

# A Description of the Gulf of Mexico Air Quality Study Data Archive Files

# **A Description of the Gulf of Mexico Air Quality Study Data Archive Files**

Prepared by

**Systems Applications International**

Prepared under MMS Contract  
14-35-0001-30604

by

**Systems Applications International  
101 Lucas Valley Road  
San Rafael, California 94903**

Published by

**U.S. Department of the Interior  
Minerals Management Service  
Gulf of Mexico OCS Region**

**New Orleans  
November 1994**

## **DISCLAIMER**

This report was prepared under contract between the Minerals Management Service (MMS) and SAI. This report has been technically reviewed by the MMS and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Service, nor does mention of trade names or commercial products constitute endorsement or recommendation for use. It is, however, exempt from review and compliance with MMS editorial standards.

## **REPORT AVAILABILITY**

Extra copies of the report may be obtained from the Public Information Unit (Mail Stop 5034) at the following address:

U.S. Department of the Interior  
Minerals Management Service  
Gulf of Mexico OCS Region  
Public Information Unit (MS 5034)  
1201 Elmwood Park Boulevard  
New Orleans, Louisiana 70123-2394

Telephone Number: 1-800-200-GULF

## **SUGGESTED CITATION**

SAI. 1994. "A Description of the Gulf of Mexico Air Quality Study Data Archive Files." OCS Study MMS 94-0046. U.S. Department of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. 62 pp.

## CONTENTS

A DESCRIPTION OF THE GMAQS DATA ARCHIVE FILES .....	1
REFERENCES .....	7
APPENDIX A Block IDs .....	A-1
APPENDIX B Parameter Codes .....	B-1
APPENDIX C Units Codes .....	C-1
APPENDIX D Interval Codes .....	D-1
APPENDIX E Null Data Reason Codes .....	E-1
APPENDIX F Validity Flag Codes .....	F-1
APPENDIX G Example of VOC Sample Analysis .....	G-1
APPENDIX H Data Summaries for Surface Sites .....	H-1

## LIST OF TABLES

Table 1	Site File Format.....	4
Table 2	Parameter File Format.....	4
Table 3	Surface File Format.....	5
Table 4	Upper Air File Format.....	6

## A DESCRIPTION OF THE GMAQS DATA ARCHIVE FILES

The Gulf of Mexico Air Quality Study (GMAQS) data archive files include surface air quality and meteorological data, upper air meteorological data, air quality measurements taken aloft from aircraft, and hydrocarbon samples collected during the study by ESE and STI. The data collected and methodology used are described in "Field Plan for the MMS GMAQS" (Roberts, et. al., 1992). In addition to data from the GMAQS, the data archive files contain other data which has been obtained to augment the data from the study. The other data include: routine surface and upper air measurements, buoy data and C-MAN data from the National Climatic Data Center (NCDC); surface air quality and meteorological data from the Texas Natural Resources Conversation Commission (TNRCC); surface air quality data from the Louisiana Department of Environmental Quality (LDEQ); surface air quality data for the portions of the states of Alabama, Mississippi, and Florida from the USEPA; surface air quality data from the Southeast Texas Regional Planning Commission (SETRPC); offshore meteorological data from the Texas-Louisiana Shelf Circulation Program (LATEX); surface air quality and meteorological data from the COAST and HRM programs obtained from Desert Research Institute (DRI). The general procedures used in preparing the data archive are described in the "GMAQS Data Archival Protocol" (SAI, 1993). This document presents a summary of the data included in the archive files and a description of the formats used for the files.

### Organization of the Data Archive Files

The data archive files are of several types. All hourly surface data is organized into a single file for each month of the study. Similarly, all upper air meteorological data is organized into a single file for each month of the study. Additional files define the parameter codes, the units codes, and the locations of sites.

Each data base file has been given a unique name. The file names are of the format 'typMMMYY.vsn' where:

typ	type of data file format
	hr = hourly
	sd = sounding
MMM	month (jan, feb,...)
YY	year (93,94,...)
vsn	version number (1.1, 1.2,...)

In addition to the surface and upper air files, aircraft data and surface VOC samples collected during the study are provided in the format received from the monitoring contractor.

## **The Site File**

The format of the site file is presented in Table 1. As is the case with all archive files, fields in the file are separated by at least one blank to allow easy importation into spread sheets or data base languages. The Site Abbreviation is a short identifier for a site that has been used in preparing model inputs and displays of observed data and model results. The UTM coordinates are given in kilometers in zone 15. Latitude and longitude location is also given. The Site ID field is a nine character field which may contain state code, county code and site number according to AIRS convention or another identifying string which uniquely identifies the site. It is this Site ID that is used to identify the site in the data archive files. The collection agency identifies the organization from which data for that site was obtained. Sites with a collection agency of "STI" or "ESE" were operated as part of the MMS GMAQS program. The Site Location/Address field gives a brief text description of the location of the site.

## **The Parameter Codes File**

The parameter file contains codes that are used in the data archive files to identify the variables for which data is included. The format of this file is described in Table 2. The file is listed in Appendix B. The first field of the parameter file gives the integer code that identifies the data monitored. The Abbreviation field gives a text identifier corresponding to that code. The Parameter Name field gives a longer description of the variable. The Unit Code is an integer code used in the archive file to identify the units used for the measurements. For each parameter, the code for the units used in the data archive is given. The Unit Name field is a text description corresponding to the unit code in the previous field.

## **The Surface File**

Each record on the surface file contains the monitored data for a single site for up to 24 hours. The contents of each field of the surface file are described in detail in Table 3. The records in the file are sorted by site, parameter, and date.

## **The Upper Air File**

Each record on the upper air file contains the monitored data for up to ten values in a sounding for a single site. Additional records follow to specify the remaining values in the sounding. The contents of each field of the upper air file are described in detail in Table 4. The records in the file are sorted by site, date, time, parameter and sequence number.

## **Aircraft Data Files**

The aircraft data files contain measurements of NO<sub>x</sub>, ozone, VOCs and other species in addition to some meteorological parameters collected during flights around the Houston area. The format and content of these files is documented in detail in "Data Collected by

the STI Aircraft during the 1993 Gulf of Mexico Air Quality Study" (Anderson, et.al. 1994).

### **Surface VOC Samples**

Summaries of the analyses of VOC samples collected during the GMAQS are in the form of text files produced from spreadsheets. These files are largely self explanatory. A sample of one of these files is presented in Appendix G.

### **Data Summaries**

Tables of availability of surface data are included in Appendix H. A separate table is included for each month of the study with information on variables that were available at each site during that month. An asterisk in the column for a variable and row for a site indicates that data for that variable is available at that site at some time during the month. Data still may be missing for certain time periods during the month.



TABLE 1. Site file format

FIELD NAME	First Column	Field Format
SITE ABBREVIATION	1	A4
UTM EASTING (KM)	6	F6.1
UTM NORTHING (KM)	13	F6.1
LATITUDE (N) DEGREES	21	F5.2
LONGITUDE (W) DEGREES	27	F5.2
SITE ID	33	A9
COLLECTION AGENCY	43	A11
SITE LOCATION/ADDRESS	55	A40

TABLE 2. Parameter file format

FIELD NAME	First Column	Field Format
PARAMETER CODE	1	I8
ABBREVIATION	11	A6
PARAMETER NAME	18	A20
UNIT CODE	42	I2
UNIT NAME	51	A28

TABLE 3. Surface File Format

Field Name	First Column	Field Format	Field Description
SITE IDENTIFIER	1	A9	A unique 9 character identifier for the site. Further information about the site is given in the Site File (See Table 1). For some sites, this identifier may be made up of a FIPS state code, a FIPS county code, and a site number. For offshore areas the state code = 99. For offshore areas the county code is assigned based on the Department of the Interior Minerals Management Service lease blocks. Refer to Appendix A. The site number uniquely identifies each air monitoring site within a county.
PARAMETER CODE	11	I5	A code assigned to a specific parameter being measured. Refer to Table 2 and Appendix B.
UNITS CODE	17	I3	A code indicating the dimensional system in which a pollutant concentration is expressed. Refer to Table 2 and Appendix C.
UNITS NAME	21	A10	Descriptive name for the specified units code.
INTERVAL CODE	32	A1	A code indicating the sampling interval for the monitoring activities; see Appendix D.
YEAR	34	I2	The last two digits of the year for which data is being reported.
MONTH	37	I2	The month for which data is being reported (01-12).
DAY	40	I2	The day of the month for which data is being reported (00-31). '00' is specified for daily data.
START TIME	43	I2	The start hour for the first value of the data values. For instantaneous readings the first hour is 0, for average hourly readings the first hour is 1. All values are to be reported in Central Standard Time.
OCCURS 24 TIMES: VALUE DP FLAG	46	I5,1x A1,1x A1,1x	As many as 31 values (a month of daily values) may be specified per record. For hourly data, a days data may be specified in the first 24 fields. VALUE is either a positive (nnnnn) or a signed negative number (-nnnn). DP, decimal indicator for specified value, indicates number of digits to right of implied decimal point for value. Blank DP indicates missing value which will also be entered in VALUE field as -9999. A VALUE of 0 with blank DP means no observation was recorded. Other VALUES are interpreted as missing values; see Appendix E. FLAG is a validity flag indicating that the observed VALUE is exceptional; see Appendix F. NOTE: all values are reported in Central Standard Time.

Note: Each field is followed by a single space.

TABLE 4. Upper Air File Format

Field Name	First Column	Field Format	Field Description
SITE IDENTIFIER	1	A9	A unique 9 character identifier for the site. Further information about the site is in the Site File (See Table 1). For some sites, this identifier may be made up of a FIPS state code, a FIPS county code, and a site number. For offshore areas the state code = 99. For offshore areas the county code is assigned based on the Minerals Management Service lease blocks. Refer to Appendix A. The site number uniquely identifies each air monitoring site within a county.
PARAMETER CODE	11	I5	A code assigned to a specific parameter being measured. Refer to Table 2 and Appendix B.
UNITS CODE	17	I3	A code indicating dimensional system in which concentration is given; see Table 2 and Appendix C.
YEAR	21	I2	The last two digits of the year for which data is being reported.
MONTH	24	I2	The month for which data is being reported (01-12).
DAY	27	I2	The day of the month for which data is being reported (00-31). '00' is specified for daily data.
BEGIN TIME	30	I4	The begin time for the first value of the data values. The format is HHMM where HH is the hour (0-23) and MM the minute (0-59), in Central Standard Time.
END TIME	35	I4	The end time for the record of data values; format is HHMM where HH is the hour (0-23) and MM the minute (0-59), in Central Standard Time.
NUMBER OF OBS	40	I4	The number of observations recorded for the specified date and time.
TEN VALUES per REC			Data values are written on a new record with up to 10 values specified per record; for more than 10, multiple records must be written. VALUE is either a positive (nnnnn) or a signed negative number (-nnnn). DP is decimal indicator, indicating number of digits to right of implied decimal point for value. A blank DP or a DP of "_" (underscore) indicates a missing value. A VALUE of 0 with a blank DP means no observation was recorded. Other VALUES are interpreted as missing value codes. Refer to Appendix E. FLAG is a validity flag indicating that observed VALUE is exceptional; see Appendix F. NOTE: all values are to be reported in Central Standard Time.
VALUE	45*	I5,1x	
DP		A1,1x	
FLAG		A1,1x	
SEQUENCE NUMBER	145	I6	A sequence number for the records constituting a single complete sounding. This number can be used to maintain the individual records in the correct order.

## REFERENCES

- Anderson, J.A., D.H. Hern, R.T. Roberts, J.D. Prouty, and B.M. Schoell. 1994. "Data Collected by the STI Aircraft During the 1993 Gulf of Mexico Air Quality Study (GMAQS)." Sonoma Technology, Inc., Santa Rosa, California (STI-92070-1403-DV).
- Roberts, P., Blumenthal, D., Lindsey, C., Anderson, J. 1992. "Gulf of Mexico Air Quality Study Field Plan Working Draft #2." Sonoma Technology, Inc., Santa Rosa, California (STI-92040-1212-WD2).
- SAI. 1993. "Gulf of Mexico Air Quality Study Data Archival Protocol." Systems Applications International, San Rafael, California (SYSAPP-93/076).

## **Appendix A**

### **Block IDs**

Attachment A. Block Ids

Block	Fips
Alaminos Canyon	99001
Apalachicola	99149
Aplachicola	99149
Atwater Valley	99005
BA	99009
Brazos	99007
Brazos South Addition	99009
Breton Sound	99011
Chandeleur	99013
Chandeleur East Addition	99015
Corpus Christi	99017
De Soto Canyon	99151
DeSoto Canyon	99151
Destin Dome	99153
EAST BREAK	99023
EC	99025
EI	99029
East Breaks	99023
East Cameron	99025
East Cameron South Addition	99027
Eugene Island	99029
Eugene Island South Addition	99031
Ewing Bank	99033
Florida Middle Ground	99155
GALVESTON AREA	99037
GC	99047
GI	99043
Galveston	99037
Galveston South Addition	99039
Garden Banks	99041
Grand Isle	99043
Grand Isle South Addition	99045
Green Canyon	99047
HI	99049
HIA	99055
HIGH ISLAND EAST	99051
High Island	99049
High Island East Addition	99051
High Island East Addition South Extension	99053
High Island South Addition	99055
Howell Hook	99157
Keathley Canyon	99059
Lloyd Ridge	99159
MC	99069
MI	99073
MOBILE BAY	99071
MP	99063
Main Pass	99063
Main Pass South and East Addition	99065
Matagorda Island	99067
Mississippi Canyon	99069
Mobile	99071
Mustang Island	99073
Mustang Island East	99075

Attachment A. Block Ids (continued)

Block	Fips
-----	-----
NG 15-8	99077
NG 15-9	99079
NG 16-4	99081
NG 16-5	99161
NG 16-7	99085
North Padre Island	99087
North Padre Island East Addition	99089
PN	99163
Pensacola	99163
Port Isabel	99093
Rankin	99095
SA	99097
SM	99103
SOUTH PELTO BLK	99119
SOUTH PELTO BLOCK	99119
SP	99119
SS	99099
ST	99121
Sabine Pass	99097
Ship Shoal	99099
Ship Shoal South Addition	99101
South Marsh Island	99103
South Marsh Island North Addition	99105
South Marsh Island South Addition	99107
South Padre Island	99109
South Padre Island East Addition	99111
South Pass	99113
South Pass East Addition	99115
South Pass South Addition	99117
South Pelto	99119
South Timbalier	99121
South Timbalier South Addition	99123
The Elbow	99167
VERMILION BLK	99127
VR	99127
Vermilion	99127
Vermilion South Addition	99129
Vernon Basin	99169
Viosca Knoll	99133
WC	99137
WD	99143
WX-1	99147
Walker Ridge	99135
West Cameron	99137
West Cameron South Addition	99139
West Cameron West Addition	99141
West Delta	99143
West Delta South Addition	99145

**Appendix B**  
**Parameter Codes**



Parameter	Abbr.	ParameterName	UnitCode	Unitname
42101	CO	CO	8	PPB
42401	SO2	SO2	8	PPB
42601	NO	NO	8	PPB
42602	NO2	NO2	8	PPB
42603	NOX	NOX	8	PPB
43102	NMHC	NONMETH ORGANIC COMP	8	PPB
43201	CH4	METHANE	8	PPB
44201	O3	O3	8	PPB
61101	WS	WIND SPEED	11	METERS/SEC
61102	WD	WIND DIRECTION	14	DEGREES
61103	RsWS	RESULTANT SPEED	11	METERS/SEC
61104	RsWD	RESULTANT DIRECTION	14	DEGREES
61106	SDHD	STD DEV HZ WND DIR	14	DEGREES
61109	VWS	VERTICAL WIND SPEED	11	METERS/SEC
61111	SDHS	STD DEV HZ WND SPD	11	METERS/SEC
62101	TEMP	OUTDOOR TEMPERATURE	37	KELVIN
62103	DEW	DEW POINT	37	KELVIN
62201	RH	RELATIVE HUMIDITY	19	PERCENT
63101	VISI	VISIBILITY	0	VISIB WBAN
63301	SORD	SOLAR RADIATION	25	LYS/MIN (langleys/minute)
63302	UVRD	ULTRVIOLET RADIATION	25	LYS/MIN (langleys/minute)
63305	NTRD	NET RADIATION	25	LYS/MIN (langleys/minute)
64101	PRES	PRESSURE	16	MILLIBARS
65102	PREC	RAIN/MELT PRECIP	29	MILLIMETER
66101	CLDC	CLOUD COVER(OPAQUE)	39	10THS OPAQ
90000	u	u COMPONENT OF WIND	11	METERS/SEC
90001	v	v COMPONENT OF WIND	11	METERS/SEC
90002	HT.w	SOUNDIG HEIGHT (WIND)	58	METERS
90003	HT.t	SOUNDING HEIGHT (TEMP)	58	METERS
90004	VirT	SOUNDING VIRTUAL TEMP	37	KELVIN
90005	HT.v	SOUNDING HT. (Tv)	58	METERS
90006	SeaT	SEA TEMPERATURE	37	KELVIN
90007	SheT	SHELTER TEMPERATURE	37	KELVIN

Parameter	Abbr.	ParameterName	UnitCode	Unitname
42101	CO	CO	8	PPB
42401	SO2	SO2	8	PPB
42601	NO	NO	8	PPB
42602	NO2	NO2	8	PPB
42603	NOX	NOX	8	PPB
43102	NMHC	NONMETH ORGANIC COMP	8	PPB
43201	CH4	METHANE	8	PPB
44201	O3	O3	8	PPB
61101	WS	WIND SPEED	11	METERS/SEC
61102	WD	WIND DIRECTION	14	DEGREES
61103	RsWS	RESULTANT SPEED	11	METERS/SEC
61104	RsWD	RESULTANT DIRECTION	14	DEGREES
61106	SDHD	STD DEV HZ WND DIR	14	DEGREES
61109	VWS	VERTICAL WIND SPEED	11	METERS/SEC
61111	SDHS	STD DEV HZ WND SPD	11	METERS/SEC
62101	TEMP	OUTDOOR TEMPERATURE	37	KELVIN
62103	DEW	DEW POINT	37	KELVIN
62201	RH	RELATIVE HUMIDITY	19	PERCENT
63101	VISI	VISIBILITY	0	VISIB_WBAN
63301	SORD	SOLAR RADIATION	25	LYS/MIN (langleys/minute)
63302	UVRD	ULTRVIOLET RADIATION	25	LYS/MIN (langleys/minute)
63305	NTRD	NET RADIATION	25	LYS/MIN (langleys/minute)
64101	PRES	PRESSURE	16	MILLIBARS
65102	PREC	RAIN/MELT PRECIP	29	MILLIMETER
66101	CLDC	CLOUD COVER(OPAQUE)	39	10THS_OPAQ
90000	u	u COMPONENT OF WIND	11	METERS/SEC
90001	v	v COMPONENT OF WIND	11	METERS/SEC
90002	HT.w	SOUNDIG HEIGHT (WIND)	58	METERS
90003	HT.t	SOUNDING HEIGHT (TEMP)	58	METERS
90004	VirT	SOUNDING VIRTUAL TEMP	37	KELVIN
90005	HT.v	SOUNDING HT. (Tv)	58	METERS
90006	SeaT	SEA TEMPERATURE	37	KELVIN
90007	SheT	SHELTER TEMPERATURE	37	KELVIN

## **Appendix C**

### **Units Codes**

(Excerpted from AIRS User's Guide, Vol VII)

#### **Airs Codes and Values**

**U.S. Environmental Protection Agency  
Office of Air Quality Planning and Standards  
Technical Support Division  
National Air Data Branch  
Research Triangle Park, North Carolina 27711**

**June 1989**

UNITS CODES

CODE	DESCRIPTION
001	UG/CU METER (25 C)
002	UG/CU METER (0 C)
003	NG/CU METER (25 C)
004	NG/CU METER (0 C)
005	MG/CU METER (25 C)
006	MG/CU METER (0 C)
007	PARTS PER MILLION
008	PARTS PER BILLION
009	COHS/1,000 LINEAR FEET
010	RUDS/10,000 LINEAR FEET
011	METERS/SECOND
012	MILES/HOUR
013	KNOTS
014	DEGREES, COMPASS
015	DEGREES, FAHRENHEIT
016	MILLIBARS
017	DEGREES, CENTIGRADE
018	LANGLEYS
019	PER CENT REL. HUMIDITY
020	MICRONS
021	INCHES (RAINFALL)
022	INCHES (MERCURY)
023	MCAL./SQ. CM./MIN.
024	MILES (VISIBILITY)
025	LANGLEYS/MINUTE
026	DEGREES-RANKINE
027	BETA SCATTER
028	DEGREES CENTIGRADE/100M
029	MILLIMETERS (RAINFALL)
030	PICOCURIES/CU. METER
031	MICROCURIES/CU. METER
032	PICOCURIES/SQ. METER
033	MICROCURIES/SQ. METER
034	PICOCURIES/CU. CM.
035	PICOCURIES/GRAM
036	CALORIES/SQ. CM./HOUR
037	DEGREES-KELVIN
038	10,000 FIBERS/CU METER
039	TENTHS OF SKY COVER
040	PARTS PER HUNDRED MILLION
041	MG. SO3/100 SQ. CM./MO.
042	RUDS/1,000 LINEAR FT.
043	GRAMS/SQ. METER/MONTH
044	UG/SQ. MILE/MONTH
045	TONS/SQ. MI./DAY
046	GRAMS/SQ. METER/DAY

UNITS CODES

CODE	DESCRIPTION
047	UG/SQ. METER/DAY
048	1000 PARTICULES/SQ. IN.
049	100 PARTICULES/SQ. IN.
050	NO. THRESHOLD LEVELS
051	% LOSS IN REFLEC./MONTH
052	MICRONS/WEEK
053	# DEFECTS/7.7 SQ. IN./MO.
054	PARTICLES/SQ. MM./WEEK
055	NBS COLOR DIF. UNITS
056	MICRONS/YEAR
057	CONDEN. NUCLEI/CU. CM.
058	METERS
059	MILLIMETERS (MERCURY)
060	KILOMETERS/HOUR
061	PH UNITS
062	MILLIGRAMS/LITER
063	MICROGRAMS/LITER
064	MICROGRAMS/MILLILITER
065	CUBIC METER
066	MILLISIEMENS/METER
067	MICROEQUIVALENCE/LITER
068	MILLISIEMENS/CM
069	MICRO SIEMENS/CM.
070	MG. F/100 SQ. CM./DAY
071	UG. F/100 SQ. CM./DAY
075	MICROMOLES/LITER
076	LITERS
077	MICROGRAMS
080	MG. SO3/100 SQ. CM./DAY
081	UG. SO2/SQ. CM./DAY
082	UG. SO2/SQ. M./DAY
090	TONS/SQ. MI./MONTH
091	MG./SQ. CM./MONTH
092	UG./CU. M./MONTH
093	GRAMS/SQ. METER/MONTH
094	POUNDS/SQ. MI./MONTH
095	MG./SQ.METER/WEEK
097	UG/SQ. CM./30 DAYS
098	MG. SO4/SQ. CM./30 DAYS
099	MG./SQ. CM./30 DAYS

**Appendix D**  
**Interval Codes**

(Excerpted from AIRS User's Guide, Vol VII)

**Airs Codes and Values**

U.S. Environmental Protection Agency  
Office of Air Quality Planning and Standards  
Technical Support Division  
**National Air Data Branch**  
Research Triangle Park, North Carolina 27711

June 1989

INTERVAL CODES

CODE	DESCRIPTION
A	1 WEEK
B	3 HOURS
C	COMPOSITE DATA
D	YEARLY
G	ANNUAL GEOMETRIC MEAN
M	ANNUAL ARITHMETIC MEAN
Q	QUARTERLY ARITHMETIC MEAN
X	24 HOUR BLOCK AVERAGE OF HOURLY DATA
Y	3 HOUR BLOCK AVERAGE
Z	8 HOUR RUNNING AVERAGE
1	1 HOUR
2	2 HOURS
3	4 HOURS
4	6 HOURS
5	8 HOURS
6	12 HOURS
7	24 HOURS
8	1 MONTH
9	3 MONTHS

**Appendix E**  
**Null Data Reason Codes**

(Excerpted from AIRS User's Guide, Vol VII)

**Airs Codes and Values**

U.S. Environmental Protection Agency  
Office of Air Quality Planning and Standards  
Technical Support Division  
**National Air Data Branch**  
Research Triangle Park, North Carolina 27711

June 1989



NULL DATA REASON CODES

CODE	DESCRIPTION
-----	-----
9973	SAMPLE TIME OUT OF LIMITS
9974	SAMPLE FLOW RATE OUT OF LIMITS
9975	INSUFFICIENT DATA (CAN'T CALCULATE)
9976	FILTER DAMAGE
9977	FILTER LEAK
9978	VOIDED BY OPERATOR
9979	MISCELLANEOUS VIOD
9980	MACHINE MALFUNCTION
9981	BAD WEATHER
9982	VANDALISM
9983	COLLECTION ERROR
9984	LAB ERROR
9985	POOR QUALITY ASSURANCE RESULTS
9986	CALIBRATION
9987	MONITORING WAIVED
9988	POWER FAILURE (POWR)
9989	WILDLIFE DAMAGE
9990	PRECISION CHECK (PREC)
9991	Q C CONTROL POINTS (ZERO/SPAN)
9992	Q C AUDIT (AUDT)
9993	MAINTENANCE/ROUTINE REPAIRS
9994	UNABLE TO REACH SITE
9995	MULTI-POINT CALIBRATION
9996	AUTO CALIBRATION

**Appendix F**  
**Validity Flag Codes**

(Excerpted from AIRS User's Guide, Vol VII)

**Airs Codes and Values**

U.S. Environmental Protection Agency  
Office of Air Quality Planning and Standards  
Technical Support Division  
**National Air Data Branch**  
Research Triangle Park, North Carolina 27711

June 1989

VALIDITY FLAG CODES

CODE	DESCRIPTION
A	HIGH WINDS
B	STRATOSPHERIC OZONE INTRUSION
C	VOLCANIC ERUPTIONS
D	SANDBLASTING
E	FOREST FIRE
F	STRUCTURAL FIRE
G	HIGH POLLEN COUNT
H	CHEMICAL SPILLS & INDUST. ACCIDENTS
I	UNUSUAL TRAFFIC CONGESTION
J	CONSTRUCTION/DEMOLITION
K	AGRICULTURAL TILLING
L	HIGHWAY CONSTRUCTION
M	REROUTING OF TRAFFIC
N	SANDING/SALTING OF STREETS
O	INFREQUENT LARGE GATHERINGS
P	ROOFING OPERATIONS
Q	PRESCRIBED BURNING
R	CLEAN UP AFTER A MAJOR DISASTER
V	VALIDATED VALUE

**Appendix G**  
**Example of VOC Sample Analysis**

Date 31-Jul-93  
 Location COCODRIE, LA.

Can # LAC-01  
 Sample #1

CO	194 ppbv	ug/m3	ppbC	Percent
Total Identified Hydrocarbons		106.1	176.9	93.5 %
Alkanes (Paraffins)		92.8	154.8	87.5 %
Alkenes (Olefins)		4.0	6.6	3.7 %
Aromatics		9.3	15.5	8.8 %
Total Unidentified Hydrocarbons		7.2	12.3	6.5 %
Total Nonmethane Hydrocarbons		113.3	189.2	100.0 %

ug/m3	ppbC	Compound	ug/m3	ppbC	Compound
1950	3257	Methane	0.8	1.3	Methylcyclopentane
24.0	40.1	Ethane	0.5	0.8	2,4-Dimethylpentane
1.0	1.6	Ethylene	2.2	3.6	Benzene
2.0	3.3	Acetylene	0.7	1.2	Cyclohexane
23.1	38.6	Propane	0.8	1.3	2-Methylhexane
0.3	0.5	Propene	0.4	0.7	2,3-Dimethylpentane
9.3	15.6	i-Butane	1.7	2.8	3-Methylhexane
0.2	0.4	i-Butene	0.8	1.3	2,2,4-Trimethylpentane
		1-Butene	0.8	1.4	n-Heptane
		1,3-Butadiene	0.2	0.3	2,4,4-Trimethyl-1-pentene
9.3	15.5	n-Butane	1.1	1.9	Methylcyclohexane
0.2	0.4	trans-2-Butene			2,4,4-Trimethyl-2-pentene
		2,2-Dimethylpropane			2,5-Dimethylhexane
		cis-2-Butene			2,4-Dimethylhexane
		3-Methyl-1-butene	0.2	0.3	2,3,4-Trimethylpentane
7.2	12.0	i-Pentane	3.7	6.1	Toluene
		1-Pentene			2,3-Dimethylhexane
		2-Methyl-1-butene	0.2	0.3	2-Methylheptane
4.0	6.6	n-Pentane	0.2	0.4	3-Et-hexane, 3-Me-heptane
		Isoprene			2,2-Dimethylheptane
0.1	0.1	trans-2-Pentene			2,2,4-Trimethylhexane
		cis-2-Pentene	0.4	0.7	n-Octane
		2-Methyl-2-butene			Ethylcyclohexane
0.6	1.0	2,2-Dimethylbutane	0.5	0.9	Ethylbenzene
		Cyclopentene	1.2	2.0	m-Xylene & p-Xylene
		4-Methyl-1-pentene	1.0	1.7	Styrene
0.4	0.6	Cyclopentane	0.5	0.8	o-Xylene
0.5	0.9	2,3-Dimethylbutane	0.3	0.5	n-Nonane
		cis-4-Methyl-2-pentene			i-Propylbenzene
2.3	3.8	2-Methylpentane			n-Propylbenzene
1.1	1.8	3-Methylpentane	0.2	0.4	p-Ethyltoluene
		2-Methyl-1-pentene			m-Ethyltoluene
		1-Hexene			1,3,5-Trimethylbenzene
1.9	3.1	n-Hexane			o-Ethyltoluene
		trans-2-Hexene			1,2,4-Trimethylbenzene
		2-Methyl-2-pentene			& sec-Butylbenzene
		cis-2-Hexene	0.2	0.3	n-Decane

**Appendix H**  
**Data Summaries for Surface Sites**

APRIL 93, SITE LIST

SiteID	CO	S02	NO	NO2	NOX	MMHC	CH4	O3	WS	WD	RaWS	RaWD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
LATX42019											*	*				*	*	*					*								*	*	
LATXBUSL1											*	*				*	*	*					*								*	*	
LATX42026											*	*				*	*	*					*								*	*	
LATX42027											*	*				*	*	*					*								*	*	
LATX42028											*	*				*	*	*					*								*	*	
LATX42029											*	*				*	*	*					*								*	*	
LATX42030											*	*				*	*	*					*								*	*	
LATX42031											*	*				*	*	*					*								*	*	
LATX42002											*	*				*	*	*					*								*	*	
LATXGDIL1											*	*				*	*	*					*								*	*	
LATXPTAT2											*	*				*	*	*					*								*	*	
LATXSRST2											*	*				*	*	*					*								*	*	
LATX42020											*	*				*	*	*					*								*	*	
LATX42033											*	*				*	*	*					*								*	*	
481676ILC			*	*	*			*	*		*	*			*	*	*						*								*	*	
22109LUMC			*	*	*			*	*		*	*			*	*	*						*								*	*	
GAL									*	*	*	*			*	*	*				*	*	*	*	*	*	*	*	*	*	*	*	
LSU									*	*	*	*			*	*	*				*	*	*	*	*	*	*	*	*	*	*	*	
HIP									*	*	*	*			*	*	*				*	*	*	*	*	*	*	*	*	*	*	*	
SEH									*	*	*	*			*	*	*				*	*	*	*	*	*	*	*	*	*	*	*	
NCDC03937											*	*				*	*	*					*								*	*	
NCDC12912											*	*				*	*	*					*								*	*	
NCDC12916											*	*				*	*	*					*								*	*	
NCDC12917											*	*				*	*	*					*								*	*	
NCDC12924											*	*				*	*	*					*								*	*	
NCDC12960											*	*				*	*	*					*								*	*	
NCDC13894											*	*				*	*	*					*								*	*	
NCDC13970											*	*				*	*	*					*								*	*	
220050004											*	*				*	*	*					*								*	*	
220110002			*	*	*			*	*		*	*				*	*	*					*								*	*	
220150008			*	*	*			*	*		*	*				*	*	*					*								*	*	
220190007			*	*	*			*	*		*	*				*	*	*					*								*	*	
220190009			*	*	*			*	*		*	*				*	*	*					*								*	*	
220330003			*	*	*			*	*		*	*				*	*	*					*								*	*	
220330008			*	*	*			*	*		*	*				*	*	*					*								*	*	
220330009			*	*	*			*	*		*	*				*	*	*					*								*	*	
220331001			*	*	*			*	*		*	*				*	*	*					*								*	*	
220470002			*	*	*			*	*		*	*				*	*	*					*								*	*	
220470007			*	*	*			*	*		*	*				*	*	*					*								*	*	
220511001			*	*	*			*	*		*	*				*	*	*					*								*	*	
220630002			*	*	*			*	*		*	*				*	*	*					*								*	*	
220710012			*	*	*			*	*		*	*				*	*	*					*								*	*	
220710017			*	*	*			*	*		*	*				*	*	*					*								*	*	
220730002			*	*	*			*	*		*	*				*	*	*					*								*	*	
220770001			*	*	*			*	*		*	*				*	*	*					*								*	*	
220930002			*	*	*			*	*		*	*				*	*	*					*								*	*	
221010003			*	*	*			*	*		*	*				*	*	*					*								*	*	
221210001			*	*	*			*	*		*	*				*	*	*					*								*	*	
480391003											*	*				*	*	*					*								*	*	
481671002											*	*				*	*	*					*								*	*	
481830001											*	*				*	*	*					*								*	*	
481990002											*	*				*	*	*					*								*	*	
482010004											*	*				*	*	*					*								*	*	
482010024											*	*				*	*	*					*								*	*	
482010029											*	*				*	*	*					*								*	*	
482010046											*	*		*		*	*	*					*								*	*	
482010047											*	*		*		*	*	*					*								*	*	
482010051											*	*		*		*	*	*					*								*	*	
482010059											*	*		*		*	*	*					*								*	*	
482010062											*	*		*		*	*	*					*								*	*	
482011003											*	*		*		*	*	*					*								*	*	
482011034											*	*		*		*	*	*					*								*	*	
482011035											*	*		*		*	*	*					*								*	*	
482011037											*	*		*		*	*	*					*								*	*	
482450009											*	*		*		*	*	*					*								*	*	
482450011											*	*		*		*	*	*					*								*	*	
483550025											*	*		*		*	*	*					*								*	*	
483550026											*	*		*		*	*	*					*								*	*	
483611001											*	*		*		*	*	*					*								*	*	

APRIL 93, SITE LIST (continued)

SiteID	CO	S02	NO	NO2	NOX	NMHC	CH4	O3	WS	WD	RsWS	RsWD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
484690003			*					*			*	*				*																	
010270001																																	
010730025	*																																
010731003																																	
010890014	*		*	*	*																												
280490018	*																																
280590006																																	
120110003					*																												
120110009	*																																
120112003																																	
120112004	*																																
120118002					*																												
120250027					*																												
120251019	*																																
120254002					*																												
120310070																																	
120310080	*																																
120330004																																	
120570063	*																																
120570081																																	
120571035	*																																
120571045	*																																
120571065					*																												
120571070	*																																
120712001																																	
120951005	*																																
120952002					*																												
120991004	*				*																												
120992004																																	
121030018	*				*																												
121030024	*																																
121035002	*				*																												
121151002	*																																
121151004	*																																
121151005																																	



MAY 93, SITE LIST

SiteID	CO	S02	NO	NO2	NOX	MMHC	CH4	O3	WS	WD	R <sub>s</sub> WS	R <sub>s</sub> WD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT	
LATX42019											*	*				*	*	*					*									*	*	
LATXBUSL1											*	*				*	*	*					*										*	*
LATX42026											*	*				*	*	*					*										*	*
LATX42027											*	*				*	*	*					*										*	*
LATX42028											*	*				*	*	*					*										*	*
LATX42029											*	*				*	*	*					*										*	*
LATX42030											*	*				*	*	*					*										*	*
LATX42031											*	*				*	*	*					*										*	*
LATX42002											*	*				*	*	*					*										*	*
LATXGDIL1											*	*				*	*	*					*										*	*
LATXPAT2											*	*				*	*	*					*										*	*
LATXSRST2											*	*				*	*	*					*										*	*
LATX42020											*	*				*	*	*					*										*	*
LATX42035											*	*				*	*	*					*										*	*
LATX42033											*	*				*	*	*					*										*	*
48167GILC			*	*	*			*	*		*	*			*	*	*						*										*	*
22109LUNC			*	*	*			*	*		*	*			*	*	*						*										*	*
BAL									*	*	*	*			*	*	*				*			*	*								*	*
LSU									*	*	*	*			*	*	*				*			*	*								*	*
SSP									*	*	*	*			*	*	*				*			*	*								*	*
HIP									*	*	*	*			*	*	*				*			*	*								*	*
SEH									*	*	*	*			*	*	*				*			*	*								*	*
NCDC03937											*	*				*	*	*			*			*									*	*
NCDC12912											*	*				*	*	*			*			*									*	*
NCDC12916											*	*				*	*	*			*			*									*	*
NCDC12917											*	*				*	*	*			*			*									*	*
NCDC12924											*	*				*	*	*			*			*									*	*
NCDC12960											*	*				*	*	*			*			*									*	*
NCDC13894											*	*				*	*	*			*			*									*	*
NCDC13970											*	*				*	*	*			*			*									*	*
220050004								*			*	*				*	*	*			*			*									*	*
220110002			*	*	*			*			*	*				*	*	*			*			*									*	*
220150006			*	*	*			*			*	*				*	*	*			*			*									*	*
220190007			*	*	*			*			*	*				*	*	*			*			*									*	*
220190009			*	*	*			*			*	*				*	*	*			*			*									*	*
220330003	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220330006	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220330009	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220331001	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220470002	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220470007	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220511001	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220630002	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220710012	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220710017	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220730002	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220770001	*		*	*	*			*			*	*				*	*	*			*			*									*	*
220930002	*		*	*	*			*			*	*				*	*	*			*			*									*	*
221010003	*		*	*	*			*			*	*				*	*	*			*			*									*	*
221210001	*		*	*	*			*			*	*				*	*	*			*			*									*	*
480391003	*		*	*	*			*			*	*				*	*	*			*			*									*	*
481671002	*		*	*	*			*			*	*				*	*	*			*			*									*	*
481830001	*		*	*	*			*			*	*				*	*	*			*			*									*	*
481990002	*		*	*	*			*			*	*				*	*	*			*			*									*	*
482010004	*		*	*	*			*			*	*				*	*	*			*			*									*	*
482010024	*		*	*	*			*			*	*				*	*	*			*			*									*	*
482010029	*		*	*	*			*			*	*				*	*	*			*			*									*	*
482010046	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482010047	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482010051	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482010059	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482010062	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482011003	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482011034	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482011035	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482011037	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482450009	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
482450011	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*
483550025	*		*	*	*			*		*	*	*		*		*	*	*			*			*									*	*

MAY 93, SITE LIST (continued)

SiteID	CO	S02	NO	NO2	NOX	NH4C	CH4	O3	WS	WD	RsWS	RsWD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT	
48350026		*						*			*	*				*																		
483611001			*	*	*			*			*	*				*																		
484690003								*			*	*				*																		
010270001								*																										
010730025	*							*																										
010731003								*																										
010890014	*		*	*	*			*																										
280490018	*							*																										
280590006								*																										
120110003				*				*																										
120110009	*							*																										
120112003								*																										
120112004	*							*																										
120118002				*				*																										
120250027				*				*																										
120251019	*							*																										
120254002				*				*																										
120310070								*																										
120310080	*							*																										
120330004								*																										
120570063	*							*																										
120570081	*							*																										
120571035	*							*																										
120571045	*							*																										
120571065	*			*				*																										
120571070	*							*																										
120712001								*																										
120951005	*							*																										
120952002				*				*																										
120991004	*			*				*																										
120992004	*			*				*																										
121030018	*			*				*																										
121030024	*							*																										
121035002	*							*																										
121151002	*							*																										
121151004	*							*																										
121151005	*							*																										

JUN 93, SITE LIST

SiteID	CO	S02	NO	NO2	NOX	NMHC	CH4	O3	WS	WD	RsWS	RsWD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
LATX42019											*	*				*	*	*					*									*	
LATXBUSL1											*	*				*	*	*					*									*	
LATX42026											*	*				*	*	*					*									*	
LATX42028											*	*				*	*	*					*									*	
LATX42002											*	*				*	*	*					*									*	
LATXGDIL1											*	*				*	*	*					*									*	
LATXPTAT2											*	*				*	*	*					*									*	
LATXSRST2											*	*				*	*	*					*									*	
LATX42020											*	*				*	*	*					*									*	
LATX42035											*	*				*	*	*					*									*	
LATX42027											*	*				*	*	*					*									*	
4816761LC			*	*	*			*	*		*	*			*	*	*	*					*									*	
22109LUMC			*	*	*			*	*		*	*			*	*	*	*					*									*	
GAL									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
LSU									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
SSP									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
HIP									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
SEH									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
NCDC03937											*	*				*	*	*					*									*	
NCDC12912											*	*				*	*	*					*									*	
NCDC12916											*	*				*	*	*					*									*	
NCDC12917											*	*				*	*	*					*									*	
NCDC12924											*	*				*	*	*					*									*	
NCDC12960											*	*				*	*	*					*									*	
NCDC13894											*	*				*	*	*					*									*	
NCDC13970											*	*				*	*	*					*									*	
220050004								*								*	*	*					*									*	
220110002			*	*	*			*								*	*	*					*									*	
220150008			*	*	*			*								*	*	*					*									*	
220190007			*	*	*			*								*	*	*					*									*	
220190009			*	*	*			*								*	*	*					*									*	
220330003	*		*	*	*			*								*	*	*					*									*	
220330008			*	*	*			*								*	*	*					*									*	
220330009	*		*	*	*			*								*	*	*					*									*	
220331001			*	*	*			*								*	*	*					*									*	
220470002			*	*	*			*								*	*	*					*									*	
220470007			*	*	*			*								*	*	*					*									*	
220511001			*	*	*			*								*	*	*					*									*	
220630002			*	*	*			*								*	*	*					*									*	
220710012			*	*	*			*								*	*	*					*									*	
220710017			*	*	*			*								*	*	*					*									*	
220730002			*	*	*			*								*	*	*					*									*	
220770001			*	*	*			*								*	*	*					*									*	
220930002			*	*	*			*								*	*	*					*									*	
221010003			*	*	*			*								*	*	*					*									*	
221210001			*	*	*			*								*	*	*					*									*	
480391003											*	*				*	*	*					*									*	
481671002		*						*			*	*				*	*	*					*									*	
481830001								*			*	*				*	*	*					*									*	
481990002								*			*	*				*	*	*					*									*	
482010004		*						*			*	*				*	*	*					*									*	
482010024	*		*	*	*			*			*	*				*	*	*					*									*	
482010029								*			*	*				*	*	*					*									*	
482010046		*						*		*	*	*	*	*	*	*	*	*					*									*	
482010047	*		*	*	*			*		*	*	*	*	*	*	*	*	*					*									*	
482010051		*						*		*	*	*	*	*	*	*	*	*					*									*	
482010059		*						*		*	*	*	*	*	*	*	*	*					*									*	
482010062		*						*		*	*	*	*	*	*	*	*	*					*									*	
482011003		*						*		*	*	*	*	*	*	*	*	*					*									*	
482011035		*	*	*	*			*		*	*	*	*	*	*	*	*	*					*									*	
482011037	*	*	*	*	*			*		*	*	*	*	*	*	*	*	*					*									*	
482450009	*	*	*	*	*			*		*	*	*	*	*	*	*	*	*					*									*	
482450011		*						*		*	*	*	*	*	*	*	*	*					*									*	
483550025		*						*		*	*	*	*	*	*	*	*	*					*									*	
483550026		*						*		*	*	*	*	*	*	*	*	*					*									*	
483611001		*	*	*	*			*		*	*	*	*	*	*	*	*	*					*									*	
484690003		*	*	*	*			*		*	*	*	*	*	*	*	*	*					*									*	
CRSC		*	*	*	*			*	*	*	*	*	*	*	*	*	*	*					*									*	
GALC		*	*	*	*			*	*	*	*	*	*	*	*	*	*	*					*									*	

S-H

JUN 93, SITE LIST (continued)

SiteID	CO	SO2	NO	NO2	NOX	NMHC	CHA	O3	WS	WD	RsWS	RsWD	SOHD	VWS	SOHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
GLRC		*	*	*				*	*	*	*	*	*			*							*									*	
HTCC		*	*	*				*	*	*	*	*	*			*							*									*	
SBRC		*	*	*				*	*	*	*	*	*			*							*									*	
SPTC		*	*	*				*	*	*	*	*	*			*							*									*	
STMC		*	*	*				*	*	*	*	*	*			*							*									*	
010270001								*																									
010730025	*							*																									
010731003								*																									
010890014	*		*	*	*			*																									
011170004			*	*	*			*																									
280490018	*							*																									
280590006								*																									
120110003				*				*																									
120110009	*							*																									
120112003								*																									
120112004	*							*																									
120118002				*				*																									
120250027				*				*																									
120251019	*			*				*																									
120254002				*				*																									
120310070								*																									
120310080	*							*																									
120330004								*																									
120570063	*							*																									
120570081	*							*																									
120571035	*							*																									
120571045	*							*																									
120571065	*			*				*																									
120571070	*			*				*																									
120712001	*							*																									
120951005	*			*				*																									
120952002	*			*				*																									
120991004	*			*				*																									
120992004	*			*				*																									
121030018	*			*				*																									
121030024	*			*				*																									
121035002	*			*				*																									
121151002	*			*				*																									
121151004	*			*				*																									
121151005	*			*				*																									
BL08									*	*	*	*	*			*																	
PC08									*	*	*	*	*			*																	
SDR8									*	*	*	*	*			*																	
VIC8									*	*	*	*	*			*																	
482010801	*	*	*	*	*			*	*	*	*	*	*			*							*		*							*	
482010803	*	*	*	*	*			*	*	*	*	*	*			*							*		*							*	
482010804	*	*	*	*	*			*	*	*	*	*	*			*							*		*							*	
482010807	*	*	*	*	*			*	*	*	*	*	*			*							*		*							*	
482010808	*	*	*	*	*			*	*	*	*	*	*			*							*		*							*	
480710900	*	*	*	*	*			*	*	*	*	*	*			*							*		*							*	
480710901	*	*	*	*	*			*	*	*	*	*	*			*							*		*							*	
482450101		*	*	*	*	*	*	*	*	*	*	*	*			*							*		*							*	
483610100		*	*	*	*	*	*	*	*	*	*	*	*			*							*		*							*	
483611100		*	*	*	*	*	*	*	*	*	*	*	*			*							*		*							*	
482450102		*	*	*	*	*	*	*	*	*	*	*	*			*							*		*							*	

JUL 93, SITE LIST

SiteID	CO	S02	NO	NO2	NOX	MMHC	CH4	O3	WS	WD	RsWS	RsWD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
LATX42019											*	*				*	*	*					*									*	
LATXBUSL1											*	*				*	*	*					*									*	
LATX42026											*	*				*	*	*					*									*	
LATX42028											*	*				*	*	*					*									*	
LATX42030											*	*				*	*	*					*									*	
LATX42002											*	*				*	*	*					*									*	
LATXGDIL1											*	*				*	*	*					*									*	
LATXPTAT2											*	*				*	*	*					*									*	
LATXSRST2											*	*				*	*	*					*									*	
LATX42020											*	*				*	*	*					*									*	
LATX42035											*	*				*	*	*					*									*	
LATX42027			*	*	*			*	*		*	*			*	*	*	*					*									*	
4816781LC			*	*	*			*	*		*	*			*	*	*	*					*									*	
22109LUMC			*	*	*			*	*		*	*			*	*	*	*					*		*							*	
GAL									*	*	*	*	*			*	*	*			*		*	*								*	
LSU									*	*	*	*	*			*	*	*			*		*	*								*	
SSP									*	*	*	*	*			*	*	*			*		*	*								*	
HIP									*	*	*	*	*			*	*	*			*		*	*								*	
SEH									*	*	*	*	*			*	*	*			*		*	*								*	
NCDC03937											*	*				*	*	*					*									*	
NCDC12912											*	*				*	*	*					*									*	
NCDC12916											*	*				*	*	*					*									*	
NCDC12917											*	*				*	*	*					*									*	
NCDC12924											*	*				*	*	*					*									*	
NCDC12960											*	*				*	*	*					*									*	
NCDC13894											*	*				*	*	*					*									*	
NCDC13970											*	*				*	*	*					*									*	
220050004								*			*	*				*	*	*					*									*	
220110002			*	*	*			*			*	*				*	*	*					*									*	
220150008			*	*	*			*			*	*				*	*	*					*									*	
220190007			*	*	*			*			*	*				*	*	*					*									*	
220190009			*	*	*			*			*	*				*	*	*					*									*	
220330003	*		*	*	*			*			*	*				*	*	*					*									*	
220330008			*	*	*			*			*	*				*	*	*					*									*	
220330009	*		*	*	*			*			*	*				*	*	*					*									*	
220331001			*	*	*			*			*	*				*	*	*					*									*	
220470002			*	*	*			*			*	*				*	*	*					*									*	
220470007			*	*	*			*			*	*				*	*	*					*									*	
220511001			*	*	*			*			*	*				*	*	*					*									*	
220630002			*	*	*			*			*	*				*	*	*					*									*	
220710012	*		*	*	*			*			*	*				*	*	*					*									*	
220710017	*		*	*	*			*			*	*				*	*	*					*									*	
220730002			*	*	*			*			*	*				*	*	*					*									*	
220770001			*	*	*			*			*	*				*	*	*					*									*	
220930002			*	*	*			*			*	*				*	*	*					*									*	
221010003			*	*	*			*			*	*				*	*	*					*									*	
221210001			*	*	*			*			*	*				*	*	*					*									*	
480391003											*	*				*	*	*					*									*	
481410002	*								*	*	*	*				*	*	*					*									*	
481410027	*	*	*	*	*			*			*	*				*	*	*					*									*	
481410028	*		*	*	*			*			*	*				*	*	*					*									*	
481410033		*	*	*	*			*			*	*				*	*	*					*									*	
481410037	*	*	*	*	*			*		*	*	*				*	*	*					*									*	
481410044	*		*	*	*			*	*	*	*	*				*	*	*					*									*	
481671002		*						*			*	*				*	*	*					*									*	
481830001								*			*	*				*	*	*					*									*	
481990002								*			*	*				*	*	*					*									*	
482010004		*						*			*	*				*	*	*					*									*	
482010024	*		*	*	*			*			*	*				*	*	*					*									*	
482010029								*			*	*				*	*	*					*									*	
482010046		*						*		*	*	*	*			*	*	*					*									*	
482010047	*		*	*	*			*		*	*	*	*	*		*	*	*					*									*	
482010051		*						*		*	*	*	*	*		*	*	*					*									*	
482010059		*						*		*	*	*	*	*		*	*	*					*									*	
482010062		*						*		*	*	*	*	*		*	*	*					*									*	
482011003		*						*		*	*	*	*	*		*	*	*					*									*	
482011035	*	*	*	*	*			*		*	*	*	*	*		*	*	*					*									*	
482011037	*	*	*	*	*			*		*	*	*	*	*		*	*	*					*									*	
482450009	*	*	*	*	*			*		*	*	*	*	*		*	*	*					*									*	

JUL 93, SITE LIST (continued)

SiteID	CO	S02	NO	NO2	NOX	MMHC	CH4	O3	WS	WD	RsWS	RsWD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT			
482450011		*						*			*	*				*																				
483550025		*						*			*	*				*																				
483550026		*						*			*	*				*																				
483611001			*	*	*			*			*	*				*																				
484690003			*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
CRSC			*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
GALC			*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
GLRC			*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
HTCC			*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
SBRC			*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
SPTC			*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
STWC			*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
010270001								*																												
010730025	*							*																												
010731003			*	*	*			*																												
010890014	*		*	*	*			*																												
011170004			*	*	*			*																												
280490018	*							*																												
280590006								*																												
120110003				*				*																												
120110009	*							*																												
120112003								*																												
120112004	*							*																												
120118002				*				*																												
120250027				*				*																												
120251019	*			*				*																												
120254002				*				*																												
120310070	*							*																												
120310080	*							*																												
120330004	*							*																												
120570063	*							*																												
120570081	*							*																												
120571035	*							*																												
120571045	*							*																												
120571065	*			*				*																												
120571070	*							*																												
120712001	*							*																												
120951005	*							*																												
120952002	*			*				*																												
120991004	*			*				*																												
120991005	*			*				*																												
120992004	*			*				*																												
121030018	*			*				*																												
121030024	*			*				*																												
121035002	*			*				*																												
121151002	*			*				*																												
121151004	*			*				*																												
121151005	*			*				*																												
BL06								*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
PC06								*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SD06								*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
VIC8								*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
482010801	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
482010803	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
482010804	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
482010807	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
482010808	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
480710900	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
480710901	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
482450101		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
483610100		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
483611100		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
482450102		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AVAT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
345T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SMLT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ME5T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
MO8T	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

AUG 93, SITE LIST

SiteID	CO	S02	NO	NO2	NOX	MMHC	CH4	O3	WS	WD	R5WS	R5WD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	Vir.t	HT.v	SeaT	SheT
LATX42019											*	*				*	*	*					*									*	
LATXBUSL1											*	*				*	*	*					*									*	
LATX42026											*	*				*	*	*					*									*	
LATX42028											*	*				*	*	*					*									*	
LATX42030											*	*				*	*	*					*									*	
LATX42035											*	*				*	*	*					*									*	
LATX42027											*	*				*	*	*					*									*	
48167GILC			*	*	*			*	*		*	*			*	*	*	*					*	*								*	
22109LUMC			*	*	*			*	*		*	*			*	*	*	*					*	*								*	
GAL									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
LSU									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
SSP									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
HIP									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
SEH									*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
NCDC03937											*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
NCDC12912											*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
NCDC12916											*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
NCDC12917											*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
NCDC12924											*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
NCDC12960											*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
NCDC13894											*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
NCDC13970											*	*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220050004										*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220110002			*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220150008			*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220190007			*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220190008			*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220190009			*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220330003	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220330008	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220330009	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220331001	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220470002	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220470007	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220511001	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220630002	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220710012	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220710017	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220730002	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220770001	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
220930002	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
221010003	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
221210001	*		*	*	*					*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
480391003	*									*	*					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
481410002	*		*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
481410027	*	*	*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
481410028	*		*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
481410033	*		*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
481410037	*		*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
481410044	*		*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
481671002	*	*							*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
481830001	*		*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
481990002	*		*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482010004	*	*							*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482010024	*		*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482010029	*		*	*	*				*	*						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482010046	*	*							*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482010047	*	*	*	*	*				*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482010051	*	*							*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482010059	*	*							*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482010062	*	*							*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482011003	*	*							*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482011035	*	*	*	*	*				*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482011037	*	*	*	*	*				*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482450009	*	*	*	*	*				*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
482450011	*	*							*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
483550025	*	*							*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
483550026	*	*							*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
483611001	*	*	*	*	*				*	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	

AUG 93, SITE LIST (continued)

SiteID	CO	S02	NO	NO2	NOX	MMHC	CH4	O3	WS	MD	RsWS	RsMD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
484690003								*			*	*				*							*										*
BUOY42001											*	*				*								*									*
LATX42002											*	*				*								*									*
BUOY42003											*	*				*								*									*
BUOY42007											*	*				*								*									*
BUOYBURL1											*	*				*								*									*
BUOYCSBF1											*	*				*								*									*
BUOYDPIA1											*	*				*								*									*
LATXGDIL1											*	*				*								*									*
LATXPTAT2											*	*				*								*									*
BUOYSMKF1											*	*				*								*									*
LATXSRST2											*	*				*								*									*
BUOYVENF1											*	*				*								*									*
CRSC			*	*	*			*	*	*	*	*	*	*	*	*							*										*
GALC		*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
GLRC		*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
HTCC		*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
SBRC		*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
SPTC		*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
STWC		*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
010270001								*																									
010730028	*							*																									
010731003								*																									
010890014	*		*	*	*			*																									
011170004	*		*	*	*			*																									
280490018	*							*																									
280590006								*																									
120110003				*				*																									
120110009	*							*																									
120112003								*																									
120112004	*							*																									
120118002				*				*																									
120250027				*				*																									
120251019	*							*																									
120254002				*				*																									
120310070								*																									
120310080	*							*																									
120330004								*																									
120570063	*							*																									
120570081	*							*																									
120571035	*							*																									
120571045	*							*																									
120571065	*			*				*																									
120951005	*			*				*																									
120952002	*			*				*																									
120991004	*			*				*																									
120991005	*			*				*																									
120992004	*			*				*																									
121030018	*			*				*																									
121030024	*			*				*																									
121035002	*			*				*																									
121151002	*			*				*																									
121151004	*			*				*																									
121151005	*			*				*																									
BL08								*	*	*	*	*	*	*	*	*																	
FC08								*	*	*	*	*	*	*	*	*																	
SDR8								*	*	*	*	*	*	*	*	*																	
VIC8								*	*	*	*	*	*	*	*	*																	
482010801	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
482010803	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
482010804	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
482010807	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
482010808	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
480710900	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
480710901	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*										*
482450101		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							*										*
483610100		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							*										*
483611100		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							*										*
482450102		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							*										*
AVAT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							*		*								*
34ST	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							*		*								*
SWLT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							*		*								*



AUG 93, SITE LIST (concluded)

SiteID	CO	S02	NO	NO2	NOX	NMHC	CH4	O3	WS	WD	RsWS	RsWD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
MEST		*	*	*	*	*	*	*	*	*	*	*	*		*		*	*		*			*	*								*	
MOBT		*	*	*	*	*	*	*	*	*	*	*	*		*		*	*		*			*	*								*	

SEP 93, SITE LIST

SiteID	CO	S02	NO	NO2	NOX	NMHC	CH4	O3	WS	WD	R <sub>s</sub> WS	R <sub>s</sub> WD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
LATX42019											*	*				*	*	*					*									*	
LATXBUSL1											*	*				*	*	*					*									*	
LATX42026											*	*				*	*	*					*									*	
LATX42028											*	*				*	*	*					*									*	
LATX42030											*	*				*	*	*					*									*	
LATX42002											*	*				*	*	*					*									*	
LATXG01L1											*	*				*	*	*					*									*	
LATXP1AT2											*	*				*	*	*					*									*	
LATXSRST2											*	*				*	*	*					*									*	
LATX42035											*	*				*	*	*					*									*	
LATX42027											*	*				*	*	*					*									*	
4816701LC		*	*	*				*	*	*	*	*			*	*	*	*					*									*	
22109LUMC		*	*	*				*	*	*	*	*			*	*	*	*					*		*							*	
GAL									*	*	*	*	*		*	*	*	*			*		*	*	*							*	
LSU									*	*	*	*	*		*	*	*	*			*		*	*	*							*	
SSP									*	*	*	*	*		*	*	*	*			*		*	*	*							*	
HIP									*	*	*	*	*		*	*	*	*			*		*	*	*							*	
SEH									*	*	*	*	*		*	*	*	*			*		*	*	*							*	
NCDC03937											*	*				*	*	*					*									*	
NCDC12912											*	*				*	*	*					*									*	
NCDC12916											*	*				*	*	*					*									*	
NCDC12917											*	*				*	*	*					*									*	
NCDC12924											*	*				*	*	*					*									*	
NCDC12960											*	*				*	*	*					*									*	
NCDC13894											*	*				*	*	*					*									*	
NCDC13970											*	*				*	*	*					*									*	
220050004								*			*	*				*	*	*					*									*	
220110002								*			*	*				*	*	*					*									*	
220150008			*	*	*			*			*	*				*	*	*					*									*	
220190007			*	*	*			*			*	*				*	*	*					*									*	
220190009			*	*	*			*			*	*				*	*	*					*									*	
220330003	*		*	*	*			*			*	*				*	*	*					*									*	
220330008	*		*	*	*			*			*	*				*	*	*					*									*	
220330009	*		*	*	*			*			*	*				*	*	*					*									*	
220331001			*	*	*			*			*	*				*	*	*					*									*	
220470002			*	*	*			*			*	*				*	*	*					*									*	
220470007			*	*	*			*			*	*				*	*	*					*									*	
220511001			*	*	*			*			*	*				*	*	*					*									*	
220630002			*	*	*			*			*	*				*	*	*					*									*	
220710012	*		*	*	*			*			*	*				*	*	*					*									*	
220710017	*		*	*	*			*			*	*				*	*	*					*									*	
220730002			*	*	*			*			*	*				*	*	*					*									*	
220770001			*	*	*			*			*	*				*	*	*					*									*	
220930002			*	*	*			*			*	*				*	*	*					*									*	
221010003			*	*	*			*			*	*				*	*	*					*									*	
221210001			*	*	*			*			*	*				*	*	*					*									*	
480391003			*	*	*			*			*	*				*	*	*					*									*	
481410002	*		*	*	*			*	*	*	*	*				*	*	*					*									*	
481410027	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
481410028	*		*	*	*			*	*	*	*	*				*	*	*					*									*	
481410033	*		*	*	*			*	*	*	*	*				*	*	*					*									*	
481410037	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
481410044	*		*	*	*			*	*	*	*	*				*	*	*					*									*	
481671002		*	*	*	*			*	*	*	*	*				*	*	*					*									*	
481830001			*	*	*			*	*	*	*	*				*	*	*					*									*	
481990002			*	*	*			*	*	*	*	*				*	*	*					*									*	
482010004		*	*	*	*			*	*	*	*	*				*	*	*					*									*	
482010024	*		*	*	*			*	*	*	*	*				*	*	*					*									*	
482010029			*	*	*			*	*	*	*	*				*	*	*					*									*	
482010046	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
482010047	*		*	*	*			*	*	*	*	*				*	*	*					*									*	
482010051	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
482010059	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
482010062	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
482011003	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
482011035	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
482011037	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
482450009	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	
482450011	*	*	*	*	*			*	*	*	*	*				*	*	*					*									*	

SEP 93, SITE LIST (continued)

SiteID	CO	S02	NO	NO2	NOX	NMHC	CH4	O3	WS	WD	RsWS	RsWD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT	
483550025	*	*						*			*	*				*																		
483550026	*	*						*			*	*				*																		
483611001			*	*	*			*			*	*				*																		
484690003								*			*	*				*																		
CRSC			*	*	*			*	*	*	*	*	*	*	*	*							*											*
GALC			*	*	*			*	*	*	*	*	*	*	*	*							*											*
GLRC			*	*	*			*	*	*	*	*	*	*	*	*							*											*
HTCC			*	*	*			*	*	*	*	*	*	*	*	*							*											*
SBRC			*	*	*			*	*	*	*	*	*	*	*	*							*											*
SPTC			*	*	*			*	*	*	*	*	*	*	*	*							*											*
STWC			*	*	*			*	*	*	*	*	*	*	*	*							*											*
010270001			*					*																										
010730028	*							*																										
010731003	*							*																										
010890014	*		*	*	*			*																										
011170004	*		*	*	*			*																										
280490018	*							*																										
280590006								*																										
120110003				*				*																										
120110009	*							*																										
120112003								*																										
120112004	*							*																										
120118002				*				*																										
120250027				*				*																										
120251019	*							*																										
120254002				*				*																										
120310070								*																										
120310080	*							*																										
120330004	*							*																										
120570063	*							*																										
120570081	*							*																										
120571035	*							*																										
120571045	*							*																										
120571065	*			*				*																										
120951005	*							*																										
120952002	*			*				*																										
120991004	*			*				*																										
120991005	*							*																										
120992004	*			*				*																										
121030018	*			*				*																										
121030024	*							*																										
121035002	*							*																										
121151002	*							*																										
121151004	*							*																										
121151005	*							*																										
BL08									*	*	*	*	*	*	*	*																		
PC08									*	*	*	*	*	*	*	*																		
SR08									*	*	*	*	*	*	*	*																		
VIC8									*	*	*	*	*	*	*	*																		
482010801	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*		*									*
482010803	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*		*									*
482010804	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*		*									*
482010807	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*		*									*
482010808	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*		*									*
480710900	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*		*									*
480710901	*	*	*	*	*			*	*	*	*	*	*	*	*	*							*		*									*
482450101			*	*	*		*	*	*	*	*	*	*	*	*	*							*		*									*
483610100			*	*	*		*	*	*	*	*	*	*	*	*	*							*		*									*
483611100			*	*	*		*	*	*	*	*	*	*	*	*	*							*		*									*
482450102			*	*	*		*	*	*	*	*	*	*	*	*	*							*		*									*

OCT 93, SITE LIST

SiteID	CO	S02	NO	NO2	NOX	MMHC	CH4	O3	WS	WD	RsWS	RsWD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
LATX42019											*	*				*	*	*					*									*	
LATXBUSL1											*	*				*	*	*					*									*	
LATX42002											*	*				*	*	*					*									*	
LATXGD1L1											*	*				*	*	*					*									*	
LATXPTAT2											*	*				*	*	*					*									*	
LATXSRST2											*	*				*	*	*					*									*	
LATX42035											*	*				*	*	*					*									*	
LATX42027											*	*				*	*	*					*									*	
4816761LC		*	*	*				*	*		*	*			*	*	*						*									*	
22109LUNC		*	*	*				*	*		*	*			*	*	*						*									*	
GAL									*	*	*	*	*			*	*	*			*		*	*								*	
LSU									*	*	*	*	*			*	*	*			*		*	*								*	
SSP									*	*	*	*	*			*	*	*			*		*	*								*	
HIP									*	*	*	*	*			*	*	*			*		*	*								*	
SEH									*	*	*	*	*			*	*	*			*		*	*								*	
NCDC03937											*	*				*	*	*					*									*	
NCDC12912											*	*				*	*	*					*									*	
NCDC12916											*	*				*	*	*					*									*	
NCDC12917											*	*				*	*	*					*									*	
NCDC12924											*	*				*	*	*					*									*	
NCDC12960											*	*				*	*	*					*									*	
NCDC13894											*	*				*	*	*					*									*	
NCDC13970											*	*				*	*	*					*									*	
220050004								*								*	*	*					*									*	
220110002			*	*	*			*								*	*	*					*									*	
220150008			*	*	*			*								*	*	*					*									*	
220190007			*	*	*			*								*	*	*					*									*	
220190009			*	*	*			*								*	*	*					*									*	
220330003	*		*	*	*			*								*	*	*					*									*	
220330008	*		*	*	*			*								*	*	*					*									*	
220330009	*		*	*	*			*								*	*	*					*									*	
220331001			*	*	*			*								*	*	*					*									*	
220470002			*	*	*			*								*	*	*					*									*	
220470007			*	*	*			*								*	*	*					*									*	
220511001			*	*	*			*								*	*	*					*									*	
220630002			*	*	*			*								*	*	*					*									*	
220710012	*		*	*	*			*								*	*	*					*									*	
220710017	*		*	*	*			*								*	*	*					*									*	
220730002			*	*	*			*								*	*	*					*									*	
220770001			*	*	*			*								*	*	*					*									*	
220930002			*	*	*			*								*	*	*					*									*	
221010003			*	*	*			*								*	*	*					*									*	
221210001		*	*	*	*			*								*	*	*					*									*	
480391003											*	*				*	*	*					*									*	
481671002	*							*			*	*				*	*	*					*									*	
481830001											*	*				*	*	*					*									*	
481990002								*			*	*				*	*	*					*									*	
482010004	*	*						*			*	*				*	*	*					*									*	
482010024	*	*	*	*	*			*			*	*				*	*	*					*									*	
482010029								*			*	*				*	*	*					*									*	
482010059		*						*			*	*				*	*	*					*									*	
482011003		*						*			*	*				*	*	*					*									*	
482450009	*	*	*	*	*			*			*	*				*	*	*					*									*	
482450011	*	*	*	*	*			*			*	*				*	*	*					*									*	
483550025	*	*	*	*	*			*			*	*				*	*	*					*									*	
483550026	*	*	*	*	*			*			*	*				*	*	*					*									*	
483611001		*	*	*	*			*			*	*				*	*	*					*									*	
484690003		*	*	*	*			*			*	*				*	*	*					*									*	
CRSC		*	*	*	*			*	*	*	*	*	*			*	*	*				*										*	
GALC		*	*	*	*			*	*	*	*	*	*			*	*	*				*										*	
GLRC		*	*	*	*			*	*	*	*	*	*			*	*	*				*										*	
HTCC		*	*	*	*			*	*	*	*	*	*			*	*	*				*										*	
SBRC		*	*	*	*			*	*	*	*	*	*			*	*	*				*										*	
SPTC		*	*	*	*			*	*	*	*	*	*			*	*	*				*										*	
STHC		*	*	*	*			*	*	*	*	*	*			*	*	*				*										*	
010270001								*			*	*				*	*	*					*									*	
010730028	*							*			*	*				*	*	*					*									*	
010731003	*							*			*	*				*	*	*					*									*	
010890014	*	*	*	*	*			*			*	*				*	*	*					*									*	

OCT 93, SITE LIST (continued)

SiteID	CO	S02	NO	NO2	NOX	MMHC	CH4	O3	WS	WD	RsWS	RsWD	SOHD	VWS	SOHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT		
011170004	*		*	*	*			*																											
280490018	*							*																											
280590006	*							*																											
120110003	*			*				*																											
120110009	*							*																											
120112003	*							*																											
120112004	*							*																											
120118002	*			*				*																											
120250027	*		*	*				*																											
120251019	*			*				*																											
120254002	*			*				*																											
120310070	*							*																											
120310080	*							*																											
120330004	*							*																											
120570063	*							*																											
120570081	*							*																											
120571035	*							*																											
120571045	*			*				*																											
120571065	*			*				*																											
120571070	*							*																											
120712001	*							*																											
120951005	*							*																											
120952002	*			*				*																											
120991004	*			*				*																											
120991005	*			*				*																											
120992004	*			*				*																											
121030018	*			*				*																											
121030024	*			*				*																											
121035002	*			*				*																											
121151002	*			*				*																											
121151004	*			*				*																											
121151005	*			*				*																											
BLOG									*	*	*	*	*			*																			
PC06									*	*	*	*	*			*																			
SDR6									*	*	*	*	*			*																			
VIC6									*	*	*	*	*			*																			
482010801	*	*	*	*	*			*	*	*	*	*	*			*					*		*											*	
482010803	*	*	*	*	*			*	*	*	*	*	*			*					*		*											*	
482010804	*	*	*	*	*			*	*	*	*	*	*			*					*		*											*	
482010807	*	*	*	*	*			*	*	*	*	*	*			*					*		*											*	
482010808	*	*	*	*	*			*	*	*	*	*	*			*					*		*											*	
480710900	*	*	*	*	*			*	*	*	*	*	*			*					*		*											*	
480710901	*	*	*	*	*			*	*	*	*	*	*			*					*		*											*	

NOV 93, SITE LIST

SiteID	CO	SO2	NO	NO2	NOX	NMHC	CH4	O3	WS	WD	R <sub>s</sub> WS	R <sub>s</sub> WD	SDHD	VWS	SDHS	TEMP	DEW	RH	VISI	SORD	UVRD	NTRD	PRES	PREC	CLDC	u	v	HT.w	HT.t	VirT	HT.v	SeaT	SheT
LATX42002											*	*				*	*						*									*	
LATXGDIL1											*	*				*	*						*									*	
LATXPTAT2											*	*				*	*						*									*	
LATXSRST2											*	*				*	*						*									*	
LATX42020											*	*				*	*						*									*	
LATX42035											*	*				*	*						*									*	
LATX42027											*	*				*	*						*									*	
480391003								*			*	*				*	*															*	
481671002		*						*			*	*				*	*															*	
481830001								*			*	*				*	*															*	
481990002								*			*	*				*	*															*	
482010004		*						*			*	*				*	*															*	
482010024	*		*	*	*			*			*	*				*	*															*	
482010029								*			*	*				*	*															*	
482010059		*						*			*	*				*	*															*	
482011003		*		*	*			*			*	*				*	*															*	
482450009	*		*	*	*			*			*	*				*	*															*	
482450011		*						*			*	*				*	*															*	
483550025		*						*			*	*				*	*															*	
483550026		*						*			*	*				*	*															*	
483611001			*	*	*			*			*	*				*	*															*	
484690003								*			*	*				*	*						*									*	
CRSC			*	*	*			*	*	*	*	*	*	*	*	*	*						*									*	
GALC			*	*	*			*	*	*	*	*	*	*	*	*	*						*									*	
GLRC			*	*	*			*	*	*	*	*	*	*	*	*	*						*									*	
HTCC			*	*	*			*	*	*	*	*	*	*	*	*	*						*									*	
SBRC			*	*	*			*	*	*	*	*	*	*	*	*	*						*									*	
SPTC			*	*	*			*	*	*	*	*	*	*	*	*	*						*									*	
STMC			*	*	*			*	*	*	*	*	*	*	*	*	*						*									*	
BL08								*	*	*	*	*	*	*	*	*	*						*									*	
PC08								*	*	*	*	*	*	*	*	*	*						*									*	
SO08								*	*	*	*	*	*	*	*	*	*						*									*	
VIC8								*	*	*	*	*	*	*	*	*	*						*									*	
482010801	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*						*		*							*	
482010803	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*						*		*							*	
482010804	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*						*		*							*	
482010807	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*						*		*							*	
482010808	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*						*		*							*	
480710900	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*						*		*							*	
480710901	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*						*		*							*	



### **The Department of the Interior Mission**

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



### **The Minerals Management Service Mission**

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the **Offshore Minerals Management Program** administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The **MMS Royalty Management Program** meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.