		4.63	
15	23		4.62	
16	24		4.61	
17	25		4.60	
18	26		4.59	
19	27		4.59	
20	28		4.58	
21	29		4.58	
22	30		4.57	
23	31		4.57	
24	32		4.56	
25	33		4.55	
26	34		4.54	
27	35		4.53	
28	36		4.53	
29	37		4.52	
30	38			

TABLE II: SUMMARY OF RECORDER SCALE FACTORS - SLIDING RECORDER SCALE FACTORS
SAFROW, ALASKA CAPTION DROXIDE PROJECT

Col:	Period 7	Date	Recorder Scale Factor
1			
	MARCH	25, 1966	4.51
	26		4.56
	27		6.49
	28		4.47
	29		4.46
	30		6.41
	31		6.44
2			
	APRIL	1	4.42
	2		4.61
	3		4.40
	4		5.38
	5		6.37
	6		4.36
	7		6.26
	8		4.33
	9		4.32
	10		4.31
	11		4.23
	12		4.23
	13		4.27
	14		4.25
	15		5.24
	16		4.23
	17		4.23
	18		4.20
	19		4.19
	20		4.18
	21		4.16

TABLE 3c: SUMMARY OF RECORDER SCALE FACTORS - SLIDING RECORDER SCALE
BARROW, ALASKA CARBON DIOXIDE PROJECT

<u>Col:</u>		<u>1</u>	<u>2</u>
		Date	recorder Scale Factor
Period 7			
	April	22, 1966	4.15
	23		4.14
	24		4.12
	25		4.11
	26		4.10
	27		4.08
	28		4.07
	29		4.06
	30		4.05
	May		
	1		4.01
	2		3.99
	3		3.98
	4		3.97
	5		3.95
	6		3.94
	September		
	27		3.88
	28		3.84
	29		3.81
	30		3.77
	October		
	1		3.74
	2		3.70
	3		3.67
	4		3.63
	5		3.60
	6		3.56
	7		3.53

TABLE 3c : SUMMARY OF RECORDER SCALE FACTORS - SLIDING RECORDER SCALE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:		Date	Recorder Scale Factor	
			1	2
Period 7	October	8		3.89
Period 11	February	26, 1967	3.44	3.44
	27		3.42	3.42
	28		3.39	3.39
	March	1	3.37	
		2	3.35	
		3	3.32	
		4	3.30	
		5	3.28	
		6	3.25	
		7	3.23	
		8	3.22	
		9	3.19	
		10	3.17	
		11	3.15	
		12	3.13	
		13	3.10	
		14	3.08	
		15	3.06	
		16	3.03	
		17	3.01	
		18	2.99	
		19	2.96	
		20	2.94	
		21	2.92	
		22	2.90	
		23	2.87	
		24	2.85	

TABLE 3c: SUMMARY OF RECORDER SCALE FACTORS - SLIDING RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:		Date	Recorder Scale Factor
Period 11		March 25, 1967	2.83
		26	2.80
		27	2.78
Period 13	April	8	2.83
		9	2.90
		10	2.97
		11	3.04
		12	3.10
		13	3.17
		14	3.24
		15	3.31
		16	3.38
		17	3.44
		18	3.51
		19	3.58
		20	3.55
Period 16	August	2	1.77
		3	1.77
		4	1.76
		5	1.76
		6	1.75
		7	1.75
		8	1.74
		9	1.74
		10	1.73
		11	1.73
		12	1.72

TABLE 3c : SUMMARY OF RECORDER SCALE FACTORS - SLIDING RECORDER SCALE FACTORS
BARROW, ALASKA CARBON DIOXIDE PROJECT

Period	Date	Recorder Scale Factor	
		1	2
16	August 13, 1967	1.72	1.72
	14	1.71	1.71
	15	1.71	1.71
	16	1.70	1.70
	17	1.70	1.70
	18	1.69	1.69
	19	1.69	1.69
	20	1.68	1.68
	21	1.68	1.68
	22	1.67	1.67
	23	1.67	1.67
	24	1.66	1.66
	25	1.66	1.66
	26	1.65	1.65
	27	1.65	1.65
	28	1.64	1.64
	29	1.64	1.64
	30	1.63	1.63
	31	1.63	1.63
September			
	1	1.62	1.62
	2	1.62	1.62
	3	1.61	1.61

TABLE 4 : INDEX VALUES OF WORKING REFERENCE GASES
BARROW, ALASKA CARBON DIOXIDE PROJECT

Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index	Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index
Primary Tanks - Prefield							Primary Tanks - Postfield						
12-07-61	5	10070	10	314.95	10		04-19-68	*	10070	50	314.80	222	314.95
12-18-61	5	10070	11	314.80	21								
02-02-62	5	10070	11	314.89	32								
04-11-62	5	10070	10	315.14	42								
04-13-62	5	10070	10	315.15	52								
04-13-62	5	10070	11	315.20	63								
04-17-62	5	10070	9	315.21	72								
04-24-62	5	10070	10	315.09	82								
04-26-62	5	10070	10	315.08	92								
04-27-62	5	10070	19	315.16	102								
05-05-62	5	10070	11	314.82	113								
- 10-25-63	7	10070	10	314.82	123								
10-28-63	7	10070	11	314.86	134								
11-11-63	7	10070	10	315.27	144								
11-12-63	7	10070	10	314.84	154								
11-13-63	7	10070	10	314.94	164								
08-23-65	9	10070	8	314.76	172								
01-27-67	11	30474	10	315.33	10								
02-07-67	11	30474	12	315.40	22								
02-07-67	11	30474	10	315.42	32								
02-13-67	11	30474	10	315.34	42								
02-13-67	11	30474	10	315.32	52								
02-16-67	11	30474	10	315.37	62								
02-16-67	11	30474	10	315.36	72								
02-20-67	11	30474	10	315.30	82								
02-20-67	11	30474	11	315.29	93								
02-20-67	11	30474	9	315.28	102								
				315.34									
					04-19-68	*							
							11589	53					
									314.49	53			
										314.59			

* Letter dated 04-19-68

TABLE 4 : INDEX VALUES OF WORKING REFERENCE CASES
PARROW, ALASKA CARBON DIOXIDE PROJECT

Date of Analysis	SIO Report No.	Tank No.	No. of Runs	No. of Index Runs	Cum. Index	Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index
<u>Low Span Tanks - Prefield</u>												
07-25-60	3	7351	22	273.17	22	03-06-64	7	7351	10	272.84	134	
07-27-60	3	7351	10	273.17	32	03-11-64	7	7351	10	272.93	144	
07-28-60	3	7351	11	273.35	43	03-12-64	7	7351	10	273.07	154	
07-28-60	3	7351	10	273.24	53	03-13-64	7	7351	10	272.84	164	
07-29-60	3	7351	10	273.43	63	03-19-64	7	7351	12	272.92	176	
04-28-61	4	7351	10	272.95	73							
06-15-61	4	7351	10	273.52	83							
06-27-61	4	7351	10	273.57	93							
08-03-61	4	7351	11	273.53	104							
08-15-61	4	7351	10	273.62	114							
08-22-61	4	7351	10	273.38	124	273.35						
- 07-01-64	8	10064	10	289.60	10	10-23-67	12	10064	10	289.35	51	
11-10-64	8	10064	11	289.32	21	10-31-67	12	10064	10	289.39	61	
11-17-64	8	10064	10	289.19	31	11-20-67	12	10064	11	288.86	72	
11-24-64	8	10064	10	289.28	41	289.35	11-20-67	12	10064	11	288.84	83
						11-29-67	12	10064	10	289.23	93	289.22
12-07-61	5	10065	11	278.78	11							
12-07-61	5	10065	10	278.90	21							
02-02-62	5	10065	9	278.85	30							
04-10-62	5	10065	10	278.96	40							
04-16-62	5	10065	10	279.05	50							
04-16-62	5	10065	8	278.92	58							
11-13-63	7	10065	10	278.40	68							
11-14-63	7	10065	9	278.58	77							
11-15-63	7	10065	11	278.45	88							
11-18-63	7	10065	10	278.20	98							
11-18-63	7	10065	10	278.35	108							
08-23-65	9	10065	10	278.20	118	278.64						

TABLE 4 : INDEX VALUES OF WORKING REFERENCE GASES
BARROW, ALASKA CARBON DIOXIDE PROJECT

Date of Analysis	SIC Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index	Date of Analysis	SIC Report No.	Rank No.	No. of Runs	Index	Cum. Runs	Cum. Index
<u>Secondary Tanks - Prefield</u>													
07-01-64	8	11111	10	309.48	10	309.48	03-30-67	11	11111	10	309.74	71	
07-02-64	6	11111	10	309.58	20	309.58	03-30-67	11	11111	10	309.79	81	
07-24-64	8	11111	10	309.51	31	309.51	04-04-67	11	11111	11	309.87	92	
08-26-64	8	11111	10	309.44	41	309.44	04-05-67	11	11111	10	309.74	102	
09-17-64	8	11111	10	309.69	51	309.69	04-20-67	11	11111	10	309.76	112	309.65
11-11-64	8	11111	10	309.61	61	309.55							
01-26-67	11	30407	10	311.94	10	311.94							
02-07-67	11	30407	10	311.90	20	311.90							
02-07-67	11	30407	10	311.79	30	311.79							
02-13-67	11	30407	10	311.83	40	311.83							
02-20-67	11	30407	10	311.97	50	311.89							
							02-19-68	*	10072	62	310.95	62	310.95

TABLE 4 : INDEX VALUES OF WORKING REFERENCE GASES
BARROW, ALASKA CARBON DIOXIDE PROJECT

Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index	Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index
High Span Tanks - Prefield													
08-25-59	2	4283	10	343.34	10	03-05-64	7	4283	10	343.07	125		
08-28-59	2	4283	10	343.17	20	03-09-64	7	4283	10	342.94	135		
08-31-59	2	4283	11	343.31	31	03-10-64	7	4283	10	342.84	145		
08-31-59	2	4283	10	343.27	41	02-16-64	7	4283	10	342.88	155		
01-24-62	5	4283	9	343.05	50	03-16-64	7	4283	10	342.86	165		
01-25-62	5	4283	12	342.77	62								
01-26-62	5	4283	10	343.16	72								
01-29-62	5	4283	10	342.52	82								
01-29-62	5	4283	10	343.06	92								
01-30-62	5	4283	11	342.68	103								
01-30-62	5	4283	12	342.95	115	343.02							
- 07-01-64	8	10071	10	339.00	10								
- 07-02-64	8	10071	10	338.96	20								
- 07-24-64	8	10071	10	338.92	30								
- 08-26-64	8	10071	10	339.25	40								
09-17-64	8	10071	10	338.91	50								
10-26-64	8	10071	10	338.96	60	339.00							

- 64

TABLE 4 : INDEX VALUES OF WORKING REFERENCE GASES
PARROW, ALASKA CARBON DIOXIDE PROJECT

Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index	Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index
Working Tanks - Prefield							Working Tanks - Postfield						
							07-11-66		10	30000	10	345.16	10
09-15-66	10	30000	10	311.48	10	311.48							345.16
11-16-65	9	4274	10	326.69	10	326.69	06-22-66	10	4274	10	326.61	20	326.65
04-29-65	9	6060	10	313.59	10	313.59	03-30-67	11	6060	10	313.79	29	313.65
08-16-66	10	6060	9	313.57	19	313.58							
03-12-63	6	7344	9	311.19	9	311.19	04-30-65	9	7344	10	310.97	29	311.11
03-25-63	6	7344	10	311.19	19	311.19							
08-04-65	9	10063	10	319.98	10	319.98	06-22-66	10	10063	10	319.97	30	319.93
08-23-65	9	10063	10	319.84	20	319.91							
- 12-06-66	10	10063	10	313.05	10	313.05	10-22-67	12	10063	11	313.08	21	313.07
⁶⁵ 05-23-66	6	10066	10	311.66	10	311.66	12-17-65	9	10066	10	311.87	20	311.73
02-15-66	10	10066	9	312.51	9	312.51	03-30-67	11	10066	10	312.65	19	312.58
08-17-67	12	10066	12	316.17	12	316.71							
08-23-65	9	10067	10	320.80	10	320.80	06-22-66	10	10067	10	320.79	31	320.83
08-05-66	10	10067	11	320.90	21	320.85							
12-06-66	10	10067	10	311.74	10	311.74	04-19-68	*	10067	10	311.83	20	311.79
08-05-65	9	10068	10	324.92	10	324.92	06-22-66	10	10068	10	324.91	20	324.92
12-06-66	10	10068	11	313.06	11	313.06							
05-21-63	6	10072	10	315.35	10	315.15	12-20-65	9	10072	10	315.48	20	315.42

* Letter dated 04-19-68

TABLE 4 : INDEX VALUES OF WORKING REFERENCE GASES
BARROW, ALASKA CARBON DIOXIDE PROJECT

Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Index	Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Index
<u>Working Tanks - Prefield</u>													
02-15-66	10	10072	9	311.04	9								
02-24-66	10	10072	10	311.02	19								
02-24-66	10	10072	10	310.98	29								
02-24-66	10	10072	10	310.96	39								
07-01-64	8	10073	10	307.48	10								
02-15-66	10	10073	11	315.29	11								
02-24-66	10	10073	10	315.27	21								
08-17-67	12	10073	10	317.34	10								
05-21-63	6	10075	10	311.60	10								
66 12-06-66	10	10075	10	310.46	10								
12-06-66	10	10076	10	310.27	10								
08-05-65	9	11082	11	325.86	11								
07-11-66	10	11082	9	325.91	20								
03-12-63	6	11097	11	313.85	11								
03-25-63	6	11097	12	313.76	23								
02-15-66	10	11097	9	312.40	9								
08-17-67	12	11097	10	314.97	10								
08-17-67	12	11111	11	317.92	11								
07-01-64	8	11633	10	310.68	10								

* Letter dated 04-19-68

TABLE 4 : INDEX VALUES OF WORKING REFERENCE GASES
BARROW, ALASKA CARBON DIOXIDE PROJECT

Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index	Date of Analysis	SIO Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index
Working Tanks - Prefield							Working Tanks - Postfield						
		11633	11	313.7	11	313.70	11	116.33	11	116.33	11	313.70	11
02-15-66	10	11633	10	320.70	10	319.70	10	116.33	10	116.33	10	313.70	11
(02-17-67)	12	11633	10	320.70	10	319.70	10	116.33	10	116.33	10	313.70	11
03-01-66	8	11665	10	316.45	10	316.45	10	116.33	9	116.33	10	306.45	11
03-04-66	8	11666	10	316.45	10	316.45	10	116.33	9	116.33	10	306.45	11
03-13-66	10	11665	10	316.45	10	316.45	10	116.33	11	116.33	10	315.45	11
03-17-66	10	11666	10	316.45	10	316.45	10	116.33	11	116.33	10	315.45	11
03-17-67	12	11666	10	316.45	10	316.45	10	116.33	11	116.33	10	315.45	11
(03-26-65)	6	12206	10	310.78	10	310.78	10	116.33	9	116.33	10	310.78	11
03-26-65	6	18206	10	310.78	10	310.78	10	116.33	9	116.33	10	310.78	11
03-26-67	6	18207	10	312.91	10	312.91	10	116.33	9	116.33	10	312.91	11
04-08-67	6	18207	10	312.91	10	312.91	10	116.33	9	116.33	10	312.91	11
03-26-66	6	1P208	10	312.50	10	312.50	10	116.33	9	116.33	10	312.50	11
04-08-66	6	1P208	10	312.50	10	312.50	10	116.33	9	116.33	10	312.50	11
03-26-67	12	1P318	10	316.56	10	316.56	10	116.33	10	116.33	10	316.56	11
03-26-67	11	1P363	10	312.50	10	312.50	10	116.33	10	116.33	10	312.50	11
03-29-67	11	1P434	10	315.83	10	315.83	10	116.33	*	116.33	11	315.83	11
04-27-67	11	20450	10	318.56	10	318.56	10	116.33	*	116.33	10	318.56	11
05-26-67	11	3P422	10	313.91	10	313.91	10	116.33	*	116.33	10	313.91	11

* Letter dated 04-19-69

TABLE 6 : INDEX VALUES OF WORKING REFERENCE CASES
MARCH, ALASKA CARBON DIOXIDE PROJECT

Date of Analysis	SIC Report No.	Tank No.	No. of Runs	Index	Cum. Runs	Cum. Index	Date of Analysis	SIC Report No.	Tank No.	% of Runs	Index	Cum. Runs	Cum. Index		
Working Tanks - Prefield													Working Tanks - Postfield		
01-27-67	11	30658	10	318.40	10	318.40	04-19-68	*	3794	10	341.02	10	341.02	20	318.42
							04-19-68	*	439C	11	332.24	11	332.24		

TABLE 5 : COMBINED SCRIPPS AND BARROW INDEX VALUES OF WORKING REFERENCE CASES
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	
Tank No.	At Scripps Prior and After Use No. of Index Compar.			At Barrow No. of Index Compar.		Wgted. No. of Compar.		Average Index	Tank No.	Date Use Began
18207	32	312.78	89	312.82	121	312.81	18207	01-02-65		
18206	30	310.70	20	310.76	50	310.72	18206	01-02-65		
11097	34	313.82	14	313.81	48	313.82	11097	01-13-65		
11633	20	310.79	57	310.95	77	310.91	11633	02-11-65		
18208	30	312.40	60	312.48	70	312.45	18208	02-11-65		
11411	112	309.65	310.90	422	109.83	11111	06-07-65			
10072	20	315.42	30	315.36	50	315.38	10072	06-08-65		
10073	21	307.42	40	307.64	61	307.56	10073	06-08-65		
11669	32	306.46	50	306.47	82	306.47	11669	06-08-65		
10066	20	311.73	30	311.71	50	311.72	10066	05-21-65		
10076	10	300.41	20	301.27	30	300.98	10076	11-01-65		
10063	30	319.91	20	319.54	50	319.77	10063	01-03-66		
10068	20	324.92	10	326.47	30	324.77	10068	02-08-66		
4274	20	326.65	20	326.58	40	326.62	4274	03-09-66		
16067	31	320.83	30	320.42	61	320.63	16067	05-07-66		
10075	20	311.68	20	311.65	40	311.67	10075	05-07-66		
10071	310.97	47	311.17	579	311.14	10071	06-02-66			
10073	31	315.29	30	315.23	61	315.26	10073	06-02-66		
11097	19	312.48	30	312.49	49	312.49	10097	06-24-66		
10066	19	312.58	30	312.65	49	312.62	10066	08-08-66		
11082	30	326.00	50	325.62	80	325.76	11082	08-08-66		
6060	20	313.65	19	313.55	48	313.61	6060	10-10-66		
11633	22	313.76	10	313.63	32	313.72	11633	12-06-66		
10076	20	310.36	30	310.37	50	310.37	10076	01-16-67		
10063	21	313.07	30	312.86	61	312.95	10063	02-25-67		
10067	20	311.79	30	311.76	50	311.78	10067	04-08-67		
10068	11	313.06	20	313.20	31	313.15	10068	05-17-67		
30454	21	315.90	28	316.32	49	316.14	30454	07-01-67		
10075	20	310.46	30	310.80	50	310.66	10075	08-01-67		

TABLE 6 : COMPARISON OF SCRIPPS AND BARROW INDEX VALUES OF WORKING REFERENCE GASES
BARROW, ALASKA CARBON DIOXIDE PROJECT

<u>Col:</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
<u>Tank No.</u>	<u>At Scripps</u>		<u>At Barrow</u>		<u>Index Difference</u> <u>BRW - SIO</u>	<u>Date Use</u> <u>Began</u>	
	<u>Prior</u>	<u>Combined</u>	<u>No. of Compar.</u>	<u>Index</u>			
18207	32	312.78	89	312.82	0.04	January 2, 1965	
18206	30	310.70	20	310.76	0.06	2	
11097	34	313.82	14	313.81	- 0.01	13	
11633	20	310.79	57	310.95	0.16	February 11,	
18208	30	312.40	40	312.48	0.08	11	
11111	112	309.65	310	309.90	0.25	June 7,	
10072	20	315.42	30	315.36	- 0.06	8	
10073	21	307.42	40	307.64	0.22	8	
11669	32	306.46	50	306.47	0.01	8	
10066	20	311.73	30	311.71	- 0.02	21	
10076	10	300.41	20	301.27	0.86*	November 1, 1966	
10063	30	319.93	20	319.54	- 0.39	January 3, 1966	
10068	20	324.92	10	324.47	- 0.45	February 8,	
4274	20	326.65	20	326.58	- 0.07	March 9	
10067	31	320.83	30	320.42	- 0.41	May 7	
10075	20	311.68	20	311.65	- 0.03	7	
10472	101	310.97	478	311.17	0.20	June 2	
12073	31	315.29	30	315.23	- 0.06	2	
11097	19	312.48	30	312.49	0.01	24	
10066	19	312.58	30	312.65	0.07	August 8	
11082	30	326.00	50	325.63	- 0.38	8	
6060	29	313.65	19	313.55	- 0.10	October 10	
11633	22	313.76	10	313.63	- 0.13	December 6	
10076	20	310.36	30	310.37	0.01	January 16, 1967	
10063	21	313.07	30	312.86	- 0.21	February 25	
10067	20	311.79	30	311.78	- 0.01	April 8	

TABLE 6 : COMPARISON OF SCRIPPS AND BARROW INDEX VALUES OF WORKING REFERENCE GASES
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	Tank No.	At Scripps		At Barrow		Index Difference BRW - SIO	Date Use Began		
		Prior and After Use Combined							
		No. of Compar.	Index	No. of Compar.	Index				
10068	11	313.06	20	313.20	0.14	May	17, 1967		
30454	21	315.90	28	316.32	0.42	July	1		
10075	20	310.46	30	310.80	0.34	August	1		

* Not included in difference

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11	Manometric Conc. (ppm)
Day of Month	Observed Scale Diff.	No. of Compar- isons	Barometric pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Air Index			
<u>1961</u>												
July 10	- 10.29	29	29.90	- 10.32	2.54	- 26.61	148	399.52	313.31	313.70		
11	- 9.86	32	29.72	- 9.95	-	- 25.27				314.25	314.85	
12	- 10.87	38	29.85	- 10.92	-	- 21.74				311.78	311.84	
13	- 10.26	43	30.17	- 10.20	-	- 25.91				313.61	314.07	
14	- 10.24	7	30.11	- 10.20	-	- 25.91				313.61	314.07	
15	- 12.57	20	29.73	- 12.68	4.18	- 53.90	10070	364.74	311.74	311.79		
16	- 12.52	44	29.79	- 12.61	-	- 52.71				312.03	312.14	
17	- 12.46	29	29.72	- 12.57	-	- 52.54				312.20		
17	2.67	14	29.72	2.69	-	11.24	10064	298.38	309.62			
							July 17 Average			311.36	311.13	
- 72	19	3.15	42	29.70	3.18	13.29				311.67	311.70	
20	3.08	37	29.58	3.12	-	13.04				311.42		
- 20	- 12.45	8	29.58	- 12.62	-	- 52.75	10070	364.74	311.99			
21	- 12.49	6	29.65	- 12.50	-	- 52.25	July 20 Average			311.52	311.52	
21	3.20	42	29.65	3.24	-	13.54	10064	298.38	311.92			
							July 21 Average			311.99	312.09	
22	3.24	46	29.88	3.25	-	13.59				311.97	312.07	
23	2.36	4	29.99	2.36	-	9.86				309.24		
23	- 13.13	13	29.99	- 13.13	-	- 54.38	10070	364.74	309.86			
							July 23 Average			309.48	309.04	
24	- 13.15	2	29.94	- 13.18	-	- 55.09	10070	364.74	309.65			
24	2.67	43	29.94	2.68	-	11.20	10064	298.38	309.58			
							July 24 Average			309.58	309.26	
25	2.67	47	29.97	2.67	-	11.16				309.54	309.11	
26	2.57	31	30.24	2.55	-	10.66				309.04		
26	- 13.00	3	30.24	- 12.90	-	- 53.92	10070	364.74	310.83			
							July 26 Average			309.20	309.70	

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Air Index	Manometric Conc. (ppm)
1961										
July 27	2.53	36	30.17	2.51	4.18	10.49	10064	298.28	308.87	
27	-12.96	10	30.17	-12.88	-53.84	10070	364.74	310.90		
28	2.78	31	30.02	2.78	4.16	11.56	July 27 Average	309.31	308.83	
28	2.46	13	30.02	2.46	10.23	10065	297.15	307.38		
29	2.39	45	29.93	2.39	9.94	July 28 Average	309.18	308.67		
30	2.22	46	29.66	2.24	9.32		307.09	306.12		
31	3.09	17	29.29	3.16	13.15		306.47	305.37		
31	-13.26	26	29.29	-13.58	-56.49	10070	364.74	310.30		
-						July 31 Average	308.25	309.06	308.52	
73 Aug.	1	2.72	30	29.58	2.53	6.98	10065	297.15	304.13	302.52
1	2	5.00	9	29.74	5.04	12.75			309.90	
2	-1.05	33	29.74	-1.06	-2.68	10069	312.30	309.62		
3	-0.80	12	29.71	-0.81	-2.17	10069	312.30	310.13		
3	5.05	23	29.71	5.10	12.90	10065	297.15	310.05		
4	5.51	22	29.84	5.54	14.02	August 3 Average	310.08	309.77		
5	-1.37	11	29.96	-1.37	-3.47	10069	312.30	311.17		
5	4.43	20	29.95	4.43	11.21	10065	297.15	308.36		
6	-1.46	4	30.08	-1.46	-3.69	August 5 Average	308.53	307.88		
6	11.06	10	30.08	11.03	27.91	10069	312.30	308.61		
7	11.17	25	30.08	11.14	28.18	August 6 Average	307.77	307.44		
7	-1.36	11	30.08	-1.36	3.29	-4.47	10069	312.30	307.71	306.95
8	8.47	47	30.06	8.45	27.80	August 7 Average	307.33	306.93		
						10077	297.53	307.33	306.42	

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Manometric Conc. (ppm)	
<u>1961</u>											
Aug. 11	8.51	4	29.82	8.56	3.29	28.16	- 3.88	10069	312.30	308.42	
11	- 1.17	5	29.82	- 1.18	-	-	-	August 11 Average	308.10	307.35	
14	- 1.22	20	29.98	- 1.22	-	- 4.01	-	10077	297.53	307.07	
14	- 8.37	15	29.98	8.37	-	27.54	-	August 14 Average	307.77	306.95	
15	- 1.71	16	29.76	- 1.72	-	- 5.66	-	10069	312.30	306.64	
16	- 2.28	13	29.73	- 2.30	-	- 7.57	-	10069	312.30	305.58	
16	8.29	31	29.73	8.36	-	27.50	-	10077	279.53	304.73	
-	17	8.78	29	29.89	8.81	2.20	20.98	August 16 Average	307.03	305.22	
18	3.71	37	29.91	3.72	-	8.18	-	10074	298.99	308.51	
-	18	- 3.53	6	29.91	- 3.54	-	- 7.79	10069	312.30	307.17	
19	- 2.82	7	29.65	- 2.85	-	-	- 6.27	August 18 Average	304.51	307.85	
19	5.86	20	29.65	5.92	-	13.02	-	10074	298.99	306.80	
21	- 2.11	14	29.63	- 2.14	2.59	-	- 5.54	August 19 Average	306.03	305.77	
22	- 1.83	5	29.72	- 1.85	-	- 4.79	-	10069	312.30	310.46	
22	3.11	43	29.72	3.14	-	8.13	-	6074	298.99	310.23	
23	3.39	41	29.90	3.40	-	-	- 8.81	August 22 Average	306.76	305.51	
23	- 1.71	6	29.90	- 1.72	-	- 4.45	-	10069	312.30	307.80	
24	3.67	23	30.02	3.67	-	- 9.51	-	6074	298.99	307.85	
24	- 1.68	6	30.02	- 1.68	-	- 4.35	-	10069	312.30	307.95	
27	- 1.71	7	29.81	- 1.72	-	- 4.45	-	August 24 Average	308.39	307.71	
28	- 1.80	10	29.38	- 1.81	-	- 4.69	-	10069	312.30	307.05	

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col. 1 Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Record'er Scale Factor	Reference Tank		Air Index	Barometric Conc. (ppm)
						Computed Index Diff.	No. Index		
<u>1961</u>									
Aug.	29 - 1.84	40	29.84	- 1.85	2.59	- 4.79	10069	312.30	307.51
30	3.35	46	29.71	3.38	- 8.75	6704	298.99	307.74	306.92
31	3.54	38	29.70	3.58	9.27			308.26	307.55
Sept.	1 3.57	4	29.82	3.59	9.30	- 4.17	10069	312.30	308.29
1 1.60	9	29.82	- 1.61					308.13	
2	3.90	21	29.74	3.93	10.18	September 1 Average	308.18	307.45	
5	4.59	44	29.45	4.67	12.10	6074	298.99	309.17	308.66
6	6.28	32	29.45	6.39	16.35			311.09	311.00
7	3.72	18	29.45	3.79	9.82	- 3.68	10069	312.30	315.54
7	- 1.39	8	29.45	- 1.42					316.42
9	- 1.45	8	30.08	- 1.45	- 3.76	September 7 Average	308.75	308.15	
9	1.56	37	30.08	3.55	9.19	6074	298.99	308.18	
10	3.54	27	30.04	3.53	9.14			308.24	307.53
13	2.76	14	29.82	3.78	9.79			308.13	307.39
13	- 1.40	10	29.82	- 1.41	- 3.65	10069	312.30	308.73	
14	- 1.53	30	29.78	- 1.54	- 3.99			308.78	
15	- 1.25	42	29.67	- 1.26	- 3.26			308.31	307.61
16	- 1.25	44	29.75	- 1.26	- 3.26			308.04	308.50
17	- 1.16	17	29.91	- 1.16	- 3.06	10069	312.30	309.30	308.82
18	- 1.52	13	29.73	- 1.53	- 3.06			308.34	307.65
21	4.20	13	29.78	4.23	1.41	3755	304.51	310.47	310.24
22	4.63	39	29.83	4.65	6.56			311.07	310.97
23	4.97	38	29.44	5.06	7.13			311.64	311.67
24	4.30	43	29.66	4.25	6.13			310.64	310.45

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Reference Tank Index	Air Index	Air Index	Manometric Conc. (ppm)
1961											
Sept.	24	4.30	48	29.66	4.35	1.41	6.13	3755	304.51	310.64	310.45
	25	3.80	48	29.98	3.30	5.36	7.97	312.48	312.69	309.87	309.51
	26	5.67	42	30.07	5.65	10.35	10.35	314.86	315.59	312.45	312.66
	27	7.31	47	29.88	7.34	7.94	7.36	311.87	311.95	310.32	310.06
	28	5.60	47	29.81	5.63	5.81	5.81	310.32	310.32		
	29	5.22	46	29.98	5.22						
	30	4.15	23	30.19	4.12						
Oct.	1	4.17	18	30.15	4.15	5.85	5.85	310.36	310.11	310.52	310.30
	2	4.25	47	29.90	4.26	6.01	6.05	310.56	310.35		
	3	4.24	48	29.64	4.29	4.29	4.29	310.94	310.82		
	4	4.52	47	29.76	4.56	6.43	6.43	311.94	312.03		
	8	5.30	47	30.18	5.27	7.43	7.43				
	9	5.61	48	30.31	5.55	7.83	7.83	312.34	312.52		
	10	5.78	46	30.18	5.75	8.11	8.11	312.62	312.86		
	11	5.51	46	30.09	5.49	7.74	7.74	312.25	312.41		
	12	4.87	46	30.06	4.86	6.85	6.85	311.36	311.33		
	13	5.46	28	29.95	5.47	7.71	7.71	312.22	312.38		
	14	7.20	24	29.89	7.22	10.18	10.18	314.69	315.39		
	15	6.28	17	29.80	6.32	8.91	8.91	313.42	313.84		
	16	7.30	45	29.62	7.39	10.42	10.42	314.93	315.68		
	17	6.28	39	29.66	6.35	8.95	8.95	313.46	313.89		
	18	7.29	43	29.94	7.30	10.29	10.29	314.80	315.52		
	19	8.06	48	29.55	8.18	11.53	11.53	316.04	317.03		
	20	7.36	44	29.55	7.47	10.53	10.53	315.04	315.81		
	21	9.15	47	29.35	9.35	13.18	13.18	317.69	319.04		
	22	9.91	45	29.36	10.12	14.27	14.27	318.78	320.37		
	23	9.16	23	29.56	9.29	13.10	13.10	317.61	318.94		
	24	9.80	40	29.65	9.91	13.97	13.97	318.48	320.00		

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BAFFIN, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Index	Air Index	Barometric Conc. (ppm)	
<u>1961</u>											
Oct.	25	9.10	.16	29.52	9.24	1.41	13.03	2755	304.51	317.54	318.86
26	7.06	47	29.66	7.14	10.07	10.46	314.97	314.58	315.25	315.73	
27	7.37	46	29.78	7.42	11.46	11.46	315.97	316.94	316.46	316.36	
28	8.06	44	29.73	8.13	10.98	10.98	315.49	316.07	317.07	317.14	
29	7.76	44	29.88	7.79	8.20	11.56	316.13	316.13	316.07	317.07	
30	8.24	47	30.14	8.20	8.24	11.62	316.13	316.13	316.07	317.07	
31	8.23	47	29.96	8.13	11.46	11.46	315.97	316.94	316.46	316.36	
<u>Nov.</u>											
1	8.09	45	29.85	8.13	8.44	11.90	316.41	317.48	317.48	318.79	
2	8.41	48	29.90	8.44	9.20	12.97	317.48	316.94	316.94	316.94	
3	9.15	47	29.85	9.20	8.12	11.66	315.97	316.94	316.94	316.94	
4	8.08	38	29.82	8.12	6.61	9.32	313.83	314.34	314.34	314.34	
5	6.62	19	30.02	6.61	5.76	6.53	314.04	314.59	314.59	315.13	
6	6.81	44	30.22	6.76	7.67	9.97	314.48	314.48	314.48	315.13	
7	7.05	41	30.05	7.05	7.05	1.55	16.93	3756	297.26	308.19	308.19
8	7.04	21	29.94	7.05	10.83	16.79	314.05	314.05	314.05	314.05	314.05
8	10.81	11	29.94	10.83	13.16	17.08	310.20	309.91	310.20	310.20	310.20
9	10.89	43	29.64	11.02	11.76	18.23	314.34	314.96	314.34	314.96	314.96
10	11.54	46	29.44	11.76	11.61	18.00	315.49	315.49	315.49	316.36	316.36
11	11.39	43	29.42	11.61	11.74	18.20	315.26	315.26	316.08	316.32	316.32
12	11.50	21	29.36	11.74	11.33	17.56	315.46	315.46	316.82	315.54	315.54
13	11.10	42	29.37	11.40	1.28	14.59	311.83	311.83	311.83	311.83	311.83
14	11.21	20	29.49	11.40	13.16	16.84	314.10	314.10	314.10	314.10	314.10
14	12.96	13	29.49	12.95	1.45	18.27	312.74	313.01	312.74	313.01	313.01
25	14.33	29	30.11	14.27	12.95	18.78	316.53	316.41	316.53	316.41	316.41
27	12.91	35	29.89	12.95	2.62	18.66	317.03	317.03	317.03	317.03	317.03
28	12.72	38	29.89	12.87	12.87	315.92	316.88	316.88	316.88	316.88	316.88

- 77 -

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW. ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index		Nanometric Conc. (ppm)	
<u>1961</u>											
Nov.	.9	13.10	46	29.77	13.19	1.45	19.13	3756	297.26	316.39	317.46
Dec.	1	12.42	25	29.60	12.58	18.24				315.50	316.37
2	12.52	42	29.68	12.65	18.34					315.60	316.49
3	12.61	42	29.75	12.71	18.43					315.69	316.60
4	12.60	44	29.83	12.66	18.36					315.62	316.52
5	13.11	36	30.02	13.10	19.00					316.26	317.30
6	13.17	17	30.22	13.06	18.94					316.20	317.23
7	13.34	42	30.40	13.15	19.07					316.33	317.38
8	13.10	29	30.51	12.88	18.68					315.94	316.91
9	12.71	21	30.05	12.68	18.39					315.65	316.56
10	12.68	19	29.81	12.76	18.50					315.76	316.69
11	12.95	43	29.84	13.01	18.86					316.12	317.13
12	13.29	14	30.20	13.20	19.14					316.40	317.47
13	13.56	23	30.33	13.41	19.44					316.70	317.83
14	13.28	8	30.47	13.07	18.95					316.21	317.24
<u>1962</u>											
Jan.	3	12.72	14	29.75	12.82	1.63	20.90			318.16	319.61
4	13.52	48	29.93	13.55	22.09					319.35	321.06
5	14.38	29	30.22	14.26	23.24					320.50	322.47
7	11.37	24	30.43	11.20	18.26					315.52	316.40
10	0.99	23	29.80	1.00	2.51	10071	319.17			321.68	323.90
11	0.98	41	30.26	0.97	2.43					321.60	323.81
12	1.03	47	30.05	1.03	2.59					321.76	324.00
13	1.00	46	29.80	1.01	2.54					321.71	323.94
14	0.95	47	29.87	0.95	2.38					321.55	323.74

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	Observed Scale diff	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Gain Factor	Computed Index Diff.	Reference Tank No.	Tank Index	Air Index		Barometric Cone Constant
									6	7	
<u>1962</u>											
Jan. 15	0.82	43	30.12	0.62	2.91	2.06	10973	319.17	321.23	323.35	323.35
16	1.00	44	30.41	0.96	2.08	2.18			321.65	323.87	
17	0.96	30	30.49	0.87	2.74	2.74			321.35	323.50	
18	1.11	43	30.33	1.16	2.01	2.01			321.93	324.21	
19	1.17	47	30.19	1.16	2.48	2.48			322.02	324.19	
20	0.81	46	30.26	0.46	1.38	1.38			321.65	323.27	
21	0.63	45	29.81	0.61	0.28	0.28			320.75	322.77	
22	0.15	40	29.91	0.15	0.50	1.68			319.55	321.31	
23	0.59	47	29.96	0.59	0.38	0.38			320.65	322.65	
24	0.45	44	30.31	0.45	0.38	0.38			319.55	321.35	
25	0.29	46	30.66	0.29	0.50	0.50			319.61	321.45	
26	0.29	36	30.61	0.28	0.70	0.70			314.67	321.30	
27	0.21	48	30.56	0.20	1.06	1.06			316.17	322.06	
28	0.03	39	30.52	0.03	0.08	0.08			315.25	320.94	
29	0.31	36	30.46	0.31	0.76	0.76			319.95	321.79	
30	0.59	45	29.88	0.56	1.48	1.48			320.65	322.65	
31	0.68	47	23.61	0.64	1.73	1.73			320.49	322.95	
Feb. 1	0.55	25	29.72	0.55	1.56	1.56			320.55	322.53	
2	0.40	40	30.01	0.40	1.00	1.00			320.17	322.06	
3	0.54	44	30.39	0.53	1.33	1.33			320.50	322.47	
4	0.52	45	30.34	0.51	1.43	1.43			320.60	322.59	
5	0.74	41	29.93	0.74	1.96	1.96			321.04	323.21	
6	0.74	43	29.77	0.73	1.03	1.03			321.40	323.50	
7	0.71	44	29.65	0.71	1.81	1.81			320.98	323.65	
8	0.49	44	28.66	0.50	1.26	1.26			320.43	322.35	
9	0.91	42	29.86	0.91	1.28	1.28			320.45	322.45	
10	0.60	42	29.45	0.60	1.51	1.51			320.58	322.68	
11	0.95	19	30.34	0.94	2.36	2.36			321.55	323.74	

TABLE 7 : INDICES OF AIR WITH CERTAINUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
<u>1962</u>											
Feb.	12	0.82	44	30.22	0.81	2.51	2.03	10071	319.17	321.20	323.32
	13	0.56	46	30.29	0.55	1.38	1.38			320.55	322.53
	14	0.43	42	30.28	0.43	1.06	1.06			320.25	322.16
	15	0.39	43	30.37	0.38	0.95	0.95			320.12	322.00
	16	0.56	34	30.46	0.55	1.38	1.38			320.55	
	16	7.50	10	30.46	7.38	18.52	10073	298.99	317.51		
							February 16 Average			319.86	321.69
	17	7.63	47	30.32	7.55	18.95				317.94	319.35
	18	7.75	48	30.18	7.70	19.33				318.32	319.81
	19	7.68	45	29.93	7.70	19.33				318.32	319.81
20	7.61	44	29.60	7.71	19.35					318.34	319.83
-	21	7.68	47	30.09	7.66	19.23				318.22	319.69
	22	7.74	47	30.48	7.62	19.13				318.12	319.56
	23	7.57	47	30.43	7.46	18.72				317.71	319.07
	24	7.49	46	30.24	7.43	18.65				317.64	318.98
	25	7.54	47	30.07	7.52	18.88				317.87	319.25
	26	7.67	46	30.38	7.57	19.00				317.99	319.41
	27	7.36	47	30.38	7.26	18.22				317.21	318.46
	28	7.44	43	30.27	7.37	18.50				317.49	318.80
Mar.	1	7.41	42	30.07	7.39	18.55				317.54	318.86
	2	7.49	46	29.93	7.50	15.83				317.82	319.20
	3	7.53	47	30.19	7.48	18.77				317.76	319.13
	4	7.46	47	30.18	7.42	18.62				317.61	318.94
	5	7.72	47	29.95	7.73	19.40				318.39	319.89
	6	7.55	47	29.99	7.55	18.95				317.94	319.35
	7	7.59	33	30.11	7.56	18.98				317.97	319.38
	8	7.50	6	30.11	7.47	18.75				317.74	319.10

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Air Index	Manometric Conc. (ppm)	
<u>1962</u>											
Mar.	9	7.34	9	30.38	7.24	2.51	18.17	10073	398.99	317.16	318.40
10	7.83	26	30.89	7.60	19.08					318.07	319.50
11	7.72	47	30.86	7.50	18.83					317.82	319.20
12	7.27	19	30.49	7.15	17.95					316.94	318.13
13	7.20	45	30.22	7.14	17.92					316.91	318.09
14	7.42	47	30.32	7.34	18.42					317.41	318.70
15	7.48	48	30.62	7.32	18.37					317.36	318.64
16	7.50	33	30.64	7.34	18.42					317.41	318.70
17	7.52	12	30.35	7.43	18.65					317.64	318.98
18	7.50	48	30.29	7.43	18.65					317.64	318.98
19	7.59	48	30.52	7.45	18.70					317.69	319.04
20	7.61	47	30.46	7.49	18.80					317.79	319.16
21	7.54	45	30.53	7.40	18.57					317.56	318.88
22	7.65	48	30.40	7.54	18.93					317.92	319.32
23	7.61	46	30.30	7.53	18.90					317.89	319.28
24	7.57	30	30.13	7.53	18.90					317.89	319.28
27	3.43	12	29.67	3.47	8.71	10068	309.02	317.73	319.09		
28	3.27	23	29.69	3.30	8.28					317.30	318.57
29	3.34	40	29.88	3.25	8.41					317.43	318.72
30	3.42	30	30.21	3.40	8.53					317.55	318.87
31	3.38	46	30.17	3.36	8.43					317.45	318.75
Apr.	1	3.45	47	30.39	3.41	8.56				317.58	318.91
2	3.32	45	30.40	3.27	8.21					317.23	318.48
3	3.45	42	30.39	3.41	8.56					317.56	318.91
4	3.16	47	30.55	3.10	7.78					316.80	317.96
5	3.45	45	30.33	3.41	8.56					317.58	318.91
6	3.49	45	29.64	3.53	8.86					317.88	319.27
7	3.52	46	29.72	3.55	8.91					317.93	319.33

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index	Reference Tank No.	Reference Tank Index	Air Index	Mansometric Conc. (ppm)	
<u>1962</u>											
Apr.	8	3.56	43	29.91	3.57	2.51	8.96	10068	309.02	317.98	319.39
	9	3.89	43	29.84	3.91	9.81				318.83	320.43
	10	3.54	48	29.78	3.56	8.94				317.96	319.37
	11	3.39	37	30.16	3.37	9.46				317.48	318.79
	12	3.60	48	30.35	3.56	8.94				317.96	319.37
	13	3.48	48	30.12	3.47	8.71				317.73	319.09
	14	3.51	32	29.90	3.52	8.84				317.86	319.25
	15	3.57	44	30.03	3.57	8.96				317.98	319.39
	16	3.62	45	30.41	3.57	8.96				317.98	319.39
	17	3.56	45	30.42	3.51	8.81				317.83	319.21
	18	3.70	48	30.16	3.68	9.24				318.26	319.74
	19	3.65	33	30.02	3.65	9.16				318.18	319.64
	20	3.53	40	30.08	3.52	8.84				317.86	319.25
	21	3.56	45	30.26	3.53	8.86				317.88	319.27
	22	3.71	46	30.09	3.70	9.29				318.31	319.80
	23	3.64	33	29.91	3.65	9.16				318.16	319.64
	24	3.76	41	29.84	3.78	9.49				318.51	320.04
	25	3.80	43	29.70	3.84	9.64				318.66	320.22
	26	3.72	43	29.83	3.74	9.39				318.41	319.92
	27	3.84	44	29.76	3.87	9.71				318.73	320.31
	28	3.53	4	30.04	3.52	8.84				317.86	319.25
	29	3.91	27	30.24	3.88	9.74				318.76	320.34
	30	6.14	28	30.30	6.08	15.26	6078	503.09	318.35	319.85	
May	1	6.34	37	30.26	6.28	15.76				318.85	320.45
	2	6.12	20	30.16	6.08	15.26				318.35	319.85
	2	6.10	43	30.30	6.04	15.16				318.25	319.72
	4	6.22	46	30.35	6.15	15.44				318.53	320.06

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Reference Tank Index	Air Index	Air Index	Manometric Conc. (ppm)
1962											
May	5	6.46	45	30.26	6.40	2.51	16.06	6078	303.09	319.15	320.82
	6	6.26	47	30.24	6.21	15.59				318.68	320.25
	7	6.38	44	30.10	6.35	15.94				319.03	320.67
	8	6.26	46	30.09	6.24	15.66				318.75	320.33
	9	6.26	44	30.19	6.22	15.61				318.70	320.27
	10	6.33	45	30.23	6.28	15.76				318.85	320.45
	11	6.35	44	30.12	6.32	15.86				318.95	320.56
	12	6.32	45	30.06	6.31	15.84				318.93	320.55
	13	6.31	47	30.01	6.30	15.81				318.90	320.52
	14	6.17	25	29.94	6.18	15.51				318.60	320.15
	15	6.29	45	29.59	6.37	15.99				319.08	320.73
	16	6.26	35	29.59	6.34	15.91				319.00	320.64
	17	6.27	34	29.93	6.28	15.76				318.85	320.45
	18	6.01	11	29.87	6.03	15.14				312.23	319.70
	19	6.19	26	29.82	6.23	15.64				318.73	320.31
	20	6.17	48	29.95	6.18	15.51				318.60	320.15
	21	6.37	42	29.94	6.38	16.01				319.10	320.76
	22	6.18	44	30.00	6.18	15.51				318.60	320.15
	23	6.19	45	30.13	6.16	15.46				318.55	320.09
	24	6.37	46	30.12	6.34	15.91				319.00	320.64
	25	6.29	47	30.01	6.28	15.76				318.85	320.45
	26	6.26	37	29.95	6.27	15.74				318.83	320.43
	27	6.40	47	30.04	6.39	16.34				319.13	320.80
	28	6.38	36	30.16	6.34	15.91				319.00	320.64
	29	6.23	43	30.13	6.20	15.56				318.65	320.21
	30	6.24	46	30.17	6.20	15.56				318.65	320.21
	31	6.57	22	30.06	6.56	16.47				319.56	321.32

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11	Manometric Conc. (ppm)						
												No. or Compar- isons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference No.	Tank Index
<u>1962</u>																		
June	27	7.03	45	29.99	7.03	2.51	17.65	3757	298.98	316.63	317.75							
	28	7.02	48	30.09	7.00		17.57			316.55	317.65							
	29	7.00	48	30.13	6.97		17.49			316.47	317.55							
	30	6.52	45	30.00	6.52		16.37			315.35	316.19							
July	1	5.83	47	29.86	5.85		14.68			314.66	314.13							
	2	6.73	44	29.91	6.75		16.94			315.92	316.88							
	3	6.82	48	30.07	6.80		17.07			316.05	317.04							
	4	6.51	43	30.07	6.49		16.29			315.27	316.09							
	5	6.52	44	30.03	6.51		16.34			315.32	316.15							
	6	5.62	44	29.94	5.63		14.13			313.11	313.46							
	7	6.22	31	29.88	6.24		15.66			314.64	315.32							
	8	5.37	46	29.65	5.43		13.63			312.61	312.85							
	9	5.98	18	29.78	6.02		15.11			314.09								
	9	6.59	28	29.78	6.64		16.67	2427	297.61	314.28								
								July 9 Average			314.21	314.80						
	10	6.55	33	29.75	6.60		16.57			314.18	314.76							
	11	6.38	45	29.77	6.42		16.11			313.72	314.20							
	12	6.21	48	29.92	6.22		15.61			313.22	313.59							
	13	5.93	45	29.91	5.95		14.93			312.54	312.77							
	14	5.44	48	29.93	5.45		13.68			311.29	311.24							
	15	5.82	47	30.03	5.81		14.58			312.19	312.34							
	16	4.81	45	30.10	4.79		12.02			309.63	309.22							
	17	3.86	43	30.11	3.84		9.64			307.25	306.32							
	18	3.97	43	30.08	3.96		9.94			307.55	306.68							
	19	4.44	47	29.94	4.45		11.17			308.78	308.18							
	20	4.26	33	29.88	4.28		10.74			308.35	307.66							
	21	6.25	48	30.09	6.23		15.64			313.25	313.63							
	22	6.07	48	30.14	6.04		15.16			312.77	313.05							

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Air Index	Manometric Conc. (ppm)	
1962											
July	23	5.81	42	29.99	5.81	2.51	14.58	2427	297.61	312.19	
	24	5.39	24	29.78	5.43	13.63	311.24			311.18	
	25	5.76	31	30.21	5.72	14.36	311.97			312.07	
	26	5.05	31	30.29	5.00	12.55	310.16			309.86	
	27	4.92	48	29.93	4.93	12.37	309.98			305.65	
	28	3.90	48	29.99	3.90	9.79	307.40			306.50	
	29	4.93	35	29.97	4.93	12.37	309.98			309.65	
	30	4.90	47	29.87	4.92	12.35	309.96			309.62	
	31	5.00	48	29.91	5.02	12.60	310.21			309.93	
Aug.											
	1	4.96	47	29.82	4.99	12.52	310.13			309.83	
	2	4.18	47	29.72	4.22	10.59	308.20			307.48	
	3	3.76	42	29.56	3.81	9.56	307.17			306.22	
	4	3.69	47	29.65	3.73	9.36	306.97			305.98	
	5	4.18	48	29.81	4.21	10.57	308.18			307.45	
	6	3.85	47	29.70	3.89	9.76	307.37			306.46	
	7	3.57	47	29.51	3.63	9.11	306.72			305.67	
	8	3.90	48	29.67	3.94	9.89	307.50			306.62	
	9	3.68	47	29.78	3.71	9.31	306.92			305.92	
	11	3.05	22	29.92	3.06	7.68	305.29			303.93	
	12	4.50	47	29.84	4.52	11.35	308.96			308.40	
	13	3.76	37	30.01	3.76	9.44	307.05			306.08	
	14	2.55	34	29.97	2.55	6.40	304.01			302.37	
	15	- 0.36	19	29.92	- 0.36	- 0.90	2426	307.55		305.59	
	16	- 0.77	43	29.82	- 0.77	- 1.93				305.62	
	17	- 0.29	27	29.81	- 0.29	- 0.73				306.82	
	17	- 1.11	5	29.81	- 1.12	- 2.81	3756	310.10		307.29	
	18	- 0.76	45	29.77	- 0.77	- 1.93	August 17 Average	306.91		305.90	
										308.17	
										307.44	

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference No.	Tank Index	Air Index	Manometric Conc. (ppm)	
1962											
Aug.	19	- 0.60	46	29.75	- 0.60	2.51	- 1.51	310.10	308.59	307.95	
	20	- 0.41	48	29.86	- 0.41	- 1.03	- 1.03		309.07	308.54	
	21	- 0.55	33	29.96	- 0.55	- 1.38	- 1.38		308.72	308.11	
	22	- 0.59	48	29.91	- 0.59	- 1.48	- 1.48		308.62	307.99	
	23	- 0.40	48	29.78	- 0.40	- 1.00	- 1.00		309.10	308.57	
	24	- 0.50	47	29.80	- 0.50	- 1.26	- 1.26		308.84	308.26	
	25	- 0.77	47	29.67	- 0.78	- 1.96	- 1.96		308.14	307.40	
	27	- 1.11	45	29.73	- 1.12	- 2.81	- 2.81		307.29	306.37	
	28	- 0.94	48	29.80	- 0.95	- 2.38	- 2.38		307.72	306.89	
	29	- 0.69	43	29.54	- 0.70	- 1.76	- 1.76		308.34	307.65	
	30	- 1.03	15	29.56	- 1.04	- 2.61	- 2.61		307.49	306.61	
	31	- 0.93	44	30.06	- 0.98	- 2.46	- 2.46		307.64	306.79	
Sept.											
	1	- 0.78	48	30.02	- 0.78	- 1.96	- 1.96		308.14	307.40	
	2	- 0.94	48	29.58	- 0.95	- 2.38	- 2.38		307.72	306.89	
	3	- 0.95	48	29.66	- 0.96	- 2.41	- 2.41		307.69	306.85	
	4	- 0.40	33	29.85	- 0.40	- 1.00	- 1.00		309.10	308.57	
	6	- 0.66	21	30.14	- 0.66	- 1.66	- 1.66		307.44	306.55	
	7	- 0.57	7	30.15	- 0.57	- 1.43	- 1.43		308.67	308.05	
	8	- 0.41	47	29.89	- 0.41	- 1.03	- 1.03		309.07	308.54	
	9	0.88	47	29.66	0.89	2.23	2.23		312.33	312.51	
	10	0.44	22	29.41	0.45	1.13	1.13		311.23	311.17	
	11	- 0.48	48	29.45	- 0.49	- 1.23	- 1.23		308.87	308.29	
	12	- 0.16	48	29.54	- 0.16	- 0.40	- 0.40		309.70	309.30	
	13	- 0.11	48	29.68	- 0.11	- 0.28	- 0.28		309.62	309.45	
	14	0.17	47	29.80	0.17	0.43	0.43		310.53	310.32	
	15	0.18	40	29.80	0.18	0.45	0.45		310.55	310.34	
	16	0.36	44	29.82	0.36	0.90	0.90		311.00	310.89	
	17	- 0.44	47	29.80	- 0.44	- 1.10	- 1.10		309.00	309.45	

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11	Manometric
												Conc. (ppm)
<u>1962</u>												
Sept.	18	0.73	43	30.02	0.73	2.51	1.83	3756	310.10	311.93	312.02	
	19	-0.24	43	29.93	-0.24	-0.60	-0.60			309.50	309.06	
	20	-0.31	25	29.58	-0.31	-0.78	-0.78			309.32	308.84	
	21	-0.40	18	29.62	-0.40	-1.00	-1.00			309.10	308.57	
	23	-0.14	48	29.88	-0.14	-0.35	-0.35			309.75	309.37	
	24	0.05	36	29.79	0.05	0.13	0.13			310.23	309.95	
	25	0.03	29	29.70	0.03	0.08	0.08			310.18		
	25	1.19	19	29.70	1.20	3.01	2426	307.55	310.56			
	September 25 Average											
										310.33	310.07	
										310.46	310.23	
										310.66	310.47	
										310.89	310.75	
										310.6	310.45	
										310.59	310.39	
Oct.	1	1.57	37	29.80	1.58	3.07	3.07			311.52		
	2	1.66	48	29.77	1.67	4.19	4.19			311.74		
	3	1.58	38	29.76	1.59	3.99	3.99			311.54		
	4	1.64	34	29.84	1.65	4.14	4.14			311.69		
	5	2.27	21	29.86	2.28	5.72	5.72			313.27		
	5	0.23	11	29.86	0.23	0.58	0.58			311.57		
	October 5 Average											
										312.69	312.95	
										311.27	311.22	
										311.04	310.94	
										310.99	310.88	
										310.14	309.84	
										310.71	310.54	
										311.39	311.36	
										311.37	311.34	

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (Inches)	5 Adjusted Scale Difference	6 Recorder Scale Factor	7 Computed Index Diff.	8 Reference Tank No.	9 Index	10 Air Index	11 Manometric Conc. (ppm)
<u>1962</u>										
Oct. 13	0.24	48	30.06	0.24	2.51	0.60	2400	310.99	311.59	311.61
14	0.16	44	29.64	0.16	0.40	0.40			311.39	311.36
15	0.32	47	29.59	0.32	0.80	0.80			311.79	311.85
16	0.21	21	29.70	0.21	0.53	0.53			311.52	311.52
18	4.12	19	29.64	4.17	10.47	10071	301.56	312.03		312.14
19	4.25	40	29.64	4.30	10.79			312.35		312.53
20	4.55	44	29.74	4.59	11.52			313.08		313.42
21	4.88	48	29.84	4.90	12.30			313.86		314.37
22	4.74	24	30.07	4.73	11.87			313.43		313.85
23	4.92	48	30.14	4.90	12.30			313.86		314.37
24	4.86	36	29.78	4.89	12.27			313.83		314.34
25	4.96	17	29.19	5.09	12.78			314.34		314.96
26	5.09	48	29.26	5.22	13.10			314.66		315.35
27	5.86	48	29.41	5.98	15.01			316.57		317.68
28	4.98	48	29.70	5.03	21.63			314.19		314.78
29	5.97	48	30.16	5.93	14.88			316.44		317.52
30	6.14	47	30.37	6.06	15.21			316.77		317.92
31	5.74	48	30.27	5.69	14.28			315.84		316.79
Nov.										
1	5.71	32	30.19	5.67	14.23			315.79		316.73
2	5.68	48	29.91	5.70	14.31			315.87		316.82
3	5.72	48	29.50	5.81	2.48			315.97		316.94
4	5.73	48	29.50	5.82	14.43			315.99		316.97
5	5.88	48	29.65	5.64	13.99			315.55		316.43
6	5.61	47	29.72	5.66	14.04			315.60		316.49
7	5.43	48	29.68	5.48	13.59			315.15		315.95
8	5.18	34	29.64	5.24	13.00			314.56		315.23
9	5.08	28	29.67	5.14	12.75			314.31		314.92
10	5.47	24	29.91	5.49	13.62			315.18		315.98

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Tank Index	Air Index	Manometric Conc. (ppm)	
1962											
Nov.	11	5.63	48	30.24	5.58	2.48	13.84	10071	301.56	315.40	316.25
	12	5.58	39	30.27	5.53	13.71				315.27	316.09
	13	5.52	38	30.10	5.50	13.64				315.20	316.01
	14	5.98	47	30.10	5.96	14.78				316.34	317.40
	15	6.26	48	30.22	6.21	15.40				316.96	318.15
	16	5.94	44	30.11	5.92	14.68				316.24	317.27
	17	5.64	25	29.77	5.68	14.09				315.65	316.56
	18	5.59	48	29.26	5.73	14.21				315.77	316.70
	19	5.39	45	29.26	5.52	13.69				315.25	316.07
20	5.36	48	29.43	5.46	13.54					315.10	315.88
	21	5.55	30	29.80	5.58	13.84				315.40	316.25
	22	5.63	20	30.06	5.62	13.94				315.50	316.37
	23	5.56	39	29.83	5.59	13.86				315.42	316.27
	24	5.83	30	29.41	5.95	14.76				316.32	317.37
	25	6.05	48	29.35	6.18	15.33				316.89	318.07
	26	6.55	46	29.57	6.64	16.47				318.03	319.46
	27	6.58	48	29.75	6.63	16.44				318.00	319.42
	28	6.32	41	29.86	6.35	15.75				317.31	318.58
	29	6.17	48	29.98	6.17	15.30				316.86	318.03
	30	6.10	48	30.01	6.09	15.10				316.66	317.79
Dec.	1	6.07	48	29.89	6.09	15.10				316.66	317.79
	2	5.79	48	29.88	5.81	14.41				315.97	316.94
	3	6.23	43	29.98	6.23	15.45				317.01	318.21
	4	6.78	46	29.96	6.79	16.84				318.40	319.91
	5	6.93	44	29.96	6.94	17.21				318.77	320.36
	6	1.32	14	30.21	1.31	2.43	3.18	10072	314.85	318.03	319.46
	7	1.70	42	30.50	1.67	4.06				318.91	320.53
	8	1.33	45	30.46	1.31	3.18				318.03	319.46

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Manometric Conc. (ppm)
1962										
Dec. 9	1.13	47	30.30	1.13	2.43	2.72	10072	314.85	317.57	318.89
10	1.10	48	30.16	1.09	2.65	2.50			317.50	318.81
11	1.03	48	30.00	1.03					317.35	318.63
12	0.88	48	29.89	0.88		2.14			316.99	318.19
13	0.93	48	29.73	0.94		2.28			317.13	318.36
14	0.83	44	29.96	0.83		2.02			316.87	318.04
15	0.79	45	29.98	0.79		1.92			316.77	317.92
16	0.77	48	29.92	0.77		1.87			316.72	317.86
17	0.77	42	29.76	0.78		1.90			316.75	317.90
18	0.70	38	29.75	0.71		1.73			316.58	317.69
19	0.85	24	30.03	0.85		2.07			316.92	318.10
20	0.81	46	30.45	0.80		1.94			316.79	317.94
21	0.90	48	30.67	0.88		2.14			316.99	318.19
22	0.70	48	30.27	0.69		1.68			316.55	317.63
23	0.72	47	29.86	0.72		1.75			316.60	317.71
24	0.98	46	30.12	0.98		2.38			317.23	318.48
25	0.99	43	30.06	0.99		2.41			317.26	318.52
26	0.79	46	30.59	0.77		1.87			316.72	317.86
27	0.82	46	30.79	0.80		1.94			316.79	317..4
28	1.09	48	30.79	1.06		2.58			317.43	318.72
29	1.01	45	30.36	1.00		2.43			317.28	318.54
30	0.79	48	30.16	0.79		1.92			316.77	317.92
31	0.91	48	30.11	0.91		2.21			317.06	318.27
1963										
Jan. 1	1.03	46	30.02	1.03		2.50			317.35	318.63
3	0.87	24	30.45	0.86		2.09			316.94	318.13
4	1.07	46	30.32	1.06		2.58			317.43	318.72
5	1.04	23	30.10	1.04		2.53			317.38	318.66
7	1.55	15	30.45	1.53		3.72			318.57	320.11

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARRON, ALASKA; CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Manometric Conc. (ppm)		
<u>1963</u>											
Jan.	8	1.42	48	30.49	1.40	2.43	3.40	10072	314.85	318.25	319.72
9	1.16	42	30.36	1.15	2.79	2.79	317.64	318.98			
10	1.10	48	30.26	1.09	2.65	2.65	317.50	318.81			
11	1.40	48	30.60	1.37	3.33	3.33	318.18	319.64			
12	1.38	32	30.43	1.36	3.30	3.30	318.15	319.60			
13	1.32	23	30.36	1.30	3.16	3.16	318.01				
13	1.17	9	30.36	1.16	2.82	4278	314.27	317.09			
							January 13 Average	317.75	319.11		
14	1.34	47	30.34	1.32	3.21	3.21					
15	1.40	48	30.28	1.39	3.38	3.38					
16	1.59	48	30.38	1.67	4.66	4.66					
17	1.26	46	30.10	1.25	3.04	3.04					
18	1.39	48	30.00	1.39	3.38	3.38					
19	1.48	48	30.09	1.48	3.60	3.60					
20	1.58	48	30.55	1.55	3.77	3.77					
21	1.87	42	30.68	1.83	4.45	4.45					
22	1.35	47	30.26	1.34	3.26	3.26					
25	1.27	29	30.18	1.26	3.06	3.06					
26	1.36	8	30.51	1.34	3.26	3.26					
27	1.08	24	36.28	1.07	2.60	2.60					
28	1.01	48	30.31	1.00	2.43	2.43					
29	0.98	48	30.17	0.97	2.36	2.36					
30	2.13	47	30.40	2.10	5.10	5.10					
31	1.90	48	30.23	1.88	4.57	4.57					
Feb.	1	2.07	39	30.59	2.03	4.93	4.93	319.20	320.88		
2	1.93	47	30.26	1.91	4.64	4.64	318.91	320.53			
3	1.87	48	30.07	1.86	4.52	4.52	318.79	320.38			
4	2.23	48	29.94	2.23	5.42	5.42	319.69	321.48			
5	2.54	48	29.79	2.23	6.22	6.22	320.49	320.45			

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computer Index Diff.	Reference Tank No.	Air Index		Manometric Conc. (ppm)
<u>1963</u>										
Feb. 6	2.47	48	29.95	2.47	2.43	6.00	4278	314.27	320.27	322.18
7	2.43	47	30.08	2.42	5.88	5.49			320.15	322.04
8	2.27	48	30.14	2.26		4.54			319.76	321.56
9	1.89	48	30.30	1.87		4.54			318.81	320.41
10	2.21	48	30.61	2.17		5.27			319.54	321.30
11	2.09	48	30.67	2.04		4.96			319.23	320.92
12	1.79	46	30.55	1.76		4.22			318.55	320.09
13	1.73	45	30.71	1.69		4.11			318.38	319.88
14	1.65	46	30.76	1.61		3.91			318.18	319.64
15	1.57	47	30.59	1.54		3.74			318.01	319.43
16	1.90	48	30.14	1.89		4.59			318.86	320.47
17	1.69	48	29.87	1.70		4.13			318.40	319.91
18	1.45	47	29.87	1.46		3.55			317.82	319.20
19	1.46	48	29.94	1.46		3.55			317.82	319.20
20	1.70	45	29.91	1.71		4.16			318.43	319.94
21	1.97	18	29.99	1.97		4.79			319.06	
21	2.27	29	29.99	2.27		5.52	4286	314.48	320.00	
February 21 Average										
22	1.92	47	30.09	1.91		4.64			319.12	320.78
23	1.73	48	30.20	1.72		4.18			318.66	320.22
24	1.74	46	30.19	1.73		4.20			318.58	320.25
25	1.61	48	29.88	1.62		3.94			318.42	319.93
26	1.44	46	29.76	1.45		3.52			318.00	319.42
27	1.50	48	29.79	1.51		3.67			318.15	319.60
28	1.54	46	29.70	1.56		3.79			318.27	319.75
Mar. 1										
2	1.87	48	30.11	1.86		4.52			319.00	320.64
3	1.86	46	30.01	1.86		4.52			319.00	320.64
4	2.06	48	29.99	2.06		5.01			319.49	321.23

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
No. of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference No.	Tank Index	Air Index	Manometric Conc. (ppm)	
1963											
Mar.	2.1	47	30.06	2.13	2.43	2.18	6236	314.48	319.66	321.44	
	2.09	47	30.06	2.09	5.08	5.08			319.56	321.32	
7	1.98	47	29.99	1.98	4.81	4.81			319.29	320.99	
8	1.92	48	29.79	1.93	4.69	4.69			319.17	320.84	
9	1.97	48	29.98	1.97	4.79	4.79			319.27	320.97	
10	1.97	48	30.32	1.95	4.74	4.74			319.22	320.91	
11	1.96	48	30.59	1.92	4.67	4.67			319.15	320.82	
12	1.93	48	30.34	1.91	4.64	4.64			319.12	320.78	
13	2.54	47	30.35	2.51	6.10	6.10			320.58	322.56	
14	2.54	48	30.04	2.53	6.15	6.15			320.63	322.62	
15	2.44	48	30.07	2.43	5.90	5.90			320.38	322.32	
16	2.61	31	29.81	2.63	6.39	6.39			320.87	322.92	
17	2.29	48	29.93	2.29	5.56	5.56			320.04	321.90	
18	2.50	29	29.95	2.50	6.08	6.08			320.56	322.54	
19	2.25	29	30.12	2.24	5.44	5.44			319.92	321.76	
20	2.35	36	30.09	2.34	5.69	5.69			320.17	322.06	
21	1.84	6	29.65	1.86	4.52	4.52			319.00	320.64	
22	2.07	48	29.85	2.08	5.05	5.05			319.53	321.28	
23	2.07	47	29.75	2.09	5.08	5.08			319.56	321.32	
24	2.02	45	30.09	2.01	4.88	4.88			319.36	321.08	
25	1.83	22	29.44	1.86	4.52	4.52			319.00	320.64	
26	1.76	39	29.81	1.77	4.30	4.30			318.78	320.37	
28	1.85	47	30.49	1.82	4.42	4.42			318.90	320.52	
29	1.98	47	30.42	1.95	4.74	4.74			319.22	320.91	
30	1.77	47	30.00	1.77	4.30	4.30			318.78	320.37	
31	1.89	47	30.05	1.89	4.59	4.59			319.07	320.72	
Apr.	1	1.94	16	30.38	1.91	4.64	319.12	320.78			
2	1.21	45	30.07	1.21	2.94	2.94	7362	315.56	318.50	320.03	
3	1.26	26	29.89	1.26	3.06	3.06			318.62	320.17	

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference No.	Tank Index	Air Index	Manometric Conc. (ppm)	
<u>1963</u>											
Apr.	19	1.31	13	30.35	1.29	2.43	3.13	7362	315.56	318.69	320.26
	20	1.40	32	30.36	1.38	3.35	3.35			318.91	320.53
	21	1.43	47	30.03	1.43	3.47	3.33			319.03	320.67
	22	1.36	48	29.73	1.37	3.33				318.89	320.50
	23	1.35	46	29.92	1.35	3.28				318.84	320.44
	24	1.38	47	30.12	1.37	3.33				318.89	320.50
	25	1.38	45	30.11	1.37	3.33				318.89	320.50
	26	1.20	33	30.17	1.19	2.89				318.45	319.97
-	27	1.38	48	30.03	1.38	3.35				318.91	320.53
95	28	1.52	46	29.89	1.52	3.69				319.25	320.94
-	29	1.59	47	29.91	1.59	3.86				319.42	321.15
	30	1.55	48	29.92	1.55	3.77				319.33	321.04
	May	1	1.52	46	29.99	1.52	3.69			319.25	320.94
	2	1.51	42	30.21	1.50	3.65				319.21	320.89
	3	1.68	46	30.42	1.66	4.03				319.59	321.36
	4	1.57	46	30.29	1.55	3.77				319.33	321.04
	5	1.68	47	30.06	1.68	4.08				319.64	321.42
	6	1.55	34	29.62	1.57	3.82				319.38	321.10
	7	1.57	47	29.42	1.60	3.89				319.45	321.19
	8	1.56	46	29.69	1.58	3.84				319.40	321.12
	9	1.63	47	29.85	1.64	3.99				319.55	321.31
	10	1.68	45	29.85	1.69	4.11				319.67	321.45
	11	1.69	47	29.79	1.70	4.13				319.69	321.48
	12	1.67	46	25.76	1.68	4.08				319.64	321.42
	13	1.72	47	29.73	1.74	4.23				319.79	321.60
	14	1.54	48	29.72	1.55	3.77				319.33	321.04
	15	1.59	45	29.84	1.60	3.89				319.45	321.19
	16	1.82	46	29.82	1.83	4.45				320.01	321.87
	17	1.60	48	30.10	1.59	3.86				319.42	321.15

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	No. of Month	Observed Scale Diff.	No. of Carbon Dioxide	Barometric Pressure (inches)	Adjusted Scale Difference	Exaggerator Scale Factor	Computed Reference Index		Air Index	Nonmetric Conc. (ppm)
							No.	Index		
1	1	1.71	47	30.19	1.70	2.43	6.13	7362	315.51	319.69
2	2	-1.57	46	30.89	-0.81	-1.97	4.284	321.91	319.94	321.42
3	3	-1.54	45	30.89	-0.91	-2.21			319.70	321.49
4	4	-0.91	47	30.26	-1.22	-2.96			318.95	320.58
5	5	-1.23	46	30.44	-1.12	-2.89			319.02	320.65
6	6	-1.21	48	30.44	-1.20	-2.92			318.99	320.63
7	7	-1.22	47	30.22	-1.11	-2.70			319.21	320.61
8	8	-1.12	47	30.21	-1.06	-2.58			319.33	321.74
9	9	-1.07	47	30.38	-1.13	-2.75			319.16	320.83
10	10	-1.14	48	30.38	-1.13	-2.75			319.16	320.83
11	11	-1.11	46	30.30	-1.10	-2.67			319.24	320.93
12	12	-1.12	47	30.25	-1.12	-2.72			319.19	320.87
13	13	-1.13	48	30.25	-1.12	-2.67			319.24	320.93
14	14	-1.10	46	30.10	-1.10	-2.67			318.44	319.45
15	15	-1.43	47	30.00	-1.43	-2.47			317.85	319.24
16	16	-1.66	46	29.78	-1.67	-4.06				
17	17	-1.67	47	29.71	-1.40	-3.62			318.29	319.77
18	18	-2.04	46	29.76	-1.58	-3.84			318.07	319.50
19	19	-1.81	47	29.73	-1.61	-3.91			318.00	319.42
20	20	-0.91	41	29.65	-1.63	-3.96			317.95	319.36
21	21	-1.23	47	29.74	-1.58	-3.84			318.07	319.50
22	22	-1.21	48	29.87	-1.56	-3.79			318.12	319.56
23	23	-1.22	47	29.85	-1.69	-4.11			317.80	319.17
24	24	-1.12	47	30.22	-1.11	-2.70			317.83	319.21
25	25	-1.07	47	30.21	-1.06	-2.58			317.83	319.21
26	26	-1.14	48	30.38	-1.13	-2.75			319.16	320.83
27	27	-1.11	46	30.30	-1.10	-2.67			319.24	320.93
28	28	-1.13	48	30.25	-1.12	-2.72			319.19	320.87
29	29	-1.10	46	30.10	-1.10	-2.67			319.24	320.93
30	30	-1.43	47	30.00	-1.43	-2.47			318.44	319.45
31	31	-1.66	46	29.78	-1.67	-4.06			317.85	319.24
June	1	-1.48	47	29.71	-1.40	-3.62			318.29	319.77
2	2	-1.57	46	29.76	-1.58	-3.84			318.07	319.50
3	3	-1.60	47	29.73	-1.61	-3.91			318.00	319.42
4	4	-1.61	41	29.65	-1.63	-3.96			317.95	319.36
5	5	-1.57	47	29.74	-1.58	-3.84			318.07	319.50
6	6	-1.55	47	29.87	-1.56	-3.79			318.12	319.56
7	7	-1.68	17	29.85	-1.69	-4.11			317.80	319.17
8	8	-1.68	16	29.86	-1.68	-4.08			317.83	319.21
9	9	-1.67	46	29.88	-1.68	-4.08			317.83	319.21
10	10	-1.74	47	30.00	-1.74	-4.23			317.68	319.03
11	11	-1.84	45	30.07	-1.83	-4.45			317.46	318.76
12	12	-1.67	47	30.06	-1.80	-4.37			317.54	318.86
13	13	-1.67	46	30.08	-1.94	-4.71			317.20	318.44
14	14	-1.74	47	30.05	-2.04	-4.96			316.95	318.14
15	15	-1.84	19	30.05	-1.81	-4.40			317.51	318.82

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
	Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Air Index	Manometric Conc. (ppm)
<u>1963</u>											
	June 20	-1.70	47	29.97	-1.70	2.43	-4.13	4284	321.91	317.78	319.15
	21	-1.69	47	29.82	-1.70	-4.13	-4.13			317.78	319.15
	22	-1.77	46	.43	-1.80	-4.37	-4.37			317.54	318.86
	23	-2.01	45	2	-2.05	-4.98	-4.98			316.93	318.11
	24	-2.10	45	29.53	-2.13	-5.18	-5.18			316.73	317.87
	25	-1.99	47	29.76	-2.01	-4.88	-4.88			317.03	318.24
	26	-1.79	48	29.81	-1.80	-4.37	-4.37			317.54	318.86
	27	-1.87	46	29.60	-1.89	-4.59	-4.59			317.32	318.59
	28	-2.03	46	29.76	-2.05	-4.98	-4.98			316.93	318.11
	29	-2.01	23	29.93	-2.01	-4.88	-4.88			317.03	318.24
	30	-2.33	47	29.77	-2.35	-5.71	-5.71			316.20	317.23
	July 1	1.52	46	29.68	1.54	3.74	3.74	3757	312.30	316.04	317.03
	2	1.72	48	29.75	1.73	4.20	4.20			316.50	317.59
	3	1.56	45	29.66	1.58	3.84	3.84			316.14	317.15
	4	1.57	47	29.52	1.60	3.89	3.89			316.19	317.21
	5	1.58	38	29.89	1.58	3.84	3.84			316.14	317.15
	6	1.35	30	29.98	1.35	3.28	3.28	4272	312.28	315.56	316.45
	7	1.01	47	29.95	1.01	2.45	2.45			314.73	315.43
	8	1.24	46	30.05	1.24	3.01	3.01			315.29	316.12
	9	1.17	47	30.08	1.17	2.84	2.84			315.12	315.91
	10	1.36	46	30.01	1.36	3.30	3.30			315.58	316.47
	11	1.08	45	29.90	1.08	2.62	2.62			314.90	315.64
	12	1.25	46	30.01	1.25	3.04	3.04			315.32	316.14
	13	1.42	46	30.15	1.41	3.43	3.43			315.71	316.63
	14	1.50	48	30.05	1.50	3.65	3.65			315.93	316.90
	15	1.43	48	29.78	1.44	3.50	3.50			315.78	316.71
	16	1.05	46	29.57	1.06	2.58	2.58			314.86	315.59
	17	0.59	47	29.53	0.60	1.46	1.46			313.74	314.23

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
HARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Air Index	Manometric Conc. (ppm)	
<u>1962</u>											
July 18	0.40	43	29.76	0.40	2.43	0.97	4272	312.28	313.25	313.63	
19	0.57	47	29.96	0.57	1.19	1.19			313.67	314.14	
20	0.03	46	29.96	0.03	0.07	0.07			312.35	312.53	
21	0.03	46	29.79	0.03	0.07	0.07			312.35	312.53	
22	0.03	47	29.65	0.03	0.07	0.07			312.35	312.53	
23	-0.69	41	29.45	-0.70	-1.70	-1.70			310.58	310.38	
24	-1.56	44	29.53	-1.58	-3.84	-3.84	18204	314.49	310.65	310.46	
25	-2.36	48	29.69	-2.38	-5.78	-5.78			308.71	308.15	
26	-2.18	46	29.65	-2.20	-5.35	-5.35			309.14	308.62	
27	-1.51	48	29.82	-1.52	-3.69	-3.69			310.80	310.64	
28	-2.25	46	29.75	-2.27	-5.52	-5.52			308.97	308.41	
29	-1.02	34	30.01	-1.02	-2.48	-2.48			312.01	312.12	
30	-0.88	41	29.82	-0.89	-2.16	-2.16			312.33	312.51	
31	-1.27	20	29.70	-1.28	-3.11	-3.11			311.38	311.35	
<u>1963</u>											
Aug. 1	-1.26	46	29.59	-1.28	-3.11	-3.11			311.38	311.35	
2	-1.37	48	29.62	-1.39	-3.38	-3.38			311.11	311.02	
3	-1.42	42	29.67	-1.44	-3.50	-3.50			310.99	310.88	
4	-1.10	48	29.83	-1.11	-2.70	-2.70			311.79	311.85	
5	-1.33	46	29.91	-1.33	-3.23	-3.23			311.26	311.21	
6	-1.79	47	29.69	-1.81	-4.40	-4.40			310.09	309.78	
7	-2.06	46	29.52	-2.09	-5.08	-5.08			309.41	308.95	
8	-2.24	48	29.49	-2.28	-5.54	-5.54			308.95	308.39	
9	-1.99	46	29.58	-2.02	-4.91	-4.91			309.58	309.16	
10	-1.84	36	30.07	-1.83	-4.45	-4.45			310.04	309.72	
11	-2.06	34	30.11	-2.05	-4.98	-4.98			309.51	309.07	
12	-2.34	28	30.08	-2.23	-5.66	-5.66			308.83	308.24	
13	-2.33	48	30.03	-2.33	-5.66	-5.66			308.83	308.24	
14	-2.41	46	29.82	-2.42	-5.88	-5.88			308.61	307.98	

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference No.	Tank Index	Air Index		Manometric Conc. (ppm)
<u>1963</u>											
Aug.	15	-2.05	45	29.42	-2.09	2.43	-5.08	18204	314.49	309.41	308.95
	16	-2.05	47	29.71	-2.07		-5.03		309.46	309.01	
	17	-2.29	48	29.59	-2.32		-5.64		308.85	308.27	
	18	-1.89	46	29.58	-1.92		-4.67		309.82	309.45	
	19	-2.06	48	30.01	-2.05		-5.01		309.48	309.04	
	20	-2.22	47	30.00	-2.22		-5.39		309.10	308.57	
	21	-2.71	33	29.97	-2.71		-6.59		307.90	307.11	
	22	-2.91	48	29.62	-2.94		-7.14		307.35	306.44	
	23	-2.56	40	29.57	-2.60		-6.32		308.17	307.44	
	24	-1.22	47	29.80	-1.23		-2.99		311.50	311.50	
	25	-2.07	45	29.65	-2.09		-5.08		309.41	308.95	
	26	-2.16	48	29.70	-2.18		-5.30		309.19	308.68	
	27	-1.16	46	29.93	-1.16		-2.82		311.67	311.70	
	28	-1.35	48	30.03	-1.35		-3.28		311.21	311.14	
	29	-1.12	46	30.08	-1.12		-2.72		311.77	311.83	
	30	-1.70	48	29.97	-1.70		-4.13		310.36	310.11	
	31	-1.78	48	30.05	-1.78		-4.33		310.16	309.86	
Sept.	1	-1.70	45	30.13	-1.69		-4.11		310.38	310.13	
	2	-1.72	37	30.09	-1.71		-4.16		310.33	310.07	
	6	-1.52	20	30.11	-1.51		-3.67	312.30	308.63	308.00	
	7	-1.47	46	30.15	-1.46		-3.55		308.75	308.15	
	8	-1.38	48	30.20	-1.37		-3.33		308.97	308.41	
	9	-1.36	48	30.22	-1.35		-3.28		309.02	308.48	
	10	-1.34	34	30.22	-1.33		-3.23		309.07	308.54	
	11	-1.07	8	30.20	-1.06		-2.58		309.72	309.33	
	12	-1.42	32	30.17	-1.41		-3.43		308.87	308.29	
	13	-1.21	48	30.09	-1.21		-2.94		309.36	308.89	
	14	-0.17	47	30.03	-0.17		-0.41		311.89	311.97	

TABLE 7 : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Difference	Recorder Scale Factor	Computed Index Diff.	Reference Tank		Air Index	Manometric Conc. (ppm)
								No.	Index		
1963											
Sept. 15	-0.82	48	29.94	-0.82	2.43	-1.99	3757	312.30	310.31	310.05	
16	-0.36	46	29.66	-0.36	-0.87	-0.87			311.43	311.41	
17	-0.74	32	29.75	-0.75	-1.82	-1.82			310.48	310.25	
18	-0.72	48	30.01	-0.72	-1.75	-1.75			310.55	310.34	
19	-0.71	46	30.07	-0.71	-1.73	-1.73			310.57	310.36	
20	-0.31	48	29.75	-0.31	-0.75	-0.75			311.55	311.56	
21	-0.89	47	29.79	-0.90	-2.19	-2.19			310.11	309.80	
22	-1.09	45	29.95	-1.09	-2.65	-2.65			309.65	309.24	
23	-1.07	9	29.95	-1.07	-2.60	-2.60	4272	312.28	309.48	309.28	
24	0.17	48	29.80	0.17	0.41	0.41			312.44	312.95	
25	1.82	48	29.70	1.84	4.47	4.47			316.15	317.90	
26	0.22	20	29.66	0.22	0.53	0.53			312.81	313.09	
27	-0.06	5	29.46	-0.06	-0.15	-0.15			312.13	312.27	
28	0.94	6	29.34	0.96	2.33	2.33			314.61	315.29	
29	0.40	48	29.40	0.41	1.00	1.00			313.28	313.67	
30	-0.11	48	29.65	-0.11	-0.27	-0.27			312.01	312.12	
Oct. 1	-0.20	45	29.85	-0.20	-0.49	-0.49			311.79	311.85	
2	-0.27	47	29.91	-0.27	-0.66	-0.66			311.62	311.64	

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (Inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Tank Index	Air Index	Manometric Conc. (ppm)	
<u>1964</u>											
Dec. 31	2.99	42	1032.0	2.94	2.28	6.70	18206	310.70	317.40	318.69	
<u>1965</u>											
Jan. 1	3.32	17	1041.5	3.24		7.39			318.09	319.53	
3	3.74	39	1037.7	3.66		8.34			319.04	320.69	
4	2.65	40	1041.2	3.56		8.12			318.82	320.42	
5	3.35	46	1027.2	3.31		7.55			318.25	319.72	
6	3.29	44	1025.4	3.36		7.66			318.36	319.86	
7	3.52	42	1042.0	3.43		7.82			318.52	320.05	
8	3.61	25	1041.6	3.52		8.03			318.73	320.31	
9	2.29	43	1031.6	2.25		5.13	11097	313.82	318.95	320.58	
10	1.91	43	1020.5	1.90		4.33			318.15	319.60	
11	1.95	35	1010.2	1.96		4.47			318.29	319.77	
12	2.07	28	1020.0	2.06		4.70			318.52	320.05	
13	3.16	34	1017.0	3.15		7.18			321.00	323.07	
14	3.40	31	1017.0	3.39		7.73			321.55	323.74	
15	3.63	38	1017.0	3.62		8.25			322.07	324.38	
16	3.15	37	1017.0	3.14		7.16			320.98	323.05	
17	3.30	41	1017.0	3.29		7.50			321.32	323.46	
18	3.32	7	1017.0	3.31		7.55			321.37	323.53	
19	2.51	19	1011.1	2.52		5.75			319.57	321.33	
20	2.53	46	1010.7	2.54		5.79			319.61	321.38	
21	3.19	43	1014.5	3.19		7.27			321.09	323.18	
22	3.50	48	1019.8	3.49		7.96			321.78	324.03	
23	3.89	45	1024.9	3.85		8.78			322.60	325.02	
24	4.25	47	1029.9	4.19		9.55			322.37	325.96	
25	5.26	12	1031.1	5.18		11.81			325.63	328.72	
Feb. 10	3.54	17	1021.7	3.52		8.03	18208	312.40	320.43	322.38	
11	3.74	32	1026.0	3.70		8.44			320.84	322.88	
12	5.11	19	1031.0	5.03		11.47	11633	310.79	322.26	324.61	
13	4.50	27	1034.3	4.42		10.08			320.87	322.92	

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index		Manometric Conc. (ppm)
1965										
Feb. 15	4.52	15	1025.6	4.47	2.28	10.19	11633	310.79	320.98	323.05
16	4.93	27	1023.4	4.89	11.15	321.94	324.22			
17	4.32	16	1029.9	4.26	9.71	320.50	322.47			
18	3.97	48	1037.2	3.89	8.87	319.66	321.44			
19	4.06	46	1043.3	3.95	9.01	319.80	321.61			
20	4.83	48	1042.8	4.70	10.72	321.51	323.70			
21	4.19	48	1031.7	4.12	9.30	320.18	322.08			
22	3.88	46	1022.5	3.85	8.78	319.57	321.33			
23	4.70	46	1022.8	4.67	10.65	321.44	323.61			
24	5.44	35	1026.4	5.38	12.27	323.06	325.58			
25	4.55	46	1027.7	4.50	10.26	321.05	323.14			
26	5.67	43	1027.4	5.60	12.77	323.56	326.19			
27	4.55	43	1020.4	4.53	10.33	321.12	323.22			
28	3.48	46	1014.1	3.48	7.93	318.72	320.30			
Mar.										
1	4.41	45	1013.6	4.42	10.08	320.87	322.92			
2	4.77	43	1012.7	4.78	10.90	321.69	323.92			
3	4.93	32	1011.7	4.95	11.29	322.08	324.39			
4	4.91	26	1015.2	4.91	11.19	321.98	324.27			
5	5.22	14	1017.2	5.21	11.88	322.67	325.11			
6	5.09	27	1016.0	5.08	11.58	322.37	324.74			
7	4.26	13	1010.3	4.28	9.76	320.55	322.53			
8	4.05	9	1008.0	4.08	9.30	320.09	321.97			
9	4.16	12	0999.1	4.23	9.64	320.43	322.38			
10	4.70	27	1021.3	4.67	10.65	321.44	323.61			
11	4.69	45	1029.9	4.62	10.53	321.32	323.46			
12	4.38	44	1028.0	4.33	9.87	320.66	322.66			
13	4.68	47	1038.4	4.58	10.44	321.23	323.35			
14	4.80	48	1043.3	4.67	10.65	321.44	323.61			
15	4.88	48	1044.3	4.74	10.81	321.60	323.81			
16	4.61	46	1039.5	4.50	10.26	321.05	323.14			

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	7 Computed Index Diff.	8 Reference Tank No.	9 Index	10 Air Index	11 Manometric Conc. (ppm)
1965										
Mar. 17	4.51	46	1032.0	4.44	2.28	10.12	11633	310.79	320.91	322.96
18	4.61	46	1020.0	4.39	10.01	10.05			320.80	322.83
19	4.44	48	1021.4	4.41					320.84	322.88
20	4.43	46	1030.4	4.36		9.94			320.73	322.75
21	4.29	48	1022.9	4.26		9.71			320.50	322.47
22	4.29	46	1020.3	4.27		9.74			320.53	322.50
23	4.25	20	1023.0	4.22		9.62			320.41	322.36
27	4.51	20	1024.2	4.47		10.19	18208	312.40	322.59	325.01
28	4.42	44	1021.5	4.39		10.01			322.41	324.79
29	4.35	46	1014.5	4.35		9.92			322.32	324.68
30	4.26	17	1017.8	4.25		9.69			322.09	324.40
31	4.19	48	1012.7	4.20		9.58			321.98	324.27
Apr. 1	4.14	27	1009.0	4.16		9.48			321.88	324.15
2	4.26	20	1002.4	4.32		9.85			322.25	324.60
3	4.14	45	1002.0	4.19		9.55			321.95	324.23
4	4.01	48	1009.6	4.03		9.19			321.59	323.79
5	3.94	47	1007.8	3.97		9.05			321.45	323.62
6	3.96	45	0996.1	4.04		9.21			321.61	323.82
7	4.07	45	1004.0	4.11		9.37			321.77	324.01
8	4.03	46	1007.2	4.06		9.26			321.66	323.88
9	4.03	47	1003.7	4.08		9.30			321.70	323.93
10	4.11	43	1002.8	4.16		9.49			321.88	324.15
11	4.09	48	1010.7	4.11		9.37			321.77	324.01
12	4.13	42	1020.4	4.11		9.37			321.77	324.01
13	4.26	19	1008.8	4.29		9.78			322.18	324.51
14	4.01	28	1017.5	4.00		9.12			321.52	323.71
20	3.43	17	1039.2	3.35		7.64			320.04	321.90
21	3.83	43	1030.6	3.77		8.60			321.00	323.07
22	4.27	34	1022.8	4.24		9.67			322.07	324.38
23	3.84	40	1021.3	3.82		8.71			321.11	323.21

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	7 Computed Index Diff.	8 Reference Tank		9 Air Index	10 Index	11 Manometric Corr. (EPA)
							No.	Index			
1965											
Apr. 24	3.86	41	1018.7	3.85	2.28	6.78	18208	312.40	321.18	323.29	
25	3.77	42	1015.7	3.77	8.60	8.55			321.00	323.07	
26	3.74	46	1012.2	3.75		7.14			320.95	323.01	
27	3.12	48	1011.8	3.13		8.85			319.54	321.30	
28	3.87	28	1012.5	3.88					321.25		
28	8.00	18	1011.3	8.03	1.16	9.31			321.71		
							April 28 Average		321.43	323.60	
									321.56	323.76	
									321.78	324.03	
May 1	8.22	47	0993.0	8.41		9.76			322.16	324.49	
2	8.15	47	0990.5	8.35		9.69			322.09	324.40	
3	8.04	35	0998.1	8.18		9.49			321.89	324.16	
4	8.47	30	1007.4	8.54		9.91			322.31	324.67	
7	11.36	17	1016.3	11.35		13.17	11111	309.65	322.82	325.29	
8	11.30	46	1020.1	11.24		13.04			322.69	325.13	
9	11.41	47	1025.0	11.31		13.12			322.77	325.23	
10	11.37	2	1026.0	11.26		13.06			322.71		
13	13.87	17	1028.5	13.69		15.88	10073	307.42	323.30		
							May 10 Average		323.21	325.77	
11	14.04	38	1027.2	13.87		16.09			323.51	326.13	
12	14.04	35	1027.0	13.89		16.11			323.53	326.16	
13	14.06	33	1027.9	13.89		16.11			323.53	326.16	
14	14.20	33	1028.8	14.02		16.26			323.68	326.34	
15	13.56	42	1022.0	13.48		15.64			323.06	325.58	
16	12.27	44	1014.9	12.27		14.23			321.65	323.87	
17	13.02	46	1012.1	13.06		15.15			322.57	324.99	
18	13.45	29	1009.0	13.53		15.69			323.11	325.65	
19	12.46	2	1012.5	12.50		14.50			321.92		
19	5.01	13	1014.8	5.02		5.82	10072	315.42	321.24		
							May 19 Average		321.66	323.88	

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1965	Day of Month	Observed Scale Diff.	No. of Compar- isons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	5		6		7		8		9		10		Air Index		Monosac- Conc. (ppm)		
							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
May	20	5.15	31	1012.5	5.27	1.16	6.00	10072	315.42	321.42	323.59	321.42	321.42	321.42	321.42	321.42	321.42	321.42	321.42	321.42	321.42	321.42	
	21	5.56	9	1005.0	5.61	6.51	5.21			321.93	321.93	321.93	321.93	321.93	321.93	321.93	321.93	321.93	321.93	321.93	321.93	321.93	
	22	6.91	42	1006.5	6.97		5.09			323.51	323.51	323.51	323.51	323.51	323.51	323.51	323.51	323.51	323.51	323.51	323.51	323.51	
	23	6.09	44	1011.8	6.11		7.09			322.51	322.51	322.51	322.51	322.51	322.51	322.51	322.51	322.51	322.51	322.51	322.51	322.51	
	24	6.30	42	1015.5	6.30		7.31			322.73	322.73	322.73	322.73	322.73	322.73	322.73	322.73	322.73	322.73	322.73	322.73	322.73	
	25	5.68	37	1014.9	5.68		6.59			322.01	322.01	322.01	322.01	322.01	322.01	322.01	322.01	322.01	322.01	322.01	322.01	322.01	
	26	5.40	47	1017.5	5.39		6.25			321.67	321.67	321.67	321.67	321.67	321.67	321.67	321.67	321.67	321.67	321.67	321.67	321.67	
	27	5.91	42	1021.6	5.87		6.81			322.23	322.23	322.23	322.23	322.23	322.23	322.23	322.23	322.23	322.23	322.23	322.23	322.23	
	28	5.36	42	1022.0	5.33		6.18			321.60	321.60	321.60	321.60	321.60	321.60	321.60	321.60	321.60	321.60	321.60	321.60	321.60	
	29	5.31	49	1022.2	5.27		6.21			321.53	321.53	321.53	321.53	321.53	321.53	321.53	321.53	321.53	321.53	321.53	321.53	321.53	
	30	5.38	48	1023.7	5.34		6.19			321.61	321.61	321.61	321.61	321.61	321.61	321.61	321.61	321.61	321.61	321.61	321.61	321.61	
	31	5.44	48	1019.8	5.42		6.29			321.71	321.71	321.71	321.71	321.71	321.71	321.71	321.71	321.71	321.71	321.71	321.71	321.71	
June	1	5.85	27	1019.7	5.84		6.77			322.19	322.19	322.19	322.19	322.19	322.19	322.19	322.19	322.19	322.19	322.19	322.19	322.19	
	10	1.58	24	1012.4	1.59	2.49	3.93			319.15	319.15	319.15	319.15	319.15	319.15	319.15	319.15	319.15	319.15	319.15	319.15	319.15	
	11	6.88	28	1015.8	6.88	4.75	4.18			319.60	319.60	319.60	319.60	319.60	319.60	319.60	319.60	319.60	319.60	319.60	319.60	319.60	
	12	0.86	48	1013.5	0.86		4.09			319.51	319.51	319.51	319.51	319.51	319.51	319.51	319.51	319.51	319.51	319.51	319.51	319.51	
	13	0.86	47	1013.3	0.86		4.09			320.17	320.17	320.17	320.17	320.17	320.17	320.17	320.17	320.17	320.17	320.17	320.17	320.17	
	14	0.84	38	1016.6	1.00		4.75			319.36	319.36	319.36	319.36	319.36	319.36	319.36	319.36	319.36	319.36	319.36	319.36	319.36	
	15	0.83	45	1020.6	0.83		3.94			319.41	319.41	319.41	319.41	319.41	319.41	319.41	319.41	319.41	319.41	319.41	319.41	319.41	
	16	0.84	48	1016.8	0.84		3.99			319.17	319.17	319.17	319.17	319.17	319.17	319.17	319.17	319.17	319.17	319.17	319.17	319.17	
	17	0.79	45	1012.6	0.79		1.75			319.22	319.22	319.22	319.22	319.22	319.22	319.22	319.22	319.22	319.22	319.22	319.22	319.22	
	18	0.80	41	1012.3	0.80		3.80			319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	
	19	1.61	25	1020.0	1.60		7.60			319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	
	20	1.60	48	1016.0	1.60		7.60			319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	
	21	1.56	47	1012.6	1.51		7.17			318.90	318.90	318.90	318.90	318.90	318.90	318.90	318.90	318.90	318.90	318.90	318.90	318.90	
	22	1.51	47	1012.6	1.51		7.17			318.86	318.86	318.86	318.86	318.86	318.86	318.86	318.86	318.86	318.86	318.86	318.86	318.86	
	23	1.50	48	1024.3	1.50		7.13			319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	319.33	
	24	1.51	47	1012.6	1.51		7.13			319.47	319.47	319.47	319.47	319.47	319.47	319.47	319.47	319.47	319.47	319.47	319.47	319.47	
	25	1.50	48	1018.2	1.60		7.60			319.05	319.05	319.05	319.05	319.05	319.05	319.05	319.05	319.05	319.05	319.05	319.05	319.05	
	26	1.60	48	1018.3	1.56		7.41			320.81	320.81	320.81	320.81	320.81	320.81	320.81	320.81	320.81	320.81	320.81	320.81	320.81	
	27	1.56	47	1017.3	1.57		7.46			320.87	320.87	320.87	320.87	320.87	320.87	320.87	320.87	320.87	320.87	320.87	320.87	320.87	
	28	1.57	48	1013.9	1.53		7.74			321.21	321.21	321.21	321.21	321.21	321.21	321.21	321.21	321.21	321.21	321.21	321.21	321.21	
	29	1.63	48	1011.0	1.54		7.32			320.79	320.79	320.79	320.79	320.79	320.79	320.79	320.79	320.79	320.79	320.79	320.79	320.79	
	30	1.53	48																				

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank		Air Index	Barometric Conc. (ppm)
							No.	Index		
1265										
July 1	1.14	48	1009.0	1.15	4.75	5.46	10066	311.73	317.19	318.43
2	1.23	48	1109.0	1.13	5.37	5.65			317.10	318.32
3	1.18	46	1005.2	1.19					317.38	318.66
4	1.21	48	1006.5	1.22					317.53	318.85
5	1.25	48	1011.8	1.26					317.72	318.08
6	1.21	48	1017.4	1.21					317.48	318.79
7	0.81	48	1018.8	0.81					315.58	316.47
8	0.88	48	1017.4	0.88					315.91	316.87
9	0.87	48	1018.0	0.87					315.86	316.81
10	0.52	46	1026.3	0.51					314.15	314.73
11	0.67	31	1025.8	0.66					314.87	315.60
12	0.73	46	1021.5	0.73					315.20	316.01
13	0.79	48	1018.0	0.79					315.48	316.35
14	0.89	45	1014.2	0.89					315.96	316.93
15	0.67	48	1010.9	0.67					314.91	315.65
16	0.40	48	1009.8	0.40					313.63	314.09
17	0.41	47	1007.2	0.41					313.68	314.15
18	0.59	45	1007.9	0.59					314.53	315.19
19	0.51	48	1012.8	0.51					314.15	314.73
20	0.78	48	1C14.3	0.78					315.44	315.30
21	0.56	48	1C12.9	0.56					314.39	315.02
22	0.51	48	1C18.5	0.51					314.15	314.73
23	0.53	47	1C21.8	0.53					314.25	314.85
24	0.43	48	1C23.4	0.43					313.77	314.26
25	0.41	46	1028.2	0.41					313.68	314.15
26	0.30	44	1028.1	0.30					313.16	313.52
27	0.07	34	1023.8	0.07					312.06	312.18
28	0.18	37	1021.5	0.18					312.59	312.83

TABLE : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	6 Reference Tank No.	7 Index	8 Index	9 Index	10 Index	11 Index
1965												
July 29	0.33	46	1025.9	0.33	4.75	1.57	10066	311.73	313.30	313.69		
30	0.30	45	1024.7	0.30	4.7	1.43			313.16	313.52		
31	0.22	47	1017.3	0.22	4.7	1.05			312.78	313.06		
AUG.												
1	- 0.18	48	1010.9	- 0.18		- 0.86			310.87	310.73		
2	- 0.58	37	1004.3	- 0.59		- 2.80			308.93	308.37		
3	0.06	36	1005.9	0.06		0.29			312.02	312.13		
4	- 0.10	36	1010.1	- 0.10		- 0.48			311.25	311.19		
5	0.07	47	1012.5	0.07		0.33			312.06	312.18		
6	- 0.04	47	1020.0	- 0.04		- 0.19			311.54	311.55		
7	- 0.16	47	1017.0	- 0.16		- 0.76			310.97	310.85		
8	- 0.12	48	1009.9	- 0.12		- 0.57			311.16	311.08		
9	- 0.31	47	1005.2	- 0.31		- 1.47			310.26	309.99		
10	- 0.65	44	0996.0	- 0.66		- 3.14			308.50	307.55		
11	- 0.56	37	1003.5	- 0.52		- 2.47	18207	312.78				
12	- 0.54	46	1007.6	- 0.54		- 2.57			310.21	309.93		
13	- 0.56	48	1004.9	- 0.57		- 2.71			310.07	309.76		
14	- 0.51	47	1003.9	- 0.52		- 2.47			310.31	310.05		
15	- 0.58	46	1007.4	- 0.58		- 2.76			310.02	309.69		
16	- 0.67	38	1009.7	- 0.67		- 3.18			309.60	309.18		
17	- 0.27	25	1009.5	- 0.27		- 1.28			311.50			
17	0.67	14	1012.1	0.67		3.18	10073	307.42				
							August 17 Average			311.18	311.11	
18	0.87	47	1009.1	0.88		4.18				311.60	311.62	
19	0.51	47	1009.2	0.51		2.42				309.84	309.47	
20	0.81	46	1006.5	0.82		3.90				311.32	311.28	
21	0.54	48	1014.7	0.54		2.57				309.99	309.66	
22	0.66	46	1009.8	0.66		3.14				310.56	310.35	
23	0.53	48	1004.0	0.54		2.57				309.99	309.66	
24	0.50	48	1015.0	0.50		2.38				309.80	309.43	

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.		Reference Tank No. Index		Air Index	Manometric Conc. (ppm)
						5	6	7	8		
<u>1965</u>											
Aug. 25	0.62	46	1019.7	0.62	4.75	2.95	1007.3	307.42	310.37	310.12	309.89
26	0.58	44	1019.1	0.58	2.76	2.76			310.18	309.89	
27	0.49	47	1022.0	0.49	2.33				309.75	309.37	
28	0.57	43	1025.5	0.56	2.66				310.08	309.77	
29	0.53	48	1020.9	0.53	2.52				309.94	309.60	
30	0.52	47	1013.9	0.57	2.47				309.89	309.54	
31	0.50	48	1015.9	0.50	2.38				309.80	309.43	
Sept. 1	0.50	47	1021.8	0.50	2.38				309.80	309.43	
2	0.51	48	1027.9	0.50	2.38				309.80	309.43	
3	0.54	45	1029.5	0.53	2.52				309.94	309.60	
4	0.53	48	1027.6	0.52	2.47				309.89	309.54	
5	0.55	47	1022.4	0.55	2.61				310.03	309.71	
6	0.53	47	1015.1	0.53	2.52				309.94	309.60	
7	0.50	45	1015.8	0.50	2.38				309.80	309.43	
8	0.53	25	1017.4	0.53	2.52				309.94	309.60	
9	1.35	42	1017.5	1.35	6.41				313.83	314.34	
10	1.01	48	1017.6	1.01	4.80				312.22	312.38	
11	0.47	44	1020.2	0.47	2.23				309.65	309.24	
12	0.67	45	1020.3	0.67	3.18				310.60	310.40	
13	0.80	45	1014.2	0.80	3.80				311.22	311.16	
14	0.63	46	1006.9	0.64	3.04				310.46	310.23	
15	0.71	48	1005.9	0.72	3.42				310.84	310.69	
16	0.78	46	1009.7	0.78	3.71				311.13	311.05	
17	0.68	46	1014.8	0.68	3.23				310.65	310.46	
18	0.68	47	1022.0	0.68	3.23				310.65	310.46	
19	0.64	48	1024.4	0.63	2.99				310.41	310.17	
20	0.57	48	1024.0	0.57	2.71				310.13	309.83	
21	0.59	17	1025.3	0.58	2.76				310.18		
21	0.87	10	1028.0	0.86	4.09	1166.9	306.46		310.55		
						September 2i Average			310.32		
									310.06		

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank		Air Index	Manometric Conc. (ppm)
							No.	Index		
<u>1965</u>										
Sept. 22	0.88	31	1024.1	0.87	4.75	4.13	11669	306.46	310.59	310.39
23	0.80	46	1015.9	0.80		3.80			310.26	309.99
24	0.78	47	1011.0	0.78		3.71			310.17	309.88
25	0.83	46	1022.8	0.83		3.94			310.40	310.16
26	1.26	48	1002.8	1.28		6.08			312.54	312.77
27	1.11	47	1005.6	1.12		5.32			311.78	311.84
28	1.00	42	1018.7	1.01		4.80			311.26	311.21
29	1.14	45	1017.0	1.14		5.42			311.88	311.96
30	1.20	45	1020.4	1.19		5.65			312.11	312.24
- Oct.	1	1.24	48	1016.5	1.24	5.89			312.35	312.53
2	1.27	47	1015.2	1.27		6.03			312.49	312.70
3	1.66	47	1012.2	1.66		7.89			314.35	314.97
4	1.53	48	1015.1	1.53		7.27			313.73	314.22
5	1.39	45	1011.0	1.40		6.65			313.11	313.46
6	1.31	48	1003.2	1.33		6.32			312.78	313.06
7	1.50	46	1003.3	1.52		7.22			313.68	314.15
8	2.30	47	1004.7	2.33		11.07			317.53	318.85
9	2.19	27	1005.0	2.21		10.50			316.96	318.15
10	2.57	47	1003.3	2.60		12.35			318.81	320.41
11	2.09	48	0998.6	2.03		9.64			316.10	317.10
12	1.63	48	1002.7	1.65		7.84			314.30	314.91
13	2.23	48	1006.9	2.25		10.69			317.15	318.38
14	3.04	48	1008.3	3.06		14.54			321.00	323.07
15	2.73	48	1006.3	2.75		13.06			319.52	321.27
16	2.54	47	0998.5	2.58		12.26			318.72	320.30
17	1.97	48	0998.2	2.00		9.50			315.96	316.93
18	1.68	31	1001.9	1.70		8.08			314.54	315.20
19	1.90	46	10C2.2	1.92		9.12			315.58	316.47
20	2.01	48	0998.8	2.05		9.74			316.20	317.23
21	2.11	44	1001.1	2.14		10.17			316.63	317.75
22	2.43	47	0995.4	2.48		11.78			318.24	319.71

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Manometric Conc. (ppm)	
<u>1965</u>										
Oct. 23	2.09	45	0994.5	2.13	4.75	10.12	11669	306.46	316.58	317.69
24	2.09	48	1004.1	2.11	10.02	9.79			316.48	317.57
25	2.05	48	1011.5	2.06		9.17			316.25	317.29
26	1.93	47	1015.7	1.93		8.93			315.63	316.53
27	1.89	48	1019.1	1.88		8.88			315.39	316.24
28	1.88	47	1018.0	1.87		8.88			315.34	316.18
29	1.90	25	1019.5	1.89		8.98			315.44	
29	3.00	11	1031.2	2.98		14.16	10076	300.41	314.57	
							October 29 Average		315.17	315.97
30	3.14	48	1011.2	3.12		14.82			315.23	316.04
31	3.17	48	1017.4	3.13		14.87			315.28	316.10
<u>1966</u>										
Nov. 1	3.29	26	1011.3	3.24		15.39			315.80	316.74
2	3.47	43	1024.5	3.44		16.34			316.75	317.90
3	3.90	48	1023.5	3.91		18.57			318.98	320.61
4	3.32	48	1014.7	3.32		15.77			316.18	317.20
5	3.35	43	1014.9	3.35		15.91			316.32	317.37
6	3.31	48	1006.5	3.34		15.87			316.28	317.32
7	3.57	48	1014.4	3.57		16.96			317.37	318.65
8	3.66	48	1020.2	3.64		17.29			317.70	319.05
9	3.63	47	1025.2	3.59		17.05			317.46	318.76
10	3.55	47	1012.3	3.56		16.91			317.32	318.59
11	3.59	45	1005.2	3.63		17.24			317.65	318.90
12	3.49	41	0997.8	3.55		16.86			317.27	318.53
13	3.47	48	1007.8	3.52		16.72			317.13	318.36
14	3.37	45	0993.5	3.44		16.34			316.75	317.90
15	3.40	48	0998.6	3.46		16.44			316.85	318.02
16	3.47	48	1010.2	3.49		16.58			316.99	318.19
17	3.57	48	1014.9	3.57		16.96			317.37	318.55
18	3.58	47	10104.9	3.62		17.20			317.61	318.94

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (Inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index		Manometric Conc. (ppm)
1965										
Nov. 19	3.57	35	0997.5	3.63	4.75	17.24	10076	300.41	317.65	318.99
20	3.44	48	1004.5	3.48	16.53	316.94	316.13			
21	3.45	48	1015.8	3.45	16.39	316.80	317.96			
22	3.54	48	1024.8	3.51	16.67	317.08	318.30			
23	3.65	48	1014.4	3.65	17.34	317.75	319.11			
24	3.67	43	1003.6	3.71	17.62	318.03	319.46			
25	3.56	48	1003.0	3.60	17.10	317.51	318.82			
26	3.55	36	0997.2	3.61	17.15	317.56	318.88			
27	3.46	46	1001.6	3.51	16.67	317.08	318.30			
28	3.37	48	1009.7	3.39	16.10	316.51	317.60			
29	3.65	48	0998.6	3.71	17.62	318.03	319.46			
30	3.96	48	0995.0	4.04	19.19	319.60	321.37			
Dec.										
1	3.77	48	1002.0	3.82	18.15	318.56	320.10			
2	3.71	48	1000.0	3.74	17.77	316.18	319.64			
3	3.97	48	1005.9	4.00	19.00	319.41	321.14			
4	3.52	48	1012.2	3.53	16.77	317.18	318.42			
5	3.49	48	1014.7	3.49	16.58	316.99	318.19			
6	3.58	48	1016.2	3.58	17.01	317.42	318.71			
7	3.56	42	1013.4	3.57	16.96	317.37				
7	- 0.45	6	1012.0	- 0.45	- 2.14	10063	319.93	317.79		
						December 7 Average		317.42	318.71	
8	- 0.49	48	1009.4	- 0.49	- 2.33			317.60	318.93	
9	- 0.48	48	1008.7	- 0.48	- 2.28			317.65	318.99	
10	- 0.55	48	1011.0	- 0.55	- 2.61			317.32	318.59	
11	- 0.53	48	1010.7	- 0.53	- 2.52			317.41	318.70	
12	- 0.52	48	1012.9	- 0.52	- 2.47			317.46	318.76	
13	- 0.47	35	1014.3	- 0.47	- 2.23			317.70	319.05	

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	7 Computed Index Diff.	Reference Tank		Air Index	11 Manometric Conc. (ppm)
							No.	Index		
<u>1965</u>										
Dec. 14	- 0.47	48	1010.0	- 0.47	4.75	- 2.23	1006.3	319.93	317.70	319.05
15	- 0.50	42	1007.8	- 0.50	- 2.38	- 2.38			317.55	318.87
16	- 0.52	48	1014.2	- 0.52	- 2.47	- 2.47			317.46	318.76
17	- 0.55	48	1018.9	- 0.55	- 2.61	- 2.61			317.32	318.59
18	- 0.53	48	1009.4	- 0.53	- 2.52	- 2.52			317.41	318.70
19	- 0.55	47	1003.5	- 0.54	- 2.57	- 2.57			317.36	318.64
20	- 0.43	48	1005.3	- 0.43	- 2.04	- 2.04			317.89	319.28
21	- 0.47	48	1009.4	- 0.47	- 2.23	- 2.23			317.70	319.05
22	- 0.42	48	1015.3	- 0.42	- 2.00	- 2.00			317.93	319.33
23	- 0.43	48	137.5	- 0.42	- 2.00	- 2.00			317.93	319.33
24	- 0.42	48	1040.8	- 0.41	- 1.95	- 1.95			317.98	319.39
25	- 0.32	48	1024.2	- 0.32	- 1.52	- 1.52			318.41	319.92
26	- 0.31	45	1013.1	- 0.31	- 1.47	- 1.47			318.46	319.98
27	- 0.38	48	1011.3	- 0.38	- 1.81	- 1.81			318.12	319.56
28	- 0.33	48	1019.2	- 0.33	- 1.57	- 1.57			318.36	319.86
29	- 0.22	48	1020.4	- 0.22	- 1.05	- 1.05			318.88	320.49
30	- 0.26	47	1015.1	- 0.26	- 1.24	- 1.24			318.69	320.26
31	- 0.21	46	1023.3	- 0.21	- 1.00	- 1.00			318.93	320.55
<u>1966</u>										
Jan. 1	- 0.21	48	1029.5	- 0.21	- 1.00	- 1.00			318.93	320.55
2	- 0.26	44	1017.2	- 0.26	- 1.24	- 1.24			318.69	320.26
3	- 0.27	31	1015.8	- 0.27	- 1.28	- 1.28			318.65	320.21
4	- 0.31	48	1011.0	- 0.31	- 1.47	- 1.47			318.46	319.98
5	- 0.25	46	1012.0	- 0.25	- 1.19	- 1.19			318.74	320.32
6	- 0.35	48	1015.1	- 0.35	- 1.66	- 1.66			318.27	319.75
7	- 0.19	45	1023.1	- 0.19	- 0.90	- 0.90			319.03	320.67
8	- 0.21	48	1021.7	- 0.21	- 1.00	- 1.00			318.93	320.55
9	- 0.23	27	1020.5	- 0.23	- 1.09	- 1.09			318.84	
9	- 1.33	19	1022.6	- 1.32	- 6.27	10068	324.92	318.65		
							January 9 Average	318.76	320.34	

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	Computed Index Diff.	Reference Tank		Air Index	Manometric Conc. (ppm)
							No. 7	No. 8		
<u>1966</u>										
Jun. 15	- 0.86	48	1028.7	- 0.85	4.75	- 4.04	IC068	324.92	320.88	322.93
16	- 0.80	48	1033.7	- 0.79	- 3.75	-			321.17	323.28
17	- 1.15	48	1038.3	- 1.12	-	5.32			319.60	321.37
18	- 1.22	48	1034.0	- 1.20	-	5.70			319.22	320.91
19	- 0.94	46	1028.8	- 0.93	-	4.42			320.50	322.47
20	- 0.85	48	1036.8	- 0.83	-	3.94			320.98	323.05
21	- 1.02	48	1027.6	- 1.01	-	4.80			320.12	322.00
22	- 1.02	48	1013.0	- 1.02	-	4.85			320.07	321.94
23	- 0.97	48	1005.0	- 0.98	-	4.66			320.26	322.17
24	- 0.92	48	1007.6	- 0.93	-	4.42			320.50	322.47
25	- 0.93	46	1012.4	- 0.93	-	4.42			320.50	322.47
26	- 1.07	44	1007.4	- 1.08	-	5.13			319.79	321.60
27	- 1.22	47	1011.2	- 1.22	-	5.80			319.12	320.78
28	- 1.26	48	1020.7	- 1.25	-	5.94			318.98	320.61
29	- 1.22	48	1029.0	- 1.20	-	5.70			319.22	320.91
30	- 1.33	48	1020.8	- 1.32	-	6.27			318.65	320.21
31	- 1.10	41	1010.6	- 1.11	-	5.27			319.65	321.43
 Feb.										
1	- 1.02	46	1012.8	- 1.02	-	4.85			320.07	321.94
2	- 1.09	43	1018.3	- 1.09	-	5.18			319.74	321.54
3	- 1.20	41	1022.9	- 1.19	-	5.65			319.27	320.97
4	- 1.19	43	1020.6	- 1.18	-	5.61			319.31	321.02
5	- 1.17	47	1025.7	- 1.17	-	5.56			319.36	322.08
6	- 1.16	48	1005.5	- 1.17	-	5.56			319.36	321.08
7	- 1.17	48	0996.7	- 1.19	-	5.65			319.27	320.97
8	- 1.18	43	1002.7	- 1.20	-	5.70			319.22	320.91
9	- 1.07	43	1013.9	- 1.07	4.7:	- 5.04			319.88	321.71
10	- 1.22	48	1022.1	- 1.21	-	5.70			319.22	320.91
11	- 1.24	48	1023.2	- 1.23	4.79	- 5.78			319.14	321.81

TABLE 7a: INDICES OF A CO_2 CONTINUOUS ANALYZER
BARROW, ALASKA, ON DIOXIDE PROJECT

Col: 1	Day of Month	Observed Scale Diff.	No. of Compres- sions	4			5			6			7			8			9			10				
				Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index	Reference Tank No.	Index	Air index	Conc. (ppm)	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index	Reference Tank No.	Index	Air index	Conc. (ppm)	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index	Reference Tank No.	Index	Air index	Conc. (ppm)
1966																										
Feb. 12	- 1.26	48	1028.6	- 1.24	4.69	- 5.82	10068	324.92	319.10	320.76																
13	- 1.28	48	1030.1	- 1.26	4.68	- 5.91					319.01	320.65														
14	- 1.38	48	1015.7	- 1.38	4.68	- 6.46					318.46	319.98														
15	- 1.34	44	1022.7	- 1.33	4.67	- 6.21					318.71	320.28														
16	- 1.30	48	1030.6	- 1.23	4.65	- 5.96					318.96	320.59														
17	- 1.29	32	1025.3	- 1.28	4.66	- 5.96					318.96															
17	- 1.35	15	1027.4	- 1.57		- 7.32	4274	326.65	319.33																	
18	- 1.64	48	1032.8	- 2.61	4.65	- 7.49	February 17 Average			319.08	320.73															
19	- 1.52	48	1032.4	- 1.46	4.64	- 6.81					319.16	320.81														
20	- 1.48	43	1033.8	- 1.65		- 6.73					319.74	321.54														
21	- 1.51	27	1033.0	- 1.48	4.63	- 6.85					319.92	321.76														
22	- 1.54	48	1011.2	- 1.55	4.62	- 7.16					319.80	321.61														
23	- 1.57	46	0999.1	- 1.50		- 7.39					319.49	321.23														
24	- 1.38	47	0997.3	- 1.61	4.61	- 7.42					319.26	320.95														
25	- 1.61	48	0994.8	- 1.65	4.60	- 7.59					319.23	320.92														
26	- 1.54	46	1000.6	- 1.56	4.59	- 7.16					319.06	320.71														
27	- 1.65	45	1017.5	- 1.65		- 7.57					319.49	321.23														
28	- 1.69	45	1036.7	- 1.65	4.58	- 7.56					319.08	320.73														
Mar. 1	- 1.69	48	1040.1	- 1.65	4.57	- 7.54					319.11	320.77														
2	- 1.68	48	1036.7	- 1.64		- 7.49					319.16	320.83														
3	- 1.68	48	1032.0	- 1.65	4.56	- 7.52					319.13	320.80														
4	- 1.58	47	1027.1	- 1.56	4.55	- 7.10					319.55	321.31														
5	- 1.51	48	1019.3	- 1.50		- 6.83					319.82	321.64														
6	- 1.62	48	1030.3	- 1.60	4.54	- 7.26					319.39	321.11														
7	- 1.48	48	1035.8	- 1.45	4.51	- 6.57					320.08	321.95														
8	- 1.45	44	1030.9	- 1.43	4.52	- 6.46					320.19	322.09														
9	- 1.50	38	1032.4	- 1.48		- 6.69					319.96	321.81														

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

	Col: 1	2	3	4	5	6	7	8	9	10	11
	Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Rank No.	Air Index	Air Index	Manometric Conc. (ppm)
1966											
Mar.	10	- 1.49	48	1028.5	- 1.47	4.52	- 6.64	4274	326.65	320.31	321.0
	11	- 1.60	47	1024.7	- 1.59	- 7.19	-			319.46	321.20
	12	- 1.51	48	1011.9	- 1.51	- 5.83	-			319.82	321.64
	13	- 1.42	48	1014.4	- 1.42	- 6.42	-			320.23	322.14
	14	- 1.44	48	1017.6	- 1.44	- 6.51	-			320.14	322.03
	15	- 1.56	48	1023.1	- 1.55	- 7.01	-			319.64	321.42
	16	- 1.50	48	1031.7	- 1.48	- 6.69	-			319.96	321.81
	17	- 1.54	48	1027.6	- 1.52	- 6.87	-			319.78	321.59
	18	- 1.56	47	1029.2	- 1.54	- 6.96	-			319.69	321.48
	19	- 1.58	48	1031.2	- 1.56	- 7.05	-			319.50	321.37
	20	- 1.57	48	1031.0	- 1.55	- 7.01	-			319.64	321.42
	21	- 1.55	48	1028.3	- 1.53	- 6.92	-			319.73	321.53
	22	- 1.52	48	1029.0	- 1.50	- 6.78	-			319.87	321.70
	23	- 1.39	48	1021.8	- 1.38	- 6.24	-			320.41	322.36
	24	- 1.39	37	1020.4	- 1.38	- 6.24	-			320.41	322.36
	25	- 1.38	28	1015.2	- 1.38	4.51	- 6.22			320.43	
	25	+ 0.05	15	1012.7	+ 0.05	+ 0.23	10067	320.83	March 25 Average	321.06	
	26	- 0.08	48	1013.5	- 0.08	4.50	- 0.36			320.47	322.43
	27	- 0.12	48	1017.1	- 0.12	4.49	- 0.54			320.29	322.21
	28	- 0.16	48	1012.3	- 0.16	4.47	- 0.72			320.11	321.99
	29	- 0.14	37	1005.5	- 0.14	4.46	- 0.62			320.21	
	29	0.00	10	1035.0	0.00	0.00	10063	319.93	March 29 Average	319.93	
	30	+ 0.01	48	1038.3	+ 0.01	4.45	+ 0.04			320.15	322.04
	31	- 0.02	48	1013.9	- 0.02	4.44	- 0.09			319.97	321.82
Apr.	1	- 0.01	45	1013.2	- 0.01	4.42	- 0.04			319.89	321.72
	2	- 0.01	42	1014.9	- 0.01	4.41	- 0.04			319.89	
	2	- 0.05	6	1016.0	- 0.05	- 0.22	10067	320.83	April 2 Average	320.61	
										319.98	321.63

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARRON, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	7 Computed Index Diff.	8 Reference No. Index	9 Tank Index	10 Air Index	11 Manometric Conc. (ppm)
1966										
Apr. 3	- 0.11	48	1018.3	- 0.11	4.40	- 0.48	10067	320.83	320.35	322.28
4	- 0.13	47	1023.7	- 0.13	4.38	- 0.57		320.26	322.17	
5	- 0.14	48	1035.8	- 0.14	4.37	- 0.61		320.22	322.12	
6	- 0.16	48	1042.3	- 0.16	4.36	- 0.70		320.13	322.01	
7	- 0.19	48	1047.3	- 0.18	4.34	- 0.78		320.05	321.92	
8	- 0.20	48	1048.8	- 0.19	4.33	- 0.82		320.01	321.87	
9	- 0.20	48	1036.2	- 0.20	4.32	- 0.86		319.97	321.82	
10	+ 0.02	48	1024.1	+ 0.02	4.31	+ 0.09		320.92	322.98	
11	- 0.13	48	1030.7	- 0.13	4.29	- 0.56		320.27	322.18	
12	- 0.14	48	1042.0	- 0.14	4.28	- 0.60		320.23	322.14	
13	- 0.09	48	1032.1	- 0.09	4.27	- 0.38		320.45	322.40	
14	- 0.20	27	1030.7	- 0.20	4.25	- 0.85		319.98	321.83	
15	0.00	21	1038.9	0.00	4.24	0.00		320.83	322.87	
16	- 0.10	48	1037.0	- 0.10	4.23	- 0.42		320.41	322.36	
17	- 0.20	48	1033.2	- 0.20	4.21	- 0.84		319.99	321.84	
18	- 0.20	48	1029.0	- 0.20	4.20	- 0.84		319.99	321.84	
19	- 0.12	48	1022.7	- 0.12	4.19	- 0.50		320.33	322.26	
20	- 0.18	48	1016.6	- 0.18	4.18	- 0.75		320.06	321.95	
21	- 0.21	48	1017.1	- 0.21	4.16	- 0.87		319.96	321.82	
22	- 0.21	42	1019.0	- 0.21	4.15	- 0.87		319.96	321.82	
23	+ 0.02	44	1023.5	+ 0.02	4.14	+ 0.08		320.75	322.77	
24	+ 0.01	48	1031.5	+ 0.01	4.12	+ 0.04		320.79	322.82	
25	- 0.09	48	1037.4	- 0.09	4.11	- 0.37		320.46	322.42	
26	- 0.04	49	1034.0	- 0.04	4.10	- 0.16		320.67	322.67	
27	- 0.02	48	1025.0	- 0.02	4.08	- 0.08		320.75	322.77	
28	- 0.06	48	1024.3	- 0.06	4.07	- 0.24		320.59	322.57	
29	- 0.04	44	1023.4	- 0.04	4.06	- 0.16		320.67	322.67	
30	- 0.03	41	1023.4	- 0.03	4.05	- 0.12		320.71	322.72	
May 1	- 0.03	38	1021.8	- 0.03	4.01	- 0.12		320.71	322.72	

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

	Col: 1	2	3	4	5	6	7	8	9	10	11
	Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Air Index	Manometric Conc. (ppm)
<u>1966</u>											
May	2	0.00	45	1009.7	0.00	3.99	0.00	10067	320.83	320.83	322.87
	3	0.00	48	1002.8	0.00	3.98	0.00			320.83	322.87
	4	0.00	6	1003.3	0.00	3.97	0.00	10075	311.68	319.30	320.83
	4	1.90	23	1005.3	1.92	7.62					
	5	1.88	19	1013.8	1.88	3.95	7.43	May 4 Average	319.62	319.11	321.39
	6	1.91	46	1013.1	1.91	3.94	7.53			319.21	320.77
	7	2.18	15	1008.2	2.20	3.91	8.60			320.28	322.20
	8	2.27	47	1012.8	2.28		8.91			320.59	322.57
	9	2.28	33	1015.3	2.28		8.91			320.59	322.57
	10	2.29	48	1018.1	2.28		8.91			320.59	322.57
	11	2.29	48	1019.9	2.28		8.71			320.59	322.57
	12	2.25	48	1014.8	2.25		8.80			320.48	322.44
	13	2.23	48	1003.6	2.26		8.84			320.52	322.49
	14	2.21	48	1010.5	2.22		8.68			320.36	322.29
	15	2.15	25	1016.7	2.15		8.41			320.09	321.97
	16	2.06	14	1017.0	2.06		8.05			319.73	321.53
	17	2.24	36	1015.3	2.24		8.76			320.44	
	17	1.27	11	1012.0	1.27		4.97	May 17 Average	315.29	320.26	322.34
	18	1.34	48	1009.3	1.35		5.28			320.40	
	19	1.48	48	1007.3	1.49		5.83			320.57	322.55
	20	1.53	46	1009.8	1.54		6.02			321.12	323.22
	21	1.56	48	1010.7	1.57		6.14			321.31	323.45
	22	1.54	48	1015.7	1.54		6.02			321.43	323.60
	23	1.54	48	1016.2	1.54		6.02			321.31	323.45
	24	1.54	39	1012.5	1.54		6.02			321.31	323.45
	25	1.44	48	1009.8	1.45		5.67			320.96	323.03
	26	1.43	48	1012.8	1.43		5.59			320.88	322.93

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	7 Computed Index Diff.	Reference Tank		10 Air Index	11 Manometric Conc. (ppm)
							No. Index	Index		
1966										
May 27	1.46	48	1022.0	1.45	3.91	5.67	10073	315.29	320.96	323.03
28	1.48	48	1023.4	1.47		5.75			321.04	323.12
29	1.55	48	1023.2	1.54		6.02			321.31	323.45
30	1.62	48	1024.8	1.61		6.30			321.59	323.79
31	1.74	48	1025.8	1.72		6.73			322.02	324.32
June 1	1.55	48	1024.2	1.54		6.02			321.31	323.45
2	1.52	27	1019.5	1.51		5.90			321.19	323.31
3	1.53	48	1024.0	1.52		5.94			321.23	323.35
4	1.43	33	1023.0	1.42		5.55			320.84	322.88
6	1.46	8	1025.0	1.45		5.67			320.96	323.03
7	1.48	47	1022.5	1.47		5.75			321.04	323.12
8	1.46	42	1016.4	1.46		5.71			321.00	323.07
9	1.46	48	1007.3	1.47		5.75			321.04	323.12
10	1.38	47	1001.5	1.40		5.47			320.76	322.78
14	1.26	19	1014.8	1.26		4.93			320.24	322.12
15	1.35	48	1017.4	1.35		5.28			320.57	322.55
16	1.34	48	1012.2	1.34		5.24			320.53	322.50
17	1.28	20	1006.8	1.29		5.04			320.33	322.26
19	1.23	20	1018.0	1.23		4.81			320.10	321.98
20	1.21	48	1014.5	1.21		4.73			320.02	321.88
21	1.30	48	1006.0	1.31		5.12			320.41	322.36
22	0.99	48	1007.2	1.00		3.91			319.20	320.88
23	1.08	48	1004.0	1.09		4.26			319.55	321.21
24	0.91	19	0997.4	0.93		3.64			318.93	320.55
25	1.94	45	1004.5	1.96		7.66			320.14	322.03
26	1.60	48	1008.0	1.61		6.30			318.78	320.37
27	1.78	47	1006.6	1.80		7.04			319.52	321.27
28	1.48	48	0998.7	1.51		5.90			318.38	319.88

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Air Index	Manometric Conc. (ppm)
<u>1966</u>										
June 29	1.62	43	1003.3	1.64	3.91	6.41	11097	312.48	318.89	320.50
30	1.33	22	1016.0	1.33	5.20				317.68	319.03
July 1	1.31	27	1014.7	1.31	5.12				317.60	318.93
2	1.58	38	1012.7	1.58	6.18				318.66	320.22
3	1.60	48	1016.3	1.60	6.26				318.74	320.32
4	1.50	48	1015.6	1.50	5.87				318.35	319.85
5	1.57	48	1011.4	1.58	6.18				318.66	320.22
6	1.53	48	1012.9	1.53	5.98				318.46	319.98
7	1.22	48	1011.5	1.22	4.77				317.25	318.50
8	0.87	48	1005.7	0.88	3.44				315.92	316.88
9	0.55	46	1001.0	0.56	2.19				314.67	315.36
10	1.01	48	1008.8	1.02	3.99				316.47	317.55
11	0.52	48	1005.9	0.52	2.03				315.17	
12	0.48	48	1007.4	0.48	1.88				314.36	314.98
13	0.38	48	1004.2	0.38	1.49				313.97	314.51
14	0.28	48	1011.9	0.28	1.09				313.57	314.02
15	- 0.10	45	1010.9	- 0.10	- 0.39				312.09	312.22
16	0.02	44	1005.5	0.02	0.08				312.56	312.79
17	0.25	47	1008.8	0.25	0.98				313.46	313.89
18	0.56	47	1017.8	0.56	2.19				314.67	315.36
19	0.29	47	1017.6	0.29	1.13				313.61	314.07
20	0.05	48	1013.9	0.05	0.20				312.68	312.94
21	- 0.37	48	1014.0	- 0.37	- 1.45				311.03	310.93
22	0.46	47	1019.7	0.46	1.80				314.28	314.89
23	0.37	23	1022.5	0.37	1.45				313.93	314.46
24	0.25	48	1025.9	0.25	0.98				313.46	313.89
25	0.43	48	1027.9	0.42	1.6:				314.12	314.69
26	0.45	47	1029.2	0.44	1.72				314.20	314.79
27	0.48	48	1025.6	0.48	1.88				314.36	

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	7 Computed Ir ex Diff.	8 Reference Tank No.	9 Index Index	10 Air Index	11 Manometric Conc. (ppm)
<u>1966</u>										
July 28	0.47	48	1013.3	0.47	3.91	1.84	11097	312.48	314.32	314.93
29	0.28	47	1006.0	0.28	-	1.09	-	-	313.57	314.02
30	0.15	42	1008.5	0.15	-	0.59	-	-	313.07	313.41
31	- 0.37	48	1004.5	- 0.37	-	1.45	-	-	311.03	310.93
Aug. 1	- 0.08	45	1000.5	- 0.08	-	0.31	-	-	312.17	312.31
2	- 0.01	48	1008.1	- 0.01	-	0.04	-	-	312.44	312.64
3	- 0.05	48	1009.9	- 0.05	-	0.20	-	-	312.28	312.45
4	- 0.14	48	1014.5	- 0.14	-	0.55	-	-	311.93	312.02
5	- 0.26	48	1021.0	- 0.26	-	1.02	-	-	311.46	311.45
6	- 0.22	47	1021.6	- 0.22	-	0.86	-	-	311.62	311.64
7	- 0.17	48	1021.2	- 0.17	-	0.66	-	-	311.82	311.89
8	- 0.10	20	1021.1	- 0.10	-	0.39	-	-	312.09	312.22
9	- 0.27	37	1023.7	- 0.27	-	1.06	10066	312.58	311.52	311.52
10	- 0.23	47	1024.9	- 0.23	-	0.90	-	-	311.68	311.72
11	- 0.34	47	1023.8	- 0.34	-	1.32	-	-	311.26	311.21
12	- 0.36	48	1020.8	- 0.36	-	1.41	-	-	311.17	311.10
13	- 0.34	48	1015.9	- 0.34	-	1.33	-	-	311.25	311.19
14	- 0.33	48	1015.1	- 0.33	-	1.29	-	-	311.29	311.24
15	- 0.57	48	1006.4	- 0.58	-	2.27	-	-	310.31	310.05
16	- 0.49	48	1005.5	- 0.49	-	1.92	-	-	310.66	310.47
17	- 0.56	48	1016.8	- 0.56	-	2.19	-	-	310.39	310.15
18	- 0.56	48	1019.0	- 0.56	-	2.19	-	-	310.29	310.15
19	- 0.54	47	1013.5	- 0.54	-	2.11	-	-	310.47	310.24
20	- 0.42	47	1010.8	- 0.42	-	1.64	-	-	310.94	310.82
21	- 0.28	48	1007.2	- 0.28	-	1.09	-	-	311.49	311.49
22	- 0.40	48	1003.4	- 0.40	-	1.56	-	-	311.02	310.91
23	- 0.38	48	1006.4	- 0.38	-	1.49	-	-	311.09	311.00
24	- 0.42	48	1014.0	- 0.42	-	1.64	-	-	310.94	310.82
25	- 0.39	48	1017.8	- 0.39	-	1.52	-	-	311.06	310.96

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col.: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index		Manometric Conc. (ppm)
<u>1966</u>										
Aug. 26	- 0.14	45	1011.6	- 0.14	3.91	- 0.55	10066	312.58	312.03	311.24
27	- 0.33	48	1008.5	- 0.33	- 1.29	-			311.29	311.24
28	- 0.58	48	1006.0	- 0.59	- 2.31	-			310.27	310.00
29	- 0.58	47	1008.3	- 0.58	- 2.27	-			310.31	310.05
30	- 0.55	12	1012.8	- 0.55	- 2.15	-			310.43	310.19
31	- 0.54	37	1020.0	- 0.54	- 2.11	-			310.47	310.24
Sept. 1	- 0.55	37	1028.1	- 0.54	- 2.11	-			310.47	310.24
2	- 0.61	48	1027.4	- 0.60	- 2.35	-			310.23	309.95
3	- 0.60	48	1022.1	- 0.60	- 2.35	-			310.23	309.95
4	- 0.68	22	1015.8	- 0.68	- 2.66	-			309.92	309.57
5	- 0.39	48	1012.1	- 0.39	- 1.52	-			311.06	310.96
6	- 0.25	47	1013.9	- 0.25	- 0.98	-			311.60	311.62
7	- 0.66	47	1018.8	- 0.66	- 2.58	-			310.00	309.67
8	- 0.29	47	1009.7	- 0.29	- 1.13	-			311.45	311.44
9	- 0.53	48	1014.0	- 0.53	- 2.07	-			310.51	310.29
10	- 0.39	47	1015.7	- 0.39	- 1.52	-			311.06	310.96
11	- 0.42	48	1005.8	- 0.42	- 1.64	-			310.94	310.82
12	+ 0.08	47	0994.1	+ 0.08	+ 0.31	-			312.89	313.19
13	+ 0.22	46	0995.4	+ 0.22	+ 0.86	-			313.44	313.86
14	- 0.06	47	1006.4	- 0.06	- 0.23	-			312.35	312.53
15	- 0.44	47	1006.2	- 0.44	- 1.72	-			310.86	310.72
16	- 0.30	34	0995.3	- 0.31	- 1.21	-			311.37	311.34
17	- 0.36	47	0996.2	- 0.37	- 1.45	-			311.13	311.05
18	- 0.25	46	0989.7	- 0.26	- 1.02	-			311.56	311.57
19	- 0.26	47	0985.2	- 0.27	- 1.06	-			311.52	311.52
20	- 0.32	45	0992.7	- 0.33	- 1.29	-			311.29	311.24
21	0.08	47	1006.1	+ 0.08	+ 0.31	-			312.89	313.19
22	0.71	48	015.7	0.71	2.78	-			315.36	316.20

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (.inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank		Air Index	Manometric Conc. (ppm)
							No.	Index		
<u>1966</u>										
Sept. 23	0.14	47	1023.4	0.14	3.91	0.55	10066	312.58	313.13	313.48
24	0.08	47	1022.8	0.08	0.31	0.31			312.89	313.19
25	0.03	47	1014.3	0.03	0.12	0.12			312.70	312.96
26	0.06	19	1009.3	0.06	0.23	0.23			312.31	313.09
27	0.64	17	1003.2	0.65	3.88	2.52	11111	309.65	312.17	312.31
28	0.68	46	1002.7	0.69	3.84	2.65			312.30	312.47
29	1.99	46	1006.4	2.01	3.81	7.66			317.31	318.58
30	2.37	46	1010.6	2.38	3.77	8.97			318.62	320.17
- Oct. 1	1.15	48	1012.7	1.15	3.74	4.30			313.95	314.48
2	0.91	48	1008.7	0.92	3.70	3.40			313.05	313.39
3	1.14	46	1003.3	1.15	3.67	4.22			313.87	314.39
4	1.36	48	1000.2	1.38	3.63	5.01			314.66	315.35
5	1.58	27	0999.0	1.61	3.60	5.80			315.45	
5	0.36	19	0995.9	0.37	1.33	6060	313.65	314.98		
							October 5 Average		315.26	316.08
6	0.29	43	0994.1	0.30	3.56	1.07			314.72	315.42
7	0.50	43	0993.2	0.51	3.53	1.80			315.45	316.31
8	0.30	47	0999.8	0.30	3.49	1.05			314.70	315.40
9	- 0.11	46	1006.4	- 0.10	3.46	- 0.35			313.39	313.69
10	0.25	24	1017.1	0.25	0.87				314.52	315.18
11	0.56	41	1018.9	0.56	1.94				315.59	316.48
12	0.51	43	1014.3	0.51	1.76				315.41	316.26
13	0.24	48	1011.0	0.24	0.87				314.48	315.13
14	0.77	47	1005.7	0.78	2.70				316.35	317.41
15	0.96	21	1003.7	0.97	3.36				317.01	318.21
16	0.81	48	1004.5	0.82	2.84				316.49	317.58
17	0.50	38	1011.2	0.50	1.73				315.38	316.23
18	0.67	42	1013.0	0.67	2.32				315.97	316.94
19	0.73	44	1015.2	0.73	2.53				316.18	317.20
20	0.50	46	1017.7	0.50	1.73				315.38	316.23

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index	Air Index	Manometric Conc. (ppm)
<u>1966</u>										
Oct. 21	0.67	45	1017.1	0.67	3.46	2.32	6060	313.65	315.97	316.94
22	0.58	27	1018.5	0.58	2.01	1.80			315.66	316.57
24	0.53	21	1028.2	0.52	2.15	2.15			315.45	316.31
25	0.63	44	1032.5	0.62	2.46	2.46			315.80	316.74
26	0.72	48	1033.0	0.71	4.91	4.91			316.11	317.12
27	1.44	37	1031.9	1.42	3.18	3.18			318.56	320.10
28	0.93	47	1027.0	0.92	0.50	1.73			316.83	317.99
29	0.50	46	1019.3	0.50	2.35	2.35			315.38	316.23
30	0.68	47	1018.5	0.68	3.18	3.18			316.00	316.98
31	0.92	44	1020.5	0.92					316.83	317.99
<u>Nov.</u>										
1	0.93	46	1016.5	0.93	3.22	3.22			316.87	318.04
2	1.12	36	1029.1	1.11	3.84	3.60			317.49	318.80
4	1.05	44	1025.0	1.04	3.81	3.81			317.25	318.50
5	1.09	46	1010.4	1.10	4.84	4.84			317.46	318.76
6	1.39	48	1007.9	1.40	5.40	5.40			318.49	320.02
7	1.55	42	1007.8	1.56	4.22	4.22			319.05	320.70
8	1.21	47	1004.5	1.22	3.43	3.43			317.87	319.26
9	0.99	47	1013.8	0.99	3.98	3.98			317.08	318.30
10	1.15	47	1015.2	1.15	3.98	3.98			317.63	318.97
11	1.15	46	1017.9	1.15	3.67	3.67			317.63	318.97
12	1.07	42	1027.6	1.06	3.11	3.11			317.32	318.59
13	0.92	27	1036.6	0.90	3.63	3.63	11633	313.76	317.39	317.04
13	1.07	21	1033.3	1.05						318.25
November 13 Average										
14	1.36	26	1022.6	1.35	4.67	4.67			318.43	319.94
15	1.55	47	1020.6	1.54	5.33	5.33			319.09	320.75
16	1.25	48	0998.0	1.37	4.74	4.74			318.50	320.03
17	1.31	48	0993.8	1.34	4.64	4.64			318.40	319.91

TABLE 7a: INDICES OF CONTINUOUS ANALYZER
HARROW, ALA., CARBON DIOXIDE PROJECT

Col: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Tank Index	Air Index	Hypsometric Conc. (ppm)
<u>1966</u>										
Nov. 18	1.29	48	1004.8	1.30	3.46	4.50	11633	313.76	318.26	319.74
19	1.26	48	1015.5	1.26	4.36	4.36			318.12	319.56
20	1.27	28	1016.5	1.27	4.39	4.39			318.15	319.60
21	1.20	45	1018.2	1.20	4.15	4.15			317.91	319.31
22	1.27	48	1015.5	1.27	4.39	4.39			318.15	319.60
23	1.19	47	1009.5	1.20	4.15	4.15			317.91	319.31
24	0.98	46	1006.3	0.99	3.43	3.43			317.19	318.43
25	1.11	48	1017.5	1.11	3.84	3.84			317.60	318.93
26	1.18	47	1030.9	1.16	4.01	4.01			317.77	319.14
27	1.25	43	1029.6	1.23	4.26	4.26			318.02	319.44
28	1.17	47	1021.5	1.16	4.01	4.01			317.77	319.14
29	1.07	44	1021.7	1.06	3.67	3.67			317.43	318.72
30	1.51	44	1028.2	1.49	5.16	5.16			318.92	320.54
Dec. 1	1.32	48	1025.3	1.29	4.46	4.46			318.22	319.69
2	1.25	27	1023.4	1.23	4.26	4.26			318.02	319.44
3	1.29	46	1011.5	1.30	4.50	4.50			318.74	
4	1.44	47	1023.2	1.43	4.95	4.95			318.71	320.28
5	1.71	46	1017.1	1.71	5.92	5.92			319.68	321.47
6	1.89	31	1022.1	1.88	6.50	6.50			320.26	322.17
7	1.40	46	1033.8	1.37	4.74	4.74			318.50	320.03
8	1.45	46	1037.8	1.42	4.91	4.91			318.67	320.24
9	1.81	48	1029.7	1.78	6.16	6.16			319.92	321.76
10	1.72	47	1021.4	1.71	5.92	5.92			319.68	321.47
11	1.70	47	1025.7	1.70	5.88	5.88			319.64	321.42
12	1.89	47	1020.6	1.90	6.57	6.57			320.33	322.26
13	1.66	48	1007.6	1.67	5.78	5.78			319.54	321.30
14	1.75	48	1017.6	1.76	6.09	6.09			319.85	321.67
15	1.66	48	1016.1	1.67	5.78	5.78			319.54	321.30

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	2	3	4	5	6	7	8	9	10	11
Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank No.	Air Index		Manometric Conc. (ppm)
<u>1966</u>										
Dec. 16	1.77	48	0996.8	1.80	3.46	6.23	11633	313.76	319.99	321.84
17	1.75	48	0994.0	1.79	6.19	-	-	-	319.95	321.79
18	1.75	27	1000.7	1.78	6.16	-	-	-	319.92	-
18	- 1.52	19	1005.8	- 1.54	- 5.33	11082	326.00	320.6-	-	322.14
							December 18 Average		320.2-	
19	- 1.62	34	1010.8	- 1.63	- 5.64	-	-	-	320.36	322.29
20	- 1.67	46	1014.7	- 1.67	- 5.78	-	-	-	320.22	322.12
21	- 1.74	48	1026.6	- 1.76	- 5.95	-	-	-	320.05	321.92
22	- 1.78	48	1026.6	- 1.76	- 6.09	-	-	-	319.91	321.75
23	- 1.73	48	1022.5	- 1.72	- 5.95	-	-	-	320.05	321.92
24	- 1.62	48	1028.7	- 1.60	- 5.54	-	-	-	320.46	322.42
25	- 1.72	47	1032.6	- 1.69	- 5.85	-	-	-	320.15	322.04
26	- 1.79	46	1020.3	- 1.78	- 6.16	-	-	-	319.84	321.66
27	- 1.86	46	1017.6	- 1.86	- 6.44	-	-	-	319.56	321.32
28	- 1.87	48	1012.5	- 1.88	- 6.50	-	-	-	319.50	321.25
29	- 1.70	48	1000.0	- 1.73	- 5.99	-	-	-	320.01	321.87
30	- 1.71	45	0997.4	- 1.74	- 6.02	-	-	-	319.98	321.83
31	- 1.72	45	1001.0	- 1.74	- 6.02	-	-	-	319.98	321.83
<u>1967</u>										
Jan. 1	- 1.61	48	1004.6	- 1.63	-	5.64	-	-	320.36	322.29
2	- 1.16	30	1014.5	- 1.16	- 4.01	-	-	-	321.99	324.17
3	- 1.23	14	1021.3	- 1.22	- 4.22	-	-	-	321.78	324.03
4	- 1.25	46	1004.0	- 1.26	- 4.36	-	-	-	321.64	323.85
5	- 1.43	48	0994.0	- 1.46	- 5.05	-	-	-	320.95	323.01
6	- 1.45	48	0992.5	- 1.48	- 5.12	-	-	-	320.88	322.93
7	- 1.52	48	0994.4	- 1.55	- 5.36	-	-	-	320.64	322.64
8	- 1.50	48	1009.0	- 1.51	- 5.22	-	-	-	320.78	322.81
9	- 1.60	36	1011.0	- 1.61	- 5.57	-	-	-	320.43	322.38

TABLE No. 1: INFLUENCE OF AIR UPTAKE CONCENTRATION ON ANALYZER

FACTORY, EASIER, CEMENT DIVISION PROJECT

Date	Day of Month	Design Scale Factor	Sensitivity Factor	Scale Factor	Sensitivity Factor	Reference Index	Compressed Air Index	Index Diff.	Air Index		Manometric Conc. (ppm)
									6	7	
Jan. 1	1	1.40	1.2	1000.0	-	1.63	1.65	-	5.88	116.80	320.91
1	2	1.61	1.8	1010.0	-	1.63	1.65	-	5.61	320.39	322.33
2	3	1.60	1.7	1010.0	-	1.59	1.65	-	5.45	320.50	
3	4	1.61	1.6	1010.0	-	1.76	1.65	-	5.74	319.76	319.50
4	5	1.83	1.7	1010.0	-	1.81	1.80	-	1.33	January 17 Average	320.13
5	6	1.62	1.7	1010.0	-	1.58	1.58	-	4.35	January 17 Average	322.01
6	7	1.70	1.8	1026.0	-	2.67	2.67	-	8.05	January 18 Average	320.02
7	8	2.49	4.8	1022.0	-	2.48	2.66	-	8.58	January 19 Average	321.70
8	9	2.68	27	1022.0	-	2.66	2.75	-	9.20	January 20 Average	321.37
9	10	2.74	4.8	1011.9	-	2.75	2.75	-	9.52	January 21 Average	320.56
10	11	2.77	4.8	0993.8	-	2.83	2.83	-	9.79	January 22 Average	321.56
11	12	2.74	4.8	0993.9	-	2.80	2.80	-	9.69	January 23 Average	321.32
12	13	2.70	4.8	1026.0	-	2.67	2.67	-	8.48	January 24 Average	321.71
13	14	2.49	4.8	1022.0	-	2.48	2.66	-	8.58	January 25 Average	322.04
14	15	2.68	27	1002.5	-	2.66	2.75	-	9.20	January 26 Average	320.05
15	16	2.74	4.8	1007.1	-	2.75	2.75	-	9.52	January 27 Average	321.92
16	17	2.77	4.8	1009.9	-	2.61	2.61	-	9.03	January 28 Average	321.92
17	18	2.74	4.8	0993.9	-	2.80	2.80	-	8.89	January 29 Average	321.92
18	19	2.74	4.8	1008.0	-	2.57	2.57	-	10.10	January 30 Average	321.92
19	20	2.55	4.6	1015.1	-	2.92	2.62	-	9.07	January 31 Average	321.92
20	21	2.55	4.6	1012.7	-	2.82	2.75	-	9.52	February 1 Average	321.92
21	22	2.73	4.8	1027.1	-	2.73	2.73	-	9.03	February 2 Average	321.92
22	23	2.60	4.8	1030.0	-	2.82	2.82	-	8.89	February 3 Average	321.92
23	24	2.55	4.6	1015.1	-	2.92	2.92	-	10.10	February 4 Average	321.92
24	25	2.92	4.6	1012.7	-	2.82	2.82	-	9.76	February 5 Average	321.92
25	26	2.81	4.6	1027.1	-	2.73	2.73	-	9.45	February 6 Average	321.92
26	27	2.76	4.8	1030.0	-	2.82	2.82	-	9.76	February 7 Average	322.00
27	28	2.86	4.8	1023.0	-	2.88	2.88	-	9.96	February 8 Average	322.25
28	29	2.90	4.7	1012.0	-	2.81	2.81	-	9.72	February 9 Average	322.00
29	30	2.80	4.8	1020.9	-	2.77	2.77	-	9.58	February 10 Average	321.95
30	31	2.78	4.7	1026.2	-	2.70	2.70	-	9.34	February 11 Average	321.78
31	Feb. 1	2.73	4.8	1025.6	-	2.72	2.72	-	9.41	February 12 Average	321.78
Feb. 1	2	2.75	4.8	1023.0	-	2.77	2.77	-	9.58	February 13 Average	321.78
2	3	2.79	17	1014.5	-	2.73	2.73	-	9.45	February 14 Average	321.62
3	4	2.73	37	1018.7	-	2.77	2.76	-	9.55	February 15 Average	321.75

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col. 1 Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Reference Tank		Air Index	Manometric Conc. (ppm)
						No.	Index		
<u>1967</u>									
Feb. 5	3.22	47	1030.5	3.17	3.46	10.97	10076	310.36	321.33
6	3.44	47	1029.6	3.39		11.73			322.09
7	3.27	46	1021.7	3.25		11.25			324.40
8	2.94	48	1019.5	2.93		19.14			323.82
9	2.97	48	1023.1	2.95		10.21			320.50
10	3.04	48	1025.7	3.01		10.41			320.57
11	2.85	48	1021.7	2.83		9.79			320.77
12	2.69	48	1020.1	2.68		9.27			322.79
13	2.77	47	1022.2	2.75		9.52			320.15
14	3.02	48	1027.9	2.98		10.31			322.04
15	3.18	47	1024.5	3.15		10.90			319.63
16	2.70	47	1012.2	2.71		9.38			321.41
17	2.93	48	0999.2	2.98		10.31			319.88
18	2.71	48	0994.9	2.77		9.58			321.71
19	2.69	48	1001.8	2.73		9.45			320.67
20	2.62	47	1004.8	2.65		9.17			322.67
21	2.65	48	1004.6	2.68		9.27			321.78
22	2.69	32	1007.2	2.71		9.38			319.81
22	2.17	14	1011.7	2.18		7.54	10063	313.07	321.62
<u>February 22 Average</u>									
23	2.40	48	1018.4	2.39		8.27			321.86
24	2.70	48	1024.5	2.68		9.27			321.34
25	2.56	28	1019.1	2.55		8.82			322.34
26	2.16	48	1009.1	2.17		3.44			324.71
27	2.45	47	1010.5	2.46		3.41			321.89
28	2.46	48	1012.0	2.47		3.39			322.50
Mar. 1	2.47	48	1018.1	2.46		3.37			323.64
2	2.40	43	1017.4	2.40		3.35			321.44
									323.61
									321.36
									323.51
									323.21

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col. 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	7 Computed Index Diff.	8 Reference Tank No.	9 Index	10 Air Index	11 Barometric Conc. (ppm)
<u>1967</u>										
Mar. 3	2.42	48	1015.4	2.42	3.32	8.03	1.0063	313.07	321.10	323.20
4	2.41	48	1019.7	2.40	3.30	7.92			320.99	323.06
5	2.60	47	1029.2	2.57	3.28	8.43			321.50	323.68
6	2.55	35	1022.1	2.53	3.25	8.22			321.29	323.43
7	2.49	16	1019.5	2.48	3.23	8.01			321.08	323.17
8	2.93	47	1027.2	2.89	3.22	9.31			322.38	324.76
9	2.82	48	1028.5	2.78	3.19	8.87			321.94	324.22
10	2.88	43	1029.4	2.84	3.17	9.00			322.07	324.38
11	2.51	48	1005.2	2.54	3.15	8.00			321.07	323.16
12	2.72	48	1020.0	2.71	3.13	8.48			321.55	323.74
13	2.66	41	1026.7	2.63	3.10	8.15			321.22	323.34
14	2.27	48	1019.7	2.26	3.08	6.96			320.03	321.89
15	2.38	48	1018.5	2.37	3.06	7.25			320.32	322.25
16	2.63	48	1024.0	2.61	3.03	7.91			320.98	323.05
17	2.35	48	1016.6	2.35	3.01	7.07			320.14	322.03
18	2.59	48	1023.9	2.57	2.99	7.68			320.75	322.77
19	2.55	48	1029.2	2.52	2.96	7.46			320.53	322.50
20	2.49	40	1019.1	2.48	2.94	7.29			320.36	322.29
21	2.75	48	1021.2	2.73	2.92	7.97			321.04	323.12
22	2.88	48	1035.3	2.83	2.90	8.21			321.28	323.42
23	2.46	48	1029.0	2.43	2.87	6.97			320.04	321.90
24	2.57	48	1027.9	2.54	2.85	7.24			320.31	322.23
25	2.55	48	1024.3	2.53	2.83	7.16			320.23	322.14
26	2.19	48	1016.2	2.19	2.80	6.13			319.20	320.88
27	2.25	17	1015.0	2.25	2.78	6.26			319.33	
27	2.57	13	1016.9	2.57	2.76	7.09			320.16	
								March 27 Average	319.69	321.48
28	2.47	48	1021.2	2.46			6.79		319.86	321.69
29	2.19	48	1021.4	2.18			6.02		319.09	320.75

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	7 Computed Index Diff.	8 Reference Tank		9 Air Index	10 Index	11 Manometric Conc. (ppm)
							No.	Index			
<u>1967</u>											
Mar. 30	2.38	48	1019.7	2.37	2.76	6.54	10063	313.07	319.61	321.38	
31	2.20	48	1016.8	2.20	6.07	6.07			319.14	320.81	
Apr. 1	2.44	48	1021.1	2.43	6.71	6.71			319.78	321.59	
2	2.28	48	1015.0	2.30	6.35	6.35			319.42	321.15	
3	2.56	47	1019.0	2.55	7.04	7.04			320.11	321.99	
4	2.53	48	1019.4	2.52	6.96	6.96			320.03	321.89	
5	2.33	48	1019.9	2.32	6.40	6.40			319.47	321.21	
6	1.85	48	1016.3	1.85	5.11	5.11			318.18	319.64	
7	2.06	33	1013.0	2.07	5.71	5.71			318.78		
7	2.66	15	1015.1	2.66	7.34	7.34	10067	311.79	319.13		
8	2.61	22	1017.8	2.61	7.20	7.20	April 17 Average	318.89	320.50		
8	4.00	2	1021.0	3.98	2.83	2.83	11.26		318.99		
9	2.95	48	1019.2	2.94	2.90	8.53			323.05		
10	2.71	43	1009.5	2.73	2.97	8.11			319.90	321.73	
11	2.95	26	1012.7	2.96	3.04	9.00			320.79	322.32	
12	2.46	16	1007.5	2.48	3.10	7.69			319.48	321.22	
13	2.54	47	1007.9	2.56	3.17	8.12			319.91	321.75	
14	2.58	33	1012.5	2.59	3.24	8.39			320.18	322.08	
15	3.79	35	1028.5	3.74	3.31	12.38			324.17	326.94	
16	3.87	36	1023.6	3.84	3.38	12.98			324.77	327.67	
17	3.09	33	1010.5	3.11	3.44	10.70			322.49	324.89	
18	2.95	33	1023.9	2.93	3.51	10.28			322.07	324.38	
19	3.01	37	1006.9	3.04	3.58	10.88			322.67	325.11	
20	2.67	26	1007.8	2.69	3.65	9.82			321.61		
20	2.83	5	1017.5	2.83	3.60	10.19			321.98		
21	2.87	35	1012.8	2.88			10.37		321.67	323.89	
									322.16	324.49	

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Cr ¹	1	2	3	4	5	6	7	8	9	10	11	Reference Tank			Air Index	Manometric Conc. (ppm)
												No.	Index			
1967																
Apr.	22	3.00	43	1007.2	3.03	3.60	10.91	10067	311.79	322.70	325.15					
	23	2.88	45	1014.0	2.89		10.40			322.19	324.52					
	24	3.04	44	1015.9	3.04		10.94			322.73	325.18					
	25	3.00	45	1050.4	2.99		10.76			322.55	324.96					
	26	3.12	45	1011.8	3.13		11.27			323.06	325.58					
	27	2.94	44	1001.7	2.98		10.73			322.52	324.93					
	28	2.99	48	1010.9	3.00		10.80			322.59	325.01					
	29	2.93	47	1020.1	2.92		10.51			322.30	324.66					
	30	2.83	47	1029.6	2.80		10.08			321.87	324.13					
May	1	3.60	40	1028.2	2.96		10.66			322.45	324.84					
	2	3.05	48	1019.1	3.04		10.94			322.73	325.18					
	3	3.07	46	1005.5	3.10		11.16			322.95	325.45					
	4	2.94	48	0998.7	2.99		10.76			322.55	324.96					
	5	2.98	48	1005.7	3.01		10.84			322.63	325.06					
	6	2.92	48	1007.2	2.94		10.58			322.37	324.74					
	7	2.99	47	1007.0	3.01		10.84			322.63	325.06					
	8	3.14	46	1023.7	3.11		11.20			322.99	325.50					
	9	3.37	48	1019.7	3.36		12.10			323.89	326.60					
	10	3.19	48	1018.5	3.18		11.45			323.24	325.80					
	11	3.39	48	1017.2	3.38		12.17			323.96	326.68					
	12	3.33	47	1027.9	3.29		11.84			323.63	326.28					
	13	2.93	29	1030.1	2.89		10.40			322.19	324.52					
	14	2.71	48	1030.6	2.67		9.61			321.40	323.56					
	15	2.59	45	1034.1	2.54		9.14			320.93	322.99					
	16	2.63	22	1017.5	2.62		9.43			321.22	323.34					
	17	2.47	16	1008.1	2.49		8.96			320.75						
	17	2.26	11	1009.8	2.27		8.17	10068	313.06	321.23						
								May 17	Average	320.95	323.01					

TABLE 7a: INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank		Air Index	Manometric Conc. (ppm)
							6	7	8	9
1967										
May 18	2.41	48	1012.7	2.42	3.60	8.71	10068	313.06	321.77	324.01
19	2.38	48	1015.6	2.38		8.57			321.63	323.84
20	2.25	48	1017.7	2.25		8.10			321.16	323.27
21	2.24	46	1019.2	2.23		8.03			321.09	323.18
22	2.31	47	1014.0	2.31		8.32			321.38	323.54
23	2.18	47	1013.5	2.18		7.85			320.91	322.96
24	2.22	48	1018.5	2.21		7.96			321.02	323.10
25	2.19	48	1013.8	2.19		7.88			320.94	322.00
26	2.18	48	1018.0	2.17		7.81			320.87	322.92
27	2.33	48	1020.0	2.32		8.35			321.41	323.57
28	2.43	48	1018.5	2.42		8.71			321.77	324.01
29	2.48	45	1015.0	2.48		8.93			321.99	324.36
30	2.23	42	1010.5	2.24		8.06			321.12	323.22
31	2.26	38	1007.0	2.28		8.21			321.27	323.40
June										
1	1.99	46	1007.3	2.01		7.24			320.30	322.22
2	1.94	48	1012.6	1.95		7.02			320.06	321.95
3	2.18	47	1018.9	2.17		7.81			320.87	322.92
4	2.16	48	1017.8	2.16		7.78			320.84	322.88
5	2.27	48	1014.2	2.27		8.17			321.23	323.34
6	2.13	46	1016.0	2.13		7.67			320.73	322.75
7	1.49	46	1018.5	1.49		5.36			318.42	319.93
8	1.48	48	1017.5	1.48		5.33			318.39	319.89
9	1.18	19	1020.3	1.17		4.21			317.27	318.53
10	3.24	5	1011.3	3.25		11.70			324.76	327.66
11	2.43	3	1011.0	2.44		8.78			321.84	324.10
12	2.39	42	1008.4	2.41		8.68			321.74	323.98
13	2.45	48	1012.1	2.46		8.86			321.92	324.20
14	2.61	48	1016.7	2.61		9.40			322.46	324.85
15	2.02	48	1022.6	2.01		7.24			320.30	322.22

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	Recorder	6 Computed Scale Factor	7 Index Diff.	Reference Tank No.	8 Index	Air Index	11 Barometric Conc. (ppm)
<u>1967</u>											
June 17	1.86	48	1023.1	1.85	3.60	6.66	10068	313.06	319.72	321.51	
18	2.06	48	1020.2	2.05		7.38			320.44	322.39	
19	2.30	42	1026.5	2.27		8.17			321.23	323.35	
20	2.18	48	1020.3	2.17		7.81			320.87	322.72	
21	2.10	48	1017.5	2.10		7.56			320.62	322.61	
22	1.70	42	1016.8	1.70		6.12			319.18	320.86	
23	2.08	48	1016.0	2.08		7.49			320.55	322.53	
24	1.98	46	1016.2	1.98		7.13			320.19	322.09	
25	2.00	48	1014.5	2.00		7.20			320.26	322.17	
-	26	1.83	47	1010.5	1.84	6.62			319.68	321.47	
27	1.47	15	1007.7	1.48		5.33			318.39	319.89	
28	0.89	12	1007.6	0.90		3.24			316.30		
28	0.83	4	1011.0	0.83		2.99			318.89		
- 132 -											
29	0.75	44	1016.5	0.75		2.70			318.20		
30	0.64	47	1022.4	0.64		2.30			318.60		
July 1	0.87	18	1022.4	0.86		3.10			319.00		
1	1.79	9	1019.2	1.78	1.78	3.17			319.07		
July 1 Average											
2	1.68	48	1014.7	1.68		2.99			318.89	320.50	
3	1.18	47	1011.7	1.18		2.10			318.00	319.42	
4	.67	39	1012.7	1.68		2.99			318.89	320.50	
5	1.58	48	1010.5	1.59		2.83			318.73	320.31	
6	1.51	48	1010.4	1.52		2.71			318.61	320.16	
7	1.71	45	1007.2	1.72		3.06			318.96	320.59	
8	1.37	43	1009.4	1.38		2.46			318.36	319.86	
9	1.27	48	1013.7	1.27		2.26			318.16	319.61	

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank		Air Index	Manometric Conc. (ppm)
							No.	Index		
<u>1967</u>										
July 10	0.69	47	1020.5	0.69	1.78	1.23	30454	315.90	317.13	318.36
11	- 0.03	39	1018.0	- 0.03	-	- 0.05			315.85	316.80
12	- 0.25	22	1016.5	- 0.25	-	- 0.45			315.45	316.31
13	- 0.03	47	1015.6	- 0.03	-	- 0.05			315.85	316.80
14	- 1.12	45	1013.8	- 1.12	-	- 1.99			313.91	314.43
15	- 2.33	44	1009.3	- 2.34	-	- 4.17			311.73	311.78
16	- 1.65	48	0996.5	- 1.68	-	- 2.99			312.91	313.22
17	- 1.53	46	0991.7	- 1.57	-	- 2.79			313.11	313.46
18	- 1.55	45	0995.7	- 1.58	-	- 2.81			313.09	313.44
19	- 0.54	47	0992.1	- 0.55	-	- 0.98			314.92	315.67
20	0.25	28	0996.8	0.25	-	0.45			316.35	317.41
21	0.19	47	1000.7	0.19	-	0.34			316.24	317.27
22	- 0.17	48	1008.6	- 0.17	-	- 0.30			315.60	316.49
23	- 0.13	48	1013.9	- 0.18	-	- 0.32			315.58	316.47
24	- 0.21	46	1017.9	- 0.21	-	- 0.37			315.53	316.41
25	- 0.35	47	1015.3	- 0.35	-	- 0.62			315.28	316.10
26	- 0.49	46	1012.7	0.49	-	- 0.87			315.03	315.80
27	- 0.46	46	1007.8	- 0.46	-	- 0.82			315.08	315.86
28	- 0.46	48	1010.6	- 0.46	-	- 0.82			315.08	315.86
29	- 0.53	47	1010.8	- 0.53	-	- 0.94			314.96	315.71
30	- 1.01	48	1003.5	- 1.02	-	- 1.82			314.08	314.64
31	- 0.89	47	1008.2	- 0.90	-	- 1.60			314.30	314.91
Aug. 1	- 1.16	21	1012.4	- 1.16	-	- 2.06			313.84	
	1.42	3	1017.0	1.42	2.53	10075	310.46	1 Average	312.99	313.73
2	0.71	47	1014.9	0.71	1.77	1.26			311.72	311.77
3	1.60	48	1015.7	1.60	-	2.83			313.29	313.68
4	0.94	44	1023.3	0.93	1.76	1.64			312.10	312.23
5	1.26	48	1023.1	1.25	-	2.20			312.66	312.91

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1	Day of Month	Observed Scale Diff.	No. of Comparisons	Barometric Pressure (inches)	Adjusted Scale Diff.	Recorder Scale Factor	Computed Index Diff.	Reference Tank		Air Index	Manometric Conc. (ppm)
								No.	Index		
<u>1967</u>											
Aug.	6	1.43	47	1017.6	1.43	1.75	2.50	10075	310.46	312.96	313.28
	7	1.39	46	1014.8	1.39	2.43	2.43			312.89	313.19
	8	1.45	48	1009.5	1.46	1.74	2.54			313.00	313.33
	9	1.42	46	1001.9	1.44	2.51	2.51			312.97	313.29
	10	1.68	48	1005.0	1.70	1.73	2.94			313.40	313.81
	11	1.98	48	1006.7	2.00	3.46	3.46			313.92	314.45
	12	1.68	46	1010.7	1.69	1.72	2.91			313.37	313.78
	13	1.58	48	1017.0	1.58	2.72	2.72			313.18	313.55
	14	1.30	42	1019.1	1.29	1.71	2.21			312.67	312.92
	15	1.36	47	1013.4	1.36	2.33	2.33			312.79	313.07
	16	1.37	46	0999.6	1.39	1.70	2.36			312.82	313.11
	17	1.99	48	0998.5	2.02	3.43	3.43			313.89	314.41
	18	3.23	48	1002.0	3.27	1.69	5.53			315.99	316.97
	19	1.05	48	1009.4	1.06	1.79	1.79			312.25	312.61
	20	1.02	48	1005.9	1.03	1.68	1.73			312.19	312.34
	21	1.10	46	1008.3	1.11	1.86	1.86			312.32	312.59
	22	1.74	48	1007.7	1.75	1.67	2.92			313.38	313.79
	23	1.35	44	1006.1	1.36	2.27	2.27			312.73	313.00
	24	0.79	48	1008.3	0.80	1.66	1.33			311.79	311.85
	25	0.69	48	1003.8	0.70	1.16	1.16			311.62	311.64
	26	1.29	48	0999.2	1.31	1.65	2.16			312.62	312.86
	27	0.95	46	1005.5	0.96	1.58	1.58			312.04	312.16
	28	1.05	47	1010.3	1.06	1.64	1.74			312.20	312.35
	29	0.65	46	1016.3	0.65	1.07	1.07			311.53	311.53
	30	0.65	48	1023.5	0.64	1.63	1.04			311.50	311.50
	31	0.72	46	1020.7	0.72	1.17	1.17			311.63	311.66
Sept.	1	0.76	48	1017.7	0.76	1.62	1.23			311.69	311.73

TABLE 7a : INDICES OF AIR WITH CONTINUOUS ANALYZER
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col: 1 Day of Month	2 Observed Scale Diff.	3 No. of Comparisons	4 Barometric Pressure (inches)	5 Adjusted Scale Diff.	6 Recorder Scale Factor	7 Computed Index Diff.		8 Reference Tank No.		9 Air Index		10 Manometric Conc. (ppm)		11
						Computed Index Diff.	Reference Tank No.	Air Index	Manometric Conc. (ppm)	11				
<u>1967</u>														
Sept. 2	0.73	48	1016.3	0.73	1.62	1.18	10075	310.46	311.64	311.67				
3	1.06	48	1013.2	1.06	1.61	1.71				312.17	312.31			
4	0.89	27	1011.5	0.89	1.60	1.42				311.88	311.96			
5	1.09	47	1013.9	1.09		1.74				312.20	312.35			
6	1.18	48	1015.6	1.18		1.89				312.35	312.53			
7	1.03	48	1012.3	1.03		1.65				312.11	312.24			
8	1.14	48	1006.7	1.15		1.84				312.30	312.47			
9	1.02	48	1010.2	1.03		1.65				312.11	312.24			
10	1.07	48	1014.5	1.07		1.71				312.17	312.31			
11	1.10	45	1014.8	1.10		1.76				312.22	312.38			
12	1.24	48	1008.4	1.25		2.00				312.46	312.67			
13	1.37	48	1005.4	1.38		2.21				312.67	312.92			
14	1.47	48	1005.7	1.48		2.37				312.83	313.12			
15	1.47	48	1007.3	1.46		2.37				312.83	313.12			

TABLE 8 : MONTHLY INDEX OF CARBON DIOXIDE (ppm) AT BARROW, ALASKA
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Month	Number of Index Days	Month	Number of Days	Index	Month	Number of Days	Index	Month	Number of Days
<u>1961</u>									
Jan.	---	---	---	Jan.	26	320.49	Jan.	27	317.74
Feb.	---	---	---	Feb.	28	319.47	Feb.	28	318.87
Mar.	---	---	---	Mar.	29	317.63	Mar.	30	319.48
Apr.	---	---	---	Apr.	30	318.00	Apr.	15	318.92
May	---	---	---	May	31	318.80	May	31	319.35
June	---	---	---	June	30	317.44	June	26	317.50
July	21	310.85	July	31	311.89	July	31	313.62	
Aug.	24	307.92	Aug.	29	307.63	Aug.	31	309.84	
Sept.	23	310.33	Sept.	28	309.80	Sept.	27	310.87	
Oct.	28	314.31	Oct.	30	312.79	Oct.	---	---	
Nov.	18	315.02	Nov.	30	315.92	Nov.	---	---	
Dec.	14	316.00	Dec.	31	317.17	Dec.	---	---	
<u>1962</u>									
Jan.	---	---	---	Jan.	27	317.74	Jan.	27	317.74
Feb.	---	---	---	Feb.	28	318.87	Feb.	28	318.87
Mar.	---	---	---	Mar.	30	319.48	Mar.	30	319.48
Apr.	---	---	---	Apr.	15	318.92	Apr.	15	318.92
May	---	---	---	May	31	319.35	May	31	319.35
June	---	---	---	June	26	317.50	June	26	317.50
July	31	311.89	July	31	313.62	July	31	313.62	
Aug.	29	307.63	Aug.	29	309.84	Aug.	31	309.84	
Sept.	28	309.80	Sept.	28	310.87	Sept.	27	310.87	
Oct.	30	312.79	Oct.	30	312.79	Oct.	---	---	
Nov.	30	315.92	Nov.	30	315.92	Nov.	---	---	
Dec.	31	317.17	Dec.	31	317.17	Dec.	---	---	
<u>1963</u>									
Jan.	---	---	---	Jan.	27	317.74	Jan.	27	317.74
Feb.	---	---	---	Feb.	28	318.87	Feb.	28	318.87
Mar.	---	---	---	Mar.	30	319.48	Mar.	30	319.48
Apr.	---	---	---	Apr.	15	318.92	Apr.	15	318.92
May	---	---	---	May	31	319.35	May	31	319.35
June	---	---	---	June	26	317.50	June	26	317.50
July	31	313.62	July	31	313.62	July	31	313.62	
Aug.	31	309.84	Aug.	31	309.84	Aug.	31	309.84	
Sept.	27	310.87	Sept.	27	310.87	Sept.	27	310.87	
Oct.	---	---	Oct.	---	---	Oct.	---	---	
Nov.	---	---	Nov.	---	---	Nov.	---	---	
Dec.	---	---	Dec.	---	---	Dec.	---	---	

TABLE 8a: MONTHLY INDEX OF CARBON DIOXIDE (ppm) AT BARROW, ALASKA
BARROW, ALASKA CARBON DIOXIDE PROJECT

Col:	1	2	3	4	5	6	7	8	9
Month	Number of Index Days		Month	Number of Index Days		Month	Number of Index Days		
<u>1965</u>									
Jan.	24	320.24	Jan.	31	319.49	Jan.	31	320.24	
Feb.	18	322.97	Feb.	28	319.30	Feb.	28	320.58	
Mar.	28	321.56	Mar.	31	319.83	Mar.	31	320.69	
Apr.	45	321.47	Apr.	29	320.32	Apr.	30	321.28	
May	76	321.46	May	31	320.70	May	31	321.97	
June	19	319.43	June	25	320.10	June	29	320.21	
July	31	314.97	July	31	314.77	July	31	315.96	
Aug.	31	316.40	Aug.	31	316.23	Aug.	31	317.75	
Sept.	30	319.72	Sept.	30	319.54	Sept.	15	312.24	
Oct.	21	315.24	Oct.	16	315.46	Oct.	...	...
Nov.	30	317.58	Nov.	29	317.69	Nov.	...	...
Dec.	11	317.89	Dec.	11	317.42	Dec.	...	...
<u>1966</u>									
Jan.	24	320.24	Jan.	31	319.49	Jan.	31	320.24	
Feb.	18	322.97	Feb.	28	319.30	Feb.	28	320.58	
Mar.	28	321.56	Mar.	31	319.83	Mar.	31	320.69	
Apr.	45	321.47	Apr.	29	320.32	Apr.	30	321.28	
May	76	321.46	May	31	320.70	May	31	321.97	
June	19	319.43	June	25	320.10	June	29	320.21	
July	31	314.97	July	31	314.77	July	31	315.96	
Aug.	31	316.40	Aug.	31	316.23	Aug.	31	317.75	
Sept.	30	319.72	Sept.	30	319.54	Sept.	15	312.24	
Oct.	21	315.24	Oct.	16	315.46	Oct.	...	...
Nov.	30	317.58	Nov.	29	317.69	Nov.	...	...
Dec.	11	317.89	Dec.	11	317.42	Dec.	...	...
<u>1967</u>									
Jan.	24	320.24	Jan.	31	319.49	Jan.	31	320.24	
Feb.	18	322.97	Feb.	28	319.30	Feb.	28	320.58	
Mar.	28	321.56	Mar.	31	319.83	Mar.	31	320.69	
Apr.	45	321.47	Apr.	29	320.32	Apr.	30	321.28	
May	76	321.46	May	31	320.70	May	31	321.97	
June	19	319.43	June	25	320.10	June	29	320.21	
July	31	314.97	July	31	314.77	July	31	315.96	
Aug.	31	316.40	Aug.	31	316.23	Aug.	31	317.75	
Sept.	30	319.72	Sept.	30	319.54	Sept.	15	312.24	
Oct.	21	315.24	Oct.	16	315.46	Oct.	...	...
Nov.	30	317.58	Nov.	29	317.69	Nov.	...	...
Dec.	11	317.89	Dec.	11	317.42	Dec.	...	...

TABLE 5 : MONTHLY INDEX TO CARGO DISCHARGE (Tons) AT RAPID CITY,
QUEBEC, ALASKA CARGO DIVISION PROJECT
MATERIALS CONCENTRATION SCALE

Col.	1	2	3	4	5	6	7	8	9	
Month	Number of Days	Number of Days	Number of Days	Number of Days	Index	Index	Index	Index	Index	
Jan.	---	---	---	---	Jan.	26	327.45	Jan.	27	JUL. 19
Feb.	---	---	---	---	Feb.	28	371.21	Feb.	26	320.68
Mar.	---	---	---	---	Mar.	29	318.97	Mar.	30	321.21
Apr.	---	---	---	---	Apr.	30	319.42	Apr.	15	320.54
May	---	---	---	---	May	31	320.39	May	31	321.56
June	---	---	---	---	June	30	318.74	June	26	318.81
July	21	310.70	July	31	311.97	July	31	314.08		
Aug.	24	327.14	Aug.	29	306.78	Aug.	31	309.47		
Sept.	23	310.07	Sept.	28	309.43	Sept.	27	310.73		
Oct.	28	314.92	Oct.	30	313.07	Oct.	—	—		
Nov.	18	315.79	Nov.	30	316.85	Nov.	—	—		
Dec.	14	316.98	Dec.	31	318.41	Dec.	—	—		
Average of Monthly Values										
312.60										
316.48										
317.28										

1961

1962

TABLE 9a: MONTHLY INDEX OF CARBON DIOXIDE (ppm) AT BARROW, ALASKA
 BARROW, ALASKA CARBON DIOXIDE PROJECT
 MANOMETRIC CONCENTRATION SCALE

Col:	1	2	3	4	5	6	7	8	9
Month	Number of Index Days	Month	Number of Days	Month	Index	Month	Number of Days	Month	Index
<u>1965</u>									
Jan.	24	322.14	Jan.	31	321.24	Jan.	31	322.14	
Feb.	18	323.04	Feb.	28	321.01	Feb.	28	322.56	
Mar.	28	323.49	Mar.	31	321.71	Mar.	31	322.69	
Apr.	25	323.64	Apr.	30	322.25	Apr.	30	323.41	
May	29	324.83	May	31	322.71	May	31	324.25	
June	19	321.22	June	25	321.98	June	29	322.11	
July	31	315.61	July	31	315.47	July	31	316.93	
Aug.	31	310.16	Aug.	31	311.15	Aug.	31	313.02	
Sept.	30	310.58	Sept.	30	312.27	Sept.	15	312.40	
Oct.	31	316.79	Oct.	30	316.34	Oct.	—	—	
Nov.	30	318.54	Nov.	29	319.28	Nov.	—	—	
Dec.	31	319.28	Dec.	31	321.43	Dec.	—	—	
<u>1966</u>									
Jan.	31	321.24	Jan.	31	322.14	Jan.	31	322.14	
Feb.	28	321.01	Feb.	28	322.56	Feb.	28	322.56	
Mar.	31	321.71	Mar.	31	322.69	Mar.	31	322.69	
Apr.	30	322.25	Apr.	30	323.41	Apr.	30	323.41	
May	31	322.71	May	31	324.25	May	31	324.25	
June	25	321.98	June	29	322.11	June	29	322.11	
July	31	315.47	July	31	316.93	July	31	316.93	
Aug.	31	311.15	Aug.	31	313.02	Aug.	31	313.02	
Sept.	30	312.27	Sept.	15	312.40	Sept.	15	312.40	
Oct.	30	316.34	Oct.	—	—	Oct.	—	—	
Nov.	29	319.28	Nov.	—	—	Nov.	—	—	
Dec.	31	321.43	Dec.	—	—	Dec.	—	—	
<u>1967</u>									
Average of Monthly Values	319.11	318.90							
									319.95

TABLE 10: TWELVE MONTH RUNNING MEAN CONCENTRATION OF ATMOSPHERIC
CARBON DIOXIDE AT BARROW, ALASKA
BARROW, ALASKA CARBON DIOXIDE PROJECT

<u>Col:</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Month				Concentration of CO ₂ (ppm)		
		<u>1962</u>	<u>1963</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>
January	316.40	316.48	318.49	319.43		
February	316.50	316.66	318.48	319.55		
March	316.47	316.88	318.56	319.70		
April	316.42	316.99	318.70	319.71		
May	316.27		318.66			
June	316.36		318.72			
July	316.48		318.90			
August	316.20		319.11			
September	316.14		319.04			
October	316.32		318.98			
November	316.42		319.11			
December	316.47		318.37			
			318.72			
			319.19			
			318.60			
			319.29			
			318.43			
			319.41			

TABLE I: VALUES OF TABLES 9, 9a REFERRED TO A CONSTANT DATUM (January 1960)
BARKOW, ALASKA CARBON DIOXIDE PROJECT

Col:	Month	Concentration of CO ₂ (ppm)							Average	Departure of Average from Annual Mean
		1	2	3	4	5	6	7		
		<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1967</u>	<u>1961-1967</u>	
January	--	321.01	316.94	318.54	316.92	317.10	318.19	-3.41		
February	--	319.71	318.26	319.38	316.63	317.46	318.29	-3.60		
March	--	317.41	318.94	319.77	317.27	317.53	318.18	-3.49		
April	--	317.80	318.20	319.86	317.75	318.19	318.36	-3.67		
May	--	318.71	318.66	320.99	318.15	318.97	319.10	-4.41		
June	--	317.00	316.35	317.32	317.36	316.77	316.95	-2.27		
July	309.62	310.17	311.56	311.65	310.79	311.53	310.89	3.80		
August	306.00	304.92	306.89	306.14	306.41	307.56	306.32	8.37		
September	308.87	307.51	308.09	306.50	307.47	306.88	307.55	7.14		
October	313.66	311.09	--	312.65	311.48	--	312.22	2.27		
November	314.47	314.84	--	314.34	314.36	--	314.50	0.19		
December	315.60	316.31	--	315.02	316.45		315.84	-1.15		

Annual Mean 314.69

TABLE 12: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month: <u>1961</u>	A. S. T.*	July		August		September	
		Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)
	00-01	310.8	307.7	306.9	310.4		
	01-02	310.8	307.9	307.1	310.6		
	02-03	311.1	307.9	307.1	310.6		
	03-04	310.9	308.7	309.0	310.7		
	04-05	311.4	308.8	308.2	310.9		
	05-06	311.2	308.9	308.3	310.8		
	06-07	311.1	308.7	308.1	310.8		
	07-08	311.3	308.3	308.9	310.7		
	08-09	311.1	308.8	308.2	310.8		
	09-10	310.9	308.2	307.5	311.1		
	10-11	310.5	308.1	307.3	310.6		
	11-12	310.6	307.9	307.1	310.7		
	12-13	310.8	307.5	306.6	310.4		
	13-14	310.8	307.3	306.4	310.5		
	14-15	310.7	307.5	306.6	310.4		
	15-16	310.5	307.5	306.6	310.6		
	16-17	310.8	307.7	306.9	310.4		
	17-18	309.9	307.6	306.7	310.6		
	18-19	310.0	307.6	306.8	310.5		
	19-20	309.9	307.6	306.8	310.3		
	20-21	310.3	307.8	307.0	310.0		
	21-22	310.7	307.5	306.6	310.1		
	22-23	310.3	307.3	306.3	310.6		
	23-24	310.1	307.4	306.5	310.7		

* Alaska Standard Time

TABLE 12: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month: <u>1961</u>	October			November			December		
	A. S. T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)
00-01	314.4	315.1		315.2	316.1		316.0	317.0	
01-02	314.3	314.9		315.3	316.1		316.0	317.0	
02-03	314.5	315.1		315.3	316.1		316.0	317.0	
03-04	314.4	315.0		315.3	316.1		316.0	317.0	
04-05	314.4	315.1		315.4	316.2		316.0	317.0	
05-06	314.4	315.0		315.4	316.2		316.0	317.0	
06-07	314.6	315.2		315.4	316.2		316.2	317.2	
07-08	314.4	315.1		315.2	316.0		316.3	317.3	
08-09	314.6	315.3		315.3	316.2		316.3	317.3	
09-10	314.3	315.0		315.4	316.2		316.4	317.4	
10-11	314.5	315.2		315.6	316.5		316.5	317.6	
11-12	314.5	315.2		315.8	316.7		316.4	317.4	
12-13	314.3	315.0		315.4	316.3		316.1	317.1	
13-14	314.3	315.0		315.7	316.6		316.1	317.0	
14-15	314.4	315.0		315.6	316.4		316.0	317.0	
15-16	314.5	315.1		315.5	316.4		316.0	317.0	
16-17	314.4	315.1		315.4	316.3		315.9	316.8	
17-18	314.3	314.9		315.6	316.5		316.0	316.9	
18-19	314.3	314.9		315.6	316.5		316.0	317.0	
19-20	314.4	315.1		315.6	316.4		316.0	317.0	
20-21	314.4	315.0		315.4	316.3		316.1	317.1	
21-22	314.5	315.2		315.4	316.2		316.3	317.3	
22-23	314.4	315.0		315.3	316.1		316.1	317.1	
23-24	314.4	315.0		315.6	316.4		316.1	317.1	

* Alaska Standard Time

TABLE 12: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

1962		January			February			March		
Month:	A. S. T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	
	00-01	317.6	319.0	317.8	319.1	317.8	319.2	317.8	319.2	
	01-02	317.7	319.0	317.8	319.2	317.8	319.2	317.8	319.1	
	02-03	317.6	318.9	317.8	319.2	317.9	319.3	317.9	319.3	
	03-04	317.6	318.9	317.9	319.3	317.9	319.3	317.9	319.3	
	04-05	317.6	318.9	317.8	319.2	317.8	319.2	319.0	319.4	
	05-06	317.8	319.2	317.9	319.2	317.9	319.2	318.0	319.4	
	06-07	318.0	319.4	317.8	319.2	317.8	319.2	318.0	319.4	
	07-08	317.5	318.8	317.9	319.2	317.9	319.2	318.0	319.4	
	08-09	318.0	319.4	317.9	319.4	317.9	319.4	317.9	319.3	
	09-10	317.7	319.1	317.9	319.4	317.9	319.4	317.9	319.3	
	10-11	317.5	318.9	317.7	319.0	317.7	319.0	317.8	319.2	
	11-12	317.5	318.8	317.8	319.2	317.8	319.2	317.9	319.3	
	12-13	317.4	318.7	317.7	319.1	317.7	319.1	317.8	319.2	
	13-14	317.2	318.5	317.8	319.2	317.8	319.2	317.8	319.2	
	14-15	317.5	318.8	318.0	319.4	317.6	319.4	317.9	319.3	
	15-16	317.5	318.8	317.9	319.3	317.8	319.2	317.8	319.2	
	16-17	317.3	318.7	317.8	319.1	317.8	319.1	317.9	319.3	
	17-18	317.3	318.5	317.8	319.1	317.8	319.1	317.9	319.3	
	18-19	317.3	318.6	317.6	319.0	317.6	319.0	317.6	319.0	
	19-20	317.6	318.9	317.8	319.1	317.8	319.1	317.8	319.2	
	20-21	317.1	318.3	317.9	319.3	317.9	319.3	317.7	319.1	
	21-22	317.6	319.0	317.9	319.3	317.9	319.3	317.8	319.1	
	22-23	317.6	319.0	317.9	319.4	317.9	319.4	317.8	319.2	
	23-24	317.7	319.1	318.0	319.4	317.7	319.4	317.8	319.2	

* Alaska Standard Time

TABLE 12: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

1962		July			August			September		
Month:	A. S. T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	
00-01	312.3	312.4	307.7	306.9	309.8	309.5	309.5	310.0	309.6	
01-02	312.4	312.6	307.7	306.8	309.0	310.0	309.6	310.0	309.6	
02-03	313.0	313.3	307.7	306.9	310.0	310.0	309.6	310.0	309.6	
03-04	312.5	312.8	307.9	307.1	310.0	310.0	309.7	310.0	309.7	
04-05	312.6	312.8	308.1	307.3	310.0	310.0	309.7	310.0	309.7	
05-06	312.3	312.5	307.7	306.9	310.1	310.1	309.8	310.0	309.8	
06-07	312.4	312.6	307.8	306.9	310.0	310.0	309.7	310.0	309.7	
07-08	312.3	312.5	307.5	306.6	309.8	309.8	309.4	310.0	309.4	
08-09	312.1	312.2	307.4	306.5	310.0	310.0	309.7	310.0	309.7	
09-10	311.9	312.0	307.4	306.5	310.0	310.0	309.7	310.0	309.7	
10-11	312.1	312.3	306.9	305.9	309.8	309.8	309.5	310.0	309.5	
11-12	312.0	312.2	307.1	306.1	309.7	309.7	309.3	310.0	309.3	
12-13	311.4	311.4	307.3	306.3	309.5	309.5	309.7	310.0	309.7	
13-14	311.7	311.7	307.4	306.5	309.6	309.6	309.1	310.0	309.1	
14-15	311.3	311.2	307.2	306.3	309.3	309.3	308.8	310.0	308.8	
15-16	311.3	311.3	307.0	306.0	309.7	309.7	309.3	310.0	309.3	
16-17	311.4	311.3	307.4	306.5	309.6	309.6	309.2	310.0	309.2	
17-18	311.4	311.4	307.2	306.2	309.7	309.7	309.3	310.0	309.3	
18-19	311.6	311.6	307.2	306.3	309.9	309.9	309.6	310.0	309.6	
19-20	311.7	311.8	307.6	306.8	311.0	311.0	309.8	310.2	309.8	
20-21	311.7	311.7	309.8	307.6	310.2	310.2	309.9	310.0	309.9	
21-22	311.7	311.8	309.8	307.6	310.3	310.3	310.0	310.0	310.0	
22-23	311.7	311.9	307.9	307.1	310.2	310.2	309.9	310.1	309.8	
23-24	312.0	312.0	307.9	307.1	310.1	310.1	309.8	310.1	309.8	

* Alaska Standard Time

TABLE 12: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

1962		April		May		June	
Month:	A. S. T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)
	00-01	318.0	319.4	318.9	320.6	317.2	318.5
	01-02	318.0	319.4	318.9	320.6	317.5	318.9
	02-03	318.0	319.5	319.0	320.7	317.5	318.8
	03-04	318.1	319.5	319.1	320.7	317.4	318.7
	04-05	318.1	319.5	319.0	320.7	317.5	318.8
	05-06	318.1	319.6	319.1	320.7	317.2	318.5
	06-07	318.2	319.6	319.0	320.7	317.6	318.9
	07-08	318.2	319.7	319.0	320.7	317.5	318.8
	08-09	318.0	319.5	319.0	320.6	317.3	318.6
	09-10	318.0	319.3	318.9	320.5	317.3	318.6
	10-11	318.1	319.5	318.9	320.5	317.3	318.6
	11-12	318.0	319.5	318.8	320.4	317.5	318.8
	12-13	318.0	319.4	318.7	320.2	317.3	318.6
	13-14	317.9	319.4	318.6	320.2	317.4	318.6
	14-15	317.9	319.3	318.6	320.2	317.5	318.9
	15-16	318.0	319.4	318.6	320.2	317.3	318.6
	16-17	317.8	319.2	318.6	320.1	317.2	318.5
	17-18	317.7	319.1	318.4	320.0	317.0	318.2
	18-19	317.7	319.0	318.4	319.9	317.1	318.3
	19-20	317.9	319.3	318.6	320.1	317.0	318.3
	20-21	318.1	319.5	318.8	320.3	317.1	318.3
	21-22	318.1	319.6	318.7	320.3	317.0	318.2
	22-23	318.2	319.6	318.9	320.5	317.0	318.1
	23-24	318.0	319.5	319.0	320.6	316.9	318.0

* Alaska Standard Time

TABLE 12 : DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

1962		Month:			October			November			December		
A. S.	T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)		
00-01		312.8	313.0		315.9		316.9		317.2		318.5		
01-02		312.8	313.0		315.9		316.9		317.2		318.4		
02-03		312.8	313.0		316.0		317.0		317.1		318.4		
03-04		312.8	313.0		316.0		317.0		317.2		318.5		
04-05		312.9	313.2		316.0		317.0		317.3		318.6		
05-06		313.0	313.3		316.0		317.0		317.3		318.5		
06-07		312.9	313.2		316.0		317.0		317.2		318.4		
07-08		312.7	312.9		315.9		316.9		317.2		318.4		
08-09		312.8	313.1		316.0		317.0		317.2		318.5		
09-10		312.7	313.0		316.0		316.9		317.1		318.4		
10-11		312.9	313.3		315.9		316.9		317.1		318.3		
11-12		312.9	313.3		315.8		316.7		317.0		318.1		
12-13		312.6	312.9		315.6		316.6		317.1		318.3		
13-14		313.2	313.5		315.8		316.7		317.2		318.5		
14-15		313.2	313.6		315.7		316.6		317.1		318.4		
15-16		313.2	313.6		315.6		316.5		316.9		318.1		
16-17		313.2	313.5		315.7		316.6		316.9		318.0		
17-18		312.9	313.2		315.8		316.8		317.0		318.2		
18-19		312.8	313.1		315.8		316.8		316.9		318.1		
19-20		312.9	313.3		315.9		316.9		317.1		318.3		
20-21		312.9	313.2		316.0		317.0		317.2		318.4		
21-22		313.0	313.3		316.1		317.1		317.2		318.6		
22-23		313.1	313.4		315.9		316.9		317.3		318.5		
23-24		313.0	313.3		315.8		316.8		317.2		318.5		

* Alaska Standard Time

TABLE 12: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month:		January			February			March		
A.	S.	T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)
00-01		317.7	319.0	318.9	320.5	319.5	321.2			
01-02		317.8	319.2	319.0	320.6	319.6	321.4			
02-03		317.8	319.2	319.0	320.6	319.6	321.4			
03-04		317.8	319.2	319.0	320.6	319.6	321.3			
04-05		317.9	319.3	318.9	320.5	319.5	321.3			
05-06		317.9	319.3	318.9	320.5	319.5	321.2			
06-07		317.9	319.3	318.9	320.5	319.5	321.3			
07-08		317.8	319.2	318.9	320.5	319.6	321.4			
08-09		317.9	319.2	319.0	320.6	319.6	321.3			
09-10		317.8	319.1	318.9	320.5	319.6	321.3			
10-11		317.6	319.0	318.9	320.5	319.5	321.4			
11-12		317.6	319.0	318.9	320.4	319.4	321.1			
12-13		317.8	319.2	318.8	320.4	319.5	321.2			
13-14		317.8	319.2	318.8	320.4	319.4	321.1			
14-15		317.7	319.1	319.0	320.6	319.5	321.3			
15-16		317.7	319.1	318.8	320.4	319.4	321.1			
16-17		317.7	319.0	318.8	320.3	319.4	321.1			
17-18		317.7	319.1	318.8	320.3	319.4	320.9			
18-19		317.7	319.1	318.8	320.4	319.4	321.1			
19-20		317.7	319.1	319.0	320.6	319.4	321.1			
20-21		317.7	319.1	319.0	320.5	319.5	321.2			
21-22		317.8	319.2	318.9	320.5	319.5	321.3			
22-23		317.8	319.2	318.9	320.5	319.5	321.3			
23-24		317.9	319.3	318.8	320.5	319.5				

* Alaska Standard Time

TABLE 12: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month	A. S. T. *	April		May		June	
		Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)
09-02	318.8	320.4	319.2	320.9	317.4	318.7	
01-02	318.9	320.5	319.2	320.9	317.4	318.7	
02-03	319.0	320.6	319.3	320.9	317.5	318.6	
03-04	318.9	320.6	319.3	321.0	317.4	318.7	
04-05	319.0	320.6	319.3	321.0	317.5	318.6	
05-06	319.0	320.7	319.3	321.0	317.5	318.8	
06-07	319.2	320.7	319.3	321.2	317.5	318.8	
07-08	319.0	320.6	318.3	321.0	317.6	318.9	
08-09	319.0	320.7	319.4	321.1	317.6	319.0	
09-10	319.1	320.6	319.4	321.2	317.7	319.2	
10-11	319.0	320.5	319.5	321.2	317.7	319.0	
11-12	318.9	320.4	319.4	321.1	317.7	318.1	
12-13	318.9	320.5	319.4	321.1	317.6	318.9	
13-14	318.1	320.8	319.5	321.2	317.7	319.0	
14-15	319.1	320.8	319.6	321.2	317.7	319.0	
15-16	319.0	320.9	319.3	321.0	317.6	319.0	
16-17	319.0	320.7	319.3	320.9	317.6	318.9	
17-18	318.9	320.4	319.3	320.9	317.6	318.9	
18-19	318.8	320.3	319.3	321.0	317.5	318.8	
19-20	318.6	319.6	319.3	319.3	317.6	318.9	
20-21	318.3	319.4	318.3	318.3	317.5	318.8	
21-22	318.4	318.4	319.3	319.3	317.4	318.7	
22-23	318.5	318.5	319.3	319.4	317.4	318.7	
23-24	318.8	318.4	319.3	319.4	317.4	318.7	

*Vaseline Standard: 318.0

TABLE 12: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month:		July		August		September	
A. S. T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	
00-01	313.9	314.4	309.9	309.5	311.3	311.2	
01-02	313.8	314.2	310.0	309.7	311.2	311.1	
02-03	313.7	314.2	310.1	309.8	311.1	311.0	
03-04	313.7	314.1	310.2	309.9	310.0	310.8	
04-05	313.6	314.1	310.3	310.0	311.1	311.0	
05-06	313.5	313.9	310.2	309.9	311.0	310.9	
06-07	313.5	313.9	310.1	309.8	310.9	310.8	
07-08	313.5	313.9	309.9	309.6	310.9	310.8	
08-09	313.7	314.1	310.0	309.6	311.0	310.8	
09-10	313.6	314.1	310.1	309.8	310.9	310.7	
10-11	313.8	314.3	310.1	309.8	310.9	310.8	
11-12	313.6	314.1	310.0	309.7	311.0	310.9	
12-13	313.8	314.3	309.9	309.6	311.0	310.9	
13-14	313.7	314.2	309.9	309.5	311.0	310.9	
14-15	314.0	314.6	309.8	309.4	311.0	310.9	
15-16	313.5	313.9	310.0	309.7	310.9	310.7	
16-17	313.6	314.1	309.7	309.3	310.8	310.7	
17-18	313.4	313.8	309.7	309.3	310.8	310.6	
18-19	313.7	314.1	309.6	309.2	310.8	310.7	
19-20	313.6	314.1	309.6	309.2	310.8	310.7	
20-21	313.6	314.1	309.5	309.1	311.0	310.9	
21-22	313.7	314.1	309.7	309.3	311.2	311.2	
22-23	313.6	314.1	309.7	309.4	310.9	310.8	
23-24	313.6	314.0	309.8	309.4	311.3	311.2	

* Alaska Standard Time

TABLE I2a: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month: 1965	January			February			March		
	A. S. T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)
00-01	320.4	322.3	321.3	323.4	321.5	323.7	323.7	321.5	323.7
01-02	320.3	322.2	321.2	323.3	321.5	323.7	323.7	321.5	323.7
02-03	320.2	322.1	321.4	323.6	321.5	323.7	323.7	321.5	323.7
03-04	320.2	322.1	321.5	323.7	321.5	323.7	323.7	321.5	323.7
04-05	320.5	322.5	321.5	323.7	321.5	323.7	323.7	321.5	323.7
05-06	320.3	322.2	321.6	323.8	321.6	323.8	323.8	321.6	323.8
06-07	320.1	322.0	321.8	324.1	321.6	324.1	324.1	321.6	324.1
07-08	319.9	321.7	321.6	323.8	321.5	323.7	323.7	321.5	323.7
08-09	320.3	322.2	321.9	324.2	321.5	323.7	323.7	321.5	323.7
09-10	320.2	322.1	321.9	324.2	321.4	323.6	323.6	321.4	323.6
10-11	320.4	322.3	321.1	323.2	321.6	323.8	323.8	321.5	323.8
11-12	320.2	322.1	320.9	323.0	321.6	323.7	323.7	321.5	323.7
12-13	320.3	322.2	321.0	323.1	321.5	323.7	323.7	321.5	323.7
13-14	320.4	322.3	320.5	322.2	321.5	323.7	323.7	321.5	323.7
14-15	320.5	322.5	320.4	322.3	321.5	323.7	323.7	321.6	323.8
15-16	320.4	322.3	320.6	322.6	321.5	323.7	323.7	321.5	323.7
16-17	320.5	322.5	321.2	323.3	321.5	323.7	323.7	321.5	323.7
17-18	320.5	322.5	321.1	323.2	321.5	323.7	323.7	321.5	323.7
18-19	320.4	322.3	320.9	323.0	321.5	323.7	323.7	321.7	323.9
19-20	320.5	322.5	321.0	323.1	321.7	323.9	323.9	321.7	323.9
20-21	320.5	322.5	320.9	323.0	321.7	324.9	324.9	321.7	324.9
21-22	320.5	322.5	320.9	323.0	321.8	324.1	324.1	321.8	324.1
22-23	320.6	322.6	321.2	323.2	321.8	324.1	324.1	321.8	324.1
23-24	320.6	322.6	320.8	322.8	321.7	323.9	323.9	321.7	323.9

* Alaska Standard Time

TABLE 12a: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month: 1965	A. S. T.*	April		May		June	
		Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)
00-01	321.7	323.9	322.5	324.9	319.7	321.5	321.5
01-02	321.8	324.1	322.5	324.9	319.5	321.3	321.3
02-03	321.7	323.9	322.4	324.8	319.5	321.3	321.3
03-04	321.6	323.8	322.5	324.9	319.4	321.1	321.1
04-05	321.7	323.9	322.4	324.8	319.9	321.7	321.7
05-06	321.5	323.7	322.3	324.7	319.8	321.6	321.6
06-07	321.6	323.8	322.3	324.7	319.6	321.4	321.4
07-08	321.6	323.8	322.3	324.7	319.4	321.1	321.1
08-09	321.5	323.7	322.3	324.7	319.5	321.3	321.3
09-10	321.5	323.7	322.4	324.8	319.5	321.3	321.3
10-11	321.5	323.7	322.4	324.8	319.6	321.4	321.4
11-12	321.6	323.8	322.4	324.8	319.5	321.3	321.3
12-13	321.5	323.7	322.5	324.9	319.4	321.1	321.1
13-14	321.5	323.7	322.3	324.7	319.4	321.1	321.1
14-15	321.5	323.7	322.3	324.7	319.3	321.0	321.0
15-16	321.5	323.7	322.6	325.0	319.2	320.9	320.9
16-17	321.7	323.9	322.4	324.8	319.1	320.8	320.8
17-18	321.7	323.9	322.5	324.9	319.2	320.9	320.9
18-19	321.7	323.9	322.5	324.9	319.1	320.8	320.8
19-20	321.6	323.8	322.3	324.7	319.2	320.9	320.9
20-21	321.7	323.9	322.5	324.9	319.3	321.0	321.0
21-22	321.6	323.8	322.5	324.9	319.2	320.9	320.9
22-23	321.7	323.9	322.5	324.9	319.2	320.9	320.9
23-24	321.8	324.1	322.6	325.0	319.2	320.5	320.5

* Alaska Standard Time

TABLE 12a: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

1965		July			August			September		
Month:	A. S. T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	
00-01	315.5	316.4	311.0	310.9	311.0	311.0	310.9	311.0	310.9	
01-02	315.3	316.1	311.2	311.1	310.9	310.9	310.8	310.9	310.8	
02-03	315.2	316.0	311.2	311.1	311.0	311.0	310.9	310.9	310.9	
03-04	315.1	315.9	311.4	311.4	311.0	311.0	310.9	311.0	310.9	
04-05	315.0	315.8	311.3	311.3	311.3	311.1	311.0	311.1	311.0	
05-06	314.9	315.6	311.1	311.0	310.9	310.9	310.8	310.9	310.8	
06-07	315.0	315.8	310.8	310.6	310.9	310.9	310.8	310.9	310.8	
07-08	314.9	315.6	310.5	310.3	310.9	310.9	310.8	310.9	310.8	
08-09	315.0	315.8	310.3	310.0	310.9	310.9	310.8	310.9	310.8	
09-10	314.9	315.6	310.0	309.7	310.9	310.9	310.8	310.9	310.8	
10-11	314.8	315.5	309.9	309.6	310.9	310.9	310.8	310.9	310.8	
11-12	314.8	315.5	309.8	309.4	310.7	310.7	310.5	310.7	310.5	
12-13	314.8	315.5	309.8	309.4	310.7	310.7	310.5	310.7	310.5	
13-14	314.8	315.5	309.8	309.4	310.8	310.8	310.6	310.8	310.6	
14-15	314.7	315.4	309.9	309.6	310.6	310.6	310.4	310.6	310.4	
15-16	314.9	315.6	309.9	309.6	310.6	310.6	310.4	310.6	310.4	
16-17	314.6	315.3	309.9	309.6	310.7	310.7	310.5	310.7	310.5	
17-18	314.3	315.5	309.9	309.6	310.7	310.7	310.5	310.7	310.5	
18-19	314.7	315.4	310.0	309.7	310.8	310.8	310.6	310.8	310.6	
19-20	314.7	315.4	310.2	309.9	310.8	310.8	310.6	310.8	310.6	
20-21	314.8	315.5	310.3	310.0	310.8	310.8	310.6	310.8	310.6	
21-22	314.8	315.5	310.5	310.3	311.0	311.0	310.9	311.0	310.9	
22-23	314.9	315.6	310.8	310.6	310.9	310.9	310.8	310.9	310.8	
23-24	315.0	315.8	310.9	310.8	310.9	310.9	310.8	310.9	310.8	

* Alaska Standard Time

TABLE 12a: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month:	A. S. T.*	October		November		December	
		Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)
1965	00-01	316.0	317.0	317.6	318.9	317.6	318.9
	01-02	316.1	317.1	317.5	318.8	317.7	319.1
	02-03	316.1	317.1	317.5	318.8	317.6	318.9
	03-04	315.9	316.9	317.6	318.9	317.6	318.9
	04-05	315.9	316.9	317.4	318.7	317.7	319.1
	05-06	315.9	316.9	317.6	318.9	317.7	319.1
	06-07	315.7	316.6	317.4	318.7	317.7	319.1
	07-08	315.8	316.7	317.3	318.6	317.6	318.9
	08-09	315.8	316.7	317.5	318.8	317.7	319.1
	09-10	315.8	316.7	317.4	318.7	317.7	319.1
	10-11	315.6	316.5	317.5	318.8	317.7	319.1
	11-12	315.6	316.5	317.6	318.9	317.7	319.1
	12-13	315.8	316.7	317.5	318.8	317.6	318.9
	13-14	315.8	316.7	317.6	318.9	317.7	319.1
	14-15	315.8	316.7	317.5	318.8	317.6	318.9
	15-16	315.9	316.9	317.4	318.7	317.7	319.1
	16-17	316.0	317.0	317.4	318.7	317.6	318.9
	17-18	316.0	317.0	317.4	318.7	317.5	318.8
	18-19	316.1	317.1	317.6	318.9	317.6	318.9
	19-20	316.1	317.1	317.6	318.9	317.6	318.9
	20-21	316.0	317.0	317.7	319.1	317.7	319.1
	21-22	315.3		317.6	318.9	317.7	319.1
	22-23	315.9	316.9	317.8	319.2	317.7	319.1
	23-24	316.0	317.0	317.7	319.1	317.6	318.9

* Alaska Standard Time

TABLE 2a : DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month:		January		February		March	
A. S. T.*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	
00-01	319.4	321.1	319.1	320.8	319.5	321.3	
01-02	319.3	321.0	319.2	320.9	319.5	321.3	
02-03	319.3	321.0	319.1	320.8	319.5	321.3	
03-04	319.4	321.1	319.1	320.8	319.4	321.1	
04-05	319.3	321.0	319.1	320.8	319.5	321.3	
05-06	319.4	321.1	319.0	320.6	319.5	321.3	
06-07	319.4	321.1	319.1	320.8	319.5	321.3	
07-08	319.4	321.1	319.0	320.6	319.4	321.1	
08-09	319.2	320.9	319.2	320.9	319.5	321.3	
09-10	319.4	321.1	319.1	320.8	319.5	321.3	
10-11	319.3	321.0	319.0	320.6	319.6	321.4	
11-12	319.4	321.1	319.0	320.6	319.5	321.3	
12-13	319.2	320.9	319.1	320.8	319.5	321.3	
13-14	319.4	321.1	319.1	320.8	319.6	321.4	
14-15	319.5	321.3	319.1	320.8	319.4	321.1	
15-16	319.4	321.1	319.2	320.9	319.4	321.1	
16-17	319.4	321.1	313.2	320.9	319.6	321.4	
17-18	319.4	321.1	319.2	320.9	319.6	321.4	
18-19	319.3	321.0	319.4	321.1	319.6	321.4	
19-20	319.3	321.0	319.2	320.9	319.6	321.4	
20-21	319.4	321.1	319.2	320.9	319.5	321.3	
21-22	319.3	319.2	319.2	320.9	319.5	321.3	
22-23	319.4	321.1	319.1	320.8	319.5	321.3	
23-24	319.3	321.0	319.0	320.6	319.5	321.3	

* Alaska Standard Time

TABLE I 2a: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month: 1966	A. S. T.*	April			May			June		
		Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)	Index
00-01	320.3	322.2	322.2	322.2	324.5	320.4	322.3	322.3	322.3	322.3
01-02	320.3	322.2	322.2	322.3	324.7	320.6	322.3	322.3	322.6	322.6
02-03	320.2	322.1	322.1	322.3	324.7	320.6	322.4	322.4	322.6	322.6
03-04	320.2	322.1	322.1	322.3	324.7	320.4	322.4	322.4	322.3	322.3
04-05	320.1	322.0	322.0	322.1	324.4	320.4	322.4	322.4	322.3	322.3
05-06	320.2	322.1	322.1	322.2	324.5	320.3	322.3	322.3	322.2	322.2
06-07	320.2	322.1	322.1	322.2	324.5	320.4	322.3	322.3	322.3	322.3
07-08	320.2	322.1	322.1	322.2	324.5	320.4	322.3	322.3	322.3	322.3
08-09	320.2	322.1	322.1	322.2	324.5	320.3	322.2	322.2	322.2	322.2
09-10	320.2	322.1	322.1	322.2	324.5	320.3	322.2	322.2	322.2	322.2
10-11	320.3	322.2	322.2	322.1	324.4	320.3	322.2	322.2	322.2	322.2
11-12	320.3	322.2	322.2	322.0	324.3	320.3	322.2	322.2	322.2	322.2
12-13	320.3	322.2	322.2	322.1	324.4	320.2	322.1	322.1	322.1	322.1
13-14	320.3	322.2	322.2	322.2	324.5	320.3	322.0	322.0	322.0	322.0
14-15	320.3	322.2	322.2	322.1	324.4	320.1	322.0	322.0	322.0	322.0
15-16	320.3	322.2	322.2	322.2	324.5	320.1	322.0	322.0	322.0	322.0
16-17	320.4	322.3	322.3	322.0	324.3	320.0	321.9	321.9	321.9	321.9
17-18	320.3	322.2	322.2	322.0	324.3	320.0	321.9	321.9	321.9	321.9
18-19	320.3	322.2	322.2	322.3	324.7	320.0	321.9	321.9	321.9	321.9
19-20	320.2	322.1	322.1	322.1	324.7	320.1	322.0	322.0	322.0	322.0
20-21	320.2	322.1	322.1	322.2	324.5	320.1	322.0	322.0	322.0	322.0
21-22	320.4	322.3	322.3	322.2	324.5	320.3	322.2	322.2	322.2	322.2
22-23	320.2	322.1	322.1	322.3	324.7	320.5	322.5	322.5	322.5	322.5
23-24	320.3	322.2	322.2	322.1	324.4	320.4	322.3	322.3	322.3	322.3

* Alaska Standard Time

TABLE 12a: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month:		July		August		September	
A. S. T. 1966	*	Index	Manometer (ppm)	Index	Manometer (ppm)	Index	Manometer (ppm)
00-01		315.3	316.1	311.5	311.5	312.0	312.1
01-02		315.2	316.0	311.5	311.5	312.1	312.2
02-03		315.0	315.8	311.4	311.4	311.9	312.0
03-04		314.8	315.5	311.2	311.1	312.0	312.1
04-05		314.7	315.4	311.1	311.0	312.2	312.4
05-06		314.5	315.2	311.0	310.9	312.2	312.4
06-07		314.4	315.0	311.0	310.9	312.2	312.4
07-08		314.4	315.0	311.1	311.0	312.2	312.4
08-09		314.3	314.9	311.0	310.9	312.1	312.2
09-10		314.2	314.8	311.0	310.9	312.1	312.2
10-11		314.2	314.8	310.9	310.8	312.2	312.4
11-12		314.2	314.8	310.9	310.8	312.2	312.4
12-13		314.1	314.7	310.9	310.8	312.2	312.4
13-14		314.1	314.7	310.9	310.8	312.0	312.1
14-15		314.1	314.7	310.9	310.8	312.1	312.2
15-16		314.2	314.8	310.9	310.8	311.9	312.0
16-17		314.1	314.7	310.9	310.8	311.9	312.0
17-18		314.3	314.9	310.8	310.6	311.9	312.0
18-19		314.5	315.2	310.9	310.8	311.8	311.9
19-20		314.8	315.5	311.0	310.9	311.8	311.9
20-21		314.9	315.6	311.2	311.1	311.9	312.0
21-22		315.1	315.9	311.5	311.5	312.0	312.1
22-23		315.2	316.0	311.5	311.5	312.1	312.2
23-24		315.1	315.9	311.5	311.5	312.2	312.4

* Alaska Standard Time

TABLE I2a: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

1966		Month:		October		November		December	
A. S. T.*	Index		Manometer (ppm)		Index	Manometer (ppm)		Index	Manometer (ppm)
00-01	315.3		316.1		317.6	318.9		319.5	321.3
01-02	315.4		316.3		317.7	319.1		319.6	321.4
02-03	315.4		316.3		317.6	318.9		319.5	321.3
03-04	315.5		316.4		317.7	319.1		319.5	321.3
04-05	315.6		316.5		317.7	319.1		319.5	321.3
05-06	315.5		316.4		317.6	318.9		319.5	321.3
06-07	315.5		316.4		317.6	318.9		319.5	321.3
07-08	315.6		316.5		317.6	318.9		319.5	321.3
08-09	315.5		316.4		317.7	319.1		319.5	321.3
09-10	315.4		316.3		317.7	319.1		319.5	321.3
10-11	315.4		316.3		317.6	318.9		319.5	321.3
11-12	315.3		316.1		317.7	319.1		319.6	321.4
12-13	315.2		316.0		317.7	319.1		319.6	321.4
13-14	315.3		316.1		317.8	319.2		319.7	321.5
14-15	315.3		316.1		317.8	319.2		319.6	321.4
15-16	315.3		316.1		317.9	319.3		319.5	321.3
16-17	315.3		316.1		317.8	319.2		319.6	321.4
17-18	315.3		316.1		317.8	319.2		319.6	321.4
18-19	315.4		316.3		317.7	319.1		319.4	321.1
19-20	315.4		316.3		317.8	319.2		319.5	321.3
20-21	315.5		316.4		317.7	319.1		319.5	321.3
21-22	315.5		316.4		317.8	319.2		319.6	321.4
22-23	315.5		316.4		317.8	319.2		319.5	321.3
23-24	315.6		316.5		317.8	319.2		319.5	321.3

* Alaska Standard Time

TABLE 12a: DIURNAL VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month: <u>1967</u>	January			February			March		
	A. S. T. * 00-01	Index 319.9	Manometer (ppm) 321.7	Index 320.4	Manometer (ppm) 322.3	Index 321.4	Manometer (ppm) 323.6		
01-02	319.9	321.7	320.4	322.3	321.8	324.1			
02-03	319.9	321.7	320.3	322.2	321.2	323.3			
03-04	319.9	321.7	320.4	322.3	321.6	323.8			
04-05	320.0	321.9	320.3	322.2	321.6	323.8			
05-06	320.1	322.0	320.4	322.3	321.5	323.7			
06-07	320.0	321.9	320.4	322.3	321.7	323.9			
07-08	320.0	321.9	320.5	322.5	321.1	323.2			
08-09	320.0	321.9	320.5	322.5	320.6	322.6			
09-10	320.0	321.9	320.3	322.2	321.4	323.6			
10-11	319.9	321.7	320.3	322.2	321.5	323.7			
11-12	319.9	321.7	320.4	322.3	321.3	323.4			
12-13	319.9	321.7	320.3	322.2	321.0	323.1			
13-14	319.9	321.7	320.3	322.2	321.2	323.3			
14-15	320.0	321.9	320.4	322.3	321.1	323.2			
15-16	319.8	321.6	320.3	322.2	321.5	323.7			
16-17	319.8	321.6	320.4	322.3	321.5	323.7			
17-18	319.9	321.7	320.4	322.3	321.2	323.3			
18-19	320.0	321.9	320.5	322.5	321.1	323.2			
19-20	319.9	321.7	320.5	322.5	321.4	323.6			
20-21	319.9	321.7	320.4	322.3	320.9	323.0			
21-22	320.0	321.9	320.5	322.5	321.5	323.7			
22-23	319.9	321.7	320.5	322.5	321.0	323.1			
23-24	319.9	321.7	320.4	322.3	321.2	323.3			

* Alaska Standard Time

TABLE I2a: DIURNAL VARIATION OF CARBON DIOXIDE
BAFFIN, ALASKA CARBON DIOXIDE PROJECT

1967		April			May			June		
Month:	A. S. T.*	Index	Mansometer (ppm)		Index	Mansometer (ppm)		Index	Mansometer (ppm)	
00-01		320.6	322.6		322.1	324.4		320.2	322.1	
01-02		320.7	322.7		322.0	324.3		320.4	322.3	
02-03		320.4	322.3		322.1	324.4		320.2	322.1	
03-04		320.4	322.3		322.0	324.3		320.1	322.0	
04-05		320.3	322.2		322.1	324.4		320.1	322.0	
05-06		320.5	322.5		322.0	324.3		320.1	322.0	
06-07		320.7	322.7		322.1	324.4		320.1	322.0	
07-08		320.5	322.5		322.1	324.4		320.0	321.9	
08-09		320.6	322.6		322.1	324.4		320.2	322.1	
09-10		320.7	322.7		322.1	324.4		320.1	322.0	
10-11		320.2	322.1		321.9	324.2		320.2	322.1	
11-12		320.7	322.7		322.0	324.3		320.2	322.1	
12-13		320.3	322.2		321.9	324.2		320.2	322.1	
13-14		320.7	322.7		321.8	324.1		320.1	322.0	
14-15		320.6	322.6		321.8	324.1		320.2	322.1	
15-16		320.7	322.7		321.8	324.1		320.1	322.0	
16-17		320.9	323.0		321.8	324.1		320.2	322.1	
17-18		320.9	323.0		321.8	324.1		320.2	322.1	
18-19		320.7	322.7		321.8	324.1		320.3	322.2	
19-20		320.8	322.8		321.9	324.2		320.1	322.0	
20-21		320.4	322.3		321.9	324.2		320.7	322.7	
21-22		320.8	322.8		322.0	324.3		320.5	322.5	
22-23		320.1	322.0		322.0	324.3		320.2	322.1	
23-24		321.1	323.2		322.1	324.4		320.2	322.1	

TABLE IIa : DAILY VARIATION OF CARBON DIOXIDE
BARROW, ALASKA CARBON DIOXIDE PROJECT

Month:	A. S. T.*	July			August			September		
		Index	Hannister (ppm)	Index	Hannister (ppm)	Index	Hannister (ppm)	Index	Hannister (ppm)	Index
00-01	316.3	317.4	312.8	313.1	312.3	312.5	312.3	312.5	312.3	312.5
01-02	316.3	317.4	312.9	313.2	312.3	312.5	312.3	312.5	312.3	312.5
02-03	316.4	317.5	312.8	313.1	312.2	312.4	312.2	312.4	312.2	312.4
03-04	316.2	317.2	313.2	313.6	312.2	312.4	312.2	312.4	312.2	312.4
04-05	316.1	317.1	313.3	313.7	312.2	312.4	312.2	312.4	312.2	312.4
05-06	315.9	316.9	313.3	313.7	312.2	312.4	312.2	312.4	312.2	312.4
06-07	315.7	316.6	313.1	313.5	312.1	312.3	312.1	312.3	312.1	312.3
07-08	315.5	316.4	313.0	313.3	312.1	312.3	312.1	312.3	312.1	312.3
08-09	315.6	316.5	312.8	313.1	312.0	312.2	312.0	312.2	312.0	312.2
09-10	315.6	316.5	312.6	312.8	311.3	312.4	311.3	312.4	311.3	312.4
10-11	315.5	316.4	312.6	312.8	310.2	312.4	310.2	312.4	310.2	312.4
11-12	315.3	316.1	312.6	312.8	309.2	312.4	309.2	312.4	309.2	312.4
12-13	315.3	316.1	312.6	312.8	308.2	312.2	308.2	312.2	308.2	312.2
13-14	315.1	316.9	312.7	313.0	307.2	312.1	307.2	312.1	307.2	312.1
14-15	315.1	315.9	312.6	312.8	307.1	312.0	307.1	312.0	307.1	312.0
15-16	315.3	316.1	312.6	312.8	307.1	312.0	307.1	312.0	307.1	312.0
16-17	315.3	316.1	312.5	312.7	307.1	312.0	307.1	312.0	307.1	312.0
17-18	315.3	316.1	312.3	312.5	307.1	312.0	307.1	312.0	307.1	312.0
18-19	315.4	316.3	312.2	312.4	307.1	312.0	307.1	312.0	307.1	312.0
19-20	315.5	316.4	312.3	312.5	307.1	312.0	307.1	312.0	307.1	312.0
20-21	315.7	316.6	312.4	312.6	307.1	312.0	307.1	312.0	307.1	312.0
21-22	315.7	316.6	312.6	312.8	307.1	312.0	307.1	312.0	307.1	312.0
22-23	315.8	316.7	312.7	313.0	307.2	312.0	307.2	312.0	307.2	312.0
23-24	316.0	317.0	312.6	312.8	307.2	312.0	307.2	312.0	307.2	312.0

* Alaska Standard Time

TABLE 12b: AVERAGE DIURNAL VAR' TON OF CARRON DIOXIDE,
1961 - 1967

A.S.T. Time	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
00-01	320.6	321.3	321.8	321.7	323.1	320.6	314.6	309.8	311.1	315.3	317.7	318.9
01-02	320.6	321.5	321.9	321.8	323.1	320.8	314.5	309.9	311.1	315.4	317.7	319.0
02-03	319.6	321.3	321.8	311.7	323.1	320.7	314.7	309.9	311.1	315.4	317.7	318.9
03-04	320.6	321.3	321.8	321.7	323.1	320.6	314.4	310.2	311.1	315.4	317.8	318.9
04-05	320.7	321.3	321.9	321.6	323.1	320.7	314.4	310.3	311.2	315.4	317.8	319.0
05-06	320.8	321.3	321.7	321.5	323.0	320.6	314.2	310.1	311.2	315.4	317.8	319.0
06-07	320.7	321.4	321.9	321.8	323.1	320.7	314.2	310.1	311.1	315.4	317.7	319.0
07-08	320.5	321.3	321.8	321.8	323.1	320.6	314.1	309.9	311.1	315.3	317.6	319.0
08-09	320.7	321.5	321.7	321.7	323.1	320.6	314	309.7	311.1	315.4	317.8	319.1
09-10	320.7	321.4	321.8	321.7	323.1	320.7	314.0	309.5	311.2	315.3	317.7	319.1
10-11	320.6	321.1	321.2	321.6	323.1	320.7	313.9	309.4	311.1	315.3	317.8	319.1
11-12	320.5	321.1	321.8	321.7	323.0	320.7	313.9	309.3	311.0	315.3	317.9	319.0
12-13	320.6	321.1	321.7	321.6	323.0	320.6	313.8	309.2	310.9	315.2	317.7	318.9
13-14	320.6	321.0	321.8	321.8	322.9	320.6	313.8	309.3	310.9	315.4	317.9	319.1
14-15	320.7	321.1	321.7	321.8	322.9	320.6	313.7	309.3	310.8	315.4	317.8	318.9
15-16	320.6	321.1	321.8	321.7	323.0	320.5	313.7	309.3	310.9	315.4	317.7	318.9
16-17	320.6	321.2	321.9	321.8	322.9	320.6	313.7	309.3	310.9	315.4	317.7	318.8
17-18	320.6	321.2	321.8	321.7	322.9	320.5	313.5	309.1	310.9	315.3	317.8	318.8
18-19	320.6	321.2	321.6	321.6	322.9	320.4	313.7	309.2	310.9	315.4	317.8	318.8
19-20	320.6	321.3	321.8	321.7	322.9	320.4	313.8	309.3	311.0	315.5	317.9	318.9
20-21	320.5	321.2	321.7	321.6	323.0	320.4	313.9	309.6	311.0	315.4	317.9	319.0
21-22	320.7	321.2	321.9	321.8	323.0	320.4	314.1	309.7	311.1	315.0	317.9	319.1
22-23	320.7	321.3	321.8	321.6	323.1	320.5	314.1	309.7	311.1	315.4	317.9	319.0
23-24	320.7	321.1	321.8	321.8	323.0	320.4	314.1	309.7	311.2	315.5	317.9	319.0

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2. Kelley, J.J., Jr., Analysis of carbon dioxide in the Arctic atmosphere, at Point Barrow, Alaska, Technical Report, Office of Naval Research Contract 477(24), University of Washington, 1964.
3. Kelley, J.J., Jr., Analysis of carbon dioxide in the Arctic atmosphere at Barrow, Alaska during 1961-1962-1963, Technical Report No. 2, Office of Naval Research, Contract 477(24), University of Washington, 1966.
4. Pales, J.C. and C.D. Keeling, The concentration of atmospheric carbon dioxide in the Hawaiian Islands, J. Geophys. Res., 70 6053-6076, 1965.

APPENDIX 1

The following is a list of publications and reports based on the atmospheric carbon dioxide program in the Arctic and at the University of Washington.

1. Kelley, J.J., Jr., An Analysis of Carbon Dioxide in the Arctic Atmosphere at Barrow, Alaska, Technical Report, University of Washington, Department of Atmospheric Sciences, ONR 477(24), 1964.
2. Kelley, J.J., Jr. and D.F. Weaver, Carbon Dioxide and Ozone in the Arctic Atmosphere, Proceedings of the 16th Alaskan Science Conference, AAAS, 1965.
3. Kelley, J.J., Jr. and E. LaChapelle, Atmospheric Carbon Dioxide Variations on Mt. Olympus, J. Geophys. Res., Vol. 71, No. 8, 1966.
4. Kelley, J.J., Jr., An Analysis of Carbon Dioxide in the Arctic Atmosphere, Report 2, Technical Report, ONR 477(24), Department of Atmospheric Sciences, University of Washington, Seattle Washington.
5. Kelley, J.J., Jr., Carbon Dioxide in the Surface Waters of Puget Sound, Final Report, prepared under Contract Nonr 477(24), Department of Atmospheric Sciences, University of Washington, Seattle, 1966.

6. Kelley, J.J., Jr. and S.M. Hodge, Measurements of the Chemical Constitution of the Atmosphere at the Blue Glacier Field Station, Mount Olympus, Washington, Summer, 1966, Scientific Report, Department of Atmospheric Sciences, University of Washington, Seattle, 1967.
7. Kelley, J.J., Jr., Carbon Dioxide and Ozone Studies in the Arctic Atmosphere, Proc. of the ONR-AINA Arctic Drifting Stations Symposium, 1967.
8. Kelley, J.J., Jr., D. Weaver, and B. Smith, The Variation of Carbon Dioxide under the Snow in the Arctic, ECOLOGY, 49(2), pp 358-361, 1968.
9. Kelley, J.J., Jr., Carbon Dioxide in the Sea Water under the Arctic Ice, NATURE, Vol 218, No 5144, pp 862-864, June, 1968.
10. Kelley, J.J., Jr., Atmospheric Trace Gases and Suspended Particulate Matter on Mt. Olympus, Olympic National Park, Washington, J. Geophys. Res. (in press), 1968.
11. Kelley, J.J., Jr., Observations of Carbon Dioxide in the Atmosphere over the Western United States, J. Geophys. Res. (in press), 1968.
12. Kelley, J.J., Jr., Equilibrium Partial Pressure of CO₂ in the Kara, Barents, and Norwegian Seas, Progress Report, AINA-ONR, Contract 401, Department of Atmospheric Sciences, University of Washington, Seattle, 1968.

APPENDIX 2
FORTRAN 4 COMPUTER PROGRAM

This program is designed for use on the IBM 7094 computer. Data for CO₂ from five sources of air are entered into the program for each half hour interval. The CO₂ index for each half hour interval is computed. Wind direction, wind speed, barometric pressure, and ambient air temperature are logged in the data output. A summary of the data is given for each day as follows:

Number of half hourly observations
Recorder Scale Factor
Mean Index 1
Mean Index 2
Mean Index 3
Mean Index 4
Mean Index 5
Mean Index all levels
Mean barometric pressure
Mean temperature, °C
Location of levels 1 through 5

INSTRUCTIONS FOR KEYPUNCHING DATA

1. The first data card has the form: three blank spaces, then the data of the day's run, e.g.:

____ 17 - March - 1965

Other data may also be placed on this card and will be reproduced in the

heading of the output just as printed on the card.

2. The second card contains the chart number (3 spaces), reference tank number (6 spaces), and the index (8 spaces)

For example, if chart number 12, reference tank, 11633, and the tank index, 310.68, are the data, then the card reads as follows:

0120116330310.680

3. Data Cards: There must be a total of forty-eight cards; i.e., one for each half hour of data even if data are missing for part of the time. The pressure, temperature, wind direction, and wind speed data must start on the first card. All data must start on the half-hour and alternate from there. For example:

<u>Time</u>	<u>L1</u>	<u>L2</u>	<u>L3</u>	<u>L4</u>	<u>L5</u>	<u>Press.</u>	<u>Temp.</u>	<u>Wind Dir.</u>	<u>Wind Speed</u>
0030	2.93	7.82	10.63	15.72	2.93	130	13	1.029	0
0100	2.83	7.89	11.01	15.47	2.93	-	-	-	-

Cards read:

002.93007.82010.63015.72002.9310.29032.130013
002.83007.89011.01015.47002.8399.39

4. Missing Data:

a) If more than one of the index values are missing, punch 99.99 in the first five columns. Then skip to column 31 and punch in the wind, temperature and pressure data on the half hour.

b) If only one of the index values is missing, substitute an average value for the missing index value.

c) If the pressure, temperature, and wind observations are missing for a particular half hour, punch 99.99 in columns 31-35.

5. Program Format:

The Fortran-4 program and a specimen of the arrangement of the data for one day are given.

```

$JOB      3,5,6000      2002650
$FORMS OUI      PROGRAM,141326
$EXECUTE      IBJOB
$IBJOB      GO,MAP
$IBFTC COTW1
C      CARBON DIOXIDE INDEX PROGRAM-SUMMER 5 LEVEL VERSION(REVISED)
      DIMENSION SD(5,48),AI(5,48),KT(48),SDA(48),T(24),P(24),IWD(24),IWS
      1(24)
1      FORMAT(13,16,F8.3)
2      FORMAT(5F6.2,F5.2,F4.0,2I3)
10     FORMAT(1H1,40X,38H DAILY CARBON DIOXIDE AIR INDEX VALUES/53X,15H B
      LARROW, ALASKA/48X,26H NORTH MEADOW LAKE STATION//)
11     FORMAT(80H
1           )
12     FORMAT(19X,15H CHART NUMBER =13,15X,18H REFERENCE GAS W =16,8X,8H
      1INDEX =F9.3/)
13     FORMAT(6H   AST,10X,24H HALF HOURLY SCALE DIFF.,19X,23H HALF HOUR
      1Y INDEX, AIR,13X,35H WIND DIR SPEED PRESSURE TEMP/10X,3H 1.,
      24X,3H 2.,4X,3H 3.,4X,3H 4.,4X,3H 5.,6X,3H 1.,7X,3H 2.,7X,3H 3.,7X,
      33H 4.,7X,3H 5.,4X,33H DEGREES KN. BARS C.)
14     FORMAT(2X,14,1X,F7.2,F7.2,F7.2,F7.2,4X,F8.3,2X,F8.3,2X,F8.3,2
      1X,F8.3,2X,F8.3,5X,13,6X,13X4X,F7.4,3X,F5.0)
15     FORMAT(2H I4,16H DATA MISSING)
16     FORMAT(/37H0 NUMBER OF HALF HOURLY OBSERVATIONS=F4.0/25H0 RECORDE
      1R SCALE FACTOR =F7.3/16H0 MEAN INDEX 1 = F8.3/16H0 MEAN INDEX 2 =F8
      2.3/16H0 MEAN INDEX 3 = F8.3/16H0 MEAN INDEX 4 = F8.3/16H0 MEAN INDEX
      3 5 = F8.3/28H0 MEAN INDEX AT ALL LEVELS = F8.3/17H0 MEAN PRESSURE =F
      47.1,10H MILLIBARS/20H0 MEAN TEMPERATURE =F5.0,19H DEGREES CENTIGRA
      5DE/16H0 L1=16.0 METERS/15H0 L2=1.0 METERS/15H0 L3=0.5 METERS/16H0
      6L4=0.25 METERS/17H0 L5=0.125 METERS)
17     FORMAT(2H 14,16H DATA MISSING,77X,13,6X,13,4X,F7.4,3X,F5.0)
18     FORMAT(1H1,114X,7H PAGE 2)
      RSF=1.720
      K1=C
      DO 50 J=1,48
      MJ=J
      IF(MOD(MJ,2))51,52,51
51     K1=K1+30
      KT(J)=K1
      K1=K1+70
      GO TO 50
52     KT(J)=K1
50     CONTINUE
200    ITR=0
      K1=0
      K2=0
      READ(5,11)
      READ(5,1) ICN,IRT,WRG
      DO 75 J=1,48
      K1=K1+1
      J1=J
      IF(MOD(J1,2))76,77,76
76     K2=K1-ITR
      READ(5,2) (SD(I,J),I=1,5),P(K2),T(K2),IWD(K2),IWS(K2)
      ITR=ITR+1
      GO TO 75

```

```

77      READ(5,2) (SD(I,J),I=1,5)
75      CONTINUE
    DO 99 J=1,48
    SDA(J)=0.0
    DO 99 I=1,5
99      AI(I,J)=0.0
    AV1=0.0
    AV2=0.0
    AV3=0.0
    AV4=0.0
    AV5=0.0
    DIN=0.0
    DO 100 J=1,48
    A=SD(1,J)
    IF(A-99.99)101,100,101
101     DIN=DIN+1.0
    AV1=AV1+SD(1,J)
    AV2=AV2+SD(2,J)
    AV3=AV3+SD(3,J)
    AV4=AV4+SD(4,J)
    AV5=AV5+SD(5,J)
100     CONTINUE
    AV1=AV1/DIN
    AV2=AV2/DIN
    AV3=AV3/DIN
    AV4=AV4/DIN
    AV5=AV5/DIN
    AV=0.0
    DO 102 J=1,48
    A=SD(1,J)
    IF(A-99.99)103,102,103
103     S=0.0
    DO 104 I=1,5
    AI(I,J)=WRG+(SD(I,J)*RSF)
104     S=S+SD(I,J)
    SDA(J)=S/5.0
    AV=AV+SDA(J)
102     CONTINUE
    AV=AV/DIN
    AV1=WRG+(AV1*RSF)
    AV2=WRG+(AV2*RSF)
    AV3=WRG+(AV3*RSF)
    AV4=WRG+(AV4*RSF)
    AV5=WRG+(AV5*RSF)
    AV=WRG+(AV*RSF)
    DO 105 I=1,24
    T(I)=0.556*(T(I)-32.0)
    IF(P(I)-15.00)316,316,317
316     P(I)=P(I)/10.0
    GO TO 105
317     P(I)=(33.864*P(I))/1000.0
105     CONTINUE
    PA=0.0
    TA=0.0
    DIT=0.0
    DO 125 I=1,24

```

```

A=P(I)
IF(A-99.99)126,125,126
126 DIT=DIT+1.0
PA=PA+P(I)
TA=TA+T(I)
125 CONTINUE
PA=(PA*1000.)/DIT
TA=TA/DIT
WRITE(6,10)
WRITE(6,11)
WRITE(6,12) ICN,IRT,WRG
WRITE(6,13)
K1=0
DO 150 J=1,48
A=SD(1,J)
IF(A-99.99)151,152,151
152 J1=J
IF(MOD(J1,2))155,156,155
155 K1=K1+1
B=P(K1)
IF(B-99.99)157,156,157
157 WRITE(6,17) KT(J),IWD(K1),IWS(K1),P(K1),T(K1)
GO TO 150
158 WRITE(6,15) KT(J)
GO TO 150
151 J1=J
IF(MOD(J1,2))153,154,153
153 K1=K1+1
WRITE(6,14) KT(J),SD(1,J),SD(2,J),SD(3,J),SD(4,J),SD(5,J),AI(1,J),
LAI(2,J),AI(3,J),AI(4,J),AI(5,J),IWD(K1),IWS(K1),P(K1),T(K1)
GO TO 150
154 WRITE(6,14) KT(J),SD(1,J),SD(2,J),SD(3,J),SD(4,J),SD(5,J),AI(1,J),
LAI(2,J),AI(3,J),AI(4,J),AI(5,J)
150 CONTINUE
WRITE(6,18),
WRITE(6,11)
WRITE(6,16) DIN,RSF,AV1,AV2,AV3,AV4,AV5,AV,PA,TA
GO TO 200
END
SENTRY          COTW1
$DATA
1 MAY 1967
1280100670311.71C
002.93007.82010.63015.72002.9310.29032.130013
0 2.83007.89011.01015.47002.8399.99
002.96007.75011.26015.39002.9610.29032.140011
002.93007.50011.05015.18002.9399.99
003.08007.61009.02015.72003.0810.29032.140011
002.90007.75010.96016.17002.9099.99
002.89008.09010.75016.78002.9910.29031.150010
0 2.89008.20010.87017.39002.8999.99
002.83008.57008.57017.88002.8310.28031.140011
002.93008.87011.23017.93002.9399.99
002.94008.91011.35018.29002.9410.28031.140009
002.88009.21011.13018.54002.8899.99
002.90008.66011.21019.23002.9010.28032.140008

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DD FORM 1 NOV 1973 (PAGE 1)

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