Table 1a

# **Data Collection Statistics** 01/01/2016 - 12/31/2016

# **National Park Service Gaseous Pollutant Monitoring Program**

Parameter % valid1

		-													
National Park Unit	Site Name	О3	SO2	SO2ADD	со	NOX	PM2.5	PM10	VWD	sws	ТМР	RH	RNF	SOL	FLOW
Big Bend	K-Bar Ranch Road	97.8							98.4	98.4	98.8	98.8	98.4	98.9	92.1
Canyonlands	Island in the Sky	98.6							96.1	96.1	99.5	99.7	94.8	99.5	98.9
Chiricahua	Entrance Station	98.2							98.7	98.7	98.7	98.8	98.2	98.5	99.4
Craters of the Moon	Visitor Center	99.0							99.5	99.5	100.0			100.0	
Denali	Headquarters	97.5							98.2	98.2	99.5	99.6	89.3	97.6	99.6
Death Valley	Park Village	85.1							50.6	99.0	94.2				
Dinosaur	West Entrance Housing	94.5							99.7	99.7	99.8		99.8	100.0	99.2
Everglades	Beard Center								97.2	97.2	99.7	99.7	81.8	99.1	98.8
Fort Laramie	North Boundary						81.3			80.2	77.7	77.7			
Glacier	West Glacier Horse Stables	98.1							52.4	98.2	99.8			99.8	99.3
Great Basin	Maintenance Yard	97.2							83.0	83.0	98.8	98.9	98.7	99.1	98.7
Grand Canyon	The Abyss	98.6							99.2	99.2	99.4	99.4	99.5	99.8	99.4
Great Smoky Mountains	Clingmans Dome	52.2							56.0	56.0	56.4	56.4	56.2	56.4	
Great Smoky Mountains	Cove Mountain	97.2							98.8	98.8	98.8	98.8	98.7		
Great Smoky Mountains	Look Rock NCORE		94.7		87.2										
Great Smoky Mountains	Look Rock	98.3							70.0	99.4	99.7	99.8	99.0	99.8	99.6
Grand Teton	Science School	99.1							99.4	99.4	99.7	99.7	99.4	99.7	
Hawaii Volcanoes	Observatory		95.4	95.4			73.6		100.0	100.0	71.1	71.1	99.7		
Hawaii Volcanoes	Visitor Center		95.3	95.3					99.8	99.8	65.1	67.6	99.6	99.9	
Joshua Tree	Black Rock	99.0							97.7	97.7	99.9	71.6	99.7	100.0	99.1
Joshua Tree	Cottonwood Canyon	98.0						64.6	99.6	99.6	99.6	99.6	99.6	99.6	
Lassen Volcanic	Manzanita Lake Fire Stn.	93.5							79.2	79.2	95.7	96.8	93.2	97.6	96.4
Mammoth Cave	Houchin Meadow	86.4	77.3		65.3				88.8	91.7	81.8	91.9	91.7	92.0	90.5
Mesa Verde	Resource Mngment Area	99.0							99.6	99.6	99.9	100.0	98.8	100.0	80.0
Minidoka	Maintenance Building						54.5			98.1	99.9	99.9			
Petrified Forest	South Entrance	97.0							99.5	99.5	99.8			98.5	95.4
Pinnacles	SW of East Entrance Stn.	99.1							98.1	98.1	98.7	99.9	99.5	94.8	99.2
Rocky Mountain	Long's Peak	98.4							99.7	99.7	99.8	99.8	99.5	99.9	97.3
Sequoia and Kings Canyon	Ash Mountain	97.6					72.1		98.7	98.7	99.1	99.1	98.8	99.2	99.1
Sequoia and Kings Canyon	Lower Kaweah	93.5							92.4	92.4	94.2	87.5	94.6	94.2	
Shenandoah	Big Meadows	98.1							98.2	98.2	98.8	96.1	98.6	98.8	98.7
Voyageurs	Sullivan Bay	87.9							90.0	98.8	99.7	99.5	99.5	81.8	99.0
Yellowstone	Old Faithful Snow Lodge				85.5		83.5		99.5	99.5	99.8	96.0			
Yellowstone	West Entrance				89.1	88.9	97.2		98.3	98.3	99.4	99.4			
Yellowstone	Water Tank	92.0							73.1	98.9	99.1	99.2	98.6	99.0	99.1
Yosemite	Turtleback Dome	90.9							56.1	94.0	94.2	94.2	94.1	83.4	93.9

## Table 1a (continued)

# **Data Collection Statistics** 01/01/2016 - 12/31/2016

### **National Park Service Gaseous Pollutant Monitoring Program**

#### Parameter % valid1

National Park Unit	Site Name	О3	SO2	SO2ADD	СО	NOX	PM2.5	PM10	VWD	sws	ТМР	RH	RNF	SOL	FLOW
Zion	Dalton's Wash	98.0							99.9	99.9	99.9		99.6	99.9	
Average Network Data Collection		94.5	90.7	95.4	81.8	88.9	77.0	64.6	90.2	95.6	94.9	93.2	95.7	96.1	96.9

#### Key: Performance Goals:

O3 = Ozone SO2 = Sulfur Dioxid SO2Add = Sulfur Dioxide CO = Carbon Monoxide	NOX = Oxides of Nitrogen PM2.5 = Particulate Matter 2.5 PM10 = Particulate Matter 10 VWD = Vector Wind Direction	TMP = Ambient Temperature RH = Relative Humidity RNF = Precipitation SOL = Solar Radiation	Quarterly Criteria: 100% of sites, >= 85% valid data capture 90% of sites, >= 90% valid data capture 80% of sites, >= 95% valid data capture	Monthly Criteria: 100% of sites, >= 60% valid data capture 90% of sites, >= 75% valid data capture 80% of sites, >= 85% valid data capture
	SWS = Scalar Wind Speed	FLOW = Filter Pack Flow Rate		

<sup>1.</sup> Percent valid can be less than 100% due to calibrations, routine maintenance, power failures, audits or other circumstances where the instrument was not available to collect data. For example, automatic zeros and spans are performed daily on most ambient gas analyzers; therefore, no ambient gas data can be collected during this time. As a result, the maximum percent valid for ambient gas data typically cannot be greater than 95.8. Percent valid can also be less than 100% due to influencing factors such as instrument error, operator error, timing problems, flow issues, and other factors that affect instrument operation.

#### Font color key:

Black: 85% - 100% data recovery

Blue: 75% - 84.9% data recovery

Orange: 60% - 74.9% data recovery

Red: 0% - 59.9% data recovery

#### Table 1b

# Data Collection Statistics 01/01/2016 - 12/31/2016 Sites Operated by the NPS for the BLM

#### Parameter % valid1

National Park Unit	Site Name	О3	SO2	SO2ADD	со	NOX	PM2.5	PM10	VWD	sws	TMP	RH	RNF	SOL	FLOW
Meeker	Plant Science	95.1				91.5	99.5		98.8	98.8	99.9	99.9	99.6	100.0	99.6
Rangely	Golf Course	96.9				97.2	94.2		99.4	99.4	99.7	99.7	99.4	99.7	
Average Network Data Collection		96.0				94.4	96.8		99.1	99.1	99.8	99.8	99.5	99.8	99.6

Key: Performance Goals:

O3 = Ozone SO2 = Sulfur Dioxid SO2Add = Sulfur Dioxide CO = Carbon Monoxide	NOX = Oxides of Nitrogen PM2.5 = Particulate Matter 2.5 PM10 = Particulate Matter 10 VWD = Vector Wind Direction	TMP = Ambient Temperature RH = Relative Humidity RNF = Precipitation SOL = Solar Radiation	Quarterly Criteria: 100% of sites, >= 85% valid data capture 90% of sites, >= 90% valid data capture 80% of sites, >= 95% valid data capture	Monthly Criteria: 100% of sites, >= 60% valid data capture 90% of sites, >= 75% valid data capture 80% of sites, >= 85% valid data capture
	SWS = Scalar Wind Speed	FLOW = Filter Pack Flow Rate		

<sup>1.</sup> Percent valid can be less than 100% due to calibrations, routine maintenance, power failures, audits or other circumstances where the instrument was not available to collect data. For example, automatic zeros and spans are performed daily on most ambient gas analyzers; therefore, no ambient gas data can be collected during this time. As a result, the maximum percent valid for ambient gas data typically cannot be greater than 95.8. Percent valid can also be less than 100% due to influencing factors such as instrument error, operator error, timing problems, flow issues, and other factors that affect instrument operation.

#### Font color key:

Black: 85% - 100% data recovery

Blue: 75% - 84.9% data recovery

Orange: 60% - 74.9% data recovery

Red: 0% - 59.9% data recovery

#### Table 1c

# **Data Collection Statistics** 01/01/2016 - 12/31/2016

## **Portable Ozone Monitoring Systems (POMS)**

#### Parameter % valid<sup>1</sup>

National Park Unit	Site Name	О3	SO2	SO2ADD	со	NOX	PM2.5	PM10	VWD	sws	ТМР	RH	RNF	SOL	FLOW
Carlsbad Caverns	Maintenance Area	94.2								99.8	99.8	99.8	99.8	99.2	
Chickamauga/Chattanooga	Lookout Mountain	93.1								92.9	74.9	74.9			
Joshua Tree	Pinto Wells	94.3								100.0	100.0	100.0		100.0	
Kings Mountain	RAWS Station	92.2								100.0	99.9	100.0	100.0	100.0	
Mojave	Kelso Mountains	87.7								100.0	100.0	100.0	100.0	100.0	
Stones River	Beasley Field	85.9								91.3	91.2	91.2	56.7	91.2	
Average Network Data Collection	n	91.2								97.3	94.3	94.3	89.1	98.1	

#### Key:

O3 = OzoneNOX = Oxides of Nitrogen SO2 = Sulfur Dioxid PM2.5 = Particulate Matter 2.5 SO2Add = Sulfur Dioxide PM10 = Particulate Matter 10 CO = Carbon Monoxide VWD = Vector Wind Direction

SWS = Scalar Wind Speed

TMP = Ambient Temperature RH = Relative Humidity RNF = Precipitation SOL = Solar Radiation

FLOW = Filter Pack Flow Rate

#### Performance Goals:

Quarterly Criteria: 100% of sites, >= 85% valid data capture 90% of sites, >= 90% valid data capture 80% of sites, >= 95% valid data capture

#### Monthly Criteria:

100% of sites, >= 60% valid data capture 90% of sites, >= 75% valid data capture 80% of sites, >= 85% valid data capture

1. Percent valid can be less than 100% due to calibrations, routine maintenance, power failures, audits or other circumstances where the instrument was not available to collect data. For example, automatic zeros and spans are performed daily on most ambient gas analyzers; therefore, no ambient gas data can be collected during this time. As a result, the maximum percent valid for ambient gas data typically cannot be greater than 95.8. Percent valid can also be less than 100% due to influencing factors such as instrument error, operator error, timing problems, flow issues, and other factors that affect instrument operation.

#### Font color kev:

Black: 85% - 100% data recovery Blue: 75% - 84.9% data recovery Orange: 60% - 74.9% data recovery Red: 0% - 59.9% data recovery

Table 2. Ozone Analyzer Precision and Accuracy Summary Sites Operated by the National Park Service National Park Service Gaseous Pollutant Monitoring Program, 2016

				Precisio	n		As-found	ti-Point	
National Park Unit		Calendar Quarter	Required No. of Precision Checks Met? <sup>1</sup>	Avg. Absolute Percent Difference <sup>3,4</sup>		Upper 95% Probability Limit <sup>6</sup>	Accuracy Check Performed During the Quarter? <sup>2</sup>	Avg. Absolute Percent Difference <sup>3,4</sup>	Max. Absolute Percent Difference⁵
Big Bend	K-Bar Ranch Road	1	Y	0.3	-1.5	0.9	N		
_		2	Y	8.0	-2.3	0.6	N	_	_
		3	Y	3.0	-6.6	0.6	Y	8.0	1.3
		4	Y	1.2	-4.2	1.8	N		
Canyonlands	Island in the Sky	1	Y	1.4	0.6	2.2	N	_	_
		2	Y	1.7	0.3	3.0	N	_	_
		3	Y	1.0	0.1 0.1	1.9	N		
Chiminahua	Entrance Station	4	Y	1.3		2.5	Y	2.4	2.9
Chiricahua	Entrance Station	2	Y	2.5 3.5	-5.9 -4.6	0.8 -2.4	N N	0.2	0.7
		3	Y	3.5 2.3	-4.6 -5.0	-2.4 0.5	Y	2.6	2.9
		3 4	Ϋ́	2.3 0.1	-5.0 -1.5	1.3	N N	2.0	2.9
Craters of the Moon	Visitor Center	1	Y	2.3	-4.0	-0.5	N N	_	_
Craters of the Moori	Visitor Ceriter	2	\ Y	1.9	-4.3	0.6	Y	2.1	2.3
		3	Ý	0.5	-2.3	1.3	N	<del></del>	
		4	Ý	0.5	-1.0	2.1	Ϋ́Υ	1.1	1.8
Denali	Headquarters	1	Ý	2.3	-3.0	-1.6	Ň	<del></del>	<del></del>
ricadquarters		2	Ý	1.6	-4.2	0.9	Y	2.5	2.9
		3	Ϋ́	0.6	-1.5	0.4	Ϋ́	2.1	3.2
		4	Y	1.8	-2.7	-0.8	N	_	<del>-</del>
Death Valley	Park Village	1	Υ	1.6	-5.1	2.0	Υ	0.3	0.6
,	ŭ.	2	Υ	3.7	-7.1	-0.2	Υ	<mark>6.8</mark>	<mark>7.1</mark>
		3	Y	0.6	-0.8	1.9	N	_	_
		4	Y	0.3	-2.1	2.7	Υ	0.2	0.5
Dinosaur	West Entrance Housing	1	Y	1.5	-3.3	0.4	N	<del></del>	_
		2	Y	3.7	-5.3	-2.0	Y	0.5	0.9
		3	Y	3.5	-4.9	-2.2	N		<del>-</del>
		4	Y	2.8	-6.6	1.1	Y	2.0	2.3
Glacier	West Glacier Horse Stabl		Y	1.6	-2.8	-0.4	N		
		2	Y	1.5	-3.2	0.2	Y	0.5	8.0
		3 4	Y	1.6	-3.1	0.0	N	4.7	
Creat Basin	Maintananaa Vard	•	Y	0.9	-2.9	1.2	Y	1.7	2.0
Great Basin	Maintenance Yard	1 2	Y	1.3 1.9	-4.3 -5.8	1.7 2.1	Y	1.0 0.4	1.9 0.6
		3	Y	0.5	-5.8 -1.8	2.1	N N	0.4	0.0
		3 4	Ϋ́	1.1	-1.6 -1.6	2.6 3.8	Y	0.8	1.3
Grand Canyon	The Abyss	1	Y	0.8	-2.8	1.2	Y	2.3	3.1
Grand Garryon	THO Abyos	2	Ϋ́	1.9	-2.6 -2.6	-1.1	N		<del></del>
		3	Ý	2.8	-4.0	-1.6	N N	_	
		4	Ý	2.5	-4.3	-0.8	Ϋ́	1.8	2.5
				2.0	7.0	0.0	•	1.0	2.0

# Table 2 (continued). Ozone Analyzer Precision and Accuracy Summary Sites Operated by the National Park Service National Park Service Gaseous Pollutant Monitoring Program, 2016

				Precisio	on	As-Found Verification Multi-Point				
National Park Unit	Site Name	Calendar Quarter	Required No. of Precision Checks Met?	Avg. Absolute Percent Difference <sup>3,4</sup>	Lower 95% Probability Limit <sup>6</sup>	Upper 95% Probability Limit <sup>e</sup>	Accuracy Check Performed During the Quarter? <sup>2</sup>	Avg. Absolute Percent Difference <sup>3,4</sup>	Max. Absolute Percent Difference	
Great Smoky Mountains	Clingmans Dome	1	_				_			
		2	Υ	1.0	-2.9	4.8	Υ	1.1	2.0	
		3	Y	3.8	-1.7	9.3	N			
Const Constant	Carra Marriata in	4	Y	0.9	-1.9	3.8	Y	3.0	3.8	
Great Smoky Mountains	Cove Mountain	1 2	Y	1.1 1.7	-5.5 -2.9	3.3 -0.6	N Y	0.5	1.2	
		3	Y	2.0	-2.9 -3.1	-0.6 -0.9	N N	0.5	1.2	
		4	\ \rac{1}{Y}	3.2	-5.4	-0.9	Y	0.9	1.5	
Great Smoky Mountains	Look Rock	1	Ý	1.4	-2.1	-0.8	N N	<del></del>	<del></del>	
,		2	Y	0.5	-2.0	1.1	Y	0.5	0.7	
		3	Υ	0.4	-3.8	3.0	N			
		4	Y	0.5	-2.0	3.1	Y	3.5	3.9	
Grand Teton	Science School	1	Υ	2.5	-3.5	-1.5	N	_	_	
		2	Y	2.4	-5.1	0.3	Y	0.5	1.4	
		3	Y	0.7	-1.9	0.6	Y	1.7	2.1	
Jackus Tree	Diagle Dagle	4	Y	1.3	-2.3	-0.3	N	<del>_</del>	_	
Joshua Tree	Black Rock	2	Y	0.2 0.3	-1.2 -1.7	0.7 1.0	N Y	0.6	1.2	
		3	Y	0.3 3.7	-1.7 -7.1	-0.3	N N	0.0	1.2	
		4	l 'n	2.1	-7.1 -7.4	3.2	l N			
Joshua Tree	Cottonwood Canyon	1	Y	2.4	<b>-</b> 7.4	2.7	N N	_	_	
	,,,	2	Y	1.1	-4.3	6.5	Y	1.2	2.5	
		3	Υ	0.7	-6.2	7.6	N	_		
		4	Y	0.3	-3.9	4.5	N	_	_	
Lassen Volcanic	Manzanita Lake Fire Str		Y	0.4	-2.2	1.4	N	<del></del>	<del></del>	
		2	Y	0.1	-1.9	1.6	Y	0.7	1.6	
		3	Y	1.7	-3.2	-0.3	N			
Mammath Cava	Houchin Meadow	4	Y	0.1	-3.8 -1.1	3.6	Y	4.0	5.1	
Mammoth Cave	Houchin Meadow	2	Y	0.2 0.3	-1.1 -2.6	0.6 1.9	N Y	0.3	0.7	
		3	Y	0.3 1.9	-2.0 -6.2	2.3	N N	0.3 —	<del>0.7</del>	
		4	l 'n	1.0	-3.1	5.0	Y	0.8	1.5	
Mesa Verde	Resource Mngment Are		Y	1.5	-0.1	3.1	Ý	2.1	2.6	
		2	Ý	2.8	1.2	4.4	N N	<del></del>		
		3	Y	3.4	1.4	5.5	N	_		
		4	Y	1.9	-1.6	5.5	Y	2.4	2.7	
Petrified Forest	South Entrance	1	Υ	2.3	-3.4	-1.3	Υ	2.2	2.8	
		2	Y	2.8	-3.8	-1.8	N	<del>-</del>	<del>-</del>	
		3	Y	2.9	-4.1	-1.8	Y	3.2	4.7	
		4	Υ	2.1	-3.2	-1.1	N			

# Table 2 (continued). Ozone Analyzer Precision and Accuracy Summary Sites Operated by the National Park Service National Park Service Gaseous Pollutant Monitoring Program, 2016

				Precisio	n	As-Found Verification Multi-Point				
National Park Unit	Site Name	Calendar Quarter	Required No. of Precision Checks Met? <sup>1</sup>	Avg. Absolute Percent Difference <sup>3,4</sup>	Lower 95% Probability Limit <sup>e</sup>	Upper 95% Probability Limit <sup>®</sup>	Accuracy Check Performed During the Quarter? <sup>2</sup>	Avg. Absolute Percent Difference <sup>34</sup>	Max. Absolute Percent Difference <sup>5</sup>	
Pinnacles	SW of East Entrance Str	n. 1	Υ	2.0	-3.2	-0.9	N	_		
		2	Y	1.2	-2.9	0.4	Y	1.1	1.7	
		3	Y	2.0	-3.2	-0.9	N	_	_	
		4	Y	0.7	-3.0	1.6	Y	0.4	0.7	
Rocky Mountain	Long's Peak	1	Υ	0.2	-0.9	1.3	N	_	_	
		2	Y	1.2	-4.2	1.8	Y	0.9	2.6	
		3	Υ	0.5	-2.3	1.3	N	_		
		4	Υ	2.3	-1.6	6.3	Υ	1.9	2.9	
Sequoia and Kings Canyon	Ash Mountain	1	Y	8.0	-1.6	0.0	N	_		
		2	Υ	0.9	-2.2	0.4	Y	0.6	1.9	
		3	Y	0.2	-1.6	2.1	Y	1.5	2.3	
		4	Y	0.6	-0.2	1.5	N			
Sequoia and Kings Canyon	Lower Kaweah	1		<del></del>		<del></del>				
		2	Y	2.1	-3.2	-1.1	Y	0.2	0.4	
		3	Y	1.7	-2.8	-0.7	Y	1.6	2.7	
	D: 14	4	Y	0.8	-1.8	0.2	N	_	_	
Shenandoah	Big Meadows	1	Y	1.0	-3.0	1.0	N	4.5		
		2	Y	0.9	-2.3	4.0	Y	1.5	1.8	
		3	Y	0.7	-2.8	4.3	Y	1.3	1.9	
V	O dilicono Dono	4	Y	2.0	0.2	3.8	N		_	
Voyageurs	Sullivan Bay	1	Y	1.9	-3.0	-0.8	N	_	_	
		2	N	1.7	-2.3	-1.2	N	4.5	4.0	
		3	Y	0.6	-1.7	0.4	Y	1.5	1.9	
V. II.	Mater Taula	4 1	Y	0.2	-1.2	0.7	Y	1.2	1.5	
Yellowstone	Water Tank	•	Y	0.5	-2.3	3.2	N	<u> </u>	4.0	
		2	· ·	0.1	-2.6	2.3	Y	0.5	1.3	
		3	Y	0.6 0.3	-2.6 -3.5	1.4 3.0	Y N	1.3	2.1	
Vacamita	Turtleback Dome	4	Y	0.3 2.4	-3.5 -4.0					
Yosemite	Turtieback Dome	1	Y			-0.9 -0.5	N Y	0.0	1.0	
		2		1.9	-3.3		•	0.9	1.8	
		3	Y	1.2 1.9	-2.2	-0.3	N Y	0.4	0.7	
		4	Y	1.9	-3.4	-0.4	Y	0.4	0.7	

# Table 2 (continued). Ozone Analyzer Precision and Accuracy Summary Sites Operated by the National Park Service National Park Service Gaseous Pollutant Monitoring Program, 2016

				Precisio	n		As-Found	Verification Mul	ti-Point
National Park Unit	Site Name	Calendar Quarter	Required No. of Precision Checks Met? <sup>1</sup>	Avg. Absolute Percent Difference <sup>3,4</sup>	Lower 95% Probability Limit <sup>e</sup>		Accuracy Check Performed During the Quarter? <sup>2</sup>	Avg. Absolute Percent Difference 34	Max. Absolute Percent Difference
Zion	Dalton's Wash	1	Y	2.9	-4.9	-0.9	Y	0.3	0.7
		2	Y	2.8	-3.9	-1.6	N	_	_
		3	Y	4.0	<b>-</b> 5.7	-2.2	N		
		4	Y	1.8	-4.3	8.0	Y	1.6	2.2
Operating agency key:				Color shading	key:				
plain text = site operated	by the National Park Service			Ide	eal: indicates a	percent differenc	e within +/-5% or a proba	ability limit within +/-	10%
underline = site operated	by a state agency by the National Park Service,	but consisting o	of non-EPA certified		ceptable: indica 10.1-15%	tes a percent diff	erence between +/-5.1-1	0% or a probability l	imit between
portable instrum	nentation				nacceptable: inc	licates a percent	difference greater than +	-/-10% or a probabili	ty limit greater

- 1. Precision checks are required by the Environmental Protection Agency (EPA) of all pollutant analyzers collecting data which are to be submitted to the EPA Air Quality System (AQS). A precision check is performed by challenging the pollutant analyzer with a known concentration of gas from the pollutant transfer standard. This precision check must be performed at least every 14 days of monitoring operation. The percent difference between the analyzer and the transfer standard is then calculated.<sup>3</sup> According to NPS Standard Operating Procedures, the pollutant analyzer must respond within 10% of the
- 2. Accuracy checks are required by the Environmental Protection Agency (EPA) of all pollutant analyzers collecting data which are to be submitted to the EPA Air Quality System (AQS). An accuracy check is performed by challenging the pollutant analyzer with a known concentration of gas from the pollutant transfer standard at several different points. The percent difference between the analyzer and the transfer standard is then calculated.<sup>3</sup> According to NPS Standard Operating Procedures, the pollutant analyzer must respond within 10% of the transfer standard. All accuracy checks reported here were performed by the reporting organization and not by an outside auditor.
- 3. Percent Difference = ((analyzer transfer std)/transfer std)x100
- 4. Average Absolute Percent Difference is the mean of the absolute value of all individual precision check percent differences during the quarter, or the mean of the absolute value of all the percent differences from each point challenged during an accuracy check.
- 5. Maximum Absolute Percent Difference is the highest percent difference from the points of a multipoint (or accuracy) calibration.
- 6. Upper/Lower 95% Probability Limits = (Average Percent Difference)+/-(1.96)(Standard Deviation of precision check percent differences in the quarter). The probability limits represent the interval having a 95% chance of containing the true average percent difference. Probability limits must be within +/-15%.