

**THE UNIVERSITY OF CALIFORNIA, RIVERSIDE  
ENVIRONMENTAL CHAMBER DATA BASE FOR  
EVALUATING OXIDANT MECHANISMS**

**Indoor Chamber Experiments Through 1993**

**Volume 2  
Appendices**

by

William P. L. Carter,  
Dongmin Luo, Irina L. Malkina and Dennis Fitz

Statewide Air Pollution Research Center, and  
College of Engineering Center for Environmental  
Research and Technology

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Project Officer

Marcia C. Dodge

Atmospheric Characterization and Modeling Division  
Atmospheric Research and Exposure Assessment Laboratory  
Research Triangle Park, NC 27711

ATMOSPHERIC RESEARCH AND EXPOSURE ASSESSMENT LABORATORY  
OFFICE OF RESEARCH AND DEVELOPMENT  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NC 27711

## **DISCLAIMER**

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## ABSTRACT

This document describes the data base of University of California, Riverside, environmental chamber experiments for use when evaluating photochemical mechanisms for urban and regional airshed models. This includes data obtained using the Statewide Air Pollution Research Center (SAPRC) Evacuatable Chamber (EC), Indoor Teflon Chamber #1 (ITC), Indoor Teflon Chamber #2 (ETC), Dividable Teflon Chamber (DTC), and Xenon arc Teflon Chamber (XTC) between September of 1975 through November of 1993. This document provides backing information and data for that data set as well. This document lists and summarizes the experiments, summarizes the facility and procedures employed, documents the analytical and monitoring methods and their calibration data and associated uncertainties, assigns and documents the input data needed to conduct model simulations of the experiments in the present data base, and describes the format of the data sets which are distributed with this document on computer diskettes. Files are included in the distribution to permit modeling of the experiments in the present data base using the SAPRC-90 and the Carbon Bond IV chemical mechanisms, though a full mechanism evaluation procedure is beyond the scope of this report. Recommendations are made concerning the steps that need to be taken before using these data to evaluate chemical mechanisms.

This document consists of two volumes. Volume 1 contains the main body of the text documenting the data base, and Volume 2 contains the three appendices. Appendix A contains printouts of spreadsheets containing summaries of the runs in the data base. Appendix B contains tabulations of the  $\text{NO}_x$  and GC calibration data, which are too lengthy to include in the main body of the report. Appendix C describes how to install the distributed data files and software on a computer and how to conduct initial model simulations of the runs using the SAPRC modeling software and the SAPRC-90 and Carbon Bond IV mechanisms. This is the second volume.



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## **APPENDIX A**

### **SPREADSHEET LISTINGS**

This Appendix contains a listing of the major summary chamber run spreadsheets which are included with this data base. The spreadsheets are discussed in Section 2.2.1 in Volume 1.

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)				
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
EC390	CHAR-0										360	0.063	345			d	11		
ITC940	CHAR-0		0.014	370%							360	0.073					10		
ITC973	CHAR-0										360						10		
ITC1008	CHAR-0										390	0.088					11		
ITC1552	CHAR-0	higher quality HCHO	0								360	0.054					12		
ETC045	CHAR-0		0.012	23%							465	0.083		0.40	0.24		1		
ETC057	CHAR-0		0.010	29%							360	0.051	345	0.11	0.12		1		
ETC151	CHAR-0										1110	0.077					2		
ETC320	CHAR-0										360	0.029					2		
ETC374	CHAR-0										405	0.002	345				3		
ETC458	CHAR-0										375	0.045					3		
ETC485	CHAR-0				0.01	15%		0.00	15%		360	0.034	330				3		
DTC049A	CHAR-0										370	0.037					1		
DTC049B	CHAR-0										370	0.033					1		
EC353	CHAR-0	problems	2								240	0.099					1		
ETC141	CHAR-0	problems	2								1290	0.062	465				2		
ETC205	CHAR-0	problems	3								870	0.036					2		
ITC642	CHAR-0										360	0.044	345				5	3	no
EC442	CHAR-1		0.482	17%	0.03	6%	0.01	6%	0.02								1		
EC464	CHAR-1		0.192	17%	0.04	6%	0.01	6%	0.06								1		
EC597	CHAR-1		0.594	8%	0.04	6%	0.01	6%	0.02	120	0.002	15	0.38	0.38			1		
EC599	CHAR-1		3.676	8%	0.03	6%	0.01	6%	0.00	240						ri	1		
EC608	CHAR-1		0.302	14%	0.23		0.00		0.01	120	0.005	45	0.46	0.46			1		
EC612	CHAR-1		0.301	15%	0.38	15%	0.02	5%	0.05	120							1		
EC613	CHAR-1		0.300	16%	0.04	6%	0.01	6%	0.04								1		
EC654	CHAR-1		0.870	3%	0.08	4%	0.01	5%	0.01								1		
EC674	CHAR-1		0.468	5%	0.07	4%	0.01	5%	0.03								1		
EC680	CHAR-1		0.439	3%	0.07	4%	0.01	5%	0.03	120	0.000		0.45	0.45			1		
EC683	CHAR-1		0.480	3%	0.08	7%	0.01	5%	0.03	120	0.001	60	0.30	0.30		o	1		
EC686	CHAR-1		0.448	6%	0.08	6%	0.01	5%	0.03	120	0.002	90	0.30	0.30		o	1		
EC690	CHAR-1		0.514	4%	0.08	7%	0.01	5%	0.02							o	1		
EC864	CHAR-1		0.556	4%	0.07	5%	0.01	7%	0.02	120	0.005	30	0.02	0.02			1		
EC869	CHAR-1		0.511	5%	0.07	4%	0.01	5%	0.02	120	0.009	105	0.52	0.52		o	1		
EC902	CHAR-1		0.511	4%	0.07	4%	0.01	5%	0.02	120	0.000	30	0.44	0.44			1		
ITC441	CHAR-1		0.073	20%	0.03	6%	0.01	6%	0.12	120	0.001	45	0.09	0.09			2		
ITC443	CHAR-1		0.148	10%	0.07	6%	0.01	5%	0.08	120	0.004	90	0.04	0.04			2		
ITC448	CHAR-1		0.077	19%	0.07	7%	0.01	5%	0.13	120	0.004	105	-0.01	-0.01			2		
ITC453	CHAR-1		0.088	17%	0.07	6%	0.01	5%	0.13	120	0.000		0.05	0.05			2		
ITC463	CHAR-1		0.089	17%	0.07	6%	0.01	5%	0.12	120	0.000	105	0.07	0.07			2		
ITC469	CHAR-1		0.086	17%	0.06	6%	0.01	5%	0.13	120	0.004	30	0.07	0.07			2		
ITC480	CHAR-1		0.087	17%	0.07	6%	0.01	5%	0.13								2		
ITC485	CHAR-1		0.083	18%	0.07	6%	0.01	5%	0.13								2		
ITC490	CHAR-1		0.085	18%	0.07	6%	0.01	5%	0.14	120	0.005	30	0.08	0.08			2		
ITC496	CHAR-1		0.090	17%	0.05	6%	0.01	5%	0.09								2		
ITC504	CHAR-1		0.090	17%	0.07	6%	0.01	5%	0.12	120	0.000		0.09	0.09			2		
ITC508	CHAR-1		0.559	3%	0.06	7%	0.01	5%	0.02	120	0.000		-0.19			hl	2		
ITC535	CHAR-1		0.552	3%	0.06	4%	0.01	5%	0.02	120	0.000		-0.22				3		
ITC539	CHAR-1		0.083		0.06	4%	0.01	5%	0.12	120	0.008	105	0.17	0.20			3		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)			
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File
ITC550	CHAR-1		0.134	11%	0.06	4%	0.01	5%	0.07	120	0.009	75	0.10	0.10			3	
ITC557	CHAR-1		0.119	23%	0.06	4%	0.01	5%	0.08	120	0.011	75	0.20	0.22			3	
ITC563	CHAR-1		0.560	19%	0.05	5%	0.01	7%	0.01	120	0.009	45	-0.10	-0.12			3	
ITC568	CHAR-1		0.132	20%	0.07	5%	0.01	7%	0.08	120	0.001	15		-0.08	nb		4	
ITC570	CHAR-1		0.109	22%	0.07	5%	0.01	7%	0.10	180	0.002	165	0.14	0.13			4	
ITC577	CHAR-1		0.119	21%	0.07	5%	0.01	7%	0.09	120	0.002	97	0.14	0.15			4	
ITC582	CHAR-1		0.085	18%	0.07	5%	0.01	7%	0.13	120	0.008		0.27	0.27			4	
ITC588	CHAR-1		0.101	29%	0.07	5%	0.01	7%	0.12	120	0.004		0.14	0.14			4	
ITC600	CHAR-1		0.089	17%	0.06	5%	0.01	7%	0.11	120	0.003	105	0.11	0.08			4	
ITC605	CHAR-1		0.094	18%	0.08	5%	0.01	7%	0.13	120	0.003	105	0.09	0.09			4	
ITC610	CHAR-1		0.089	19%	0.08	5%	0.01	7%	0.14	120	0.009		0.05				4	
ITC614	CHAR-1		0.083	20%	0.08	5%	0.01	7%	0.15	120	0.003	90	0.06	0.06			4	
ITC621	CHAR-1		0.282	9%	0.08	5%	0.01	7%	0.04	120	0.001		0.09	0.09	nb		5	
ITC692	CHAR-1		0.505	3%	0.07	5%	0.01	7%	0.02	120	0.000	90	0.05	0.05	nb		6	
ITC695	CHAR-1		0.487	4%	0.07	5%	0.01	7%	0.02	120	0.000	60	0.12	0.12			6	
ITC700	CHAR-1		0.502	3%	0.08	5%	0.01	7%	0.02	120	0.000		0.13	-0.09			6	
ITC704	CHAR-1		0.504	3%	0.07	5%	0.01	7%	0.02	120	0.000		0.08	0.08			6	
ITC707	CHAR-1		0.998	2%	0.08	5%	0.01	7%	0.01	120	0.000						6	
ITC712	CHAR-1		0.486	5%	0.07	5%	0.01	7%	0.02	120	0.000	30	0.23	0.23			6	
ITC714	CHAR-1		0.983	4%	0.07	5%	0.01	7%	0.01	120	0.000	75	0.12	0.12			6	
ITC717	CHAR-1		0.520	4%	0.08	5%	0.01	7%	0.02	120	0.008		-0.05	-0.05			6	
ITC731	CHAR-1		0.555	5%	0.07	5%	0.01	7%	0.02	120	0.000	15	0.10	0.10			6	
ITC734	CHAR-1		0.279	6%	0.09	5%	0.01	7%	0.05	120	0.000	30	0.29	0.29			6	
ITC737	CHAR-1		0.520	5%	0.07	5%	0.01	7%	0.02	120	0.000		0.30	0.30			7	
ITC740	CHAR-1		0.554	5%	0.07	5%	0.01	7%	0.02	120	0.000	15	0.16	0.16			7	
ITC745	CHAR-1		0.564	5%	0.07	5%	0.01	7%	0.02	120	0.017	105	0.33	0.33			7	
ITC749	CHAR-1		0.250	7%	0.08	5%	0.01	7%	0.05	120	0.007	90	0.33	0.33			7	
ITC752	CHAR-1		0.562	3%	0.08	5%	0.01	7%	0.02	120	0.007		0.35	0.35			7	
ITC757	CHAR-1		0.254	5%	0.08	5%	0.01	7%	0.05	120	0.012	75	0.63	0.63			7	
ITC760	CHAR-1		0.565	3%	0.08	5%	0.01	7%	0.02	120	0.003	30	0.44				7	
ITC772	CHAR-1		0.441	3%	0.08	5%	0.01	7%	0.03	120	0.011		0.62	0.62			7	
ITC776	CHAR-1		0.557	3%	0.08	5%	0.01	7%	0.02	120	0.001	90	0.44	0.48			7	
ITC787	CHAR-1		0.248	6%	0.07	5%	0.01	7%	0.05	120	0.000		0.45	0.45			7	
ITC789	CHAR-1		0.560	4%	0.08	5%	0.01	7%	0.02	120	0.000	45	0.52	0.52			7	
ITC793	CHAR-1		0.521	8%	0.08	5%	0.01	7%	0.02	120	0.006	15	-0.17	-0.49			8	
ITC803	CHAR-1		0.320	8%	0.07	5%	0.01	7%	0.04	120	0.003	90	0.24	0.24			8	
ITC808	CHAR-1		0.456	4%	0.07	5%	0.01	7%	0.02	120	0.002	105	0.28	0.28			8	
ITC814	CHAR-1		0.529	3%	0.07	5%	0.01	7%	0.02	120	0.000	75	0.14	0.22			8	
ITC824	CHAR-1		0.399	4%	0.07	5%	0.01	7%	0.03	120	0.006	60	0.23	0.16			8	
ITC861	CHAR-1		0.553	3%	0.08	5%	0.01	7%	0.02	120	0.000	90	0.07	0.07			9	
ITC870	CHAR-1		0.347	6%	0.07	5%	0.01	7%	0.03	120	0.008	90	0.07	0.09			9	
ITC875	CHAR-1		0.396	6%	0.07	5%	0.01	7%	0.03	120	0.002	105	-0.06	-0.06			9	
ITC878	CHAR-1		0.749	5%	0.11	4%	0.01	7%	0.02	120	0.008	90	0.13	0.09			9	
ITC882	CHAR-1		0.689	4%	0.08	5%	0.01	7%	0.02	120	0.000		-0.07	-0.07			9	
ITC884	CHAR-1		0.664	3%	0.08	5%	0.01	7%	0.02	120	0.001	105	-0.15				9	
ITC889	CHAR-1		0.351	5%	0.08	5%	0.01	7%	0.03	120	0.000	30	0.02	0.02			9	
ITC893	CHAR-1		0.377	5%	0.09	5%	0.01	7%	0.04	120	0.003	75	0.07	0.07			9	
ITC924	CHAR-1		0.664	9%	0.10	5%	0.02	7%	0.02	120	0.011	60	-0.26		nb		10	

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)				
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
ITC932	CHAR-1		0.532	11%	0.09	5%	0.02	7%	0.03	120	0.003	105	-0.22				10		
ITC958	CHAR-1		0.495	11%	0.08	10%	0.01	5%	0.03	120	0.002	45	-0.09				10		
ITC964	CHAR-1		0.520	10%	0.08		0.01		0.03	150	0.001	90	-0.24				10		
ITC970	CHAR-1		0.446	12%	0.08		0.01		0.03	250	0.011	105	-0.22				10		
ITC1004	CHAR-1		0.076	20%	0.08		0.01		0.17	210	0.012	180	0.25	0.21			11		
ITC1551	CHAR-1		0.452	7%	0.09		0.02		0.05	120	0.002	31	-0.20				12		
ETC046	CHAR-1		0.500	2%	0.14		0.04		0.07	120	0.000		0.18	0.18			1		
ETC056	CHAR-1		0.501	2%	0.12		0.03		0.06	120	0.000			0.09	0.10		1		
ETC070	CHAR-1		0.541	3%	0.10	8%	0.02	5%	0.04	120	0.010	60	0.14	0.14			1		
ETC076	CHAR-1		0.506	3%	0.12	8%	0.03	5%	0.06	120	0.010	30	0.06	0.06			1		
ETC112	CHAR-1		0.503	2%	0.10	6%	0.03	10%	0.05	120	0.005	60	0.15	0.15			2		
ETC211	CHAR-1		0.505	2%	0.13	5%	0.04	7%	0.08	120	0.000		0.01	0.01			2		
ETC212	CHAR-1		0.500	2%	0.06	8%	0.00	8%	0.00	180	0.001	165	-0.01				2		
ETC317	CHAR-1		0.505	3%	0.11	7%	0.03	9%	0.05	120	0.001		-0.02	-0.02			2		
ETC380	CHAR-1		0.493	2%						390	0.003	225	0.01	0.05			3		
ETC462	CHAR-1		0.540	2%	0.02		0.01		0.01	120	0.005	45	0.12	0.12			3		
DTC059A	CHAR-1		0.240	0%	0.06	5%	0.03	5%	0.13	370	0.001	310					1		
DTC059B	CHAR-1		0.241	0%	0.06	5%	0.03	5%	0.13	370	0.001	320	0.06	-0.01			1		
DTC062A	CHAR-1		0.270	1%	0.07	5%	0.03	5%	0.13	375	0.006		0.29	0.24	rh		2		
DTC062B	CHAR-1		0.269	1%	0.07	5%	0.03	5%	0.13	375	0.008		0.30	0.24	rh		2		
EC519	CHAR-1	minor problems	1	0.496	10%	0.03	6%	0.01	6%	0.02	120	0.000		0.50	0.50		1		
EC521	CHAR-1	minor problems	1	0.994	10%	0.03	6%	0.01	6%	0.01	120	0.000		0.97	0.97		1		
EC532	CHAR-1	minor problems	1	0.464	11%	0.03	6%	0.01	6%	0.02	120	0.002	30	0.47	0.47		1		
EC534	CHAR-1	minor problems	1	0.520	10%	0.03	6%	0.01	6%	0.02	120	0.000		0.18	0.18		1		
ITC514	CHAR-1	problems	2	0.590	3%	0.07	6%	0.01	5%	0.02	120	0.000		-0.05	0.14	hl		2	
ITC942	CHAR-1	problems	2	0.515	11%	0.07	5%	0.01	7%	0.02	120	0.002	45	-0.10			10		
ITC949	CHAR-1	NOx imprecise	2	0.269	19%	0.08	10%	0.01	5%	0.04	120	0.008		-0.17	-0.17		10		
ETC213	CHAR-1	Do not model	9	0.494	2%	0.11	5%	0.03	7%	0.06	120	0.001		-0.05			2		
EC518	CHAR-1	don't model	9	0.519	11%	0.21		0.08		0.15	120	0.004	15	0.10	0.10	d,uv,lt	12	1	
EC436	CHAR-1	No Temp, SD	2	1.866	15%	0.04	6%	0.01	6%	0.01							0	2	no
EC440	CHAR-1	No Temp	2	0.781	17%	0.07		0.02		0.03							0	2	no
EC457	CHAR-1	2-part run. No temp.	2	0.497	16%	0.03	6%	0.01	6%	0.02							0	2	no
ITC782	CHAR-1		99	0.519	4%	0.03	7%	0.01	7%	0.02	120	0.010	75	0.20	0.20		7	3	no
ITC436	CHAR-1	No Temp	2	0.079	19%	0.07	7%	0.01	5%	0.14	60	0.000		0.07	0.03	nb	2	3	no
ITC449	CHAR-1	No Temp	2	0.829	2%	0.07	6%	0.01	5%	0.01	120	0.001	75	0.30	0.30		2	3	no
EC898	CHAR-1	No k1	3	0.481	5%	0.08	4%	0.01	5%	0.02	120	0.103		0.51			1	3	no
EC662	CHAR-1	Don't model	9	0.457	7%	0.06	4%	0.01	5%	0.02						uv,o	1	3	no
ITC430	CHAR-1	don't model	9	1.303	4%	0.07	7%	0.01	5%	0.01	120	0.023	15				1	3	no
ITC475	CHAR-1	reject	99	0.000													2	3	no
EC643	CHAR-1	Don't model	9	0.532	4%	0.07		0.01		0.02	120	0.008	60	0.81	0.81		1	9	
EC650	CHAR-1	do not model	9	0.468	5%	0.08	4%	0.01	5%	0.03						ri	1	9	
EC664	CHAR-1	Don't model	9	0.458	7%	0.05	6%	0.01	5%	0.02	120	0.995	15	16.51	16.51		1	9	
ITC428	CHAR-1	don't model	9	0.162	9%	0.08	7%	0.01	5%	0.08	90	0.002		0.00	0.04		1	9	
ITC595	CHAR-1	Don't model	9	0.086	17%	0.07	5%	0.01	7%	0.12	120	0.008	105	0.51	0.59	o	4	9	
ITC829	CHAR-1	Don't model	9	0.251	6%						120	0.000	15	-0.05	-0.13		8	9	
ITC976	CHAR-1	Don't model	9	0.045	113%	0.08		0.01		0.31	120	0.016	105	0.19	0.22		11	9	
EC526	CHAR-1	reject	99	0.529	11%	0.03	6%	0.01	6%	0.02							1	9	
ITC641	CHAR-2			0.000							1090	0.491	205				5		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)				
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
ITC624	CHAR-2		0.000														5	3	no
ITC697	CHAR-2		0.000							930	1.135						6	3	no
ITC822	CHAR-2		0.000														8	3	no
EC253	CHAR-3				1.16		0.33			360	0.134						1		
ITC627	CHAR-3				0.77	10%	0.23	10%		360	0.060						5		
ITC892	CHAR-3				0.64	28%	0.19	28%		240	0.038						9		
ITC957	CHAR-3				1.51	26%	0.46	26%		360	0.076		-0.02	0.11			10		
ITC1009	CHAR-3				1.41	26%	0.42	26%		360	0.074						11		
ETC319	CHAR-3				1.00	10%	0.30	10%		360	0.025						2		
ETC382	CHAR-3				0.69	5%	0.21	5%		360	0.039						3		
ITC616	CHAR-3	problems	2		0.75	10%	0.23	10%		360	0.044	345					4		
ITC632	CHAR-3	problems	2		0.93	10%	0.28	10%		360	0.051						5		
ITC636	CHAR-3	problems	2		0.75	10%	0.23	10%		360	0.047	330					5		
ITC639	CHAR-3	problems	2		0.71	10%	0.21	10%		300	0.036						5		
ITC825	CHAR-3	problems	2		0.82	10%	0.25	10%		180	0.033						8		
ITC974	CHAR-3	problems	2		1.63	26%	0.49	26%		360	0.086	345					10		
ITC1558	CHAR-3	problems	2		1.31		0.39			360	0.059						12		
ETC379	CHAR-4				0.24	2%	0.09	2%		360	0.057						3		
ETC385	CHAR-4				0.28	2%	0.11	2%		360	0.001	90	0.06	0.04			3		
EC250	CHAR-4	problems	2		0.40		0.12			360	0.211	345					1		
EC255	CHAR-4	problems	2		0.40		0.13			360	0.202	355					1		
ITC625	CHAR-5			0.270	9%	0.07	5%	0.01	7%	0.04	240	0.005	225	0.00	0.03	ri	5		
ITC628	CHAR-5			0.323	8%	0.08	5%	0.01	7%	0.04	240	0.010		-0.02	0.02	ri	5		
ITC634	CHAR-5			0.565	8%	0.08	5%	0.01	7%	0.02	250	0.000		-0.11	-0.01	ri	5		
EC624	CHAR-5	Don't model	9	0.559	15%						330	0.014	315	0.85	0.90	d,ht	13	1	no
ITC638	CHAR-5	A minor dataset problems	1	0.303	9%	0.08	5%	0.01	7%	0.04	240	0.000		0.00	0.03	ri	5		
EC895	CHAR-6	don't model	9	0.000													0	2	no
EC896	CHAR-6	don't model	9	0.000													0	2	no
EC972	CHAR-6	don't model.	9														0	2	no
EC726	CHAR-6	Don't model	9	0.923													1	3	no
ITC821	CHAR-6	Don't model	9	0.000													8	3	no
EC670	CHAR-7			0.000						280	0.448						0	2	no
ETC483	CO	MRE		0.424	2%	158.39		1.95		4.60	360	1.164		3.06	2.97		3		
ETC487	CO	MRE		0.457	2%	110.59		1.52		3.33	360	1.098		2.79	4.18		3		
ETC414	CO	MR3		0.547	3%	141.25		1.68		3.07	360	0.959		5.36	3.98		3		
ETC416	CO	MR3		0.619	3%	151.89		1.82		2.93	360	0.668					3		
ETC418	CO	MR3		0.519	2%	106.61		1.39		2.68	360	0.717		1.58	2.61		3		
DTC014A	CO	MR8		0.477	1%	159.18		1.83		3.83	375	1.094		9.13	6.31		1		
DTC016A	CO	MR8		0.479	1%	78.90		1.08		2.25	380	0.862		7.11	4.66		1		
DTC015B	CO	MR8	problems	1	0.505	1%	165.47		1.89	3.75	360	1.141		10.62	7.03		1		
DTC020B	CO	MR8	problems	2	0.502	1%	107.39		1.33	2.65	375	0.879		6.46	4.68		1		
DTC029A	CO	R8		0.175	0%	90.00		1.21		6.94	370	0.701	290	10.06	5.37		1		
ETC049	ETHANE			0.508	2%	124.00	5%	0.65	5%	1.28	360	0.015	315	1.32	0.88		1		
ITC999	ETHANE	A		0.081	19%	0.08		0.01		0.16	360	0.260		0.21	0.67	ri	11		
ETC506	ETHANE	MRE		0.412	2%	102.53	5%	1.03	4%	2.49	360	0.918		2.16	3.04		3		
ETC062	ETHANE	MR3		0.508	3%	39.14	5%	0.59	5%	1.15	360	0.499		1.99	2.32		1		
ETC068	ETHANE	MR3		0.503	3%	23.80	4%	0.48	5%	0.96	360	0.313		1.66	1.90		1		
ETC073	ETHANE	MR3		0.505	3%	39.83	5%	0.55	5%	1.09	360	0.325		1.52	1.85		1		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
ETC079	ETHANE	MR3			0.508	3%	39.40	5%	0.53	5%	1.05	360	0.351		2.06	1.98		1		
ETC088	ETHANE	MR3			0.526	3%	52.32	5%	0.61	4%	1.15	360	0.494		2.45	2.36		1		
ETC092	ETHANE	MR3			0.512	2%	38.66	5%	0.54	5%	1.05	360	0.217		0.63	1.28		2		
ETC099	ETHANE	MR3			0.503	2%	38.75	5%	0.53	5%	1.06	360	0.204		0.83	1.33		2		
ETC235	ETHANE	MR3			0.491	2%	91.34	5%	0.87	4%	1.76	360	0.606		1.21	2.28		2		
ETC332	ETHANE	MR3			0.504	2%	43.15		0.39		0.78	360	0.696		1.67	2.79		2		
ETC333	ETHANE	MR3			0.491	2%						360	0.880		4.41	3.86		2		
ITC979	ETHANE	R4	Don't model	9	0.089	57%	32.00	9%	0.43	4%	4.79	360	0.459		5.06	2.55		11	9	
ITC992	ETHANE	R4	Don't model	9	0.081	63%	44.40	9%	0.46	5%	5.68	360	0.405		5.07	2.22		11	9	
ETC226	PROPANE	MR3			0.477	2%	38.50	5%	0.92	5%	1.93	360	0.355		0.77	1.51		2		
ETC230	PROPANE	MR3			0.513	2%	88.68	5%	1.67	4%	3.26	360	0.738		1.40	2.39		2		
ETC305	PROPANE	MR3			0.544	3%	64.96		1.27		2.33	360	0.612		1.01	1.97		2		
EC134	N-C4				0.414		8.27	5%	0.20	5%	0.49	360	0.034		1.10	0.91	d	11		
EC137	N-C4				0.386		8.65	5%	0.21	5%	0.55	360	0.042		1.14	0.98	d	11		
EC162	N-C4				0.540	4%	8.20		0.20		0.37	360	0.112		2.14	2.01		1		
EC178	N-C4				0.099	11%	7.84		0.19		1.96	490	0.380	450	1.80	1.49		1		
EC304	N-C4				0.507	8%	17.11	11%	0.42	11%	0.83	430	0.353		2.82	2.08		1		
EC305	N-C4				0.108	9%	17.19	11%	0.42	11%	3.90	360	0.397	345	2.76	2.32		1		
EC307	N-C4				0.114	9%	25.74	11%	0.63	11%	5.53	390	0.418	345	3.01	2.19		1		
EC355	N-C4				0.502	11%	16.80		0.41		0.82	360	0.188		1.63	1.75	vn	1		
EC356	N-C4				0.496	11%	17.30		0.43		0.86	360	0.178		1.84	1.48	vn	1		
ITC533	N-C4				0.102	15%	11.80	5%	0.29	5%	2.84	420	0.164		0.70	0.61		3		
ITC939	N-C4				0.532	11%	19.43	5%	0.48	5%	0.90	360	0.010	285	0.40	0.31		10		
ETC054	N-C4				0.509	2%	17.94	14%	0.44	14%	0.87	360	0.003	330	0.43	0.35		1		
ETC214	N-C4				0.485	2%	15.71	8%	0.39	8%	0.80	360	0.002	345	0.02	0.10		2		
ETC318	N-C4				0.522	4%	16.89	10%	0.42	10%	0.80	360	0.001	45	0.09	0.10		2		
DTC058A	N-C4				0.241	0%	14.73	5%	0.38	5%	1.56	370	0.021		0.39	0.38		1		
DTC058B	N-C4				0.240	0%	15.13	5%	0.39	5%	1.61	370	0.015		0.28	0.33		1		
XTC085	N-C4				0.548	3%	15.18	6%	0.39	6%	0.71	360	0.001	230	0.40	0.33		1		
XTC098	N-C4				0.567	3%	16.23	6%	0.42	6%	0.74	360	0.005	345	0.28	0.33		1		
EC133	N-C4		Minor data problems	2	0.396		8.60	5%	0.21	5%	0.54	360	0.249		2.94	2.18		1		
ITC507	N-C4		No Temp	2	0.094	16%	14.99		0.37		3.93	360	0.148					2		
ITC948	N-C4		NOx imprecise	2	0.256	20%	18.72		0.46		1.80	360	0.045		0.79	0.56		10		
EC354	N-C4				0.047	42%	17.07		0.42		8.91	360	0.236		0.41			1	3	no
EC130	N-C4		Reject	99	0.052		17.44	5%	0.43	5%	8.19	600	0.458	240	4.35	4.46		1	9	
ITC770	N-C4	A			0.549	3%	0.03	7%	0.01	7%	0.02	360	0.023		0.16	0.72	ri	7		
ETC484	N-C4	MRE			0.456	2%	64.09	6%	2.04	5%	4.48	360	1.063	330	3.06	4.38		3		
ETC488	N-C4	MRE			0.419	2%	44.44	5%	1.53	4%	3.65	360	1.013		2.16	3.30		3		
ETC051	N-C4	MR3			0.497	2%	13.55	10%	0.63	7%	1.27	360	0.461		1.64	1.99		1		
ETC053	N-C4	MR3			0.511	2%	24.68	12%	0.87	9%	1.70	360	0.433		1.78	2.22		1		
ETC059	N-C4	MR3			0.503	3%	10.91	9%	0.54	6%	1.08	360	0.378		1.79	1.96		1		
ETC082	N-C4	MR3			0.516	3%	30.58	12%	1.00	9%	1.94	360	0.342		1.63	1.99		1		
ETC086	N-C4	MR3			0.514	3%	31.61	12%	1.04	9%	2.02	360	0.438		1.87	1.95		1		
ETC094	N-C4	MR3			0.481	2%	31.86		1.02		2.12	360	0.234		0.82	1.22		2		
ETC097	N-C4	MR3			0.502	2%	28.18		0.94		1.88	360	0.259		0.98	1.33		2		
ETC135	N-C4	MR3			0.515	5%	27.50		0.89		1.73	360	0.182		0.73	1.18		2		
ETC224	N-C4	MR3			0.498	2%	44.77	7%	1.41	6%	2.83	360	0.542		1.14	1.95		2		
ETC389	N-C4	R3	problems	1	0.155	4%	19.01	5%	0.72	4%	4.61	360	0.599		0.89	2.09		3		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
ETC393	N-C4	R3	problems	1	0.158	4%	18.34	5%	0.69	4%	4.38	360	0.615		0.91	2.12		3		
ITC482	N-C4	R4			0.083	14%	1.13	6%	0.28	4%	3.35	360	0.279		2.31	2.16		2		
ITC492	N-C4	R4	No Temp	2	0.083	14%	7.21	9%	0.44	5%	5.28	360	0.325		3.39	2.01		2	3	no
ITC494	N-C4	R4	No Temp	2	0.088	14%	7.61	9%	0.45	5%	5.09	360	0.318	300	3.38	2.20		2	3	no
DTC019B	N-C4	MR8			0.460	1%	28.49		1.00		2.17	375	0.936		6.90	5.07		1		
DTC031A	N-C4	R8			0.171	1%	24.59		0.93		5.42	370	0.662	250	9.59	5.75		1		
EC135	N-C5		No Temp	2	0.096	6%	20.42	19%	0.65	19%	6.69	390	0.434	300	3.28	4.33		0	2	no
EC606	N-C6				0.560	13%	27.41		0.98		1.76	360	0.229		3.13	2.41		1		
EC607	N-C6				0.625	13%	56.84		2.05		3.27	360	0.293		2.25	2.36		1		
EC615	N-C6				0.241	15%	59.13		2.13		8.84	480	0.396	405	2.81	2.20		1		
EC677	N-C6				0.172	6%	55.96	5%	2.02	5%	11.72	360	0.167		1.26	1.20		1		
EC610	N-C6		problems	2	0.298	14%	29.74		1.07		3.59	360	0.273		1.53	1.52		1		
EC611	N-C6		problems	2	0.296	14%	56.37		2.03		6.86	360	0.320		1.77	1.74		1		
ITC559	N-C6		problems	2	0.081	31%	290.09	5%	10.47	5%	129.57	360	0.350		1.11	0.99		3		
EC131	N-C6		No Temp	2	0.098	6%	24.61		0.89		9.10	600	0.392	330	2.12	1.84		0	2	no
DTC072A	N-C6	MRE			0.468	1%	21.46	4%	1.16	3%	2.48	375	0.566		1.03	1.47		1		
ETC209	N-C6	MR3			0.507	3%	14.12	10%	0.74	7%	1.46	360	0.109		0.91	0.60		2		
ETC201	N-C6	MR3	problems	3	0.504	3%						360	0.185		0.72	1.12		2		
ITC538	N-C7				0.102	15%	61.67	5%	2.45	5%	24.05	360	0.149		0.63	0.66		3		
ITC540	N-C7				0.108	13%	281.01	5%	11.14	5%	102.90	360	0.350		1.65	1.63		3		
ITC552	N-C8				0.117	10%	445.57	5%	18.81	5%	160.59	360	0.313		0.86	1.20		3		
ITC762	N-C8	A			0.281	4%	0.08	5%	0.01	7%	0.05	420	0.101		0.23	0.53	ri	7		
ITC763	N-C8	A			0.288	5%						420	0.034		0.15	0.42	ri	7		
ITC797	N-C8	A			0.541	4%	0.07	5%	0.01	7%	0.02	390	0.003	375	0.35	0.48	ri	8		
ITC761	N-C8	A	Don't model	9								420	0.018		0.13	0.60	ri	7	9	
ETC472	N-C8	MRE			0.421	2%	16.43	4%	1.12	4%	2.66	360	0.650		0.96	2.00		3		
ETC474	N-C8	MRE			0.455	3%	21.76	4%	1.34	4%	2.95	360	0.604		0.88	1.52		3		
ETC237	N-C8	MR3			0.476	2%	17.79	8%	0.95	7%	1.99	360	0.037		0.37	0.63		2		
ETC239	N-C8	MR3			0.525	2%	16.90	8%	0.92	7%	1.74	360	0.019		0.42	0.63		2		
DTC024B	N-C8	MR8			0.503	1%	12.19		0.75		1.49	380	0.620		3.55	3.29		1		
DTC070A	N-C8	MR8			0.488	1%	9.32	3%	0.63	2%	1.29	375	0.492		2.95	3.04		1		
DTC037B	N-C8	R8			0.175	0%	12.44		0.77		4.38	380	0.529	280	5.44	4.14		1		
DTC071B	N-C8	R8			0.177	0%	8.32	3%	0.56	2%	3.16	375	0.511	335	6.53	3.60		1		
EC155	N-C9		Don't model	9	0.046	68%	37.35		1.63		35.52	540	0.263	345	1.59	1.31		0	2	no
ITC1001	N-C15				0.070	21%	2.51		0.13		1.79	360	0.042		0.22	0.18		11		
ITC981	N-C15	R4	Don't model	9	0.100	51%	6.48		0.47		4.67	360	0.361	300	2.45	2.90		11	9	
ITC993	N-C15	R4	Don't model	9	0.067	76%	7.23		0.47		7.07	360	0.259	345	2.45	2.43		11	9	
ETC228	2-ME-C3	MR3			0.507	2%	15.49	5%	0.67	6%	1.32	360	0.332		0.72	1.50		2		
ETC232	2-ME-C3	MR3			0.512	2%	88.07	6%	2.31	6%	4.51	360	0.929		1.13	2.18		2		
ETC241	2-ME-C3	MR3			0.481	2%	45.69	6%	1.32	5%	2.75	360	0.816		0.87	1.84		2		
ETC303	2-ME-C3	MR3			0.453	3%	30.83		0.96		2.13	360	0.540		0.59	1.42		2		
EC171	23-DMB				0.100	6%	3.52		0.12		1.25	630	0.402		1.90	1.15		1		
EC169	23-DMB		problems	2	0.203	7%	4.44		0.16		0.77	690	0.490		1.76	1.15		1		
EC165	23-DMB		dataset problems	7	0.107	5%	11.31		0.40		3.72	540	0.487	510	2.07	1.65		1		
ETC291	224TM-C5	MR3			0.503	3%	84.67	10%	1.81	8%	3.60	360	0.640		0.71	1.42		2		
ETC293	224TM-C5	MR3			0.486	3%	90.09	10%	1.92	8%	3.96	360	0.617		0.78	1.37		2		
ITC766	ME-CYCC6	A			0.268	5%	0.08	5%	0.01	7%	0.05	420	0.109		0.18	0.50	ri	7		
ITC767	ME-CYCC6	A			0.565	3%	0.08	5%	0.01	7%	0.02	420	0.023		0.24	0.56	ri	7		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)				
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
ITC800	ME-CYCC6	A		0.608	7%	0.07	5%	0.01	7%	0.02	360	0.015	285	0.00	0.41	ri	8		
ITC765	ME-CYCC6	A	minor problems	0.571	3%	0.07	5%	0.01	7%	0.02	420	0.016	375			ri	7		
EC142	ETHENE			0.489	3%	1.90	6%	0.31	6%	0.63	360	0.780	355	3.57	3.30		1		
EC143	ETHENE			0.502	2%	4.05	6%	0.66	6%	1.31	360	1.085	210	8.26	8.81		1		
EC156	ETHENE			0.472	6%	3.99	6%	0.65	6%	1.37	360	1.103	200	9.10	9.06		1		
EC285	ETHENE			1.014	8%	3.90	6%	0.63	6%	0.62	360	0.837		5.94	5.08		1		
EC286	ETHENE			0.973	8%	7.52		1.22		1.25	360	1.076	175	12.58	12.06		1		
EC287	ETHENE			0.545	8%	7.99	6%	1.30	6%	2.38	360	0.961	130	14.23	13.99		1		
ITC926	ETHENE			0.530	11%	7.88	6%	1.28	6%	2.42	360	0.992	195	6.39	8.17		10		
ITC936	ETHENE			0.518	11%	3.88	6%	0.63	6%	1.22	420	0.949		2.10	2.74		10		
ITC1555	ETHENE		higher quality HCHO	0.450	8%	4.19	10%	0.68	10%	1.51	420	1.117	390	2.76	3.61		12		
ETC220	ETHENE			0.507	2%	1.22	13%	0.20	13%	0.39	360	0.005		0.27	0.44		2		
ETC221	ETHENE			0.515	2%	8.09	5%	1.31	5%	2.55	360	1.121	255	5.49	9.02		2		
ETC377	ETHENE			0.268	2%						360	0.845		2.25	3.89		3	no	no
ETC381	ETHENE			0.519	2%	4.12	5%	0.67	5%	1.29	360	1.105		2.03	3.25		3		
ETC439	ETHENE			0.664	2%	3.91	6%	0.63	6%	0.95	360	0.859		1.67	2.49		3		
ETC464	ETHENE			0.375	2%	3.01	6%	0.48	6%	1.29	360	0.874		1.37	2.18		3		
ETC466	ETHENE			0.412	2%	3.00	6%	0.48	6%	1.17	360	0.766		1.42	2.06		3		
ETC467	ETHENE			0.525	2%	2.98	6%	0.48	6%	0.91	360	0.337		1.09	1.33		3		
ETC469	ETHENE			0.455	2%	3.60	6%	0.58	6%	1.27	360	0.794		1.40	2.10		3		
ETC471	ETHENE			0.452	2%	3.61	6%	0.58	6%	1.28	360	0.925		1.58	2.42		3		
ETC473	ETHENE			0.459	2%	3.79	6%	0.61	6%	1.32	360	0.889		1.73	2.35		3		
ETC476	ETHENE			0.432	3%	3.42	6%	0.55	6%	1.27	360	0.745		1.05	1.85		3		
ETC479	ETHENE			0.418	2%	3.57	6%	0.57	6%	1.37	360	0.828		1.39	2.11		3		
ETC482	ETHENE			0.410	2%	3.20	6%	0.51	6%	1.25	360	0.820		1.89	2.23		3		
ETC486	ETHENE			0.440	2%	3.18	6%	0.51	6%	1.16	360	0.737		1.24	1.92		3		
ETC497	ETHENE			0.454	3%	3.54	6%	0.57	6%	1.26	360	0.868		1.44	2.13		3		
ETC502	ETHENE			0.429	2%	3.45	6%	0.56	6%	1.29	360	0.752		1.20	1.74		3		
ETC505	ETHENE			0.398	2%	3.29		0.53		1.33	360	0.798		1.71	2.10		3		
DTC041B	ETHENE			0.167	0%	4.08	5%	0.57	6%	3.41	375	0.742	355	2.11	3.81		1		
DTC043A	ETHENE			0.467	1%	3.95	5%	0.55	6%	1.18	375	0.671		1.17	1.81		1		
DTC044B	ETHENE			0.165	0%	4.19	5%	0.59	6%	3.56	380	0.757	360	1.49	3.60		1		
DTC045A	ETHENE			0.476	1%	4.06	5%	0.57	6%	1.19	375	0.776		1.23	1.99		1		
DTC046B	ETHENE			0.170	0%	4.44	5%	0.57	6%	3.36	370	0.440		0.54	1.11		1		
DTC047A	ETHENE			0.480	1%	4.53	5%	0.59	6%	1.22	370	0.799		1.61	2.10		1		
DTC048B	ETHENE			0.169	0%	4.55	5%	0.59	6%	3.49	375	0.751	335	2.42	3.85		1		
DTC050A	ETHENE			0.162	0%	4.57	5%	0.59	6%	3.66	370	0.731	330	1.57	3.63		1		
DTC051A	ETHENE			0.484	1%	4.55	5%	0.59	6%	1.23	375	0.814		1.38	2.08		1		
DTC072B	ETHENE			0.467	1%	4.33	4%	0.56	5%	1.19	375	0.722		1.50	1.96		1		
XTC105	ETHENE			0.241	3%	4.54	5%	0.60	6%	2.50	360	0.781		1.05	2.31		1		
XTC112	ETHENE			0.518	3%	6.24	4%	0.87	5%	1.68	375	0.934		1.55	2.80		1		
ETC199	ETHENE	MR3	problems	3		5.28	6%	0.52	3%		360	0.845		1.03	2.37		2		
ETC203	ETHENE	MR3	problems	3	0.516	3%	4.79	3%	0.46	2%	0.89	360	0.573		0.93	2.00		2	
DTC017A	ETHENE	MR8		0.479	1%	5.02	3%	0.56	3%	1.16	380	0.821		5.73	4.25		1		
DTC038A	ETHENE	R8		0.169	0%	5.03		0.57		3.40	370	0.526	190	8.55	6.47		1		
EC121	PROPENE			0.514	2%	1.45	5%	0.48	5%	0.94	390	0.505	310	7.53	4.62		1		
EC177	PROPENE			0.501	10%	1.48		0.49		0.98	460	0.539	435	4.64	4.04		1		
EC216	PROPENE			0.524	2%	1.51		0.50		0.96	490	0.563	465	4.86	4.44		1		



RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)				
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
EC230	PROPENE		0.504	2%	1.64		0.55		1.08	420	0.341		2.94	2.41			1		
EC256	PROPENE		0.532	3%	0.39		0.11		0.21	360	0.002	315	0.85				1		
EC276	PROPENE		0.520	8%	1.62		0.54		1.04	360	0.372		3.65	2.92			1		
EC277	PROPENE		0.114	10%	1.69		0.56		4.94	360	0.311	130	4.72	4.58			1		
EC278	PROPENE		0.498	9%	3.05	6%	1.02	6%	2.04	360	0.623	185	7.85	7.85			1		
EC279	PROPENE		0.984	8%	3.43		1.15		1.16	360	0.674	350	7.29	5.89			1		
EC314	PROPENE		0.980	2%	3.19	6%	1.06	6%	1.08	360	0.725		8.36	6.16			1		
EC317	PROPENE		0.566	2%	1.48	6%	0.49	6%	0.87	390	0.613	385	4.73	4.26			1		
EC665	PROPENE		0.443	8%	1.43	5%	0.48	5%	1.07	360	0.191						1		
EC684	PROPENE		0.438	7%	3.38	6%	1.13	6%	2.57	360	0.400	210	7.00	7.00	o		1		
EC687	PROPENE		0.470	5%	3.12	6%	1.04	6%	2.21	360	0.547	270	5.26	5.22	o		1		
EC691	PROPENE		0.490	12%	3.25	6%	1.08	6%	2.21	360	0.466	255	6.06	5.39			1		
EC863	PROPENE		0.565	4%	1.55	7%	0.52	7%	0.91	360	0.114		2.84	2.34			1		
EC870	PROPENE		0.538	4%	3.13	5%	1.04	5%	1.94	360	0.490	210	8.26	7.53			1		
EC885	PROPENE		0.522	3%	2.78	5%	0.93	5%	1.77	360	0.490	300	5.27	4.76			1		
EC899	PROPENE		0.485	3%	3.18	5%	1.06	5%	2.19	360	0.439	240	5.43	4.97			1		
ITC484	PROPENE		0.453	4%	1.38	6%	0.46	6%	1.02	1545	0.400		1.04	1.04	o		2		
ITC510	PROPENE		0.594	3%	2.85	6%	0.95	6%	1.60	360	0.769		4.09	4.84	hl		2		
ITC532	PROPENE		0.555	3%	2.72	5%	0.91	5%	1.63	360	0.581				nb		3		
ITC569	PROPENE		0.478	22%	2.81	7%	0.94	7%	1.96	360	0.691		4.03	3.97			4		
ITC693	PROPENE		0.478	3%	3.20	7%	1.07	7%	2.23	360	0.774		3.98	5.31			6		
ITC716	PROPENE		0.530	10%	3.03	7%	1.01	7%	1.90	360	0.707		4.18	4.83			6		
ITC728	PROPENE		0.490	5%	3.05	7%	1.02	7%	2.07	400	0.626	360	3.68	4.41			6		
ITC736	PROPENE		0.490	5%	1.49	7%	0.50	7%	1.01	420	0.271		1.84	1.68	nb		7		
ITC754	PROPENE		0.571	3%	2.84	7%	0.95	7%	1.66	360	0.811		4.59	4.89			7		
ITC791	PROPENE		0.528	3%	2.77	7%	0.92	7%	1.75	420	0.772						7		
ITC792	PROPENE		0.499	7%	2.85	7%	0.95	7%	1.90	360	0.739		3.99	4.38			8		
ITC810	PROPENE		0.521	3%	2.70	7%	0.90	7%	1.73	360	0.816		3.87	4.67			8		
ITC860	PROPENE		0.523	3%	2.93	7%	0.98	7%	1.87	360	0.586		3.40	3.76	nb		9		
ITC925	PROPENE		0.558	10%	3.17	7%	1.06	7%	1.89	420	0.782		3.31	3.93			10		
ITC938	PROPENE		0.535	11%	2.42	7%	0.81	7%	1.51	420	0.733	405	3.26	4.06			10		
ITC947	PROPENE		0.541	10%	1.80		0.60		1.11	450	0.717		3.08	3.41			10		
ITC972	PROPENE		0.507	10%	2.37		0.79		1.56								10		
ITC1550	PROPENE	higher quality HCHO	0	0.486	7%	2.95	5%	0.98	5%	2.02	330	0.851	300	4.36	5.59			12	
ITC1556	PROPENE	higher quality HCHO	0	0.488	6%	2.98	5%	0.99	5%	2.03	390	0.850		3.50	4.73			12	
ETC044	PROPENE		0.529	2%	3.72	5%	1.24	5%	2.35	360	1.080	174	15.64	12.83			1		
ETC321	PROPENE		0.443	3%	3.05	5%	1.02	5%	2.30	360	0.800	315	2.48	4.97			2		
ETC440	PROPENE		0.595	2%	3.51		1.16		1.94	360	0.843		2.96	5.43			3		
ETC449	PROPENE		0.252	2%	2.78		0.91		3.61	360	0.580	165	3.94	6.56			3		
ETC475	PROPENE		0.264	4%	2.72		0.89		3.38	360	0.589	135	6.68	8.78			3		
DTC026A	PROPENE		0.488	1%	3.50		1.15		2.36	370	0.863	240	5.00	7.43			1		
DTC026B	PROPENE		0.493	1%	3.53		1.16		2.35	370	0.871	210	6.52	8.38			1		
DTC052A	PROPENE		0.302	1%	2.83	5%	0.94	5%	3.12	370	0.655	150	9.16	9.83			1		
DTC054A	PROPENE		0.287	1%	3.60	4%	0.98	5%	3.43	375	0.645	145	7.64	9.13			1		
DTC060A	PROPENE		0.245	1%	3.47	4%	0.93	5%	3.81	300	0.577	160	4.82	7.47			1		
DTC060B	PROPENE		0.514	1%	3.60	4%	0.97	5%	1.89	300	0.809		3.61	5.38			1		
DTC061A	PROPENE		0.502	1%	3.36	4%	0.90	5%	1.79	370	0.792	320	3.21	5.09	rh		2		
DTC061B	PROPENE		0.502	1%	3.54	4%	0.95	5%	1.89	370	0.803	310	3.75	5.60	rh		2		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
XTC081	PROPENE		0.557	2%	4.21	4%	1.10	5%	1.97	360	0.866		2.57	5.03		1				
XTC082	PROPENE		0.540	2%	4.09	4%	1.06	5%	1.96	360	0.873		2.39	5.43		1				
XTC097	PROPENE		0.561	3%	4.63	4%	1.20	5%	2.14	360	0.857	350	2.40	5.22		1				
XTC113	PROPENE		0.533	3%	4.57	4%	1.19	5%	2.23	370	0.775	325	2.66	5.07		1				
DTC063A	PROPENE	problems	1	0.477	1%	3.53	4%	0.95	5%	2.00	375	0.819	305	3.51	7.20		1			
DTC063B	PROPENE	problems	1	0.476	1%	3.57	4%	0.96	5%	2.02	375	0.828	295	4.33	7.83		1			
EC673	PROPENE	sparse data	2	0.471	4%	1.42	5%	0.47	5%	1.00	360	0.163					1			
EC682	PROPENE	sparse data	2	0.452	5%	2.85	5%	0.95	5%	2.10	360	0.596	270	4.50	5.15	o	1			
EC689	PROPENE	sparse data	2	0.563	5%	3.22	6%	1.07	6%	1.91	360	0.394	240	5.38	5.19	o	1			
ITC759	PROPENE	data sparse	2	0.568	3%	2.97	7%	0.99	7%	1.74	360	0.797		5.58	5.50		7			
ITC1005	PROPENE	data sparse	2	0.399	4%	1.67		0.56		1.39	360	0.833	329	5.46	5.62		11			
ETC216	PROPENE	problems	2	0.510	2%	3.05	33%	1.02	33%	2.00	420	0.809	285	3.33	6.22		2			
EC678	PROPENE	major problems	3	0.443	4%	1.41	5%	0.47	5%	1.06	360	0.129	345	2.08	2.23		1			
ETC375	PROPENE	Do not model	9	0.516	2%	3.69		1.23		2.39	360	0.833	315	4.26	6.90		3			
EC685	PROPENE	No temp.	2	0.464	4%	3.22	6%	1.07	6%	2.31	300	0.470	225	6.39	5.93	o	0	2	no	
EC921	PROPENE	No k1	3	0.515	4%	2.39	7%	0.80	7%	1.55	360	0.332		5.17	4.94	o	0	2	no	
EC930	PROPENE	No k1	3	0.449	5%	2.69	7%	0.90	7%	2.00	360	0.613		2.71	2.76	o	1	3	no	
ITC623	PROPENE	don't model	9	0.445	7%						220	0.679		3.77	4.57	ri	5	3	no	
EC095	PROPENE	Don't model	9	0.463	2%	1.51	5%	0.50	5%	1.09	360	0.434	265	7.45	4.96		1	9		
EC096	PROPENE	Don't model	9	0.464	6%	1.52		0.51		1.09	360	0.424	295	5.30	4.01		1	9		
EC318	PROPENE	don't model	9	0.635	3%	1.53	6%	0.51	6%	0.80	380	0.689	280	7.39	4.89		1	9		
EC319	PROPENE	don't model	9	0.788	3%	1.51	6%	0.50	6%	0.64	360	0.752	255	7.93	5.58		1	9		
EC320	PROPENE	don't model	9	0.601	3%	1.61	6%	0.54	6%	0.89	360	0.640	330	6.07	6.67		1	9		
EC663	PROPENE	Don't model	9	0.461	7%	1.38	5%	0.46	5%	1.00	300	0.117			3.42		1	9		
EC681	PROPENE	don't model	9	0.439	5%	2.82	5%	0.94	5%	2.14	360	0.327	285				1	9		
ITC960	PROPENE	do not model	9	0.493	11%	2.59	5%	0.86	5%	1.75	360	0.728	330	3.42	4.53	ht	10	9		
ITC975	PROPENE	Don't model	9	0.412	13%	1.27		0.42		1.02	360	0.461		1.71	1.91	nb	11	9		
ITC990	PROPENE	Don't model	9	0.418	12%	1.02		0.34		0.81	360	0.479		2.27	2.20		11	9		
ITC1547	PROPENE	Don't model	9			2.86	5%	0.95	5%		345	0.787	300			nb	12	9		
ETC496	PROPENE	MRE		0.375	2%	4.13	6%	0.82	8%	2.18	360	0.947		2.48	4.85		3			
ETC500	PROPENE	MRE		0.420	2%	4.03	6%	0.76	7%	1.81	360	0.966		2.26	3.78		3			
ETC065	PROPENE	MR3		0.510	3%	4.16	6%	0.47	6%	0.91	360	0.390		1.44	1.98		1			
ETC072	PROPENE	MR3		0.499	3%	4.04	6%	0.47	5%	0.95	360	0.333		1.16	1.76		1			
ETC106	PROPENE	MR3		0.515	2%	3.98	6%	0.44	5%	0.86	360	0.283		0.75	1.49		2			
ETC108	PROPENE	MR3		0.523	2%	4.01	6%	0.45	5%	0.85	360	0.196		0.87	1.45		2			
ETC110	PROPENE	MR3		0.522	2%	3.69	6%	0.42	6%	0.80	360	0.202		0.73	1.46		2			
ETC118	PROPENE	MR3	problems	1	0.500	2%	4.06	6%	0.49	5%	0.98	360	0.336		0.68	1.48		2		
ITC474	PROPENE	R4		0.085	14%	3.76	7%	0.43	4%	5.12	360	0.294	345	3.42	1.99		2			
ITC478	PROPENE	R4		0.086	13%	4.53	6%	0.64	4%	7.53	360	0.322	345	4.79	2.21		2			
ITC575	PROPENE	R4		0.099	21%	2.89	6%	0.17	5%	1.72	360	0.320	345	2.42	1.80		4			
ITC579	PROPENE	R4		0.095	16%	3.13	6%	0.19	4%	1.98	360	0.354		1.93	1.57		4			
ITC585	PROPENE	R4		0.078	16%	4.59	5%	0.67	6%	8.52	360	0.312		5.18	2.08		4			
ITC472	PROPENE	R4	No Temp	2	0.093	12%	3.26	9%	0.19	6%	2.09	360	0.258		1.84	1.40		2		
DTC018A	PROPENE	MR8		0.482	1%	5.16		0.71		1.48	375	0.787	340	6.71	5.65		1			
DTC032B	PROPENE	R8		0.175	0%	4.86		0.66		3.78	380	0.469	120	8.50	8.50		1			
EC122	1-BUTENE			0.505	3%	0.87	7%	0.26	7%	0.51	420	0.219	415	2.49	2.01		1			
EC123	1-BUTENE			0.510	2%	1.62	7%	0.48	7%	0.95	450	0.505	430	4.72	3.08		1			
EC124	1-BUTENE			1.004	2%	1.70	7%	0.51	7%	0.50	630	0.246		2.21	1.75		1			

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)				
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
ITC927	1-BUTENE		0.538	10%	4.25	6%	1.27	6%	2.36	360	0.651		2.80	3.47			10		
ITC930	1-BUTENE		0.526	11%	11.17	10%	3.33	10%	6.34	360	0.725	135	7.83	10.33			10		
ITC935	1-BUTENE		1.088	7%	11.45	10%	3.42	10%	3.14	360	0.879	330	4.77	6.08			10		
ITC928	1-BUTENE	A	1.050	7%	0.04	7%	0.01	7%	0.01	360	0.019		-0.11	0.08	ri		10		
ITC929	1-HEXENE		0.519	11%	5.07		1.19		2.29	360	0.299		1.19	1.23			10		
ITC931	1-HEXENE		0.512	11%	10.23		2.40		4.69	360	0.610	255	1.74	2.74			10		
ITC934	1-HEXENE		1.069	7%	9.68		2.27		2.12	420	0.382		1.54	1.86			10		
ITC937	1-HEXENE	A	1.078	7%	0.08		0.01		0.01	360	0.006	180	-0.29	0.10	ri		10		
ITC694	ISOBUTEN		0.500	3%	4.05	8%	1.98	8%	3.95	360	0.893	315	7.55	7.58			6		
DTC052B	ISOBUTEN		0.297	1%	2.17	5%	1.06	5%	3.56	370	0.723		3.52	4.37			1		
ETC253	ISOBUTEN	MR3	0.476	2%	5.41		0.81		1.70	360	0.855		1.59	3.02			2		
ETC255	ISOBUTEN	MR3	0.477	2%	5.34	5%	0.79	4%	1.65	360	0.830		1.57	2.94			2		
ETC257	ISOBUTEN	MR3	0.482	2%	4.98	5%	0.62	4%	1.29	360	0.604		1.20	2.11			2		
EC146	T-2-BUTE		0.512	3%	0.92	6%	0.56	6%	1.09	360	0.239	355	5.47	3.33			1		
EC147	T-2-BUTE		0.962	2%	1.67	6%	1.01	6%	1.05	360	0.154		8.70	8.62			1		
EC157	T-2-BUTE		0.557	3%	0.86		0.52		0.94	360	0.205	355	5.33	2.83			1		
ETC493	T-2-BUTE	MRE	0.425	2%	4.20	5%	0.93	4%	2.18	360	0.931	315	11.23	6.88			3		
ETC501	T-2-BUTE	MRE	0.424	2%	3.72	6%	0.72	5%	1.69	360	0.969		5.31	4.89			3		
DTC043B	T-2-BUTE	MRE	0.466	1%	4.37	5%	0.79	4%	1.69	375	1.052		7.94	5.59			1		
DTC041A	T-2-BUTE	RE	0.167	0%	4.43	5%	0.79	4%	4.73	375	0.629	185	9.57	7.47			1		
ETC307	T-2-BUTE	MR3	0.543	3%	4.65	6%	0.60	4%	1.10	360	0.703		3.56	3.74			2		
ETC309	T-2-BUTE	MR3	0.524	3%	4.35	6%	0.53	4%	1.00	360	0.660		2.71	3.40			2		
ITC498	T-2-BUTE	R4	0.090	13%	3.56	8%	0.28	5%	3.12	360	0.280	330	2.01	1.77	o		2		
ITC500	T-2-BUTE	R4	0.091	13%	3.74	7%	0.47	4%	5.19	360	0.285		4.28	2.77			2		
ITC502	T-2-BUTE	R4	0.092	12%	4.21	7%	0.72	4%	7.82	360	0.269		4.60	1.74			2		
DTC021B	T-2-BUTE	MR8	0.492	1%	5.22		1.06		2.16	380	0.730	350	13.39	5.78			1		
DTC069A	T-2-BUTE	MR8	0.478	1%	4.35	2%	0.72	3%	1.50	375	0.682		9.06	4.40			1		
DTC033A	T-2-BUTE	R8	0.168	0%	4.52		0.65		3.88	370	0.456		8.33	3.10			1		
EC669	ISOPRENE		0.471	4%	2.38	9%	1.82	9%	3.86	360	0.293		6.22	3.51			1		
ITC511	ISOPRENE		0.599	3%	5.01	9%	3.83	9%	6.39	300	0.892	120	16.71	16.71	hl		2		
ITC811	ISOPRENE		0.464	8%	3.17	7%	2.42	7%	5.22	240	0.917	195	9.49	11.80			8		
ITC812	ISOPRENE		0.534	3%	1.67	7%	1.28	7%	2.39	390	0.760		4.37	4.39			8		
DTC053A	ISOPRENE		0.146	0%	1.52	5%	1.16	5%	7.94	370	0.461		1.89	2.81			1		
DTC053B	ISOPRENE		0.243	1%	1.53	5%	1.17	5%	4.82	370	0.595		1.98	2.93			1		
DTC056A	ISOPRENE		0.473	1%	4.29	4%	2.73	5%	5.77	375	0.880	265	7.27	8.61			1		
DTC056B	ISOPRENE		0.472	1%	2.67	4%	1.48	5%	3.13	375	0.626		3.33	3.51			1		
XTC093	ISOPRENE		0.165	3%	2.41	7%	1.07	11%	6.47	360	0.387		1.34	2.11			1		
XTC101	ISOPRENE		0.527	3%	3.10	7%	1.55	11%	2.93	360	0.453		1.66	2.62			1		
EC520	ISOPRENE	minor problems	1	0.492	11%	2.21		1.69		3.44	360	0.503	300	5.42	4.78			1	
EC522	ISOPRENE	minor problems	1	0.958	10%	2.25		1.72		1.79	360	0.273		6.66	4.48			1	
EC524	ISOPRENE	minor problems	1	1.003	10%	4.36	10%	3.34	10%	3.33	360	0.757	240	18.15	20.72			1	
EC527	ISOPRENE	minor problems	1	0.527	10%	2.10	10%	1.61	10%	3.05	360	0.508	300	6.04	5.85			1	
EC525	ISOPRENE	reject	99	0.562	10%	4.21		3.20		5.70	300	0.686	120	10.47	10.47	o		1	9
ETC495	ISOPRENE	MRE	0.417	2%	4.45	5%	1.28	4%	3.07	360	1.007		2.57	4.23			3		
ETC503	ISOPRENE	MRE	0.420	2%	4.78	5%	1.61	4%	3.83	360	0.974	315	3.98	5.97			3		
ETC510	ISOPRENE	MRE	0.408	2%	4.57	5%	1.43	4%	3.52	360	0.977		2.68	4.54			3		
DTC047B	ISOPRENE	MRE	0.478	1%	5.05	4%	1.02	4%	2.12	370	1.072		2.26	3.66			1		
DTC046A	ISOPRENE	RE	0.171	0%	5.11	4%	1.04	4%	6.08	370	0.416		0.87	1.99			1		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
DTC050B	ISOPRENE	RE	0.162	0%	4.99	4%	0.99	4%	6.14	370	0.653	280	3.89	4.22			1			
ETC271	ISOPRENE	MR3	0.495	2%	5.25	5%	0.98	6%	1.99	360	0.800		1.72	3.00			2			
ETC273	ISOPRENE	MR3	0.486	3%	5.09	5%	0.92	6%	1.88	360	0.837		1.49	3.06			2			
ETC275	ISOPRENE	MR3	0.489	3%	4.81	5%	0.79	6%	1.62	360	0.794		1.55	2.79			2			
ETC277	ISOPRENE	MR3	0.496	3%	4.65	5%	0.67	5%	1.35	360	0.748		1.29	2.59			2			
ETC420	A-PINENE		0.291	2%	2.63	5%	0.54	5%	1.85	360	0.333		1.75	2.62			3			
ETC443	A-PINENE		0.257	2%	2.81	5%	0.57	5%	2.23	360	0.401		2.30	2.74			3			
ETC444	A-PINENE		0.299	2%	2.77	5%	0.56	5%	1.86	360	0.379		2.77	2.62			3			
ETC446	A-PINENE		0.534	2%	2.77	5%	0.56	5%	1.04	360	0.134		1.28	1.77			3			
ETC447	A-PINENE		0.132	3%	2.79	5%	0.56	5%	4.23	360	0.300		4.14	2.07			3			
XTC095	A-PINENE		0.242	3%	3.77	7%	0.59	9%	2.43	360	0.280	345	2.79	2.51			1			
ETC426	A-PINENE	Can't model	9	0.266	2%												3	no	no	
ETC492	A-PINENE	MRE		0.384	2%	4.45	5%	0.77	4%	2.00	360	0.921		2.66	3.98			3		
ETC508	A-PINENE	MRE		0.409	2%	4.71		0.82		2.01	360	0.924		2.99	4.47			3		
DTC045B	A-PINENE	MRE		0.476	1%	5.16	5%	0.79	5%	1.66	375	1.039		3.08	4.27			1		
DTC044A	A-PINENE	RE		0.165	0%	5.19	5%	0.79	5%	4.80	380	0.592	270	5.56	4.92			1		
DTC034B	A-PINENE	R8		0.165	0%	6.57		0.93		5.65	370	0.358	80	7.99	10.05			1		
ETC433	B-PINENE			0.269	2%	2.66	5%	0.80	5%	2.98	360	0.035		0.25	0.37			3		
ETC434	B-PINENE			0.293	2%	9.69	5%	2.92	5%	9.95	360	0.295	225	0.86	1.40			3		
ETC435	B-PINENE			0.137	3%	2.78	5%	0.84	5%	6.09	360	0.246		0.30	0.56			3		
ETC442	B-PINENE			0.288	2%	2.72	5%	0.82	5%	2.85	360	0.032		0.22	0.39			3		
XTC099	B-PINENE			0.233	3%	6.25	9%	1.59	10%	6.84	375	0.283	345	0.68	0.97			1		
ETC421	B-PINENE	Problems	3	0.252	2%	2.73	5%	0.82	5%	3.27	360	0.067						3		
ETC494	B-PINENE	MRE		0.446	2%	5.02		0.98		2.20	360	0.849		1.09	1.83			3		
DTC051B	B-PINENE	MRE		0.484	1%	5.59	4%	0.92	5%	1.89	375	0.868		1.35	1.88			1		
ETC507	B-PINENE	MRE	Can't model	9	0.410	2%					360	0.774		0.94	1.61			3	no	no
DTC048A	B-PINENE	RE		0.170	0%	5.64	4%	0.91	5%	5.33	375	0.563	345	0.90	3.10			1		
ETC422	TERPINEN	Can't model	9	0.239	2%						360	0.504		7.70	3.54			3	no	no
ETC425	D-LIMONE			0.251	2%	3.00	7%	1.97	7%	7.83	360	0.411		5.97	2.90			3		
ETC450	D-LIMONE			0.242	2%	2.74	7%	1.77	7%	7.28	360	0.438		6.16	2.97			3		
ETC451	D-LIMONE			0.566	2%	2.63	7%	1.69	7%	2.99	360	0.137		2.29	2.59			3		
ETC452	D-LIMONE			0.160	2%	2.73	7%	1.76	7%	11.02	360	0.378		6.31	2.87			3		
ETC424	3-CARENE			0.254	2%	2.94	5%	0.99	5%	3.91	360	0.365		1.07	2.50			3		
ETC456	3-CARENE			0.234	2%	2.48	5%	0.83	5%	3.53	360	0.354		0.94	2.23			3		
ETC457	3-CARENE			0.158	3%	2.66	5%	0.88	5%	5.58	360	0.283		1.03	2.17			3		
ETC459	3-CARENE			0.498	2%	2.30	5%	0.76	5%	1.53	360	0.124		0.76	1.10			3		
ETC423	SABINENE			0.253	2%	2.56	9%	1.15	9%	4.55	360	0.327		0.89	2.17			3		
ETC436	SABINENE			0.288	2%	2.58	9%	1.14	9%	3.94	360	0.268		0.67	1.49			3		
ETC437	SABINENE			0.576	2%	2.59	9%	1.14	9%	1.99	360	0.059		0.87	1.25			3		
ETC438	SABINENE			0.136	3%	1.37	9%	0.59	9%	4.38	360	0.187		0.42	0.93			3		
ITC560	BENZENE			0.108	22%	344.90	10%	2.84	10%	26.38	180	0.321	90	6.18	7.42			3		
ITC561	BENZENE			0.114	22%	41.06	10%	0.34	10%	2.97	150	0.271	105	5.11	5.90			3		
ITC562	BENZENE			0.569	20%	43.46	10%	0.36	10%	0.63	360	0.409	285	2.51	3.20			3		
ITC698	BENZENE			0.485	3%	84.27		0.70		1.43	300	0.370	240	2.12	2.80			6		
ITC710	BENZENE			0.534	3%	84.48		0.70		1.31	360	0.363	270	1.92	2.84			6		
ITC831	BENZENE	A		1.008	2%	0.07		0.01		0.01	360	0.009	345	-0.20	0.14	ri		8		
ETC263	BENZENE	MR3		0.476	2%	44.99	9%	0.73	5%	1.54	360	0.595	300	1.10	2.38			2		
ETC265	BENZENE	MR3		0.485	2%	39.18	9%	0.69	5%	1.42	360	0.601	345	1.15	2.46			2		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
DTC039B	BENZENE	R8	problems	2	0.178	0%	48.38		0.76		4.28	380	0.387	100	8.10	9.72		1		
EC264	TOLUENE				0.440	2%	8.09		0.26		0.60	240	0.417	210	3.99	2.72		1		
EC266	TOLUENE				0.440	3%	8.37		0.27		0.62	360	0.404	215	3.95	4.48		1		
EC269	TOLUENE				0.485	9%	3.96		0.13		0.26	360	0.297		2.58	2.35		1		
EC270	TOLUENE				0.466	9%	4.20		0.20		0.42	360	0.367	325	4.17	3.31		1		
EC271	TOLUENE				0.215	9%	8.02		0.26		1.21	360	0.294	90	6.64	7.26		1		
EC273	TOLUENE				0.112	9%	4.11		0.13		1.19	380	0.214	75	4.83	6.32	o	1		
EC293	TOLUENE				0.487	8%	7.49	10%	0.24	10%	0.50	360	0.416	155	7.63	7.33		1		
EC327	TOLUENE				0.492	2%	4.01	10%	0.13	10%	0.26	360	0.375		2.44	2.56		1		
ITC534	TOLUENE				0.526	3%	15.02	10%	0.49	10%	0.93	330	0.490	195	3.68	4.96		3		
ITC699	TOLUENE				0.493	3%	11.31	13%	0.37	13%	0.74	250	0.480	195	3.97	5.26		6		
DTC042A	TOLUENE				0.986	2%	7.47	5%	0.24	5%	0.25	375	0.030		0.19	0.56		1		
DTC042B	TOLUENE				0.099	0%	3.94	5%	0.13	5%	1.30	375	0.256	215	2.65	2.93		1		
XTC106	TOLUENE				0.245	3%	14.49	5%	0.47	5%	1.93	360	0.395	145	3.12	3.79		1		
EC340	TOLUENE		problems	2	0.493	4%	3.76	10%	0.12	10%	0.25	330	0.343	325	2.93	2.64		1		
EC292	TOLUENE		Low Temp.	6	0.505	8%	6.61	10%	0.21	10%	0.42	360	0.124		2.95	2.31	lt	12	1	
EC265	TOLUENE		Don't model	9	0.437	2%	7.49		0.24		0.56	260	0.391	205				1	9	
EC671	TOLUENE		Don't model	9	0.434	4%	8.16	10%	0.27	10%	0.61	360	0.189			2.49		1	9	
ITC828	TOLUENE	A			1.008	2%	0.07	5%	0.01	7%	0.01	360	0.011		-0.18	0.12	ri	8		
ETC061	TOLUENE	MR3			0.509	3%	5.06	6%	0.41	6%	0.81	360	0.652		1.95	2.52		1		
ETC064	TOLUENE	MR3			0.552	3%	4.46	6%	0.41	7%	0.75	360	0.297		1.34	1.89		1		
ETC069	TOLUENE	MR3			0.498	3%	4.43	6%	0.39	6%	0.78	360	0.406		1.58	2.03		1		
ETC101	TOLUENE	MR3			0.503	2%	4.71	6%	0.38	6%	0.75	360	0.284		0.63	1.42		2		
ETC103	TOLUENE	MR3			0.516	2%	4.78	6%	0.38	6%	0.73	360	0.308		0.76	1.45		2		
ITC451	TOLUENE	R4			0.090	13%	4.73	6%	0.38	4%	4.19	360	0.312		4.00	1.95		2		
ITC455	TOLUENE	R4			0.083	14%	4.01	7%	0.34	4%	4.12	360	0.304		3.54	1.92		2		
DTC023A	TOLUENE	MR8			0.469	1%	7.51		0.52		1.10	375	0.721	305	5.55	4.75		1		
DTC030B	TOLUENE	R8			0.166	0%	11.34		0.64		3.83	375	0.369	85	8.14	10.02		1		
ETC311	C2-BENZ	MR3			0.522	3%	5.29	6%	0.42	5%	0.79	360	0.230		0.52	1.30		2		
ETC313	C2-BENZ	MR3			0.528	3%	5.03	6%	0.40	5%	0.75	360	0.273		0.55	1.43		2		
ETC315	C2-BENZ	MR3			0.526	3%	6.14	6%	0.44	5%	0.83	360	0.399		0.59	1.64		2		
EC288	O-XYLENE				0.502	8%	1.44	10%	0.10	10%	0.19	360	0.253		3.91	2.89		1		
EC291	O-XYLENE				0.495	9%	4.83	10%	0.32	10%	0.64	360	0.462	165	7.81	8.15		1		
ETC259	O-XYLENE	MR3			0.490	2%	5.01	5%	0.44	5%	0.90	360	0.573		1.05	2.17		2		
ETC261	O-XYLENE	MR3			0.476	2%	5.01	5%	0.44	5%	0.92	360	0.644		1.07	2.16		2		
ETC346	P-XYLENE	MR3			0.467	2%						360	0.772		0.91	2.50		2	no	no
ETC348	P-XYLENE	MR3			0.519	2%	5.73	3%	0.49	3%	0.94	360	0.658		1.08	2.41		2		
EC344	M-XYLENE				0.776	2%	3.89	25%	0.44	25%	0.57	360	0.587	170	11.65	10.46		1		
EC345	M-XYLENE				0.315	6%	3.84	25%	0.44	25%	1.38	360	0.394	65	10.42	13.38		1		
ITC702	M-XYLENE				0.503	3%	4.42	10%	0.50	10%	1.00	270	0.622	195	7.70	8.04		6		
ETC222	M-XYLENE				0.482	2%	4.11	10%	0.47	10%	0.97	360	0.674	240	3.03	5.46		2		
DTC073A	M-XYLENE				0.485	1%	1.28	4%	0.11	5%	0.23	360	0.075		0.40	1.29		1		
DTC076B	M-XYLENE				0.484	1%	1.41	4%	0.13	5%	0.26	370	0.082		0.37	1.16		1		
XTC107	M-XYLENE		Problems	1	0.249	3%	3.45	6%	0.31	7%	1.22	360	0.447	195	3.94	4.95		1		
EC346	M-XYLENE		incomplete results	2	0.297	3%	3.89	25%	0.44	25%	1.48	120	0.382	55				1		
ETC150	M-XYLENE		can't model	9								360	0.010	330	0.12	0.36		2		
EC343	M-XYLENE		reject	99	0.326	5%	3.98	25%	0.45	25%	1.38	360	0.282	75	7.95	9.92		1	9	
ITC827	M-XYLENE	A			1.051	2%	0.07	5%	0.01	7%	0.01	360	0.016	270			ri	8		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
ETC477	M-XYLENE	MRE	0.461	3%	4.94	5%	0.73	5%	1.58	360	0.981	285	4.15	6.39		3				
ETC478	M-XYLENE	MRE	0.429	3%	4.21	5%	0.64	5%	1.49	360	1.002		2.08	4.09		3				
ETC499	M-XYLENE	MRE	0.429	2%	4.69	5%	0.70	5%	1.63	360	0.962	315	3.19	5.40		3				
ETC301	M-XYLENE	MR3	0.462	3%	4.87	6%	0.43	5%	0.94	360	0.617		0.68	2.09		2				
ETC344	M-XYLENE	MR3	0.525	2%	5.11		0.45		0.85	360	0.912		1.83	3.81		2				
ETC196	M-XYLENE	MR3	problems	3	0.477	7%				360	0.560		0.71	2.02		2				
ETC207	M-XYLENE	MR3	problems	3	0.508	3%				360	0.586		0.91	2.24		2				
DTC025A	M-XYLENE	MR8			0.467	1%	4.87		0.50	1.06			6.24	4.20		1				
DTC068B	M-XYLENE	MR8			0.484	1%	4.25	2%	0.43	0.89	375	0.640	4.86	3.46		1				
DTC035A	M-XYLENE	R8			0.166	0%	4.82		0.49	2.97	370	0.423	7.77	2.99		1				
DTC067B	M-XYLENE	R8			0.171	0%	5.12	3%	0.52	3.05	375	0.398	175	8.35	6.06		1			
EC901	135-TMB				0.490	5%	2.78	10%	0.68	1.39	360	0.382	180	8.17	6.75		1			
EC903	135-TMB				1.011	3%	4.91	10%	1.21	1.19	360	0.500	226	14.52	9.83		1			
ITC703	135-TMB				0.495	4%	5.02	10%	1.23	10%	2.49	240	0.702	150	13.67	12.49		6		
ITC706	135-TMB				0.466	4%	2.49	10%	0.61	1.31	360	0.635	7.44	4.73		6				
ITC709	135-TMB				0.973	2%	4.47	10%	1.10	1.13	360	0.773	11.96	7.00		6				
ITC742	135-TMB				0.522	5%	4.44	10%	1.09	10%	2.08	270	0.775	12.96	16.73		7			
XTC103	135-TMB				0.496	3%	3.02	9%	0.67	1.34	360	0.671	5.04	5.67		1				
EC900	135-TMB		don't model	9	0.521	3%	5.59	10%	1.37	10%	2.63	240	0.380	90			1	3	no	
ITC826	135-TMB	A			0.903	2%	0.07	5%	0.01	7%	0.01	360	0.013	300	-0.24	0.38	ri	8		
ETC249	135-TMB	MR3			0.494	2%	5.43	5%	0.57	3%	1.16	360	0.885	1.59	3.28		2			
ETC251	135-TMB	MR3	problems	1	0.500	2%	5.05	5%	0.51	5%	1.03	300	0.511	1.12	2.55		2			
ETC297	123-TMB	MR3			0.462	3%	4.83	5%	0.45	5%	0.97	360	0.861	1.35	3.32		2			
ETC299	123-TMB	MR3			0.481	3%	4.71	5%	0.44	5%	0.90	360	0.801	1.07	2.90		2			
ETC267	124-TMB	MR3			0.486	2%	4.93	6%	0.45	5%	0.93	360	0.563	0.99	2.03		2			
ETC269	124-TMB	MR3			0.484	2%	4.85	6%	0.45	5%	0.92	360	0.653	1.06	2.29		2			
ITC739	TETRALIN				0.545	5%	2.74	27%	0.36	27%	0.66	360	0.001	0.82	0.62		7			
ITC747	TETRALIN				0.540	5%	114.69	27%	15.10	27%	27.95	390	0.479	360	2.52		7			
ITC748	TETRALIN				0.234	7%	103.34	27%	13.61	27%	58.25	330	0.337	255	2.09	2.80		7		
ITC750	TETRALIN				0.536	3%	54.02	27%	7.12	27%	13.27	360	0.452	2.07	2.07		7			
ITC832	TETRALIN	A			0.993	2%	0.07		0.01	0.01	360	0.023		0.71		ri	8			
ITC751	NAPHTHAL				0.538	3%	7.49	10%	0.62	10%	1.16	390	0.083	1.04	1.34		7			
ITC755	NAPHTHAL				0.272	11%	14.08	10%	1.18	10%	4.32	360	0.248	300	1.26	1.60		7		
ITC756	NAPHTHAL				0.252	3%	27.43	10%	2.28	10%	9.06	300	0.242	240	2.17	2.36		7		
ITC798	NAPHTHAL				0.599	8%	19.41	10%	1.62	10%	2.70	360	0.186	1.47	1.85		8			
ITC802	NAPHTHAL				0.595	8%	8.46	10%	0.71	10%	1.19	360	0.105	1.37	1.60		8			
ITC771	23-DMN				0.246	5%	4.77	10%	1.18	10%	4.77	300	0.293	240	2.52	2.51		7		
ITC774	23-DMN				0.557	3%	4.04	10%	0.99	10%	1.78	360	0.341	2.08	2.73		7			
ITC775	23-DMN				0.256	5%	1.74	10%	0.42	10%	1.65	360	0.273	1.49	1.66		7			
ITC806	23-DMN				0.380	8%	5.87	10%	1.45	10%	3.81	360	0.360	3.06	2.79		8			
ITC1006	ACETYLEN				0.269	10%	119.07	11%	1.78	11%	6.61	240	0.942	165	13.69	12.46	o	11		
ITC1007	ACETYLEN				0.227	6%	127.53	11%	1.92	11%	8.45	240	0.878	135	13.17	13.35		11		
ITC1000	ACETYLEN	A			0.095	15%	0.07		0.01	0.12	360	0.490	0.22	1.16		ri	11			
ITC866	MEOH	A	2-part run	0	0.512	3%	0.07		0.01	0.02	255	0.003	0.12	0.10		ri	9			
ITC887	MEOH	A			0.326	5%	0.07		0.01	0.03	240	0.050	0.06	0.09		ri	9			
ETC285	MEOH	MR3			0.517	2%	11.97	4%	0.66	4%	1.27	360	0.873	1.03	2.51		2			
ETC287	MEOH	MR3			0.512	3%	5.06	5%	0.41	5%	0.80	360	0.477	0.69	1.82		2			
ETC289	MEOH	MR3			0.505	3%	6.68	4%	0.47	4%	0.92	360	0.683	0.75	2.13		2			

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHR /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
ITC612	MEOH	R4	Don't model	9	0.051	83%	4.85		0.41		8.13	360	0.359		3.04	2.09		4	9	
ETC131	ETOH	MR3			0.538	5%	9.64	4%	0.70	4%	1.29	360	0.216		0.74	1.43		2		
ETC133	ETOH	MR3			0.534	5%	9.10	4%	0.66	4%	1.24	360	0.222		0.64	1.38		2		
ETC138	ETOH	MR3			0.536	5%	9.70	4%	0.70	4%	1.30	360	0.181		0.78	1.30		2		
ITC587	ETOH	R4			0.089	29%	5.30		0.43		4.89	360	0.370		3.80	2.14		4		
ITC593	ETOH	R4	data sparse	2	0.084	34%	7.74		0.64		7.56	360	0.353		4.14	2.13	o	4		
ITC591	ETOH	R4	Don't model	9	0.053	114%	5.55		0.45		8.52	360	0.400	345	3.68	2.51		4	9	
ETC148	I-C3-OH	MR3			0.515	2%	16.67	19%	1.19	18%	2.31	360	0.394		0.99	1.91		2		
ETC155	I-C3-OH	MR3			0.503	3%	8.58	12%	0.67	10%	1.34	360	0.540		1.24	2.12		2		
ETC157	I-C3-OH	MR3			0.512	3%	7.27	10%	0.60	9%	1.16	360	0.385		1.02	1.80		2		
ETC159	I-C3-OH	MR3			0.503	3%	8.23	11%	0.65	10%	1.29	360	0.428		0.93	1.83		2		
ETC279	ME-O-ME	MR3			0.505	3%	12.38	4%	0.85	4%	1.68	360	0.929		1.46	2.73		2		
ETC281	ME-O-ME	MR3			0.509	3%	11.06	4%	0.77	4%	1.51	360	0.825		1.19	2.43		2		
ETC283	ME-O-ME	MR3			0.508	2%	8.60	4%	0.63	4%	1.24	360	0.776		1.09	2.39		2		
ETC295	ME-O-ME	MR3			0.477	3%	8.47	4%	0.62	4%	1.30	360	0.659		0.95	2.12		2		
ETC120	MTBE	MR3			0.529	2%						360	0.149		0.72	1.28		2		
ETC123	MTBE	MR3			0.515	2%						360	0.375		0.82	1.68		2		
ETC125	MTBE	MR3			0.515	2%						360	0.153		0.52	1.17		2		
ETC127	MTBE	MR3			0.532	2%						360	0.168		0.64	1.30		2		
ITC602	MTBE	R4			0.094	12%	8.48	6%	0.46	4%	4.95	360	0.370		3.84	2.31		4		
ITC606	MTBE	R4			0.092	14%	13.14	7%	0.59	4%	6.38	360	0.430	345	3.95	3.08		4		
ITC608	MTBE	R4			0.088	15%	17.18	8%	0.66	5%	7.46	360	0.430	270	3.83	3.14		4		
ETC171	ETO-ETOH	MR3			0.492	4%	7.10	3%	1.03	4%	2.09	360	0.842		1.05	2.22		2		
ETC163	ETO-ETOH	MR3	problems	1	0.492	2%						360	1.054		1.40	2.77		2		
ETC175	ETO-ETOH	MR3	problems	3	0.503	4%						360	0.525		0.89	1.80		2		
ETC166	CARBITOL	MR3			0.507	2%	7.66	4%	1.43	4%	2.81	360	0.734		1.23	2.04		2		
ETC169	CARBITOL	MR3			0.513	2%	6.83	5%	1.21	4%	2.35	360	0.424		0.94	1.62		2		
ETC173	CARBITOL	MR3			0.511	4%	10.33	4%	2.29	4%	4.48	360	0.489		0.84	1.52		2		
ITC711	FURAN				0.511	3%	1.69	8%	0.38	8%	0.75	300	0.467	165	9.96	9.47		6		
ITC713	FURAN				0.975	4%	1.62	8%	0.37	8%	0.38	360	0.039	255	4.73	5.24		6		
ITC715	FURAN				0.490	5%	0.90	8%	0.20	8%	0.42	360	0.057		2.77	2.13		6		
ITC743	FURAN				0.540	5%	1.56	8%	0.35	8%	0.65	360	0.585		9.93	5.89		7		
EC389	FORMALD				4.747	12%	9.53		3.42		0.72	260	0.002	145	32.98	18.71	vn,d	11		
EC391	FORMALD				5.395	4%	18.06		6.62		1.23	300	2.363	235	76.39	49.47	vn,d	11		
EC392	FORMALD				11.366	4%	9.95		3.58		0.31	240	0.000		22.71	14.68	d	11		
EC407	FORMALD				5.069	5%	9.71		3.49		0.69	360	0.002	225	37.05	20.07	d	11		
ITC1549	FORMALD		higher quality HCHO	0	0.368	7%	0.08		0.02		0.05	390	0.042		-0.11	-0.06	ri	12		
ITC1554	FORMALD		higher quality HCHO	0	0.436	7%	1.01		0.38		0.87	330	0.181		2.95	1.94		12		
ETC378	FORMALD				0.240	2%	0.22	2%	0.08	2%	0.35	360	0.012		0.53	0.56		3		
ETC441	FORMALD				0.274	2%	0.50	2%	0.17	2%	0.61	360	0.064		1.83	1.18		3		
XTC086	FORMALD				0.161	3%	1.68	3%	0.21	2%	1.32	360	0.322		2.34	1.67		1		
XTC091	FORMALD		problems	1	0.153	3%	1.73	3%	0.27	2%	1.79	360	0.308		2.22	1.65		1		
EC251	FORMALD		problems	2	0.108	7%	0.25		0.07		0.67	360	0.270	320	3.05	1.77		1		
EC252	FORMALD		problems	2	0.467	3%	0.42		0.14		0.29	360	0.024		2.02	1.34		1		
XTC096	FORMALD		Problems	2	0.170	3%	1.65	3%	0.27	3%	1.58	360	0.236		2.17	1.49		1		
EC406	FORMALD		problems	2	4.983	5%	9.29		3.34		0.67	360	0.002	170	36.23	15.66	d,lt	12	1	
EC403	FORMALD		High T. Don't model	6			9.64		3.45			360	0.007	335	38.47	14.26	d,ht	13	1	
EC404	FORMALD		Low T. Don't model	6			1.17		0.30			360	0.000		1.83	1.76	d,lt	12	1	

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHR /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
EC393	FORMALD		5.442	4%	9.94		3.57		0.66	260	0.798		72.48	36.51	d,uv	11	4			
ITC864	FORMALD	A	0.544	3%	0.08		0.01		0.02	300	0.000		-0.09	0.31		9				
ETC468	FORMALD	MRE	0.428	2%	3.51	6%	0.59	6%	1.37	360	0.949		2.68	3.01		3				
ETC470	FORMALD	MRE	0.390	2%	3.57	6%	0.63	5%	1.61	360	1.078		4.37	5.09		3				
ETC489	FORMALD	MRE	Problems	3	0.419	2%	3.61	6%	0.64	5%	1.53	360	1.062	3.61		3				
ETC352	FORMALD	MR3			0.525	2%	4.89	3%	0.46	3%	0.88	360	0.701	2.44	2.92		2			
ETC357	FORMALD	MR3			0.527	2%	4.97	3%	0.52	3%	0.99	360	0.793	3.70	3.63		2			
DTC022B	FORMALD	MR8			0.505	1%	4.48		0.56		1.10	380	0.692		7.43	4.25		1		
DTC036A	FORMALD	R8			0.182	0%	4.64		0.53		2.92	375	0.492	225	7.92	5.40		1		
EC254	ACETALD				0.107	5%	0.98		0.28		2.66	360	0.263		1.63	1.19		1		
EC400	ACETALD				5.535	11%	22.03		6.51		1.18	360	0.019	5	-31.59		d	11		
DTC055B	ACETALD				0.145	0%	3.30	6%	0.79	7%	5.44	370	0.336		1.78	1.41		1		
XTC083	ACETALD				0.246	3%	2.63	5%	0.62	6%	2.52	360	0.286		2.39	1.70		1		
XTC092	ACETALD				0.248	3%	3.32	4%	0.69	6%	2.76	360	0.225		1.93	1.45		1		
EC164	ACETALD	problems	2		0.542	4%	0.68	10%	0.21	10%	0.38	360	0.085		2.27	1.63		1		
EC397	ACETALD						32.37		9.63			270	1.663	180	57.63	44.59	d,uv	11	4	
EC399	ACETALD	Don't model	9				24.23		7.17			360	1.685	285			d,uv	11	4	
EC405	ACETALD	Low T. reject	99				16.16		4.76			360	0.407		-6.72		d,lt	11	9	
ETC335	ACETALD	MR3			0.536	2%	5.90	4%	0.80	6%	1.49	360	0.608		3.43	3.11		2		
ETC338	ACETALD	MR3			0.521	2%	7.02	5%	1.14	8%	2.19	360	0.625		4.52	3.33		2		
DTC065A	ACETALD	MR8			0.455	1%	6.96	3%	1.31	4%	2.88	375	0.629		6.29	3.74		1		
DTC066B	ACETALD	R8			0.175	0%	7.15	3%	1.37	4%	7.80	375	0.406		5.66	2.62		1		
ITC941	ACROLEIN				0.546	10%	2.02		0.51		0.93	360	0.092		1.30	1.18		10		
ITC943	ACROLEIN				0.534	11%	0.32		0.08		0.15	420	0.725	405	3.49	3.05		10		
ITC944	ACROLEIN				0.267	20%	4.93		1.24		4.66	360	0.489		2.29	1.93		10		
ITC945	ACROLEIN	A			0.523	10%	0.07		0.01		0.02	300	0.032	285	-0.05	0.36	ri	10		
ITC946	ACROLEIN	M			0.538	10%	4.11		1.20		2.22	360	0.786	255	4.53	6.23		10		
EC651	METHACRO				0.445	5%	5.78	10%	1.85	10%	4.15	360	0.247	315	6.05	3.36		1		
EC652	METHACRO				0.449	5%	3.17	10%	1.01	10%	2.26	360	0.229		5.53	2.79		1		
EC655	METHACRO				0.796	6%	5.86	10%	1.88	10%	2.36	390	0.350		7.09	4.18		1		
ITC513	METHACRO				0.571	3%	10.05	10%	3.22	10%	5.63	390	0.672	255	6.89	5.84	hl	2		
ITC819	METHACRO				0.482	4%	6.89		2.21		4.58	360	0.747		4.52	3.40		8		
ITC823	METHACRO				0.511	3%	129.34		41.39		81.07	360	0.674	240	6.45	5.31		8		
ETC386	METHACRO				0.564	3%	8.83	5%	2.83	5%	5.01	360	0.664	270	5.28	4.56		3		
DTC075A	METHACRO				0.497	1%	18.49	16%	5.69	17%	11.43	370	0.600	210	7.26	5.72		1		
DTC075B	METHACRO				0.259	1%	10.37	15%	3.09	17%	11.90	370	0.450	260	2.88	2.82		1		
XTC094	METHACRO				0.492	3%	16.77	5%	5.06	5%	10.28	360	0.457	245	5.24	4.28		1		
XTC102	METHACRO				0.236	3%	7.17	4%	2.00	5%	8.44	360	0.405	305	3.09	2.46		1		
EC530	METHACRO	minor problems	1		0.427	11%	3.01	10%	0.96	10%	2.25	360	0.300		3.50	2.64		1		
DTC057A	METHACRO	do not model	9		0.449	1%	13.81	16%	4.22	17%	9.38	380	0.464	60	13.21	26.06		1	no	
DTC057B	METHACRO	do not model	9		0.243	1%	7.30	15%	2.13	17%	8.75	380	0.383		9.39	3.10		1	no	
DTC074A	BIACET	can't model	9		0.000													1	no	no
DTC074B	BIACET	can't model	9		0.000													1	no	no
EC401	ACETONE				6.410	9%	1.64		0.01		0.00	360	0.056	5	1.02	14.15	d	11		
ETC445	ACETONE				0.137	3%	25.44	10%	0.08	10%	0.58	360	0.231		1.18	0.99		3		
DTC054B	ACETONE				0.286	1%	33.68	7%	0.13	6%	0.45	375	0.220		1.63	1.24		1		
DTC055A	ACETONE				0.146	0%	45.79	7%	0.17	6%	1.14	370	0.416		2.23	1.59		1		
XTC084	ACETONE				0.241	3%	27.94	5%	0.12	4%	0.48	360	0.377		2.41	1.86		1		



RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
XTC090	ACETONE		problems	1	0.195	3%	30.07	6%	0.13	5%	0.64	360	0.357		1.94	1.55		1		
ETC480	ACETONE	MRE			0.417	2%	13.91	8%	0.58	6%	1.40	360	0.890		1.91	2.57		3		
ETC481	ACETONE	MRE			0.417	2%	20.59	9%	0.57	6%	1.37	360	0.878		2.33	2.75		3		
ETC490	ACETONE	MRE			0.422	2%	27.74	9%	0.58	5%	1.37	360	0.953		2.95	3.39		3		
ETC243	ACETONE	MR3			0.494	2%	6.37	10%	0.38	8%	0.77	360	0.398		0.86	1.80		2		
ETC245	ACETONE	MR3			0.496	2%	9.14	13%	0.40	8%	0.80	360	0.478		1.11	2.06		2		
ETC247	ACETONE	MR3			0.491	2%	13.01	17%	0.40	8%	0.82	360	0.551		1.55	2.27		2		
DTC028A	ACETONE	MR8			0.483	1%	30.24		0.49		1.01	375	0.672		5.50	3.61		1		
DTC064B	ACETONE	MR8			0.487	1%	52.61	7%	0.52	3%	1.07	375	0.788		7.26	4.23		1		
EC648	MVK				0.835	6%	3.60	25%	0.65	25%	0.77	360	0.375	300	7.26	5.50		1		
ITC512	MVK				0.605	3%	8.01	25%	1.44	25%	2.39	360	0.570	210	6.48	5.82	hl	2		
ITC815	MVK				0.520	3%	7.39	25%	1.33	25%	2.55	330	0.592	254	5.77	4.54		8		
ITC816	MVK				0.506	3%	3.49	25%	0.63	25%	1.24	450	0.731		3.46	2.68		8		
XTC120	MVK				0.529	3%	8.98	4%	1.45	5%	2.75	365	0.471	240	2.71	3.55		1		
XTC121	MVK				0.517	3%	4.72	4%	0.69	5%	1.33	375	0.456		1.26	2.23		1		
EC529	MVK		minor problems	1	0.484	11%	3.91	25%	0.70	25%	1.45	360	0.469	330	3.67	3.64		1		
EC644	MVK			1	0.491	7%	2.34	25%	0.42	25%	0.85	330	0.312	255	6.30	5.83		1		
EC649	MVK	A			0.465	5%	0.07		0.01		0.02	360	0.235	345	0.55	2.15	ri	1		
EC647	BENZALD	A			0.873	3%	0.07		0.01		0.01						ri	1		
ITC460	BENZALD	A			0.085	18%	0.07	6%	0.01	5%	0.13	360	0.013	105	0.10	0.12	ri	2		
EC646	BENZALD	A		1	0.486	5%	0.07		0.01		0.02	390	0.992	270	0.53	0.63	ri	1		
ITC457	BENZALD	R4			0.085	13%	8.12	17%	0.65	15%	7.67	330	0.187	255	0.86	1.38		2		
ITC462	BENZALD	R4			0.094	12%	6.92	7%	0.57	5%	6.06	345	0.099	225	0.38	0.71		2		
ITC466	BENZALD	R4			0.097	13%	5.93	6%	0.50	4%	5.18	360	0.131	240	0.54	0.70		2		
ITC468	BENZALD	R4			0.086	13%	4.20	7%	0.38	4%	4.36	360	0.176	240	0.80	1.29		2		
EC281	CRESOL				0.488	10%	2.76		0.64		1.30	390	0.075	385	1.40	1.56		1		
EC289	CRESOL				0.468	10%	2.08		0.48		1.03	360	0.136	175	3.52	2.63		1		
EC290	CRESOL				0.500	9%	2.55		0.59		1.18	360	0.071	350	1.55	1.41		1		
EC280	CRESOL		reject	99								360	0.073		-0.21					9
ITC778	PYRROLE				0.491	8%	3.87	5%	4.46	5%	9.07	60	0.511		14.99	29.62		7		
ITC779	PYRROLE				0.566	17%	1.07	5%	1.23	5%	2.17	90	0.057		6.84	8.45		7		
ITC735	PYRROLE		VOC/NOx too high	1	0.513	5%	2.11		2.43		4.74	270	0.319	30	12.01	17.27		6		
ITC780	PYRROLE	A			0.537	4%	0.08	5%	0.01	7%	0.02	300	0.030	285	0.18	0.78	ri	7		
ITC729	THIOPHEN				0.526	5%	1.72		0.05		0.10	360	0.068		1.17	1.50		6		
ITC730	THIOPHEN				0.492	5%	7.11		0.22		0.45	300	0.405	195	5.04	5.95		6		
ITC733	THIOPHEN				0.262	5%	1.73		0.05		0.20	450	0.248		1.45	1.56		6		
ITC744	THIOPHEN				0.572	5%	6.55		0.20		0.35	270	0.479	195	6.56	7.27		7		
ETC342	CL2IBUTE	MR3			0.549	2%	4.51		0.48		0.88	360	0.899		1.35	3.16		2		
ETC343	CL2IBUTE	MR3			0.543	2%	4.87		0.50		0.93	360	0.887		1.45	2.92		2		
ETC350	CL2IBUTE	MR3			0.532	2%	5.29		0.57		1.07	360	0.959		1.63	3.43		2		
ETC179	SI2OME6	MR3	problems	3	0.387							360	0.012		0.59	0.74		2		
ETC183	SI2OME6	MR3	problems	3	0.369							360	0.022		0.63	0.78		2		
ETC391	SI2OME6	R3			0.145	4%	28.28	4%	0.54	3%	3.70	360	0.192		0.52	0.74		3		
ETC396	SI2OME6	R3			0.150	4%	21.29	4%	0.50	4%	3.29	360	0.296		0.56	0.92		3		
ETC406	(SIOME)4	MR3			0.165	4%	14.74	5%	0.36	4%	2.19	360	0.304		0.44	0.93		3		
ETC181	(SIOME)4	MR3	problems	3	0.389							360	0.010	315	0.33	0.43		2		
ETC185	(SIOME)4	MR3	problems	3	0.382							360	0.021	315	0.42	0.69		2		
ETC194	(SIOME)4	MR3	problems	3								360	0.082		0.46	0.93		2		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)						
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File			
ETC398	(SIOME)4	R3		0.136	4%	25.50	5%	0.43	4%	3.14	360	0.212		0.40	0.68		3				
ETC402	(SIOME)4	R3		0.116	4%	18.44	5%	0.39	4%	3.34	360	0.260		0.38	0.76		3				
ETC187	(SIOME)5	MR3	problems	3	0.388						360	0.014		0.19	0.45		2	no	no		
ETC190	(SIOME)5	MR3	problems	3							360	0.031		0.32	0.57		2	no	no		
ETC192	(SIOME)5	MR3	problems	3							360	0.032		0.30	0.58		2				
ETC404	SI2OMEOH	MR3		0.195	4%	9.64	35%				360	0.219		0.41	0.82		3	no			
ETC412	SI2OMEOH	MR3		0.523	3%	8.47	24%				360	0.149		0.67	1.27		3	no			
ETC409	SI2OMEOH	MR3	porblems	3	0.561	3%	16.41	38%			360	0.040		0.51	0.93		3	no			
ETC400	SI2OMEOH	R3		0.130	4%	18.45	41%				360	0.119		0.41	0.56		3	no			
EC166	MIX-A			0.106	12%	9.18		0.25		2.31	480	0.461	410	2.56	1.90		1				
EC172	MIX-A			0.102	12%	2.78		0.08		0.82	690	0.368		1.45	0.92		1				
EC144	MIX-E			0.510	2%	4.72	5%	0.88	4%	1.72	360	1.063	170	10.92	10.74		1				
EC145	MIX-E			1.004	2%	3.38	4%	0.77	4%	0.77	360	0.775		6.21	4.84		1				
EC149	MIX-E			0.999	2%	1.99	4%	0.89	4%	0.89	360	0.275		10.01	4.83		1				
EC150	MIX-E			1.015	2%	3.46	4%	0.90	3%	0.88	360	0.797		8.24	5.34		1				
EC151	MIX-E			2.065	2%	4.87	3%	1.47	3%	0.71	360	0.146		10.15	11.38		1				
EC152	MIX-E			0.512	3%	3.67	4%	0.96	3%	1.87	380	0.790	215	10.31	8.27		1				
EC160	MIX-E			1.013	2%	3.23		0.73		0.72	360	0.873		7.79	5.84		1				
EC161	MIX-E			0.542	5%	3.23		0.83		1.54	345	0.855	210	10.12	8.46		1				
EC153	MIX-E	problems		0.987	2%	6.61	4%	1.70	3%	1.72	360	1.048	180	17.82	14.62		1				
XTC111	MIX-AE			0.224	3%	15.91	4%	1.14	4%	5.10	375	0.488		0.39	0.87		1				
EC114	MIX-AE	Don't model		9	1.155	2%	16.94	4%	1.13	4%	0.97	360	0.744	330	10.37	7.40		1	3	no	
EC115	MIX-AE	Don't model		9	0.589	3%	12.69	5%	0.60	4%	1.02	450	0.590	420	4.60	3.67		1	3	no	
EC116	MIX-AE	Don't model		9	0.574	3%	18.47	4%	1.22	4%	1.22	450	0.743	170	9.04	9.28		1	3	no	
EC097	MIX-AE	Don't model		9	0.484	2%	9.74		0.70		1.45	360	0.578	240	6.57	5.76		1	9		
EC099	MIX-AE	Don't model		9	0.500	3%	9.20		0.60		1.20	360	0.557	300	6.22	4.68		1	9		
EC106	MIX-AE	Don't model		9	0.509	3%	9.21		0.60		1.18	440	0.592	380	4.07	3.57		1	9		
EC113	MIX-AE	Don't model		9	0.134	7%	9.43	4%	0.61	4%	4.58	360	0.352	130	5.43	5.32		1	9		
EC163	MIX-AO	problems		2	0.508	3%	8.81		0.47		0.92	360	0.429		4.59	2.85		1			
EC168	MIX-AO	reject		99	0.488	4%	7.95		0.23	0.47	690	0.653	640	3.70	1.84		1	9			
EC217	MIX-EO				0.479	4%	0.59		0.19	0.39	720	0.149		1.11	1.06		1				
EC257	MIX-EO	problems		2	0.524	3%	0.77		0.25	0.48	360	0.066		3.52	2.26		1				
EC272	MIX-RO	problems			0.479	8%	4.78		0.35	0.73	360	0.409	355	4.35	3.00		1				
EC335	MIX-RO				0.499	4%	7.64	9%	0.42	8%	0.85	360	0.397	220	5.38	4.65		1			
EC336	MIX-RO				0.495	4%	7.36		0.34	0.69	360	0.394	160	6.65	6.24		1				
EC337	MIX-RO				0.507	4%	7.92	9%	0.30	8%	0.60	360	0.324	255	2.60	2.92		1			
EC338	MIX-RO				0.502	3%	14.79	8%	0.42	7%	0.83	360	0.482	230	5.80	5.20		1			
EC339	MIX-RO				0.503	3%	5.07	8%	0.21	7%	0.43	360	0.224		1.31	1.73		1			
EC328	MIX-AR				0.496	3%	12.13	8%	0.33	8%	0.67	360	0.521	350	4.42	3.36		1			
EC331	MIX-AR				0.520	3%	22.11	8%	0.65	8%	1.26	360	0.523	125	9.45	9.77		1			
DTC073B	MIX-AR				0.487	1%	9.11	4%	0.44	4%	0.90	360	0.014		0.35	0.51		1			
DTC076A	MIX-AR				0.483	1%	5.75	4%	0.31	4%	0.64	370	0.033		0.41	0.66		1			
EC329	MIX-ER				0.498	3%	4.18	9%	0.22	6%	0.45	360	0.402	300	3.73	3.27		1			
EC330	MIX-ER				0.316	2%	4.25	9%	0.22	6%	0.70	360	0.343	180	4.30	4.03		1			
EC334	MIX-ER				0.499	3%	7.24	10%	0.32	7%	0.64	360	0.407	175	6.16	5.90		1			
ETC218	MIX-ER				0.469	2%	4.83	8%	0.61	8%	1.29	360	0.788	225	4.68	6.56		2			
EC231	SURG-7				0.681	3%	13.17		0.97		1.42	360	0.621	240	6.49	6.48		o	1		
EC232	SURG-7				0.482	4%	9.31		0.47		0.97	390	0.339		2.88	2.71		1			

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			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
EC233	SURG-7		0.094	20%	9.50		0.48		5.06	360	0.326	240	3.98	2.97			1		
EC238	SURG-7		0.906	2%	10.10		0.82		0.90	490	0.688	430	5.77	4.18			1		
EC241	SURG-7		0.465	2%	4.97		0.40		0.86	360	0.406		2.89	2.52			1		
EC242	SURG-7		0.462	5%	12.83		1.47		3.18	360	0.678	100	14.91	16.32			1		
EC243	SURG-7		0.469	3%	9.74					150	0.712	125	13.57	13.64			1		
EC245	SURG-7		0.937	2%	12.86		1.47		1.57	360	0.890	175	12.89	12.75			1		
EC246	SURG-7		0.478	2%	8.56		0.44		0.91	570	0.571	560	3.17	2.16			1		
EC247	SURG-7		0.481	2%	6.17		0.72		1.50	300	0.654	220	7.21	6.55			1		
EC237	SURG-7	problems	2	0.465	2%	10.66		0.84		1.80	360	0.649	240	7.17	6.15			1	
ITC438	SURG-4		0.080	17%	3.93	8%	0.37	4%	4.62	360	0.298		3.42	2.08			2		
ITC440	SURG-4		0.079	16%	1.84	8%	0.17	4%	2.15	360	0.313		1.77	1.53			2		
ITC442	SURG-4		0.139	9%	3.67	8%	0.34	4%	2.46	360	0.481		3.15	2.66			2		
ITC444	SURG-4		0.138	10%	1.78	8%	0.16	4%	1.19	630	0.446		1.24	1.16			2		
ITC446	SURG-4		0.075	16%	5.49	6%	0.39	4%	5.26	360	0.246	165	4.23	1.65			2		
ITC450	SURG-4		0.082	14%	3.62	8%	0.35	4%	4.24	360	0.343	345	3.47	2.10			2		
ITC452	SURG-4		0.084	13%	3.51	8%	0.33	4%	3.96	360	0.342		3.32	2.02			2		
ITC456	SURG-4		0.083	14%	17.47		0.41		4.92	360	0.337		3.20	1.97			2		
ITC459	SURG-4		0.080	14%	3.68	8%	0.35	4%	4.33	360	0.330	345	3.00	2.12			2		
ITC461	SURG-4		0.086	13%	3.74	8%	0.35	4%	4.09	360	0.327		3.15	1.98			2		
ITC465	SURG-4		0.091	12%	3.55	8%	0.33	4%	3.66	360	0.331	345	3.33	2.13			2		
ITC467	SURG-4		0.094	13%	3.61	8%	0.33	4%	3.52	360	0.305		2.94	1.91			2		
ITC471	SURG-4		0.088	14%	3.46	8%	0.33	4%	3.72	360	0.297		2.91	1.87			2		
ITC483	SURG-4		0.083	15%	3.61	8%	0.34	4%	4.03	360	0.337		2.66	1.95			2		
ITC488	SURG-4		0.081	14%	5.35	9%	0.39	4%	4.75	360	0.292		3.07	1.80			2		
ITC489	SURG-4		0.085	13%	3.69	8%	0.35	4%	4.06	360	0.293		2.88	1.80			2		
ITC497	SURG-4		0.086	13%	3.60	8%	0.34	4%	3.95	360	0.292		2.62	1.77			2		
ITC501	SURG-4		0.088	13%	3.58	8%	0.34	4%	3.81	360	0.316	345	2.96	1.97			2		
ITC503	SURG-4		0.094	15%	3.64	8%	0.34	4%	3.61	360	0.284		2.87	1.74			2		
ITC571	SURG-4		0.110	21%	3.57	5%	0.33	4%	3.01	360	0.313	331	2.62	2.32			4		
ITC572	SURG-4		0.120	19%	3.66	5%	0.34	4%	2.83	360	0.361		3.24	2.17			4		
ITC574	SURG-4		0.095	21%	3.47	5%	0.33	4%	3.49	360	0.329	345	3.61	2.18			4		
ITC578	SURG-4		0.088	18%	3.39	5%	0.32	4%	3.61	360	0.349		2.82	1.98			4		
ITC580	SURG-4		0.093	13%	3.52	5%	0.33	4%	3.51	360	0.352		2.80	2.13			4		
ITC581	SURG-4		0.092	13%	3.99	5%	0.48	5%	5.18	360	0.350	345	4.06	2.31			4		
ITC584	SURG-4		0.093	12%	3.73	5%	0.36	4%	3.82	360	0.375		2.91	2.23			4		
ITC586	SURG-4		0.080	19%	3.58	5%	0.34	4%	4.29	360	0.352		3.42	2.22			4		
ITC590	SURG-4		0.086	34%	3.54	5%	0.33	4%	3.81	360	0.369		2.98	2.05			4		
ITC598	SURG-4		0.096	12%	3.69	5%	0.37	4%	3.83	360	0.363		3.16	2.18			4		
ITC603	SURG-4		0.088	13%	3.47	5%	0.34	4%	3.88	360	0.330		3.03	2.04			4		
ITC607	SURG-4		0.096	14%	3.81	5%	0.37	4%	3.89	360	0.380		2.92	2.25			4		
ITC609	SURG-4		0.090	15%	3.82	5%	0.37	4%	4.10	360	0.363		3.01	2.10			4		
ITC613	SURG-4		0.083	16%	3.81	5%	0.37	4%	4.52	360	0.334	345	2.90	1.97			4		
EC676	SURG-4	problems	3	0.090	18%	4.22	8%	0.40	4%	4.40	360	0.171	150					1	
ITC437	SURG-4	problems	3	0.080	16%	3.79	8%	0.35	4%	4.41	360	0.396		4.74	5.13			2	
ITC473	SURG-4	No Temp	2	0.086	15%	3.54	8%	0.33	4%	3.81	360	0.296	285	2.50	2.18			2	3 no
ITC493	SURG-4	No Temp	2	0.083	14%	3.70	8%	0.35	4%	4.24	360	0.296		2.96	1.85			2	3 no
ITC499	SURG-4	No Temp	2	0.086	13%	3.63	8%	0.34	4%	3.91	360	0.287		2.90	1.78			2	3 no
ITC439	SURG-4	Reject	99	0.075	15%					360	0.345	345	3.67	2.04			2	3 no	

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)				
			ppm	unc	ppmC	unc	Prop. Equiv	unc	Ohr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
EC675	SURG-4	Don't model	9	0.121	16%	4.10	8%	0.38	4%	3.12	300	0.174	165				1	9	
ITC445	SURG-4	don't model	9	0.038	92%	3.41	8%	0.32	4%	8.33	400	0.332		3.78	1.81		2	9	
ITC479	SURG-4	Don't model	9	0.083	14%	3.61	8%	0.34	4%	4.08	360	0.332		2.99	1.99		2	9	
ITC592	SURG-4	Don't model	9	0.053	98%	3.19	5%	0.31	4%	5.79	360	0.359	345	3.10	2.17		4	9	
ITC597	SURG-4	Don't model	9	0.087	13%	3.43	5%	0.34	4%	3.87	360	0.339		3.02	2.73	o	4	9	
ITC977	SURG-4	Don't model	9	0.097	53%	3.17	2%	0.30	2%	3.12	360	0.365	345	4.29	2.24		11	9	
ITC978	SURG-4	Don't model	9	0.074	69%	3.28	2%	0.32	2%	4.27	360	0.351	345	4.28	2.17		11	9	
ITC980	SURG-4	Don't model	9	0.100	51%	2.64	2%	0.25	2%	2.52	360	0.400		3.74	2.24		11	9	
ITC982	SURG-4	Don't model	9	0.084	60%	2.95	2%	0.29	2%	3.38	360	0.364		4.33	2.36		11	9	
ITC985	SURG-4	Don't model	9	0.088	58%	2.70	2%	0.27	2%	3.03	360	0.355		4.17	2.00		11	9	
ITC991	SURG-4	Don't model	9	0.106	48%	2.56	2%	0.25	3%	2.37	360	0.387	345	4.68	2.23		11	9	
ITC994	SURG-4	Don't model	9	0.075	68%	2.47	2%	0.24	3%	3.24	360	0.333		4.08	1.86		11	9	
ITC997	SURG-4	Don't model	9	0.105	49%	2.69	2%	0.26	2%	2.49	360	0.322		3.93	1.91		11	9	
ITC477	SURG-4	reject	99	0.089	13%	3.46	8%	0.33	4%	3.73	360	0.359	165	2.78	2.24		2	9	
ITC487	SURG-4	reject	99	0.084	14%	3.58	8%	0.28	5%	3.37	360	0.278	345				2	9	
ITC573	SURG-4R			0.111	20%	3.10	6%	0.18	4%	1.62	360	0.339		2.27	2.07		4		
ETC455	SURG-8			0.550	2%	4.07		0.42		0.76	360	0.234		2.36	2.56		3		
ETC460	SURG-8			0.500	2%	3.83		0.37		0.75	360	0.286		2.30	2.69		3		
ETC463	SURG-8			0.515	2%	0.06		0.02		0.04	360	0.235		2.16	2.50		3		
DTC029B	SURG-8			0.174	0%	4.27		0.43		2.46	370	0.495		6.06	3.36		1		
DTC030A	SURG-8			0.167	0%	4.00		0.40		2.38	375	0.459		6.53	3.10		1		
DTC031B	SURG-8			0.171	1%	4.27		0.43		2.50	370	0.480		5.85	3.28		1		
DTC032A	SURG-8			0.174	0%	4.21		0.42		2.44	380	0.468		6.30	3.15		1		
DTC033B	SURG-8			0.168	0%	4.15		0.41		2.46	370	0.476	340	5.70	3.43		1		
DTC034A	SURG-8			0.165	0%	3.96		0.41		2.46	370	0.465	350	6.29	3.31		1		
DTC035B	SURG-8			0.167	0%	3.98		0.40		2.36	370	0.474	340	5.69	3.21		1		
DTC036B	SURG-8			0.181	0%	4.35		0.44		2.40	375	0.481	315	7.12	3.85		1		
DTC037A	SURG-8			0.174	0%	4.25		0.42		2.43	380	0.471	350	6.49	3.37		1		
DTC038B	SURG-8			0.169	0%	3.91		0.39		2.29	370	0.468	340	5.64	3.37		1		
DTC066A	SURG-8			0.173	0%	3.80	2%	0.37	2%	2.16	375	0.459	325	5.73	3.43		1		
DTC067A	SURG-8			0.171	0%	3.84	2%	0.38	2%	2.20	375	0.457		5.56	3.09		1		
DTC071A	SURG-8			0.178	0%	3.97	2%	0.39	2%	2.18	375	0.464	345	5.77	3.32		1		
XTC109	SURG-8			0.243	3%	3.75	3%	0.38	2%	1.58	360	0.517		3.61	3.08		1		
XTC116	SURG-8			0.222	3%	4.07	3%	0.42	3%	1.88	365	0.491		3.84	3.12		1		
DTC027A	SURG-8	minor problems	1	0.153	0%	3.98		0.40		2.63	385	0.493	345				1		
DTC027B	SURG-8	minor problems	1	0.153	0%	4.03		0.41		2.65	385	0.498					1		
ETC454	SURG-8	problems	2	0.517	2%	4.17		0.41		0.80	360	0.292		8.20	2.73		3		
DTC039A	SURG-8	problems	2	0.178	0%	4.09		0.41		2.28	380	0.469		6.58	3.22		1		
ETC504	SURG-8	Can't model	9	0.402	2%						360	0.382		2.27	2.30		3		
ITC626	SURG-8	MD		0.293	8%	4.07	3%	0.51	5%	1.74	1800	0.615	660	2.07	2.17	md,ri	5		
ITC630	SURG-8	MD		0.312	8%	1.93	4%	0.25	5%	0.79	3600	0.282	720	1.14	0.86	md,ri	5		
ITC631	SURG-8	MD		0.319	11%	1.05	3%	0.14	5%	0.42	4170	0.042	705	0.63	0.42	md,ri	5		
ITC633	SURG-8	MD		0.613	8%	3.94	4%	0.51	5%	0.82	3300	0.230	720	1.39	1.17	md	5		
ITC635	SURG-8	MD		1.188	7%	4.01	4%	0.52	5%	0.44	2850	0.006	660	1.14	0.82	md	5		
ITC637	SURG-8	MD		0.298	9%	3.93	4%	0.51	5%	1.70	5190	0.614	570	2.20	2.25	md,ri	5		
ITC865	SURG-8	MD		0.310	10%	4.51	4%	0.63	5%	2.04	4680	0.635	510	2.10	2.58	md,ri	9		
ITC867	SURG-8	MD	4-day run, inj. days 3,4	0	0.280	6%	5.02		0.52	1.85	4680	0.634	675	2.55	1.97	md,ri	9		
ITC868	SURG-8	MD		0.366	4%	2.49	4%	0.39	5%	1.07	2805	0.520	675	2.50	1.68	md	9		

RunID	Classification	MD	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)			
				ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File
ITC871	SURG-8	MD		0.366	5%	1.97	4%	0.29	5%	0.79	2760	0.377	735	1.25	1.13	md	9		
ITC872	SURG-8	MD		0.361	5%	2.12		0.25		0.68	1800	0.214	705	1.45	0.96	md	9		
ITC873	SURG-8	MD		0.375	5%	1.20	4%	0.19	5%	0.51	2775	0.161	735	0.99	0.75	md	9		
ITC874	SURG-8	MD		0.359	5%	2.05	9%	0.22	6%	0.60	2865	0.192	750	0.94	0.77	md	9		
ITC877	SURG-8	MD		0.376	7%	2.53		0.26		0.70	2160	0.251	735	1.55	0.94	md	9		
ITC880	SURG-8	MD		0.664	5%	2.34	5%	0.31	5%	0.47	4590	0.031	735	0.85	0.73	md	9		
ITC881	SURG-8	MD		0.665	5%	2.27		0.25		0.38	4200	0.012	450	0.78	0.65	md	9		
ITC885	SURG-8	MD		0.638	2%	1.39	4%	0.19	5%	0.29	4215	0.012	720	0.46	0.45	md	9		
ITC888	SURG-8	MD		0.317	4%	3.61	11%	0.40	6%	1.26	2760	0.583	720	1.46	1.58	md	9		
ITC891	SURG-8	MD		0.321	4%	4.18	4%	0.57	5%	1.78	2760	0.606	495	2.11	2.70	md	9		
ITC886	SURG-8	MD	Don't model	9	0.708	2%	2.33	0.23		0.32	4200	0.012	600	0.40	0.46	md	9	9	
ETC047	SURG-3M			0.530	2%	4.24	8%	0.39	8%	0.74	360	0.355		2.10	1.93		1		
ETC050	SURG-3M			0.511	2%	3.87	8%	0.38	8%	0.74	360	0.310		1.81	1.96		1		
ETC052	SURG-3M			0.514	2%	3.85	8%	0.37	8%	0.73	360	0.243		1.51	1.87		1		
ETC058	SURG-3M			0.500	3%	3.83	7%	0.38	7%	0.76	360	0.231		1.40	1.77		1		
ETC060	SURG-3M			0.505	3%	3.88	7%	0.38	7%	0.74	360	0.285		1.33	1.74		1		
ETC063	SURG-3M			0.507	3%	3.78	7%	0.37	7%	0.73	360	0.243		1.24	1.66		1		
ETC067	SURG-3M			0.504	3%	3.76	7%	0.36	7%	0.71	360	0.246		1.34	1.70		1		
ETC071	SURG-3M			0.498	3%	3.57	7%	0.35	7%	0.70	360	0.291		1.35	1.70		1		
ETC075	SURG-3M			0.509	3%	3.68	7%	0.35	7%	0.69	360	0.182		0.95	1.38		1		
ETC077	SURG-3M			0.508	3%	3.60	7%	0.34	7%	0.68	360	0.213		0.84	1.38		1		
ETC080	SURG-3M			0.505	3%	3.65	7%	0.35	7%	0.68	360	0.290		1.68	1.76		1		
ETC081	SURG-3M			0.513	3%	3.67	7%	0.35	7%	0.68	360	0.195		1.19	1.49		1		
ETC083	SURG-3M			0.503	3%	3.64	7%	0.35	7%	0.69	360	0.235		1.66	1.80		1		
ETC087	SURG-3M			0.512	3%	3.65	7%	0.35	7%	0.68	360	0.187		1.22	1.45		1		
ETC089	SURG-3M			0.520	3%	3.63	7%	0.35	7%	0.67	360	0.182		1.25	1.46		1		
ETC090	SURG-3M			0.546	3%	3.80	7%	0.37	7%	0.67	360	0.109		0.53	0.95		2		
ETC091	SURG-3M			0.508	2%	3.55	7%	0.33	7%	0.66	360	0.090		0.46	0.99		2		
ETC093	SURG-3M			0.515	2%	3.63	7%	0.34	7%	0.67	360	0.122		0.63	1.09		2		
ETC095	SURG-3M			0.509	2%	3.67	7%	0.35	7%	0.69	360	0.105		0.54	1.01		2		
ETC098	SURG-3M			0.511	2%	3.52	7%	0.33	7%	0.65	360	0.088		0.57	1.09		2		
ETC100	SURG-3M			0.510	2%	3.56	7%	0.34	7%	0.66	360	0.109		0.52	0.96		2		
ETC102	SURG-3M			0.507	2%	3.59	7%	0.34	7%	0.67	360	0.138		0.75	1.13		2		
ETC104	SURG-3M			0.498	2%	3.51	7%	0.34	7%	0.68	360	0.110		0.55	0.98		2		
ETC107	SURG-3M			0.501	2%	3.71	7%	0.36	7%	0.72	360	0.130		0.78	1.19		2		
ETC109	SURG-3M			0.518	2%	3.60	7%	0.34	7%	0.66	360	0.075		0.45	0.78		2		
ETC113	SURG-3M			0.508	2%	3.62	7%	0.35	7%	0.69	360	0.085		0.47	0.90		2		
ETC114	SURG-3M			0.486	2%	3.59	7%	0.34	7%	0.69	360	0.089		0.39	0.89		2		
ETC115	SURG-3M			0.533	2%	3.54	7%	0.33	7%	0.61	360	0.066		0.41	0.90		2		
ETC116	SURG-3M			0.514	2%	3.79	7%	0.37	7%	0.72	360	0.194		0.56	1.31		2		
ETC117	SURG-3M			0.521	2%	3.64	7%	0.33	7%	0.64	360	0.088		0.46	0.97		2		
ETC119	SURG-3M			0.523	2%	3.77	7%	0.35	7%	0.67	360	0.111		0.57	1.11		2		
ETC122	SURG-3M			0.527	2%	3.46	7%	0.31	6%	0.58	360	0.121		0.46	0.97		2		
ETC124	SURG-3M			0.502	2%	3.42	7%	0.31	6%	0.61	360	0.111		0.43	0.91		2		
ETC126	SURG-3M			0.524	2%	3.50	7%	0.31	6%	0.59	360	0.083		0.43	0.89		2		
ETC128	SURG-3M			0.531	2%	3.53	7%	0.31	6%	0.59	360	0.066		0.39	0.87		2		
ETC129	SURG-3M			0.527	2%	3.50	7%	0.31	6%	0.59	360	0.071		0.35	0.40		2		
ETC130	SURG-3M			0.523	5%	3.39	7%	0.30	6%	0.58	360	0.077		0.48	0.94		2		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)				
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
ETC132	SURG-3M		0.540	5%	3.50	7%	0.31	6%	0.56	360	0.082		0.35	0.90			2		
ETC134	SURG-3M		0.531	5%	3.46	7%	0.31	6%	0.57	360	0.085		0.38	0.91			2		
ETC137	SURG-3M		0.523	5%	3.29	7%	0.29	6%	0.56	360	0.064		0.55	0.82			2		
ETC139	SURG-3M		0.530	5%	3.43	7%	0.31	6%	0.58	360	0.074		0.64	0.87			2		
ETC143	SURG-3M				3.16	7%	0.29	8%		360	0.097		0.57	1.25			2		
ETC145	SURG-3M		0.513	2%	3.06	8%	0.28	9%	0.55	360	0.051		0.40	0.85			2		
ETC147	SURG-3M		0.503	2%	3.06	8%	0.28	9%	0.55	360	0.055		0.45	0.88			2		
ETC149	SURG-3M		0.514	2%	3.06	7%	0.28	8%	0.54	360	0.064		0.37	0.92			2		
ETC153	SURG-3M		0.527	3%						360	0.316		0.93	1.80			2	no	no
ETC154	SURG-3M		0.505	3%						360	0.249		0.85	1.53			2	no	no
ETC156	SURG-3M		0.508	3%	4.35	7%	0.40	8%	0.79	360	0.301		0.80	1.70			2		
ETC158	SURG-3M		0.495	3%	4.33	7%	0.40	8%	0.80	360	0.236		0.63	1.43			2		
ETC160	SURG-3M		0.500	3%	4.87	8%	0.44	8%	0.88	360	0.297		0.75	1.66			2		
ETC161	SURG-3M		0.518	2%	4.69	8%	0.43	8%	0.83	360	0.300		0.73	1.63			2		
ETC162	SURG-3M		0.496	2%	4.71	8%	0.43	9%	0.86	360	0.316		0.72	1.64			2		
ETC165	SURG-3M		0.503	2%	4.89		0.43		0.85	360	0.411		0.71	1.72			2		
ETC168	SURG-3M		0.518	2%	4.51	7%	0.39	5%	0.75	360	0.336		0.76	1.69			2		
ETC170	SURG-3M		0.511	2%	4.54	9%	0.40	12%	0.78	360	0.337		0.73	1.62			2		
ETC172	SURG-3M		0.501	4%	4.54	7%	0.41	4%	0.81	360	0.307		0.62	1.49			2		
ETC174	SURG-3M		0.496	4%	4.80	6%	0.44	4%	0.88	360	0.297		0.63	1.49			2		
ETC210	SURG-3M		0.502	3%	4.78	7%	0.41	5%	0.82	360	0.280		0.57	1.51			2		
ETC215	SURG-3M		0.481	2%	4.59	8%	0.39	8%	0.80	360	0.265		0.60	1.47			2		
ETC223	SURG-3M		0.500	2%	4.39	8%	0.40	8%	0.79	360	0.324		0.88	1.72			2		
ETC225	SURG-3M		0.502	2%	4.40	8%	0.40	8%	0.80	360	0.169		0.58	0.44			2		
ETC227	SURG-3M		0.501	2%	4.86	8%	0.43	8%	0.86	360	0.242		0.59	1.34			2		
ETC229	SURG-3M		0.514	2%	4.70	8%	0.43	8%	0.83	360	0.236		0.55	1.40			2		
ETC231	SURG-3M		0.504	2%	4.72	8%	0.42	8%	0.83	360	0.255		0.64	1.47			2		
ETC236	SURG-3M		0.499	2%	4.31	8%	0.38	8%	0.77	360	0.314		0.67	1.54			2		
ETC238	SURG-3M		0.474	2%	4.10	8%	0.37	8%	0.79	360	0.313		0.57	1.47			2		
ETC240	SURG-3M		0.479	2%	4.18	8%	0.37	8%	0.78	360	0.263		0.51	1.30			2		
ETC242	SURG-3M		0.480	2%	4.35	8%	0.38	8%	0.80	360	0.362		0.66	1.57			2		
ETC244	SURG-3M		0.475	2%	4.20	8%	0.37	8%	0.78	360	0.320		0.53	1.48			2		
ETC246	SURG-3M		0.490	2%	4.33	8%	0.38	8%	0.78	360	0.341		0.68	1.55			2		
ETC248	SURG-3M		0.490	2%	4.61	8%	0.42	9%	0.86	360	0.452		0.73	1.72			2		
ETC250	SURG-3M		0.498	2%	4.84	5%	0.44	3%	0.88	360	0.347		0.63	1.56			2		
ETC252	SURG-3M		0.495	2%	4.36		0.41		0.83	360	0.295		0.61	1.45			2		
ETC254	SURG-3M		0.423	2%	4.14	6%	0.37	5%	0.88	360	0.258		0.60	1.28			2		
ETC256	SURG-3M		0.489	2%	4.50	6%	0.41	5%	0.83	360	0.399		0.94	1.67			2		
ETC258	SURG-3M		0.483	2%	4.57	6%	0.41	5%	0.85	360	0.391		0.83	1.67			2		
ETC260	SURG-3M		0.493	2%	4.60	6%	0.41	5%	0.84	360	0.331		0.74	1.56			2		
ETC262	SURG-3M		0.474	2%	4.47	6%	0.40	5%	0.85	360	0.391		0.86	1.68			2		
ETC264	SURG-3M		0.488	2%	4.55	6%	0.41	5%	0.84	360	0.386		0.89	1.75			2		
ETC266	SURG-3M		0.475	2%	4.54	6%	0.40	5%	0.85	360	0.375		0.85	1.70			2		
ETC268	SURG-3M		0.484	2%	4.44	6%	0.39	5%	0.81	360	0.460		0.91	1.91			2		
ETC270	SURG-3M		0.491	2%	4.45	6%	0.39	5%	0.80	360	0.368		0.86	1.68			2		
ETC272	SURG-3M		0.483	3%	4.53	6%	0.40	5%	0.82	360	0.395		0.74	1.71			2		
ETC274	SURG-3M		0.518	4%	4.44	6%	0.39	5%	0.75	360	0.438		0.61	1.84			2		
ETC276	SURG-3M		0.490	3%	4.29	6%	0.38	5%	0.78	360	0.424		0.73	1.75			2		

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)			
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File
ETC278	SURG-3M		0.509	3%	4.25	6%	0.38	5%	0.74	360	0.419		0.65	1.68			2	
ETC280	SURG-3M		0.503	3%	4.31	6%	0.38	5%	0.76	360	0.459		0.69	1.76			2	
ETC282	SURG-3M		0.503	3%	4.21	6%	0.37	5%	0.74	360	0.433		0.66	1.75			2	
ETC284	SURG-3M		0.494	2%	4.32	6%	0.38	5%	0.77	360	0.456		0.57	1.75			2	
ETC286	SURG-3M		0.482	2%	4.28	6%	0.39	5%	0.80	360	0.473		0.62	1.71			2	
ETC288	SURG-3M		0.491	3%	4.09	6%	0.37	5%	0.76	360	0.505		0.73	1.77			2	
ETC290	SURG-3M		0.493	3%	4.46	3%	0.39	4%	0.79	360	0.527		0.70	1.89			2	
ETC292	SURG-3M		0.491	3%	4.29	6%	0.38	5%	0.78	360	0.410		0.68	1.74			2	
ETC294	SURG-3M		0.476	3%	4.27	3%	0.38	4%	0.79	360	0.425		0.61	1.69			2	
ETC296	SURG-3M		0.472	3%	4.15	6%	0.37	5%	0.78	360	0.465		0.63	1.77			2	
ETC298	SURG-3M		0.486	3%	4.46	6%	0.40	5%	0.82	360	0.517		0.75	1.93			2	
ETC300	SURG-3M		0.476	3%	4.42	6%	0.40	5%	0.83	360	0.436		0.76	1.77			2	
ETC302	SURG-3M		0.458	3%	4.40	6%	0.38	5%	0.82	360	0.222		0.43	1.18			2	
ETC304	SURG-3M		0.486	3%	4.29	6%	0.37	5%	0.75	360	0.222		0.46	1.25			2	
ETC306	SURG-3M		0.541	3%	4.22	6%	0.37	5%	0.68	360	0.241		0.42	1.27			2	
ETC308	SURG-3M		0.526	3%	4.30	6%	0.37	5%	0.71	360	0.272		0.54	1.37			2	
ETC310	SURG-3M		0.528	3%	4.34	6%	0.37	5%	0.71	360	0.196		0.48	1.22			2	
ETC312	SURG-3M		0.524	3%	4.35	6%	0.38	5%	0.73	360	0.176		0.46	1.15			2	
ETC314	SURG-3M		0.535	3%	4.26	6%	0.37	5%	0.70	360	0.208		0.48	1.26			2	
ETC316	SURG-3M		0.499	3%	4.15	6%	0.36	5%	0.73	360	0.234		0.50	1.34			2	
ETC323	SURG-3M		0.544	2%	4.71	6%	0.43	5%	0.79	360	0.606		1.21	2.31			2	
ETC324	SURG-3M		0.619	2%	4.78	6%	0.42	5%	0.68	360	0.201		0.76	1.64			2	
ETC325	SURG-3M		0.528	2%	4.73	4%	0.42	5%	0.80	360	0.392		0.86	1.93			2	
ETC326	SURG-3M		0.530	2%	4.66	4%	0.42	5%	0.79	360	0.440		1.13	2.06			2	
ETC327	SURG-3M		0.491	2%	4.62		0.44		0.90	360	0.492		0.90	1.98			2	
ETC328	SURG-3M		0.520	2%	4.56		0.42		0.80	360	0.380		0.86	1.59			2	
ETC329	SURG-3M		0.525	2%	4.65	4%	0.41	5%	0.79	360	0.416		0.84	1.97			2	
ETC330	SURG-3M		0.498	2%	4.59		0.41		0.83	360	0.480		0.95	2.05			2	
ETC331	SURG-3M		0.509	2%	4.58	4%	0.40	5%	0.79	360	0.413		0.87	1.92			2	
ETC334	SURG-3M		0.523	2%	4.62	4%	0.41	5%	0.79	360	0.423		0.99				2	
ETC336	SURG-3M		0.529	2%	4.72	3%	0.43	3%	0.81	360	0.439		0.98	2.04			2	
ETC339	SURG-3M		0.520	2%	4.95	3%	0.45	3%	0.86	360	0.522		1.14	1.53			2	
ETC345	SURG-3M		0.520	2%	4.85	4%	0.44	4%	0.84	360	0.502		0.97	2.15			2	
ETC347	SURG-3M		0.518	2%	4.84	4%	0.43	4%	0.83	360	0.457		0.98	2.08			2	
ETC349	SURG-3M		0.509	2%	4.77	3%	0.42	4%	0.83	360	0.509		1.07	2.20			2	
ETC351	SURG-3M		0.572	2%	4.66	3%	0.42	4%	0.73	360	0.331		0.91	1.91			2	
ETC353	SURG-3M		0.507	2%	4.70	3%	0.42	4%	0.82	360	0.437		0.94	1.88			2	
ETC356	SURG-3M		0.512	2%	4.31	3%	0.39	4%	0.77	360	0.375		0.83	1.79			2	
ETC373	SURG-3M		0.561	2%	4.71	3%	0.43	4%	0.77	360	0.757		1.46	2.73			3	
ETC376	SURG-3M		0.499	2%	4.70	3%	0.41	4%	0.83	360	0.388		0.81	1.76			3	
ETC408	SURG-3M		0.532	3%	4.60	4%	0.41	4%	0.77	360	0.255		0.77	1.69			3	
ETC411	SURG-3M		0.519	3%	4.80	4%	0.43	4%	0.83	360	0.289		0.68	1.67			3	
ETC413	SURG-3M		0.537	3%	4.68	4%	0.42	4%	0.78	360	0.251		0.77	1.63			3	
ETC415	SURG-3M		0.535	3%	4.71	4%	0.42	4%	0.79	360	0.182		0.53				3	
ETC417	SURG-3M		0.583	2%	5.02	3%	0.48	4%	0.82	360	0.209		0.74	1.60			3	no
ETC419	SURG-3M		0.541	2%	4.97	4%	0.45	4%	0.83	360	0.231		0.69	1.59			3	
XTC104	SURG-3M		0.509	3%	3.83	4%	0.33	4%	0.65	360	0.166		0.49	1.29			1	
ETC164	SURG-3M	problems	1	0.501	2%					360	0.280		0.68	1.51			2	no

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)				
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File	
ETC234	SURG-3M	problems	1	0.496	2%	4.35	8%	0.39	8%	0.78	360	0.342		0.42	1.51		2		
ETC176	SURG-3M	problems	3								360	0.261		0.55	1.38		2	no	no
ETC177	SURG-3M	problems	3								360	0.259		0.62	1.45		2	no	no
ETC178	SURG-3M	problems	3								360	0.282		0.58	1.49		2	no	no
ETC180	SURG-3M	problems	3	0.381		3.83	9%	0.22	8%	0.59	360	0.430		0.70	1.77		2		
ETC182	SURG-3M	problems	3	0.378							360	0.328		0.62	1.55		2		no
ETC184	SURG-3M	problems	3	0.377							360	0.242		0.53	1.34		2		no
ETC186	SURG-3M	problems	3	0.405		2.19	5%	0.08	5%	0.20	360	0.283		0.32	1.46		2		
ETC188	SURG-3M	problems	3			3.04	5%	0.18	6%		360	0.383		0.65	1.70		2		
ETC189	SURG-3M	problems	3	0.533	9%						360	0.332		0.69	1.66		2	no	no
ETC191	SURG-3M	problems	3	0.457	8%						360	0.351		0.61	1.48		2	no	no
ETC193	SURG-3M	problems	3	0.444	8%						360	0.305		0.35	1.29		2	no	no
ETC195	SURG-3M	problems	3	0.475	7%						360	0.340		0.53	1.52		2	no	no
ETC197	SURG-3M	problems	3			2.93	4%	0.17	4%		360	0.454		2.28	2.29		2		
ETC198	SURG-3M	problems	3	0.507	3%						360	0.282		0.63	1.46		2	no	no
ETC200	SURG-3M	problems	3	0.495	3%						360	0.307		0.63	1.48		2	no	no
ETC202	SURG-3M	problems	3	0.504	3%						360	0.297		0.61	1.52		2	no	no
ETC204	SURG-3M	problems	3	0.518	3%						360	0.353		0.72	1.70		2	no	no
ETC208	SURG-3M	problems	3	0.489	3%	4.48	3%	0.40	3%	0.82	360	0.196		0.57	1.19		2		
ETC233	SURG-3M	problems	9	0.518	2%						360	0.268		0.42	1.46		2		no
ETC372	SURG-3M	Do not model	9	0.483	2%	4.72	3%	0.43	4%	0.89	360	0.758		1.48	2.58		3		
ETC217	SURG-3			0.257	2%	4.49	8%	0.39	8%	1.52	360	0.644		0.72	1.96		2		
ETC219	SURG-3			0.250	2%	4.39	8%	0.38	8%	1.52	420	0.706		0.83	2.27		2		
ETC387	SURG-3			0.147	4%	3.16	4%	0.28	4%	1.88	360	0.504		0.97	2.17		3		
ETC388	SURG-3			0.149	4%	3.78	3%	0.34	4%	2.27	360	0.536		1.12	2.51		3		
ETC390	SURG-3			0.144	4%	3.92	4%	0.34	4%	2.38	360	0.543		0.72	2.36		3		
ETC392	SURG-3			0.154	4%	3.65	3%	0.32	4%	2.10	360	0.557		1.01	2.44		3		
ETC395	SURG-3			0.143	4%	3.91	4%	0.34	4%	2.41	360	0.547		0.97	2.43		3		
ETC399	SURG-3			0.155	4%	3.90	4%	0.35	4%	2.24	360	0.480		0.97	2.34		3		
ETC401	SURG-3			0.148	4%	3.93	4%	0.35	4%	2.35	360	0.486	330	0.69	2.06		3		
ETC403	SURG-3			0.151	4%	3.41	4%	0.31	4%	2.02	360	0.510		0.82	1.40		3		
ETC405	SURG-3			0.134	4%	3.68	4%	0.33	4%	2.44	360	0.506		0.88	2.19		3		
ETC407	SURG-3			0.158	4%	3.73	3%	0.34	4%	2.18	360	0.539		1.04	2.25		3		
ETC397	SURG-3	probmems	2	0.135		3.86	3%	0.35	4%	2.59	360	0.531		1.12	2.50		3	no	no
DTC011A	SURG-8M			0.522	2%	3.91		0.39		0.75	360	0.343		3.61	2.99		1		
DTC011B	SURG-8M			0.521	2%	3.78		0.38		0.74	360	0.368		3.07	2.85		1		
DTC013A	SURG-8M			0.452	1%	4.11		0.40		0.89	365	0.440		3.32	2.84		1		
DTC013B	SURG-8M			0.454	1%	4.00		0.40		0.87	365	0.437		4.16	3.09		1		
DTC014B	SURG-8M			0.477	1%	3.99		0.39		0.82	375	0.449		4.12	2.95		1		
DTC016B	SURG-8M			0.475	1%	3.92	3%	0.38	3%	0.80	380	0.440		3.28	2.94		1		
DTC017B	SURG-8M			0.479	1%	3.94	3%	0.38	3%	0.80	380	0.428		3.25	2.89		1		
DTC018B	SURG-8M			0.484	1%	4.23		0.41		0.85	375	0.469		4.54	3.11		1		
DTC019A	SURG-8M			0.459	1%	4.13		0.40		0.88	375	0.428		4.17	2.85		1		
DTC021A	SURG-8M			0.492	1%	4.15		0.42		0.84	380	0.411		3.36	2.91		1		
DTC022A	SURG-8M			0.503	1%	4.01		0.40		0.79	380	0.400		3.22	2.90		1		
DTC023B	SURG-8M			0.471	1%	4.08		0.40		0.85	375	0.462		4.29	2.84		1		
DTC024A	SURG-8M			0.502	1%	4.09		0.41		0.81	380	0.450		3.41	2.95		1		
DTC025B	SURG-8M			0.466	1%	4.19		0.42		0.90	375	0.482		3.64	2.95		1		



RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)					
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File		
DTC028B	SURG-8M		0.485	1%	4.11		0.41		0.85	375	0.418		2.98	2.84			1			
DTC064A	SURG-8M		0.486	1%	3.97	2%	0.40	2%	0.82	375	0.384		3.25	2.84			1			
DTC065B	SURG-8M		0.477	1%	3.95	2%	0.40	2%	0.83	375	0.393		3.73	2.76			1			
DTC068A	SURG-8M		0.484	1%	3.80	2%	0.38	2%	0.78	375	0.345		2.86	2.59			1			
DTC069B	SURG-8M		0.478	1%	3.65	2%	0.36	2%	0.76	375	0.389		3.84	2.74			1			
DTC070B	SURG-8M		0.487	1%	4.01	2%	0.40	2%	0.82	375	0.368		3.88	2.77			1			
XTC114	SURG-8M		0.478	3%	4.70	3%	0.50	3%	1.04	365	0.366		2.84	2.96			1			
DTC012A	SURG-8M	problems	1	0.517	2%	4.07		0.41		0.78	360	0.403	3.59	2.99			1			
DTC012B	SURG-8M	problems	1	0.512	2%	4.04		0.41		0.79	360	0.401	4.35	3.21			1			
DTC015A	SURG-8M	problems	1	0.503	1%	4.16		0.41		0.82	360	0.443	4.34	3.30			1			
DTC020A	SURG-8M	problems	2	0.501	1%	4.12		0.38		0.76	375	0.295	2.23	2.48			1			
ITC781	SYNFUEL			0.516	4%	44.04		2.75		5.33	360	0.714		3.03			7			
ITC784	SYNFUEL			0.508	8%	86.55		5.31		10.44	360	0.746	330	3.30	4.03			7		
ITC785	SYNFUEL			0.260	6%	44.85		2.77		10.64	360	0.599	345	1.88	2.87			7		
ITC786	SYNFUEL			0.492	6%	72.84		5.05		10.27	270	0.635	135	5.06	6.86			7		
ITC788	SYNFUEL			0.474	6%	92.11		5.69		11.99	360	0.717	300	2.85	3.97			7		
ITC795	SYNFUEL			0.531	8%	46.06		3.25		6.13	360	0.743		2.16	3.30			8		
ITC796	SYNFUEL			0.590	8%	97.63		6.83		11.57	360	0.596	255	3.77	5.03			8		
ITC799	SYNFUEL	problems	2	0.614	8%	96.84		5.58		9.10	360	0.839	315	4.32	5.30			8		
ITC801	SYNFUEL	Don't model	9	0.610	7%	41.25		2.39		3.91	420	0.880		2.67	3.28			8	9	
ITC805	SYNFUEL	Don't model	9	0.588	8%	90.75		5.73		9.75	360	0.772	345	2.81	4.13			8	9	
ITC807	SYNFUEL	Don't model	9	0.475	3%	69.64	3%	4.70	7%	9.88	300	0.523	195	7.99	7.60			8	9	
ITC963	SYNEXH	data sparse	2	0.469	11%	5.41		0.71		1.52	390	0.830		4.36	3.94			10		
ITC965	SYNEXH	Don't model	9	0.465	11%	4.81		0.81		1.75	360	0.865	330	5.19	5.06			10	9	
ITC967	SYNEXH	Don't model	9	0.238	22%	5.33		0.77		3.24	360	0.594	195	5.82	5.73			10	9	
ITC968	SYNEXH	Don't model	9	0.470	11%	7.50		1.33		2.83	360	0.857	150	12.04	11.72			10	9	
ETC355	SPECIAL			0.000		4.40	3%	0.40	4%									2	no	no
DTC040A	SPECIAL			0.001	0%	3.90		0.39		283.57	375	0.020		0.04	0.06			1		
DTC040B	SPECIAL			0.001	0%	3.95		0.39		424.75	375	0.027		0.15	0.08			1		
ETC354	SPECIAL	Do not model	9	0.000		5.03	4%	0.44	4%									2	no	no
EC402	SPECIAL	Reject	99			292.88		5.03										0	2	no
EC725	SPECIAL	Don't model	9															1	3	no
ITC640	SPECIAL	don't model. 3-part run	9								420	0.531					o	5	9	
ITC429	REJECT	reject	99	0.000		1.59	11%	0.04	11%		120	0.065	60					1	3	no
<b>Modelability Codes</b>																				
<b>EC</b>																				
1	Chamber parameters not assigned for this set of conditions.																			
2	Characterization set not defined																			
2	Insufficient run conditions defined to create model input file																			
<b>ITC</b>																				
1	Chamber parameters not assigned for this set of conditions																			
2	Characterization set not defined																			
3	Insufficient run conditions defined to create model input file																			
4	Simulation failed for SAPRC-90 mechanism and software																			
9	Simulation succeeded, but recommended not to model run.																			

RunID	Classification	Data base status	Initial NOx		Carbon		OH React'y			Run time (min)	Max O3		d(O3-NO)/dt (ppb/min)		(See below for codes)			
			ppm	unc	ppmC	unc	Prop. Equiv	unc	OHr /NOx		(ppm)	(min)	1st hour	to 1/2 max	Condi-tions	Char. set	Model-able	Inp File
<b>Others</b>																		
no	Not modelable																	
<b>Special Conditions Codes</b>																		
<b>EC</b>																		
d	Dry																	
lt	Low Temperature																	
ht	High Temperature																	
vn	Vacuum injected NOx																	
uv	Varied UV - different Pyrex filter																	
n	Reactant injected in moddle of run																	
<b>ITC</b>																		
nb	New bag																	
ri	Reactant injected during run																	
hl	100% lights																	
md	Multi-day. Lights off at night, on during day																	
ht	Unusually high temperature.																	
o	Other -- see main sheet																	
<b>DTC</b>																		
rh	50% RH																	
<b>Characterixation Sets</b>																		
<b>EC</b>																		
1	T, RH in normal range																	
2	Low T																	
3	High T																	
1x	Low RH (Second digit indicates T.)																	
<b>ITC</b>																		
1-12	Same as ITC Bag number.																	
<b>ETC</b>																		
1	First bag, before vacuum injected NOx																	
2	First bag, vacuum injected NOx																	
3	Third bag, vacuum injected NOx																	
<b>DTC</b>																		
1	Normal (dry)																	
2	50% RH																	
<b>XTC</b>																		
1	Normal																	

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RunID	Date	Report	CHADPRO title	Classification	Run conditions	Data quality comments	Data base status
EC095	9/29/75	EPA-79	PROPENE	PROPENE	Sdist changing rapidly during this period. Runs without spectral data should not be modeled	No Sdist. data. O3 factor uncertain by 20%	Don't model
EC096	9/30/75	EPA-79	PROPENE	PROPENE		See above.	Don't model
EC097	10/1/75	EPA-79	PROPENE + BUTANE	MIX-AE		See above.	Don't model
EC099	10/6/75	EPA-79	PROPENE + BUTANE	MIX-AE		See above.	Don't model
EC106	10/14/75	EPA-79	PROPENE + BUTANE	MIX-AE			Don't model
EC113	11/24/75	EPA-79	PROPENE + BUTANE	MIX-AE	Runs with Cl2 in chamber and several k1's	No Sdist. data	Don't model
EC114	12/2/75	EPA-79	PROPENE + BUTANE	MIX-AE		Data needed for k1 estimate missing. O3 factor uncertain by 20%	Don't model
EC115	12/3/75	EPA-79	PROPENE + BUTANE	MIX-AE		See above	Don't model
EC116	12/4/75	EPA-79	PROPENE + BUTANE	MIX-AE		See above	Don't model
EC121	2/26/76	EPA-79	PROPENE	PROPENE	CMA program (with Cl2) and pumping system modifications		
EC122	2/27/76	EPA-79	BUTENE-1	1-BUTENE			
EC123	3/1/76	EPA-79	BUTENE-1	1-BUTENE			
EC124	3/2/76	EPA-79	BUTENE-1	1-BUTENE			
EC130	3/10/76		N-BUTANE	N-C4		No NO2 data. Nominal NO2 = 0.05. Anomalous Sdist data.	Reject
EC131	3/11/76		N-HEXANE	N-C6		No T data	No Temp
EC133	3/16/76		N-BUTANE	N-C4		No NO2-UNC. Only has NO2-CORR	Minor data problems
EC134	3/17/76		N-BUTANE DRY	N-C4	Dry. 87 dry, 54 wet	Only has NO2-CORR	
EC135	3/18/76		N-PENTANE	N-C5		Only has NO2-CORR. No Temp.	No Temp
EC137	3/25/76		EC-137 N-BUTANE VERY DRY	N-C4	Dry - backfill "ultra dry air". Poor temperature control. T goes up to 310 at t=2-3, then down		
EC142	4/1/76	EPA-79	ETHENE	ETHENE	Follows butane run		
EC143	4/2/76	EPA-79	ETHENE	ETHENE			
EC144	4/5/76	EPA-79	ETHENE + PROPENE	MIX-E			
EC145	4/6/76	EPA-79	ETHENE + PROPENE	MIX-E			
EC146	4/12/76	EPA-79	TRANS-2-BUTENE	T-2-BUTE			
EC147	4/13/76	EPA-79	TRANS-2-BUTENE	T-2-BUTE			
EC149	4/16/76	EPA-79	PROPENE + TRANS-2-BUTENE	MIX-E			
EC150	4/19/76	EPA-79	FOUR ALKENES	MIX-E		No Sdist data	
EC151	4/20/76	EPA-79	FOUR ALKENES	MIX-E			
EC152	4/21/76	EPA-79	FOUR ALKENES	MIX-E			
EC153	4/22/76	EPA-79	FOUR ALKENES	MIX-E		Uncertain initial 1-Butene	problems
EC155	4/28/76	EPA-79	N-NONANE	N-C9		NO zero grossly off. No Temp data. No k1 estimate	Don't model
EC156	5/4/76	EPA-79	ETHENE	ETHENE			
EC157	5/5/76	EPA-79	TRANS-2-BUTENE	T-2-BUTE			
EC160	5/10/76	EPA-79	ETHENE + PROPENE	MIX-E			
EC161	5/11/76	EPA-79	FOUR ALKENES	MIX-E			
EC162	5/12/76	EPA-79	N-BUTANE	N-C4			

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## Listing of Spreadsheet EC-USE

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RunID	Date	Report	CHADPRO title	Classification	Run conditions	Data quality comments	Data base status
EC163	5/13/76	EPA-79	N-BUTANE + ACETALDEHYDE	MIX-AO		Initial ACETALD may be 27% lower than indicated by initial measurement. Adjusted down by 14%.	problems
EC164	5/17/76	EPA-79	ACETALDEHYDE	ACETALD	Poor temperature control. T goes from normal to 312 at end of run.	Initial ACETALD may be 15% lower. Not adjusted.	problems
EC165	5/18/76	EPA-79	2,3-DIMETHYLBUTANE	23-DMB	Poor temperature control T goes up to 310 at T=3-4, then drops to normal at end of run.	Inorgainc timeset or channel data messed up.	dataset problems
EC166	5/24/76	EPA-79	N-BUTANE + 2,3-DIMETHYLBUTANE	MIX-A			
EC168	5/28/76	EPA-79	N-BUTANE + FORMALDEHYDE	MIX-AO		FORMALD data highly questionable. Subsequent measurements low compared to initial. Initial FORMALD from injection = .23,, twice as high as initial.	reject
EC169	6/2/76	EPA-79	2,3-DIMETHYLBUTANE	23-DMB	Poor temperature control or problems with T. Data. T goes up to 312, and has discontinuities in data.		problems
EC171	6/9/76	EPA-79	2,3-DIMETHYLBUTANE	23-DMB			
EC172	6/10/76	EPA-79	N-BUTANE + 2,3-DIMETHYLBUTANE	MIX-A			
EC177	7/9/76	EPA-79	PROPENE	PROPENE	Poor temperature control . T normal for first hour, drops suddenly to 297, then raises to		
EC178	7/13/76	EPA-79	N-BUTANE	N-C4	Temp goes fro 303 to 308		
EC216	2/14/77	EPA-79	PROPENE	PROPENE	Follows dummy propene run. ~37% RH		
EC217	2/15/77	EPA-79	PROPENE + ACETALDEHYDE	MIX-EO		Last EC run on data base where Temperature corrected by -2 F.	
EC230	8/9/77	EPA-79	PROPENE	PROPENE		Follows temperature calibration. Temperature calibration assumed to be correct.	
EC231	8/10/77	EPA-79	7-HYDROCARBON MIX #4	SURG-7	Unusually high sampling rate because N2 accidently left flushing into chamber.		
EC232	8/11/77	EPA-79	7-HYDROCARBON MIX #1	SURG-7			
EC233	8/12/77	EPA-79	7-HYDROCARBON MIX #2	SURG-7			
EC237	10/28/77	EPA-79	7-HYDROCARBON MIX #4	SURG-7		Init ETHENE questionable. Adjusted up 11%	problems
EC238	10/31/77	EPA-79	7-HYDROCARBON MIX #3	SURG-7			
EC241	11/4/77	EPA-79	7-HYDROCARBON MIX #5	SURG-7			
EC242	11/7/77	EPA-79	7-HYDROCARBON MIX #7	SURG-7			
EC243	11/8/77	EPA-79	7-HYDROCARBON MIX #7A	SURG-7	Run only 150 min.		

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RunID	Date	Report	CHADPRO title	Classification	Run conditions	Data quality comments	Data base status
EC245	11/9/77	EPA-79	7-HYDROCARBON MIX #6	SURG-7			
EC246	11/10/77	EPA-79	7-HYDROCARBON MIX #1	SURG-7			
EC247	11/11/77	EPA-79	7-HYDROCARBON MIX #8	SURG-7			
EC250	11/16/77	EPA-79	FORMALDEHYDE - AIR	CHAR-4		Calc HCHO Injected = 0.54 ppm - 1.7 x obs.	problems
EC251	11/17/77	EPA-79	FORMALDEHYDE + NOX	FORMALD		Calc HCHO injected = 0.55 ppm = 3 x obs	problems
EC252	11/18/77	EPA-79	FORMALDEHYDE + NOX	FORMALD		Calc HCHO injecterd = 0.564 ppm = 1.6 x obs.	problems
EC253	11/21/77	EPA-79	ACETALDEHYDE - AIR	CHAR-3			
EC254	11/22/77	EPA-79	ACETALDEHYDE + NOX	ACETALD		Calc inj. ACETALD = 0.508 ppm	
EC255	11/23/77	EPA-79	FORMALDEHYDE - AIR	CHAR-4		Calc inj HCHO = 0.510 = 1.5 x obs.	problems
EC256	11/29/77	EPA-79	PROPENE	PROPENE			
EC257	11/30/77	EPA-79	FORMALDEHYDE + PROPENE	MIX-EO		Calc inj HCHO = 0.547 ppm = 1.5 x obs	problems
EC264	1/23/78	EPA-79	TOLUENE	TOLUENE	Followed propene run	No Sdist data	
EC265	2/2/78	EPA-79	TOLUENE	TOLUENE	No valid O3 data for first 2 hours	No Sdist data	Don't model
EC266	2/7/78	EPA-79	TOLUENE	TOLUENE			
EC269	3/16/78	EPA-79	TOLUENE #3	TOLUENE	Follows propene run		
EC270	3/20/78	EPA-79	TOLUENE + FORMALDEHYDE	TOLUENE		Calc inj HCHO = 0.199 ppm = 1.16 x obs. DUP TOLUENE CHANNELS	
EC271	3/21/78	EPA-79	TOLUENE #2	TOLUENE			
EC272	3/22/78	EPA-79	TOLUENE + ACETALDEHYDE	MIX-RO		Calc inj ACETALD = 0.292 ppm = 0.8 x obs. Init acetaldehyde	problems
EC273	3/23/78	EPA-79	TOLUENE #1	TOLUENE	NO2 not injected		
EC276	3/29/78	EPA-79	PROPENE #6	PROPENE			
EC277	3/30/78	EPA-79	PROPENE #1	PROPENE			
EC278	3/31/78	EPA-79	PROPENE #2	PROPENE			
EC279	4/3/78	EPA-79	PROPENE #3	PROPENE			
EC280	4/4/78	EPA-79	O-CRESOL - AIR	CRESOL	For GM-MS data	No o-cresol data	reject
EC281	4/5/78	EPA-79	O-CRESOL	CRESOL		Apparent cresol interference on O3 channel. But NO data sufficient for modeling	
EC285	4/25/78	EPA-79	ETHENE	ETHENE			
EC286	4/26/78	EPA-79	ETHENE	ETHENE			
EC287	4/27/78	EPA-79	ETHENE	ETHENE			
EC288	5/1/78	EPA-79	O-XYLENE	O-XYLENE			
EC289	5/3/78	EPA-79	M-CRESOL + NO	CRESOL		cresol interference with O3	
EC290	5/4/78	EPA-79	P-CRESOL + NO	CRESOL		cresol interference with O3	

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RunID	Date	Report	CHADPRO title	Classification	Run conditions	Data quality comments	Data base status
EC291	5/8/78	EPA-79	O-XYLENE + NO	O-XYLENE			
EC292	5/9/78	EPA-79	TOLUENE - LOW TEMP	TOLUENE	Low Temp: 280-282		Low Temp.
EC293	5/11/78	EPA-79	TOLUENE #4	TOLUENE			
EC304	7/25/78	EPA-79	N-BUTANE	N-C4	Followed dummy propene		
EC305	7/26/78	EPA-79	N-BUTANE	N-C4			
EC307	7/28/78	EPA-79	N-BUTANE	N-C4			
EC314	10/10/78	EPA-79	PROPENE	PROPENE			
EC317	10/16/78	EPA-79	PROPENE	PROPENE			
EC318	10/17/78	EPA-79	PROPENE + PAN	PROPENE			don't model
EC319	10/18/78	EPA-79	PROPENE + PAN	PROPENE			don't model
EC320	10/19/78	EPA-79	PROPENE + PAN	PROPENE			don't model
EC327	11/2/78	EPA-79	TOLUENE	TOLUENE	Followed dummy propene	Anomalous Sdist data.	
EC328	11/3/78	EPA-79	TOLUENE + N-BUTANE	MIX-AR			
EC329	11/6/78	EPA-79	TOLUENE + PROPENE	MIX-ER			
EC330	11/7/78	EPA-79	TOLUENE + PROPENE	MIX-ER			
EC331	11/8/78	EPA-79	TOLUENE + N-BUTANE	MIX-AR			
EC334	11/13/78	EPA-79	TOLUENE + PROPENE	MIX-ER			
EC335	11/15/78	EPA-79	TOLUENE + ACETALDEHYDE	MIX-RO		Calc ACETALD inj = 0.299 ppm, within 10% of obs	
EC336	11/16/78	EPA-79	TOLUENE + FORMALDEHYDE	MIX-RO		Calc HCHO inj = 0.303 ppm, very close to obs.	
EC337	11/17/78	EPA-79	TOLUENE + BENZALDEHYDE	MIX-RO			
EC338	11/20/78	EPA-79	TOLUENE + N-BUTANE	MIX-RO			
EC339	11/21/78	EPA-79	TOLUENE + BENZALDEHYDE	MIX-RO			
EC340	11/22/78	EPA-79	TOLUENE	TOLUENE		NOx data in CHADPRO has incorrect time and doesn't agree with data in DAC printout. All data from DAC system are suspect.	problems
EC343	11/29/78	EPA-79	M-XYLENE	M-XYLENE		Initial m-xylene uncertain - GC problems	reject
EC344	11/30/78	EPA-79	M-XYLENE	M-XYLENE			
EC345	12/1/78	EPA-79	M-XYLENE	M-XYLENE			
EC346	12/8/78	EPA-79	M-XYLENE	M-XYLENE		Missing NOx , O3 data during O3 buildup period.	incomplete results
EC353	1/24/79		PURE AIR PHOTOLYSIS	CHAR-0	Follows propene run	Problems with O3 data after t=240. NOx looks questionable.	problems
EC354	1/30/79		N-BUTANE	N-C4	Standard conditions		
EC355	1/31/79		N-BUTANE VACUUM INJECTION NOx	N-C4	First run with vacuum injected NOx		
EC356	2/1/79		N-BUTANE VACUUM INJECTED NOx	N-C4	Vacuum injected NOx		
EC389	5/3/79		HIGH CONC. FORMALD - NOx	FORMALD	Dry pure air. Vac inj reactants. Nylon filter on NOx line at t=200	Calc injected NO, NO2, HCHO = 4.0, 1.0, 10.0. Obs. looks ok.	
EC390	5/4/79		PURE AIR PHOTOLYSIS	CHAR-0	Dry pure air.		

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RunID	Date	Report	CHADPRO title	Classification	Run conditions	Data quality comments	Data base status
EC391	5/8/79		HIGH CONC FORMALD - NOx	FORMALD	Dry pure air. Vac inj.	Calc inj NO, NO2, HCHO = 4., 1., 18.93.	
EC392	5/10/79		HIGH CONC FORMALD - NOx	FORMALD	Dry. Moderately high temp (310). Nylon filter in line with 14B#1 until 1446, then switched to 14B/E.	Calc inj NO, NO2, HCHO = 8, 2, 10 (ok)	
EC393	5/11/79		HIGH CONC. HCHO - NOx, 1/16" PYREX	FORMALD	1/4" PYREX REPLACED WITH 1/16". Dry. Nylon filter in NOx line. Off at t=215.	Calc inj NO, NO2, HCHO = 4, 1, 10 ppm	
EC397	5/17/79		HIGH CONC. ACETALD - NOx, 1/16" PYREX	ACETALD	1/16" Pyrex. Dry.	Calc inj NO, NO2, = 1.44, 3.40.	
EC399	5/31/79		HIGH CONC. ACETALD - NOx, 1/16" PYREX	ACETALD	1/16" Pyrex. "Ultra dry", "CO scrubbed"..	Reject O3, NOx data around 1130-1140. NO2 data look anomalous.	Don't model
EC400	6/1/79		HIGH CONC. ACETALD - NOx,	ACETALD	1/4" PYREX BACK. Dry, CO scrubbed. Nylon filter on NOx line		
EC401	6/5/79		HIGH CONC. ACETONE - NOx	ACETONE	Ultra dry. CO Scrubbed. Nylon filter used		
EC402	6/12/79		ABORTED HIGH CONC FORMALD - NOX	SPECIAL	Equipment Problems - aborted	No Sdist data	Reject
EC403	6/19/79		HIGH CONC FORMALD - NOx	FORMALD	Dry. High Temp (323). Nylon filter used		High T. Don't model
EC404	6/21/79		HIGH CONC FORMALD - NOx	FORMALD	Dry. Low T (280). No CO scrubber. Nylon filter used	Anomalous Sdist data. NOx problems	Low T. Don't model
EC405	6/22/79		HIGH CONC. ACETALD - NOx,	ACETALD	Dry. Low T (280). Nylon filter used	Init NO2 uncertain	Low T. reject
EC406	6/26/79		HIGH CONC FORMALD - NOx	FORMALD	Very dry pure air fill. Low T. Nylon filter used	First HCHO point agrees with 10 ppm inj, 2nd and subsequent points lower. HCHO data dubious.	problems
EC407	6/27/79		HIGH CONC FORMALD - NOx	FORMALD	Very dry. CO scrubber. Nylon filter used.	Anomalous Sdist data	
EC436	9/17/80	ARB-83a	NOX-AIR IRRADIATION	CHAR-1	Nominal 50% RH for this and subsequent runs in this series unless indicated.	Temp's all zero. Channel deleted. No Sdist data	No Temp, SD
EC440	10/1/80	ARB-83a	NOX-AIR IRRADIATION	CHAR-1	Follows conditioning run.	Temp's all zero. Channel deleted.	No Temp
EC442	10/3/80	ARB-83a	NOX-AIR IRRADIATION	CHAR-1			
EC457	10/27/80	ARB-83a	NOX-AIR, VARY LIGHT	CHAR-1	Light intensity reduced at t = 2 hrs.	Temp's all zero. Channel deleted.	2-part run. No temp.
EC464	11/7/80	ARB-83a	NOX-AIR IRRADIATION	CHAR-1			
EC518	4/10/81		NOX AIR IRRADIATION	CHAR-1	Dry. 1/4" + 1/8" PYREX. COLD (270). Dry. Non-standard Sdist.	NO2 converter efficiency may be as low as 85%, or it may be ok. This is applicable for this run through EC530	don't model

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RunID	Date	Report	CHADPRO title	Classification	Run conditions	Data quality comments	Data base status
EC519	4/13/81		NOX-AIR IRRADIATION	CHAR-1	Standard 1/4" Pyrex back. Following 50% RH unless indicated differently	See EC518	minor problems
EC520	4/14/81		NOX-ISOPRENE IRRADIATION	ISOPRENE		See EC518	minor problems
EC521	4/15/81		NOX-AIR IRRADIATION	CHAR-1		See EC518	minor problems
EC522	4/16/81		NOX-ISOPRENE IRRADIATION	ISOPRENE		See EC518	minor problems
EC524	4/20/81		NOX-ISOPRENE IRRADIATION	ISOPRENE		See EC518	minor problems
EC525	4/21/81		NOX-ISOPRENE IRRADIATION	ISOPRENE	Run conditions not adequately documented. Appears that lights turned off in middle of run and NOx injected.	Nox data have discontinuities, perhaps due to undocumented operations. See EC464.	reject
EC526	4/22/81		NOX-AIR IRRADIATION	CHAR-1		Temperature and Sdist. data missing. NOx data show changes not corresponding to any documented operations. See EC518	reject
EC527	4/23/81		NOX-ISOPRENE STP	ISOPRENE		Apparently bad O3 point; otherwise OK. See EC518	minor problems
EC529	4/27/81		NOX-METHYLVINYLKETONE	MVK		See EC518	minor problems
EC530	4/28/81		NOX-METHACROLEIN	METHACRO		See EC518	minor problems
EC532	4/30/81		NOX-AIR IRRADIATION	CHAR-1		See EC518	minor problems
EC534	5/4/81		NOX-AIR IRRADIATION	CHAR-1		See EC518	minor problems
EC597	10/21/81		NOX-AIR IRRADIATION	CHAR-1		No Sdist data. NO2 converter check ok.	
EC599	10/29/81		NOX-AIR IRRADIATION, 5 PPM NO2	CHAR-1	O3 injected t=130.	O3 data garbage	
EC606	11/11/81		N-HEXANE	N-C6			
EC607	11/12/81		N-HEXANE	N-C6			
EC608	11/13/81		NOX-AIR IRRADIATION (TRACERS)	CHAR-1		No Sdist data	
EC610	11/17/81		N-HEXANE	N-C6		Init N-C6 low compared to later. Increased by 45%.	problems
EC611	11/18/81		N-HEXANE	N-C6		Poor quality N-C6 data. Unc. by 25%. No Sdist data.	problems
EC612	11/18/81		NOX-AIR IRRADIATION	CHAR-1	O3 data garbage		
EC613	11/24/81		NOX-AIR IRRADIATION	CHAR-1			
EC615	11/30/81		N-HEXANE	N-C6	Poor T control		
EC624	12/29/81		NOX-AIR IRRADIATION (50 PPM CO)	CHAR-5	Dry. Very high T (350) or anomalous T data. Logbook says "on heat".	No Sdist data . No k1 estimate	Don't model



Table A-2

## Listing of Spreadsheet EC-USE

5/21/95

RunID	Date	Report	CHADPRO title	Classification	Run conditions	Data quality comments	Data base status
EC643	2/10/82		NOX-AIR IRRADIATION	CHAR-1	Follows k1 + dummy propene. Poor T control,	T at start uncertain by 4 K because of poor control and data sparcity. No Sdist data	Don't model
EC644	2/11/82		NOX-METHYLVINYLKETONE (.6 PPM)	MVK	3 K T variation in first 1.5 hr.	No Sdist data	
EC646	2/16/82		NOX-AIR WITH ADDED BENZALDEHYDE	BENZALD	A BZCHO added T=2. No propene, n-butane factors. ~10 ppb assumed.	O3 data garbage. No Sdist data	
EC647	2/17/82		NOX-AIR WITH ADDED BENZALDEHYDE	BENZALD	A BZCHO added t=2. NO2 added t = 5. Poor T control, goes up to 310 around start, up again to 307 at end. No propene, n-butane factors. ~10 ppb assumed.	No Sdist data	
EC648	2/18/82		NOX-METHYLVINYLKETONE	MVK			
EC649	2/19/82		NOX-AIR + MVK AT T=2. (2 PPM)	MVK	A MVK added at T=2. No propene, n-butane factors. ~10 ppb assumed.	No Sdist data	
EC650	2/22/82		NOX-AIR IRRADIATION	CHAR-1	H2O2 added during run. More propene added.	Low quality T data	do not model
EC651	2/23/82		NOX-METHACROLEIN	METHACRO	Poor T control - up to 307. at start		
EC652	2/24/82		NOX-METHACROLEIN	METHACRO	Poor T control - up to 308. at start	Sdist data anomolous	
EC654	3/1/82		NOX-AIR IRRADIATION	CHAR-1			
EC655	3/2/82		NOX-METHACROLEIN	METHACRO	Poor T control - up to 309. at start		
EC662	4/7/82		NOX-AIR IRRADIATION	CHAR-1	PLEXIGLAS FILTER at start, removed at T=2.	Slight jump in NO, NO2 data at start. No k1 estimate	Don't model
EC663	4/9/82		PROPENE-NOX (CONTROL RUN)	PROPENE	Anomalous spectrum may be real	Missing O3 data at start. Spectral distribuiton anomalous	Don't model
EC664	4/14/82		NOX-AIR IRRADIATION	CHAR-1	Anomalous spectrum may be real	O3 data garbage. Spectral distribuiton anomalous	Don't model
EC665	4/15/82		PROPENE - NOX (CONTROL RUN)	PROPENE			
EC669	4/22/82		ISOPRENE-NOX	ISOPRENE			
EC670	4/23/82		OZONE DECAY (LIGHT)	CHAR-7		No Sdist data	
EC671	4/27/82		TOLUENE-NOX	TOLUENE		No O3 data at start of run. Anomalous Sdist.	Don't model
EC673	5/4/82		PROPENE-NOX	PROPENE	Poor T control - up to 307. at start	No O3 data at start of run. Sparse propene data. No Sdist data.	sparse data
EC674	5/5/82		NOX-AIR IRRADIATION	CHAR-1			
EC675	5/10/82		MINI-SURROGATE	SURG-4	Makeup air bag replaced AFTER this run.	No O3 data at t=0. Uncertain ozone zero. Very large NO zero	Don't model
EC676	5/12/82		MINI-SURROGATE	SURG-4		No O3 data at t=0. Uncertain ozone zero. Init NOx 18% uncertain	problems
EC677	5/13/82		N-HEXANE	N-C6			
EC678	5/17/82		PROPENE-NOX	PROPENE	Temp control problems. T drops to 296 in middle of run.		major problems

Table A-2

## Listing of Spreadsheet EC-USE

5/21/95

RunID	Date	Report	CHADPRO title	Classification	Run conditions	Data quality comments	Data base status
EC680	5/20/82		NOX-AIR IRRADIATION	CHAR-1		No Sdist data.	
EC681	5/21/82		PROPENE-NOX	PROPENE		No O3 data at start. O3 looks strange at t=300.	don't model
EC682	5/27/82		PROPENE-NOX	PROPENE	CHAMBER WASHED WITH METHYLENE CHLORIDE then conditioned with 1 ppm O3.	Only initial and final propene.	sparse data
EC683	5/28/82		NOX-AIR IRRADIATION	CHAR-1			
EC684	6/1/82		PROPENE - NOX CONTROL	PROPENE			
EC685	6/7/82		PROPENE-NOX	PROPENE	CHAMBER WASHED WITH METHYLENE CHLORIDE then conditioned with 1 ppm O3.	No Temp data. Only initial and final propene	No temp.
EC686	6/8/82		NOX-AIR IRRADIATION	CHAR-1			
EC687	6/9/82		PROPENE - NOX CONTROL	PROPENE			
EC689	6/17/82		PROPENE-NOX	PROPENE	CHAMBER WASHED WITH METHYLENE CHLORIDE then conditioned with 1 ppm O3.	Only initial and final propene	sparse data
EC690	6/18/82		NOX-AIR IRRADIATION	CHAR-1	Moderately high T (306)	No Sdist data.	
EC691	6/23/82		PROPENE-NOX	PROPENE			
EC725	8/9/82		BIACETYL - METHYL NITRITE - NO	SPECIAL		No useable NOx data. No CH3ONO data. No k1 estimate	Don't model
EC726	8/10/82		BIACETYL - NO	CHAR-6		No useable NOx data. No k1 estimate	Don't model
EC863	6/7/83		PROPENE, NOX	PROPENE	Follows NOx-air.	No Sdist data.	
EC864	6/8/83		NOX-AIR IRRADIATION	CHAR-1		No Sdist data.	
EC869	6/27/83		NOX-AIR IRRADIATION	CHAR-1	Followed low pr. Cl2 irradiation + dummy propene.	No Sdist data.	
EC870	6/28/83		PROPENE-NOX	PROPENE		No Sdist data.	
EC885	7/21/83		PROPENE-NOX	PROPENE	Followed dummy + NOx-air		
EC895	8/1/83		BIACETYL-PURE AIR PHOTOLYSIS	CHAR-6		No O3 or temp. data	don't model
EC896	8/1/83		BIACETYL-AIR PHOTOLYSIS	CHAR-6		No O3 or temp data	don't model
EC898	8/3/83		NOX-AIR IRRADIATION	CHAR-1	Followed k1 + dummy.	No k1 estimate	No k1
EC899	8/4/83		PROPENE-NOX	PROPENE			
EC900	8/5/83		MESITYLENE-NOX	135-TMB		No O3 data until after max. No k1 estimate. NO 135-TMB FACTOR	don't model
EC901	8/8/83		MESITYLENE-NOX	135-TMB			
EC902	8/9/83		NOX-AIR IRRADIATION	CHAR-1			
EC903	8/10/83		MESITYLENE-NOX	135-TMB			
EC921	11/7/83		PROPENE-NOX	PROPENE	Walls cleaned with CH2Cl2. Pump and bake. Dummy propene conditioning.	No Temp. Data. No k1 estimate	No k1
EC930	11/18/83		PROPENE-NOX	PROPENE	TEFLON BAG IN EC. Poor Temp. control. T goes up to 311 after	No k1 estimate	No k1
EC972	5/3/84		BIACETYL	CHAR-6		No O3, T, or NOx data. No k1 estimate	don't model.

Table A-3

## Listing of Spreadsheet ITC-USE

5/21/95

RunID	Date	Document-ation	Title on CHADPRO	Classification	Run conditions	Data quality comments	Data base status
ITC428	1/29/82		NOX-AIR IRRADIATION	CHAR-1	3 Dump and fills. Humidity not documented this run, but previous run has "wet" fill, runs before that had "50%RH".		don't model
ITC429	1/29/82		N-BUTANE, PROPENE, AIR	REJECT		Data a mess - all sorts of problems	reject
ITC430	2/1/82		NOX-AIR IRRADIATION	CHAR-1			don't model
ITC436	2/9/82		NOX-AIR IRRADIATION	CHAR-1	<b>NEW BAG (#2) 2/2/82.</b> 50% RH. 3 dumps and fill. 70% lights unless indicated otherwise.	No T data	No Temp
ITC437	2/10/82		MINI-SURROGATE	SURG-4		T data missing for first half of run. Initial NO may be 20% higher, but NOx is ok.	problems
ITC438	2/11/82		MINI-SURROGATE	SURG-4			
ITC439	2/12/82		MINI-SURROGATE	SURG-4		No VOC data	Reject
ITC440	2/16/82		MINI-SURROGATE	SURG-4			
ITC441	2/17/82		NOX-AIR IRRADIATION	CHAR-1			
ITC442	2/18/82		MINI-SURROGATE	SURG-4			
ITC443	2/19/82		NOX-AIR IRRADIATION	CHAR-1			
ITC444	2/22/82		MINI-SURROGATE	SURG-4			
ITC445	2/23/82		MINI-SURROGATE	SURG-4	Log book comment (at end of run): "air handler output flow has been blocked from beginning of this series. Block removed.	NOx too uncertain to model	don't model
ITC446	2/24/82		MINI-SURROGATE	SURG-4			
ITC448	2/25/82		NOX-AIR IRRADIATION	CHAR-1			
ITC449	3/8/82		NOX-AIR IRRADIATION	CHAR-1		No T data	No Temp
ITC450	3/9/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC451	3/10/82		MINI-SURROGATE + 180 PPB TOLUENE	TOLUENE	R4		
ITC452	3/11/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC453	3/12/82	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC455	3/15/82	ARB-83b	MINI-SURROGATE + 89 PPB TOLUENE	TOLUENE	R4		
ITC456	3/16/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC457	3/17/82	ARB-83b	MINI-SURROGATE + BENZALDEHYDE	BENZALD	R4		
ITC459	3/19/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC460	3/23/82	ARB-83b	NOX-AIR + BENZALDEHYDE	BENZALD	A	BENZALD injected at t=2	
ITC461	3/24/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC462	3/25/82	ARB-83b	MINI-SURROGATE + 518 PPB BENZALDEHYDE	BENZALD	R4		
ITC463	3/25/82	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC465	3/29/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC466	3/30/82	ARB-83b	MINI-SURROGATE + 347 PPB BENZALDEHYDE	BENZALD	R4		
ITC467	3/31/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC468	4/1/82	ARB-83b	MINI-SURROGATE + 115 PPB BENZALDEHYDE	BENZALD	R4		
ITC469	4/2/82	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC471	4/5/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC472	4/6/82	ARB-83b	MINI-SURROGATE W/O PROPENE	PROPENE	R4	Temp. data problems. Use T=303.	No Temp
ITC473	4/7/82	ARB-83b	MINI-SURROGATE	SURG-4		Temp. data problems. Use T=303.	No Temp
ITC474	4/8/82	ARB-83b	MINI-SURROGATE + 113 PPB ADDED PROPENE	PROPENE	R4		
ITC475	4/9/82	ARB-83b	NOX-AIR IRRADIATION	CHAR-1		No data in CHADPRO	reject
ITC477	4/14/82	ARB-83b	MINI-SURROGATE	SURG-4		O3 data messed up	reject

Table A-3

## Listing of Spreadsheet ITC-USE

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RunID	Date	Document-ation	Title on CHADPRO	Classification	Run conditions	Data quality comments	Data base status
ITC478	4/15/82	ARB-83b	MINI-SURROGATE WITH ADDED PROPENE	PROPENE	R4		
ITC479	4/16/82	ARB-83b	MINI-SURROGATE	SURG-4		Temp dips to 295 in middle of run for no apparant reason.	Temp. data uncertain Don't model
ITC480	4/20/82	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC482	4/21/82	ARB-83b	MINI-SURROGATE WITHOUT N-BUTANE	N-C4	R4		
ITC483	4/22/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC484	4/23/82	ARB-83b	PROPENE - NOX (CONTROL RUN)	PROPENE		25 Hour run	
ITC485	4/27/82	ARB-83b	NOX-AIR IRRADIATION	CHAR-1		Blacklight spectrum taken on day of this run	
ITC487	4/28/82	ARB-83b	MINI-SURROGATE	SURG-4			No T-2-BUTE data reject
ITC488	4/29/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC489	4/30/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC490	5/3/82	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC492	5/4/82	ARB-83b	MINI-SURROGATE WITH ADDED N-BUTANE	N-C4	R4		No Temp data. Use 303. No Temp
ITC493	5/5/82	ARB-83b	MINI-SURROGATE	SURG-4			No Temp data. Use 303. No Temp
ITC494	5/6/82	ARB-83b	MINI-SURROGATE WITH ADDED N-BUTANE	N-C4	R4	Logbook has T=303-302.5 in middle of run	No Temp data. Use 303. No Temp
ITC496	5/10/82	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC497	5/11/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC498	5/13/82	ARB-83b	MINI-SURROGATE WITHOUT TRANS-2-BUTEN	T-2-BUTE	R4	Fan on for run	
ITC499	5/14/82	ARB-83b	MINI-SURROGATE	SURG-4			No Temp data. Use 303. No Temp
ITC500	5/17/82	ARB-83b	MINI-SURROGATE WITH ADDED T2-C4=	T-2-BUTE	R4		
ITC501	5/18/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC502	5/19/82	ARB-83b	MINI-SURROGATE WITH ADDED T2-C4=	T-2-BUTE	R4		
ITC503	5/20/82	ARB-83b	MINI-SURROGATE	SURG-4			
ITC504	5/21/82		NOX-AIR IRRADIATION	CHAR-1			
ITC507	5/25/82		N-BUTANE--NOX	N-C4			Temp data only at end of run. Use 302. No Temp
ITC508	5/26/82		NOX-AIR IRRADIATION	CHAR-1		100% LIGHTS	
ITC510	5/27/82		PROPENE - NOX CONTROL	PROPENE		100% LIGHTS	
ITC511	5/28/82		ISOPRENE-NOX	ISOPRENE		100% LIGHTS	
ITC512	6/1/82		METHYLVINYLKETONE-NOX	MVK		100% LIGHTS	
ITC513	6/3/82		METHACROLEIN-NOX	METHACRO		100% LIGHTS	
ITC514	6/4/82		NOX-AIR IRRADIATION	CHAR-1		100% LIGHTS	NO2 uncertain by 10%. Adjusted down to agree with pre- and post-t=0. problems
ITC532	11/9/82	ARB-83a	PROPENE-NOX	PROPENE		<b>NEW BAG (#3) INSTALLED around ITC518 (10/21/82).</b> Conditioned with propene runs, mini-surrogate, and series of NOx-air runs, including ones with dry air (ITC-523 -528). Back to 70% lights.	
ITC533	11/10/82	ARB-83a	N-BUTANE/NOX	N-C4			Formaldehyde data indicates 60 ppb FORMALD to start, then declining. No injections. Formald. data ignored.
ITC534	11/11/82	ARB-83a	TOLUENE-NOX	TOLUENE			
ITC535	11/12/82	ARB-83a	NOX-AIR IRRADIATION	CHAR-1			

Table A-3

## Listing of Spreadsheet ITC-USE

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RunID	Date	Document-ation	Title on CHADPRO	Classification	Run conditions	Data quality comments	Data base status
ITC538	11/16/82	ARB-83a	N-HEPTANE/NOX	N-C7			
ITC539	11/17/82	ARB-83a	NOX-AIR IRRADIATION	CHAR-1			
ITC540	11/18/82	ARB-83a	N-HEPTANE	N-C7			
ITC550	12/8/82	ARB-83a	NOX-AIR	CHAR-1	Follows series of runs with methyl nitrite		
ITC552	12/9/82	ARB-83a	N-OCTANE	N-C8			
ITC557	12/16/82	ARB-83a	NOX-AIR IRRADIATION	CHAR-1			
ITC559	12/17/82	ARB-83a	N-HEXANE	N-C6		Questionable initial NO point.	problems
ITC560	12/20/82	ARB-83a	BENZENE	BENZENE			
ITC561	12/21/82	ARB-83a	BENZENE	BENZENE			
ITC562	12/22/82	ARB-83a	BENZENE	BENZENE			
ITC563	12/23/82	ARB-83a	NOX-AIR IRRADIATION	CHAR-1			
ITC568	1/17/83		NOX-AIR IRRADIATION	CHAR-1	<b>NEW BAG (#4).</b>		
ITC569	1/18/83		PROPENE-NOX	PROPENE	Temperature data look odd. Unusually low Temp (296) at start, going up to 301.		
ITC570	1/20/83		NOX-AIR IRRADIATION	CHAR-1			
ITC571	1/21/83		MINI-SURROGATE	SURG-4		Do not use NO data at end of run to establish NO zero.	
ITC572	1/24/83		MINI-SURROGATE	SURG-4			
ITC573	1/25/83		MINI-SURROGATE W/O PROPENE	SURG-4R		Has unusually initial formaldehyde reading which is probably garbage (none injected).	
ITC574	1/26/83		MINI-SURROGATE	SURG-4			
ITC575	1/27/83		MINI-SURROGATE W/O PROPENE	PROPENE	R4		
ITC577	1/28/83		NOX-AIR IRRADIATION	CHAR-1			
ITC578	1/31/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC579	2/1/83	ARB-83b	MINI-SURROGATE WITHOUT PROPENE	PROPENE	R4		
ITC580	2/2/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC581	2/3/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC582	2/4/83	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC584	2/7/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC585	2/8/83	ARB-83b	MINI-SURROGATE + 306 PPB ADDED PROPENE	PROPENE	R4		
ITC586	2/9/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC587	2/10/83	ARB-83b	MINI-SURROGATE WITH 888 PPB ETHANOL	ETOH	R4		
ITC588	2/11/83	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC590	2/14/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC591	2/15/83	ARB-83b	MINI-SURROGATE WITH ETHANOL	ETOH	R4	NOx too uncertain to model	Don't model
ITC592	2/16/83	ARB-83b	MINI-SURROGATE	SURG-4		GC Data sparse. Init NOx uncertain	Don't model
ITC593	2/17/83	ARB-83b	MINI-SURROGATE WITH ETHANOL	ETOH	R4	GC Data sparse	data sparse
ITC595	2/23/83	ARB-83b	NOX-AIR IRRADIATION	CHAR-1		NO data look noisy	Don't model
ITC597	2/24/83	ARB-83b	MINI-SURROGATE	SURG-4	Pair of lamps discovered to be out. May affect previous runs.		Don't model
ITC598	2/25/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC600	3/1/83	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC602	3/2/83	ARB-83b	MINI-SURR. + 965 PPB MTBE	MTBE	R4		
ITC603	3/3/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC605	3/7/83	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC606	3/8/83	ARB-83b	MINI-SURR. + 1.84 PPM MTBE	MTBE	R4		
ITC607	3/9/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC608	3/10/83	ARB-83b	MINI-SURR. + 2.69 PPM MTBE	MTBE	R4		
ITC609	3/11/83	ARB-83b	MINI-SURROGATE	SURG-4			

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## Listing of Spreadsheet ITC-USE

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RunID	Date	Document-ation	Title on CHADPRO	Classification	Run conditions	Data quality comments	Data base status
ITC610	3/14/83	ARB-83b	NOX-AIR IRRADIATION	CHAR-1			
ITC612	3/15/83	ARB-83b	MINI-SURROGATE WITH 1 PPM METHANOL	MEOH	R4		Init NOx too uncertain
ITC613	3/16/83	ARB-83b	MINI-SURROGATE	SURG-4			
ITC614	3/17/83		NOX-AIR IRRADIATION	CHAR-1			
ITC616	3/18/83		ACETALDEHYDE - AIR	CHAR-3		Initial ACETALD uncertain. Adjusted downward by 20% to agree with pre and post-t=0 data.	problems
ITC621	3/29/83	EPA-84	NOX-AIR IRRADIATION	CHAR-1	NEW BAG (#5). Unconditioned.		
ITC623	3/30/83	EPA-84	PROPENE-NOX CONDITIONING	PROPENE	50 ppm CO injected t=2.	No propene data.	don't model
ITC624	3/31/83	EPA-84	OZONE DARK DECAY	CHAR-2			
ITC625	4/1/83	EPA-84	NOX-AIR + CO-NOX IRRADIATION	CHAR-5	50 ppm CO injected t=2.	No measurement of amount of CO injected	
ITC626	4/4/83	EPA-84	SURROGATE	SURG-8	MD	2 day run. NO injected on day 2. Lights off t=6, on at t=12, NO inj t=13. VOCs injected day before	
ITC627	4/7/83	EPA-84	ACETALDEHYDE-AIR IRRADIATION	CHAR-3			
ITC628	4/8/83	EPA-84	NOX-AIR + CO-NOX IRRADIATION	CHAR-5	51 ppm CO injected at t=2.	CO injected calculated from simultaneous isobutane injection	
ITC630	4/11/83	EPA-84	SURROGATE	SURG-8	MD	3-Day run. NO injected 0850 day 2, 1200 day 3. VOCs injected day before	
ITC631	4/18/83	EPA-84	SURROGATE	SURG-8	MD	4-Day run. NO injected 0820 (before lights on) on day 2. VOCs injected day before	
ITC632	4/22/83	EPA-84	ACETALDEHYDE-AIR IRRADIATION	CHAR-3		t=0 Acetald ~25% higher than pre- and post-t=0 values. Latter used. Initial NO2 assumed to be zero.	problems
ITC633	4/25/83	EPA-84	SURROGATE	SURG-8	MD	3-Day run. Hydrocarbon injections made on day before. Nylon filter used on day 2.	
ITC634	5/2/83	EPA-84	NOX-AIR + CO-NOX IRRADIATION	CHAR-5	320 ml CO injected t=2.		
ITC635	5/2/83	EPA-84	SURROGATE	SURG-8	MD	2 day run. VOCs injected day before.	
ITC636	5/5/83	EPA-84	ACETALDEHYDE-AIR IRRADIATION	CHAR-3		t=0 Acetald ~30% higher than pre- and post-t=0 values. Latter used. Initial NO2 assumed to be as measured.	problems
ITC637	5/9/83	EPA-84	SURROGATE	SURG-8	MD	4-day run. NO injections 1 hr. after lights on each day. VOCs injected night before 1st day.	
ITC638	5/16/83	EPA-84	NOX-AIR + CO-NOX IRRADIATION	CHAR-5	A	320 ml CO injected at t=2.	Log book said Dasibi CO on ITC, but no data given
ITC639	5/17/83	EPA-84	ACETALDEHYDE-AIR IRRADIATION	CHAR-3		Initial NOx assumed zero. NO drift evident. t=0 acetald 10% high, but used.	minor dataset problems
ITC640	5/18/83	EPA-84	O3, O3 + NOX IRRADIATION	SPECIAL		O3 injected into chamber before t=0, then NO injected after lights on. Log book says NO injected at 1045, but probably was 0954. Lights off 1300, but data kept taken.	problems
ITC641	5/18/83	EPA-84	OZONE DARK DECAY	CHAR-2			don't model. 3-part run
ITC642	5/20/83	EPA-84	PURE AIR IRRADIATION	CHAR-0			

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RunID	Date	Document-ation	Title on CHADPRO	Classification	Run conditions	Data quality comments	Data base status
ITC692	11/28/83	AF-84	NOX - AIR IRRADIATION	CHAR-1	<b>NEW BAG (#6)</b> ITC690. Propene conditioning		
ITC693	11/29/83	AF-84	PROPENE - NOX	PROPENE			
ITC694	11/30/83	EPA-84	ISOBUTENE - NOX	ISOBUTEN			
ITC695	12/1/83	AF-84	NOX - AIR IRRADIATION	CHAR-1			
ITC697	12/1/83	AF-84	O3 DARK DECAY	CHAR-2			
ITC698	12/2/83	AF-84	BENZENE - NOX	BENZENE			
ITC699	12/5/83	AF-84	TOLUENE - NOX	TOLUENE			
ITC700	12/6/83	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC702	12/7/83	AF-84	M-XYLENE - NOX	M-XYLENE			
ITC703	12/8/83	AF-84	MESITYLENE - NOX	135-TMB			
ITC704	12/9/83	AF-84	NOX - AIR IRRADIATION	CHAR-1			
ITC706	12/12/83	AF-84	MESITYLENE - NOX	135-TMB			
ITC707	12/13/83	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC709	12/14/83	AF-84	MESITYLENE - NOX	135-TMB			
ITC710	12/15/83	AF-84	BENZENE - NOX	BENZENE			
ITC711	12/16/83	AF-84	FURAN - NOX	FURAN			
ITC712	12/19/83	AF-84	NOX - AIR IRRADIATION	CHAR-1			
ITC713	12/20/83	AF-84	FURAN - NOX	FURAN			
ITC714	12/21/83	AF-84	NOX - AIR IRRADIATION	CHAR-1			
ITC715	12/22/83	AF-84	FURAN - NOX	FURAN			
ITC716	12/23/83	AF-84	PROPENE-NOX	PROPENE			
ITC717	1/4/84	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC728	1/20/84	AF-84	PROPENE-NOX	PROPENE			
ITC729	1/23/84	AF-84	THIOPHENE-NOX	THIOPHEN			
ITC730	1/24/84	AF-84	THIOPHENE - NOX	THIOPHEN			
ITC731	1/25/84	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC733	1/26/84	AF-84	THIOPHENE-NOX	THIOPHEN			
ITC734	1/27/84	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC735	2/1/84	AF-84	PYRROLE-NOX	PYRROLE	Reaction extremely rapid (may not be sensitive test of mechanism)		VOC/NOx too high
ITC736	2/3/84	AF-84	PROPENE-NOX	PROPENE	<b>NEW BAG (#7)</b> . Flushed but not otherwise conditioned.		
ITC737	2/6/84	AF-84	NOX-AIR IRRADIATION	CHAR-1	Follows propene run in new bag.		
ITC739	2/7/84	AF-84	TETRALIN-NOX	TETRALIN		Tetralin data scattered - precision ~20%. (True of other tetralin runs in this series).	
ITC740	2/8/84	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC742	2/9/84	AF-84	MESITYLENE-NOX	135-TMB			
ITC743	2/10/84	AF-84	FURAN - NOX	FURAN			
ITC744	2/13/84	AF-84	THIOPHENE-NOX	THIOPHEN			
ITC745	2/14/84	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC747	2/15/84	AF-84	TETRALIN-NOX	TETRALIN			
ITC748	2/16/84	AF-84	TETRALIN-NOX	TETRALIN			
ITC749	2/17/84	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC750	2/22/84	AF-84	TETRALIN-NOX + TRACERS	TETRALIN		"Butane" increases slightly with time.	

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ITC751	2/23/84	AF-84	NAPHTHALENE-NOX	NAPHTHAL				
ITC752	2/24/84	AF-84	NOX-AIR IRRADIATION	CHAR-1				
ITC754	2/27/84	AF-84	PROPENE-NOX	PROPENE				
ITC755	2/28/84	AF-84	NAPHTHALENE-NOX + TRACERS	NAPHTHAL				
ITC756	2/29/84	AF-84	NAPHTHALENE-NOX + TRACERS	NAPHTHAL				
ITC757	3/1/84	AF-84	NOX-AIR IRRADIATION	CHAR-1				
ITC759	3/2/84	AF-84	PROPENE - NOX	PROPENE	Intended to be conditioning run.	Only initial and final propene data taken.	data sparse	
ITC760	3/5/84	AF-84	NOX-AIR IRRADIATION	CHAR-1				
ITC761	3/6/84	AF-84	NOX-AIR + N-OCTANE	N-C8	A	n-Octane injected at t=2.	No reliable NO2 data No propene data for first part of run.	Don't model
ITC762	3/7/84	AF-84	NOX-AIR + N-OCTANE	N-C8	A	n-Octane injected at t=2.		
ITC763	3/8/84	AF-84	NOX-AIR + N-OCTANE	N-C8	A	n-Octane injected at t=2.		
ITC765	3/12/84	AF-84	NOX-AIR + METHYLCYCLOHEXANE	ME-CYCC6	A	me-CycC6 injected at t=2.	Apparently bad NOx data at t=0. Init NO, NO2 estimated based on subsequent values.	minor problems
ITC766	3/13/84	AF-84	NOX-AIR + METHYLCYCLOHEXANE	ME-CYCC6	A	me-CycC6 injected at t=2.		
ITC767	3/14/84	AF-84	NOX-AIR + METHYLCYCLOHEXANE	ME-CYCC6	A	me-CycC6 injected at t=2.		
ITC770	3/19/84	AF-84	NOX-AIR + N-BUTANE	N-C4	A	n-Butane injected at t=2.		
ITC771	3/20/84	AF-84	2,3-DIMETHYLNAPHTHALENE - NOX	23-DMN				
ITC772	3/21/84	AF-84	NOX-AIR IRRADIATION	CHAR-1				
ITC774	3/22/84	AF-84	2,3-DIMETHYLNAPHTHALENE - NOX + TRACE	23-DMN				
ITC775	3/23/84	AF-84	2,3-DIMETHYLNAPHTHALENE - NOX + TRACE	23-DMN			23-DMN data scattered. Init value may be ~10-15% high.	
ITC776	3/26/84	AF-84	NOX - AIR IRRADIATION	CHAR-1				
ITC778	3/29/84	AF-84	PYRROLE - NOX	PYRROLE		Reaction extremely rapid (may not be sensitive test of mechanism)		
ITC779	3/30/84	AF-84	PYRROLE - NOX	PYRROLE				
ITC780	4/2/84	AF-84	NOX-AIR + PYRROLE	PYRROLE	A	Pyrrrole injected at t=2 and t=4.		
ITC781	4/5/84	AF-84	SYNTHETIC FUEL #1 - NOX	SYNFUEL			No O3 data for first 3 hours, but O3 max ok.	
ITC782	4/6/84	AF-84	NOX-AIR IRRADIATION	CHAR-1				
ITC784	4/9/84	AF-84	SYNTHETIC FUEL #1 - NOX	SYNFUEL				
ITC785	4/10/84	AF-84	SYNTHETIC FUEL #1 - NOX	SYNFUEL				
ITC786	4/11/84	AF-84	SYNTHETIC FUEL #1 + FURAN + NOX	SYNFUEL				
ITC787	4/12/84	AF-84	NOX-AIR IRRADIATION	CHAR-1				
ITC788	4/13/84	AF-84	SYNTHETIC FUEL #1 + THIOPHENE + NOX	SYNFUEL				
ITC789	4/16/84	AF-84	NOX-AIR IRRADIATION	CHAR-1				
ITC791	4/17/84	AF-84	PROPENE - NOX	PROPENE				
ITC792	4/19/84	AF-84	PROPENE - NOX	PROPENE		Temp. somewhat low (297)	<b>NEW BAG (#8)</b>	
ITC793	4/20/84	AF-84	NOX-AIR IRRADIATION	CHAR-1				
ITC795	4/23/84	AF-84	SYNTHETIC FUEL #2 - NOX	SYNFUEL				
ITC796	4/24/84	AF-84	SYNTHETIC FUEL #2 - NOX	SYNFUEL				
ITC797	4/25/84	AF-84	NOX-AIR + N-OCTANE	N-C8	A	n-Octane injected t-2.		
ITC798	4/26/84	AF-84	NAPHTHALENE - NOX	NAPHTHAL				
ITC799	4/27/84	AF-84	SYNTHETIC FUEL #3 - NOX	SYNFUEL			t=0 values for much of the VOCs except SP-II look low. Init conc's adjusted based on pre- and post t=0 data.	problems
ITC800	4/30/84	AF-84	NOX-AIR + METHYLCYCLOHEXANE	ME-CYCC6	A	me-CycC6 injected at t=2.		



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RunID	Date	Document-ation	Title on CHADPRO	Classification	Run conditions	Data quality comments	Data base status
ITC801	5/1/84	AF-84	SYNTHETIC FUEL #3 - NOX	SYNFUEL		Most GC data extremely scattered. No ME-NAPH data. Initial fuel components probably not well estimated by data in this run.	Don't model
ITC802	5/2/84	AF-84	NAPHTHALENE - NOX	NAPHTHAL			
ITC803	5/3/84	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC805	5/4/84	AF-84	SYNTHETIC FUEL #1 - NOX	SYNFUEL		Most GC data look pretty bad and should not be relied upon to determine initial concentrations.	Don't model
ITC806	5/7/84	AF-84	2,3-DIMETHYLNAPHTHALENE - NOX	23-DMN			
ITC807	5/9/84	AF-84	SYNTHETIC FUEL #1 + PYRROLE - NOX	SYNFUEL		GC data incomplete.	Don't model
ITC808	5/10/84	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC810	5/11/84	AF-84	PROPENE - NOX	PROPENE			
ITC811	5/16/84	AF-84	ISOPRENE - NOX	ISOPRENE			
ITC812	5/17/84	AF-84	ISOPRENE - NOX	ISOPRENE			
ITC814	5/21/84	AF-84	NOX-AIR IRRADIATION	CHAR-1			
ITC815	5/22/84	AF-84	METHYLVINYLKEYTONE - NOX	MVK			
ITC816	5/23/84	AF-84	METHYLVINYLKEYTONE - NOX	MVK			
ITC819	5/25/84	AF-84	METHACROLEIN - NOX	METHACRO			
ITC821	5/29/84	AF-84	BIACETYL	CHAR-6		No O3 or NOx data	Don't model
ITC822	5/30/84	AF-84	OZONE DECAY	CHAR-2			
ITC823	5/31/84	AF-84	METHACROLEIN, NOX	METHACRO			
ITC824	6/1/84	AF-84	NOX - AIR IRRADIATION	CHAR-1			
ITC825	6/1/84	AF-84	ACETALDEHYDE - AIR	CHAR-3		Initial NOx assumed to be zero. Pre-t=0 and t=0 acetaldehyde agree, but are ~50% higher than subsequent values, which tend to decrease with time. So acetaldehyde data questionable.	problems
ITC826	6/4/84	AF-84	NOX - AIR + MESITYLENE	135-TMB	A	135-TMB added at t=2	Initial NO somewhat uncertain, increases slightly at start of run.
ITC827	6/6/84	AF-84	NOX - AIR + M-XYLENE	M-XYLENE	A	m-Xylene added at t=2.	
ITC828	6/7/84	AF-84	NOX - AIR + TOLUENE	TOLUENE	A	Toluene added at t=2.	
ITC829	6/8/84	AF-84	NOX-AIR IRRADIATION	CHAR-1		no propene data	Don't model
ITC831	6/11/84	AF-84	NOX - AIR + BENZENE	BENZENE	A	Benzene added at t=2.	Anomolously low and noisy temperature data at start of run ignored.
ITC832	6/12/84	AF-84	NOX-AIR - TETRALIN	TETRALIN	A	Tetralin added at t=2.	Tetralin data extremely scattered.
ITC860	9/20/84	ARB-86	PROPENE-NOX	PROPENE		<b>NEW BAG (#9)</b> (ITC858). Conditioned with propene run, then	
ITC861	9/21/84	ARB-86	NOX-AIR IRRADIATION	CHAR-1			
ITC864	9/27/84	ARB-86	NOx - AIR + FORMALDEHYDE	FORMALD	A	1.21 torr formald. in 2.0 liter bulb injected at t=2:06. Calc ~0.5 ppm agrees with data.	
ITC865	10/2/84	ARB-86	17:1 BASE CASE SURROGATE	SURG-8	MD	4-day run. NO injected 1116 day 3, 1100 day 4.	
ITC866	10/16/84	ARB-86	NOX-AIR + METHANOL	MEOH	A	Methanol injected t=2 (1418)	2-part run
ITC867	10/23/84	ARB-86	17:1 "MF" SUBST. SURROGATE	SURG-8	MD	4-day run. NO injected day 3 (1100), day 4 (1100)	4-day run, inj. days 3,4

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RunID	Date	Document-ation	Title on CHADPRO	Classification	Run conditions	Data quality comments	Data base status
ITC868	10/30/84	ARB-86	7.5:1 BASE CASE SURROGATE	SURG-8	MD	2-day run	
ITC870	11/2/84	ARB-86	NOX-AIR IRRADIATION	CHAR-1			
ITC871	11/5/84	ARB-86	6:1 BASE CASE SURROGATE	SURG-8	MD	2-day run	223-tmC5 data noisy
ITC872	11/8/84	ARB-86	6:1 "MF" SUBST. SURROGATE	SURG-8	MD	2-day run	
ITC873	11/12/84	ARB-86	3.6:1 BASE CASE SURROGATE	SURG-8	MD	2-day run	
ITC874	11/15/84	ARB-86	6:1 METHANOL SUBST. SURROGATE	SURG-8	MD	2-day run	
ITC875	11/19/84	ARB-86	NOX-AIR IRRADIATION	CHAR-1			
ITC877	11/19/84	ARB-86	6:1 "MF" SUBST. SURROGATE	SURG-8	MD	2-day run	
ITC878	11/30/84	ARB-86	NOX-AIR IRRADIATION	CHAR-1			
ITC880	12/5/84	ARB-86	3:1 BASE CASE SURROGATE	SURG-8	MD	3-day run	
ITC881	12/10/84	ARB-86	3:1 "MF" SUBST. SURROGATE	SURG-8	MD	3-day run	
ITC882	12/14/84	ARB-86	NOX-AIR IRRADIATION	CHAR-1			Some data missing during 1st hr.
ITC884	1/4/85	ARB-86	NOX-AIR IRRADIATION	CHAR-1			
ITC885	1/7/85	ARB-86	2.3:1 BASE CASE SURROGATE	SURG-8	MD	3-day run	
ITC886	1/14/85	ARB-86	3:1 METHANOL SUBST. SURROGATE	SURG-8	MD	3-day run. Minor temperature control problems.	Unexplained jump in NO and NO2 data in middle of day 1. Logbook notes Teco problems earlier.
ITC887	1/18/85	ARB-86	NOX-AIR + METHANOL IRRADIATION	MEOH	A	Methanol inj. t=2 (1116)	
ITC888	1/22/85	ARB-86	14:1 METHANOL SUBST. SURROGATE	SURG-8	MD	2-day run	
ITC889	1/25/85	ARB-86	NOx-AIR IRRADIATION	CHAR-1			
ITC891	1/30/85	ARB-86	17:1 BASE CASE SURROGATE	SURG-8	MD	2-day run	
ITC892	2/4/85	ARB-86	ACETALDEHYDE - AIR IRRADIATION	CHAR-3			Initial NOx assumed to be 0. As with all acetaldehyde air runs, t=0 acetaldehyde is high (by ~50%) compared to pre- and post-t=0 data. Latter used (but this may be a real effect?)
ITC893	2/5/85	ARB-86 AF-87	NOX-AIR IRRADIATION	CHAR-1			
ITC924	3/11/86	ARB-86 AF-87	NOX-AIR	CHAR-1		<b>NEW BAG (#10).</b> Conditioned with propene run	
ITC925	3/12/86	AF-87	PROPENE - NOX	PROPENE			
ITC926	3/13/86	AF-87	ETHENE - NOX	ETHENE			
ITC927	3/14/86	AF-87	1-BUTENE - NOX	1-BUTENE			
ITC928	3/17/86	AF-87	NOX-AIR + 1-BUTENE	1-BUTENE	A	1-Butene added t=2 (1215)	
ITC929	3/21/86	AF-87	1-HEXENE - NOX	1-HEXENE			
ITC930	3/24/86	AF-87	1-BUTENE - NOX	1-BUTENE			
ITC931	3/25/86	AF-87	1-HEXENE - NOX	1-HEXENE			
ITC932	3/26/86	AF-87	NOX - AIR	CHAR-1			
ITC934	3/27/86	AF-87	1-HEXENE - NOX	1-HEXENE			
ITC935	3/28/86	AF-87	1-BUTENE - NOX	1-BUTENE			
ITC936	3/31/86	AF-87	ETHENE - NOX	ETHENE			
ITC937	4/1/86	AF-87	NOX-AIR + 1-HEXENE	1-HEXENE	A	1-Hexene inj. t=2 (1130)	
ITC938	4/2/86	AF-87	PROPENE - NOX	PROPENE			
ITC939	4/3/86	AF-87	N-BUTANE - NOX	N-C4			
ITC940	4/4/86	AF-87	PURE AIR IRRADIATION	CHAR-0			NOx data available. Initial NOx zero.
ITC941	4/7/86	AF-87	ACROLEIN - NOX	ACROLEIN			
ITC942	4/8/86	AF-87	NOX - AIR	CHAR-1			Low quality propene data problems

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RunID	Date	Document-ation	Title on CHADPRO	Classification	Run conditions	Data quality comments	Data base status
ITC943	4/14/86	AF-87	ACROLEIN - NOX	ACROLEIN			
ITC944	4/16/86	AF-87	ACROLEIN - NOX	ACROLEIN			
ITC945	4/22/86	AF-87	NOX - AIR + ACROLEIN	ACROLEIN	A	Acrolein added t=2 (1130)	
ITC946	4/22/86	AF-87	PROPENE + ACROLEIN - NOX	ACROLEIN	M		
ITC947	4/22/86	AF-87	PROPENE - NOX	PROPENE			
ITC948	4/23/86	AF-87	N-BUTANE - NOX	N-C4		NO profiles act like initial HONO is present	NOx 20% uncertain NOx imprecise
ITC949	4/24/86	AF-87	NOX - AIR	CHAR-1		NO profile looks ok	NOx 20% uncertain NOx imprecise
ITC957	5/8/86	AF-87	ACETALDEHYDE - AIR	CHAR-3			In this run, the acetdehyde looks almost OK.
ITC958	5/12/86	AF-87	NOX - AIR	CHAR-1			
ITC960	5/14/86	AF-87	PROPENE - NOX	PROPENE		Unusually high temperature (320)	Temperature data questionable? do not model
ITC963	6/10/86	AF-87	SYNTHETIC EXHAUST - NOX	SYNEXH		Meglyox not injected	Unsure whether all init cond's established. Only pre t=0 data for some species. data sparse
ITC964	6/11/86	AF-87	NOX - AIR	CHAR-1			
ITC965	6/13/86	AF-87	SYNTHETIC EXHAUST - NOX	SYNEXH			Can't determine initial concentrations of all reactants, including methylglyoxal. Don't model
ITC967	6/17/86	AF-87	SYNTHETIC EXHAUST - NOX	SYNEXH			Can't determine initial concentrations of all reactants, including methylglyoxal. Zero drift makes NOx data uncertain Don't model
ITC968	6/19/86	AF-87	SYNTHETIC EXHAUST - NOX	SYNEXH			Can't determine initial concentrations of all reactants, including methylglyoxal. Zero drift makes NOx data uncertain Don't model
ITC970	6/23/86	AF-87	NOX - AIR	CHAR-1		T control problems. T slightly higher than normal (306).	
ITC972	6/24/86	AF-87	PROPENE - NOX	PROPENE			
ITC973	6/25/86	AF-87	PURE AIR IRRADIATION	CHAR-0			No and NO2 data taken, but always zero or negative
ITC974	6/25/86	AF-87	ACETALDEHYDE - AIR	CHAR-3			Columbia NO drift - 50 ppb in 6 hrs. Evidence for Columbia zero drift for all runs in this series. Acetald. data noisy - at least 15% uncertain problems
ITC975	7/1/86	EPA-87	PROPENE-NOX CONDITIONING	PROPENE		<b>NEW BAG (#11)</b> . O3 conditioned.	Looks like NO drifting up at end of run (Col.). Only initial and final propene. Don't model
ITC976	7/2/86	EPA-87	NOX-AIR IRRADIATION	CHAR-1			Zero drift makes NOx uncertain. Don't model
ITC977	7/7/86	EPA-87	STANDARD MINI-SURROGATE	SURG-4			Zero drift makes NOx uncertain. Don't model
ITC978	7/8/86	EPA-87	STANDARD MINI-SURROGATE	SURG-4			Zero drift makes NOx uncertain. Don't model
ITC979	7/9/86	EPA-87	MINI-SURROGATE + 10 ppm ETHANE	ETHANE	R4		Zero drift makes NOx uncertain. Don't model
ITC980	7/10/86	EPA-87	STANDARD MINI-SURROGATE	SURG-4			Zero drift makes NOx uncertain. Don't model
ITC981	7/14/86	EPA-87	MINI-SURROGATE + 0.2 ppm N-C15	N-C15	R4		Zero drift makes NOx uncertain. Don't model
ITC982	7/15/86	EPA-87	STANDARD MINI-SURROGATE	SURG-4			Zero drift makes NOx uncertain. Don't model
ITC985	7/18/86	EPA-87	MINI SURROGATE	SURG-4		Poor T control last hour. Goes up to 306	Zero drift makes NOx uncertain. Don't model

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RunID	Date	Document-ation	Title on CHADPRO	Classification	Run conditions	Data quality comments	Data base status	
ITC990	8/4/86	EPA-87	PROPENE - NOX CONDITIONING	PROPENE		Conditioning after experiments with biphenyl, naphthalene, methyl nitrite, or N2O5 in chamber.	Zero drift makes NOx uncertain, though less so than others because NOx is higher. Only initial and final propene.	Don't model
ITC991	8/5/86	EPA-87	MINI-SURROGATE	SURG-4			Zero drift makes NOx highly uncertain.	Don't model
ITC992	8/6/86	EPA-87	MINI-SURROGATE + ETHANE	ETHANE	R4		Zero drift makes NOx highly uncertain.	Don't model
ITC993	8/7/86	EPA-87	MINI-SURROGATE + N-C15	N-C15	R4		Zero drift makes NOx highly uncertain.	Don't model
ITC994	8/8/86	EPA-87	MINI-SURROGATE	SURG-4			Zero drift makes NOx highly uncertain.	Don't model
ITC997	8/13/86	EPA-87	MINI-SURROGATE	SURG-4			Zero drift makes NOx uncertain.	Don't model
ITC999	8/15/86	EPA-87	NOX-AIR + ETHANE AT T=2	ETHANE	A	Ethane inj. at t=2 (1130)	NOx instrument changed. No apparent zero drift. Looks like n-c4 was in the ethane.	
ITC1000	8/18/86	EPA-87	NOX-AIR + ACETYLENE	ACETYLEN	A	Acetylene injected at t=2 (1200)		
ITC1001	8/19/86	EPA-87	N-PENTADECANE - NOx	N-C15				
ITC1004	8/22/86	EPA-87	NOX-AIR	CHAR-1				
ITC1005	8/25/86	EPA-87	PROPENE-NOX-(COND.)	PROPENE		Follows runs with printing oils. Drier air fill than usual.	Only initial and final propene data, but init cond looks ok.	data sparse
ITC1006	8/26/86	EPA-87	ACETYLENE-NOX	ACETYLEN		Extremely rapid initial NO conversion suggests acetylene may be contaminated. Acetone present		
ITC1007	8/27/86	EPA-87	PURIFIED ACETYLENE-NOX	ACETYLEN		Acetylene passed through dry ice/acetone trap. But results same as ITC1006. Acetone much lower		
ITC1008	8/28/86	EPA-87	PURE AIR	CHAR-0				
ITC1009	8/29/86	EPA-87	ACETALDEHYDE-AIR	CHAR-3				
ITC1547	10/2/89	UNC	PROPENE CONDITIONING	PROPENE		<b>NEW BAG (#12).</b>	No data for first half or run.	Don't model
ITC1549	10/4/89	UNC	NOX - AIR + FORMALDEHYDE	FORMALD		HCHO injected t=2 (1128): 0.467 torr in 5.2-liter bulb	UNC formaldehyde data.	higher quality HCHO
ITC1550	10/5/89	UNC	PROPENE - NOx	PROPENE				higher quality HCHO
ITC1551	10/6/89	UNC	NOx - AIR	CHAR-1				
ITC1552	10/7/89	UNC	PURE AIR IRRADIATION	CHAR-0			UNC formaldehyde data indicate offgasing rate - 20 ppb/6 hr.	higher quality HCHO
ITC1554	10/10/89	UNC	FORMALDEHYDE - NOx	FORMALD				higher quality HCHO
ITC1555	10/11/89	UNC	ETHENE / NOx	ETHENE				higher quality HCHO
ITC1556	10/12/89	UNC	PROPENE / NOx	PROPENE				higher quality HCHO
ITC1558	10/16/89	UNC	ACETALDEHYDE - AIR	CHAR-3			Noisy acetald. data. Init may be 20% high.	problems

RunID	Date	Document-ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
ETC044	10/25/89	EMIR-93	PROPENE - NOx	<b>New bag installed</b> , followed by O3 decay. O3 decay rate = 2.23 %/hr. Until noted otherwise, following conditions used: Dump and refill bag with dry pure air. Normal flush procedure: 6 hours with lights, 3 hours w/o. Syringe injected NOx	Temperature readings jump around.between 302 and 304.	
ETC045	10/26/89	EMIR-93	PURE AIR IRRADIATON		No GC data	
ETC046	11/17/89	EMIR-93	TRACER NOX			
ETC047	11/20/89	EMIR-93	MINI-SURROGATE, 3 PPMC		Highly scattered n-hexane data for all surrogate runs until noted otherwise.	
ETC049	11/22/89	EMIR-93	ETHANE / NOx	Rapid rate of initial NO oxidation suggests HONO or other contaminant		
ETC050	11/27/89	EMIR-93	MINISURROGATE, 3 PPMC			
ETC051	11/29/89	EMIR-93	MINI-SURROGATE + 2 PPM N-BUTANE			
ETC052	12/6/89	EMIR-93	MINISURROGATE			
ETC053	12/7/89	EMIR-93	MINISURROGATE + 4 PPM NC4		Hexane data look better than before.	
ETC054	12/8/89	EMIR-93	BUTANE / NOx			
ETC056	12/20/89	EMIR-93	TRACER NOX			
ETC057	1/9/90	EMIR-93	PURE AIR IRRADIATION			
ETC058	1/12/90	EMIR-93	MINI-SURROGATE		Hexane data scattered again	
ETC059	1/17/90	EMIR-93	MINI-SURROGATE + n-BUTANE			
ETC060	1/18/90	EMIR-93	MINI-SURROGATE			
ETC061	1/19/90	EMIR-93	MINI-SUROGATE + TOLUENE			
ETC062	1/23/90	EMIR-93	MINI-SURROGATE + ETHANE		No ethene data after ethane injected.	
ETC063	1/24/90	EMIR-93	MINI-SURROGATE			
ETC064	1/25/90	EMIR-93	MINI-SURROGATE + TOLUENE			
ETC065	1/26/90	EMIR-93	MINI-SURROGATE + PROPENE			
ETC067	1/31/90	EMIR-93	MINI-SURROGATE			
ETC068	2/1/90	EMIR-93	MINISURROGATE + 10 PPM ETHANE		No ethene data after ethane injected.	
ETC069	2/8/90	EMIR-93	MINI-SURROGATE + TOLUENE			
ETC070	2/9/90	EMIR-93	TRACER-NOx			
ETC071	2/13/90	EMIR-93	MINI-SURROGATE			
ETC072	2/15/90	EMIR-93	MINI-SURROGATE + PROPENE			
ETC073	2/16/90	EMIR-93	MINI-SURROGATE + 18 PPM ETHANE		No ethene data after ethane injected.	
ETC075	2/21/90	EMIR-93	MINI-SURROGATE			
ETC076	2/22/90	EMIR-93	TRACER - NOX - AIR			
ETC077	2/23/90	EMIR-93	MINI-SURROGATE	Subsequent injections made into chamber after end of run.	Minor T control problems. T varies by 3 degrees during run.	

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ETC079	2/28/90	EMIR-93	MINI-SURROGATE + 18 PPM ETHANE	Follows ozone span check experiments in chamber, and an attempt of this run which was aborted because of a leak. Leak repaired.	No ethene data after ethane injected.	
ETC080	3/2/90	EMIR-93	STANDARD MINI-SURROGATE	Different NOx syringes used		
ETC081	3/6/90	EMIR-93	MINI-SURROGATE			
ETC082	3/7/90	EMIR-93	MINI-SURROGATE + 6 PPM BUTANE			
ETC083	3/8/90	EMIR-93	MINI-SURROGATE			
ETC086	3/14/90	EMIR-93	MINI-SURROGATE + 6 PPM N-BUTANE			
ETC087	3/15/90	EMIR-93	MINI-SURROGATE			
ETC088	3/20/90	EMIR-93	MINI-SURROGATE + 25 PPM ETHANE	Higher than normal temperature	No ethene data after ethane injected.	
ETC089	3/21/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC090	3/22/90	EMIR-93	STANDARD MINI-SURROGATE WITH VACUUM N	<b>This and all subsequent runs (unless noted) used vacuum injected NOx.</b> Causes lower initial rate of NO oxidation.		
ETC091	3/29/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC092	3/30/90	EMIR-93 CMA-93	STANDARD MINI-SURROGATE + 18 PPM ETHANE		No ethene data after ethane injected.	
ETC093	4/3/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC094	4/5/90	EMIR-93	6 PPM N-BUTANE			
ETC095	4/6/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC097	4/19/90	EMIR-93	MINI-SURROGATE + 6 PPM N-BUTANE	Followed O3 comparisons and actinometry in bag.		
ETC098	4/20/90	EMIR-93	MINI-SURROGATE			
ETC099	4/24/90	EMIR-93 CMA-93	STANDARD MINI-SURROGATE + ETHANE		No ethene data after ethane injected.	
ETC100	4/27/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC101	5/1/90	EMIR-93	STANDARD MINI-SURROGATE + TOLUENE			
ETC102	5/3/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC103	5/4/90	EMIR-93	STANDARD MINI-SURROGATE + TOLUENE	Temperature varies by 3 K.		
ETC104	5/9/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC106	5/11/90	EMIR-93	STANDARD MINI-SURROGATE + PROPENE			
ETC107	5/17/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC108	5/18/90	EMIR-93	STANDARD MINI-SURROGATE + PROPENE			
ETC109	5/22/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC110	5/24/90	EMIR-93	MINI-SUROGATE + PROPENE			
ETC112	5/30/90	EMIR-93	TRACER-NOX-AIR			
ETC113	5/31/90	EMIR-93	STANDARD MINI-SURROGATE		Sparse GC data during first half	
ETC114	6/13/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC115	6/15/90	EMIR-93	STANDARD MINI-SURROGATE			
ETC116	6/18/90	EMIR-93	STANDARD MINI-SURROGATE	Temperature varies by 3 K.		
ETC117	6/19/90	EMIR-93	STANDARD MINI-SURROGATE	Temperature varies by 3 K.		
ETC118	6/20/90	EMIR-93	MINI-SURROGATE + PROPENE	Temperature varies by 4 K.	T=0 and t=1 propene data look anomalous. Use pre t=0 to establish amount injected.	problems 1
ETC119	6/21/90	EMIR-93	MINI-SURROGATE			

RunID	Date	Document-ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
ETC120	6/22/90	EMIR-93	MINI-SURROGATE +MTBE			
ETC122	6/26/90	EMIR-93	MINI-SURROGATE	Follows k1.		
ETC123	6/27/90	EMIR-93	MINI-SURROGATE + MTBE (3 ppm)			
ETC124	6/28/90	EMIR-93	MINI-SURROGATE			
ETC125	6/29/90	EMIR-93	MINI-SURROGATE + MTBE (2.5 ppm)			
ETC126	7/2/90	EMIR-93	MINI-SURROGATE			
ETC127	7/3/90	EMIR-93	MINI-SURROGATE + MTBE			
ETC128	7/5/90	EMIR-93	MINI-SURROGATE			
ETC129	7/6/90	EMIR-93	MINI-SURROGATE			
ETC130	7/16/90	EMIR-93	MINI-SURROGATE	Apple instrument interface adapter replaced with in-house box. No apprent change in quality of O3 data.		
ETC131	7/17/90	EMIR-93	MINI-SURROGATE + ETHANOL			
ETC132	7/18/90	EMIR-93	MINI-SURROGATE			
ETC133	7/19/90	EMIR-93	MINI-SURROGATE + ETOH			
ETC134	7/20/90	EMIR-93	MINI-SURROGATE			
ETC135	7/24/90	EMIR-93	MINI-SURROGATE + BUTANE		n-C4 data scattered. Init n-C4 uncertain by ~10%.	
ETC137	7/26/90	EMIR-93	MINI-SURROGATE	Follows k1.		
ETC138	7/27/90	EMIR-93	MINI-SURROGATE + ETOH		Ethanol data scattered. Init ethanol uncertain by ~10%.	
ETC139	7/30/90	EMIR-93	MINI-SURROGATE			
ETC141	10/23/90	EMIR-93	PURE AIR PHOTOLYSIS	Follows k1. Temperature extremely variable, either data bad or poor T control. Varies from 301 to 304, with dip in middle of run.	NO2 increases throughout run. O3 changes lcontinually even at low concentration, suggesting no DAC zero problem(?).	problems 2
ETC143	10/31/90	EMIR-93	MINI-SURROGATE		<b>Kiethly</b> tests noted in log book. Probably not used. Usual O3 zero problem.	
ETC145	11/2/90	EMIR-93	MINI-SURROGATE			
ETC147	11/7/90	EMIR-93	MINI-SURROGATE	Follows k1		
ETC148	11/9/90	EMIR-93	MINI-SURROGATE + ISOPROPANOL (4 PPM)			
ETC149	11/12/90	EMIR-93	MINI-SURROGATE	Poor T control Goes from 301 to 303		
ETC150	11/16/90	EMIR-93	m-XYLENE	Follows use of bag for O3 calibration	No GC data	can't model 9
ETC151	1/7/91	EMIR-93	PURE AIR PHOTOLYSIS	<b>Chamber relocated to Fawcett 101</b>		
ETC153	1/9/91	EMIR-93	MINI-SURROGATE	Follows k1		
ETC154	1/10/91	EMIR-93	MINI-SURROGATE			
ETC155	1/11/91	EMIR-93	MINI-SURROGATE + ISOPROPANOL (1.72 PPM)			
ETC156	1/14/91	EMIR-93	MINI-SURROGATE			
ETC157	1/16/91	EMIR-93	MINI-SURROGATE + 1.22 PPM ISOPROPANOL			
ETC158	1/17/91	EMIR-93	MINI-SURROGATE			
ETC159	1/18/91	EMIR-93	MINI-SURROGATE + ISOPROPANOL (1.5 PPM)			
ETC160	1/22/91	EMIR-93	MINI-SURROGATE			
ETC161	1/24/91	EMIR-93	MINI-SURROGATE			
ETC162	1/28/91	EMIR-93	MINI-SURROGATE			

RunID	Date	Document-ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status	
ETC163	1/31/91	EMIR-93	MINI-SURROGATE + OXITOL	High T (303) at end.	No ethene data	problems	1
ETC164	2/1/91	EMIR-93	STANDARD MINI-SURROGATE	High T (303) at end.	No ethene data	problems	1
ETC165	2/6/91	EMIR-93	STANDARD MINI-SURROGATE	After previous run, Bag removed and "numerous" leaks repaired. Outside dry wiped. High T (305 at end).			
ETC166	2/7/91	EMIR-93	MINI + CARBITOL (.512 PPM)	High T (306 at end).	No pre t=0 O3 or NOx data.		
ETC168	2/12/91	EMIR-93	STANDARD MINI-SURROGATE	Follows k1.			
ETC169	2/13/91	EMIR-93	MINI SURROGATE + CARBITOL (.412 ppm)				
ETC170	2/14/91	EMIR-93	STANDARD MINI-SURROGATE				
ETC171	2/20/91	EMIR-93	STANDARD MINI-SURROGATE+OXITOL .702 PPM				
ETC172	2/21/91	EMIR-93	STANDARD MINI-SURROGATE				
ETC173	2/22/91	EMIR-93	STANDARD MINI-SURROGATE + CARBITOL				
ETC174	2/25/91	EMIR-93	STANDARD MINI-SURROGATE	Increased amount of m-xylene injected by 7%.			
ETC175	2/26/91	EMIR-93	STANDARD MINI-SURROGATE+OXITOL .406 PPM		Extremely low quality ethene data for this run through ETC207. Scattered calibration results.	problems	3
ETC176	2/27/91	EMIR-93	STANDARD MINI SURROGATE		Low quality ethene data.	problems	3
ETC177	3/19/91	EMIR-93	STANDARD MINI-SURROGATE	Room air flush with lights on March 13 (pure air down), followed by calibrations and room air purge. Normal flush before run.	Consistently negative O3 zero offset for this and following runs. Low quality ethene data.	problems	3
ETC178	3/20/91	EMIR-93	STANDARD MINI-SURROGATE		Ethene data garbage.	problems	3
ETC179	3/21/91	DOW-92 EMIR-93	STD. MINI-SURROGATE + HEXASIOX(9.16 ppm)		Siloxanes found to destroy NOx convertor. No valid NO2 data until noted. Low quality ethene data.	problems	3
ETC180	3/22/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data. No NO2 data	problems	3
ETC181	3/26/91	DOW-92 EMIR-93	STD. MINI-SURROGATE + OCTASIOX(10.0ppm)		Low quality ethene data. No NO2 data	problems	3
ETC182	3/27/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data. No NO2 data	problems	3
ETC183	3/28/91	DOW-92 EMIR-93	STD. MINI-SURROGATE + HEXASIOX (6,94PPM)		Low quality ethene data. No NO2 data	problems	3
ETC184	3/29/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data. No NO2 data	problems	3
ETC185	4/2/91	DOW-92 EMIR-93	STD. MINI-SURROGATE + OCTASIOX (4.2ppm)		Low quality ethene data. No NO2 data	problems	3
ETC186	4/3/91	EMIR-93	STANDARD MINI-SURROGATE		Initial m-xylene uncertain. Low quality ethene data. No NO2 data.	problems	3
ETC187	4/4/91	DOW-92 EMIR-93	STD. MINI-SURROGATE + DECASIOX (4.87ppm)		Low quality ethene data. Initial n-C6 uncertain.. No NO2 data.	problems	3
ETC188	4/5/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data. No NO2 data	problems	3
ETC189	4/12/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data. NO2 data available again.	problems	3



RunID	Date	Document-ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
ETC190	4/15/91	DOW-92 EMIR-93	STD. MINI-SURROGATE + DECASIOX		Low quality ethene data. No NO2 data. Very poor siloxane data, initial concentration uncertain.	problems 3
ETC191	4/16/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data.	problems 3
ETC192	4/17/91	DOW-92 EMIR-93	STD. MINI-SURROGATE + DECASIOX (1.92ppm)		Low quality ethene data. No NO2 data	problems 3
ETC193	4/18/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data.	problems 3
ETC194	4/19/91	DOW-92 EMIR-93	STD. MINI-SURROGATE + OCTASIOX (2.13ppm)		Low quality ethene data. No NO2 data	problems 3
ETC195	4/22/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data.	problems 3
ETC196	4/23/91	EMIR-93	STD. MINI-SURROGATE + M-XYL (170ppb)		Low quality ethene data.	problems 3
ETC197	4/25/91	EMIR-93	STANDARD MINI-SURROGATE	Apparent methyl nitrite contamination in NOx injections.	Low quality ethene data.	problems 3
ETC198	4/26/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data. Bad pre t=0 and t=0 m-xylene points.	problems 3
ETC199	4/29/91	EMIR-93	STD. MINI-SURROGATE + ETHENE (1.13ppm)		Low quality ethene data. Initial ethene cannot be reliably determined except by amount injected.	problems 3
ETC200	4/30/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data.	problems 3
ETC201	5/1/91	EMIR-93	STD. MINI-SURROGATE + N-C6 (1.61ppm)		Low quality ethene data.	problems 3
ETC202	5/2/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data.	problems 3
ETC203	5/7/91	EMIR-93	STD. MINI-SURROGATE + ETHENE (.933ppm)		Low quality ethene data. Initial ethene cannot be reliably determined except by amount injected. Only pre t=0 n-c6 data.	problems 3
ETC204	5/8/91	EMIR-93	STANDARD MINI-SURROGATE		Low quality ethene data.	problems 3
ETC205	5/9/91	EMIR-93	PURE AIR PHOTOLYSIS		Low quality ethene data.	problems 3
ETC207	5/10/91	EMIR-93	STD. MINI-SURROGATE + m-XYL(143ppm)		Low quality ethene data. Pre t=0 and t=0 m-xylene data anomalous, so initial m-xylene uncertain	problems 3
ETC208	5/14/91	EMIR-93	STANDARD MINI-SURROGATE		Ethene may have better characterized calibration, but problem instrument still used.	problems 3
ETC209	5/15/91	EMIR-93	STD. MINI-SURROGATE + HEXANE (1.88 ppm)			
ETC210	5/16/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC211	5/17/91	EMIR-93	TRACER-NOX			
ETC212	5/22/91	EMIR-93	TRACER-NOX		O3 has a positive zero offset until noted otherwise.	
ETC213	5/22/91	EMIR-93	TRACER-NOX		n-Butane and isobutene data suspect. Decreasing rapidly pre t=0, continuing at start. O3 has positive zero offset now.	Do not model 9
ETC214	5/23/91	EMIR-93	BUTANE-NOX		Ozone continues to have positive zero offset.	
ETC215	5/24/91	EMIR-93	STANDARD MINI-SURROGATE		Another instrument used for ethene for this run and those following.	

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ETC216	5/30/91	EMIR-93	PROPENE - NOX		Tests with Nylon filter in line with different NOx analyzers near end of run. No reliable calibration factor for propene.	problems 2
ETC217	5/31/91	EMIR-93	MINI-SURROGATE + 1/2 NOX			
ETC218	6/3/91	EMIR-93	M-XYLENE(0.35PPM)+ETHENE(0.648PPM)+NOX			
ETC219	6/4/91	EMIR-93	STD. MINI-SURROGATE + 1/2 NOX			
ETC220	6/6/91	EMIR-93	ETHENE (0.6 PPM) + NOX			
ETC221	6/7/91	EMIR-93	ETHENE (4 PPM) + NOX			
ETC222	6/10/91	EMIR-93	M-XYLENE (.4 PPM)-NOX		Nylon filter put in line at end of run for this and following runs. Should not affect data pre t=Tend. O3 has no zero offset.	
ETC223	6/12/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC224	6/13/91	EMIR-93	STD. MINI-SURROGATE + BUTANE (10.4 PPM)			
ETC225	6/14/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC226	6/17/91	EMIR-93	STD. MINI-SURROGATE + PROPANE (10 PPM)			
ETC227	6/18/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC228	6/19/91	EMIR-93	STD. MINI-SURROGATE + ISO-C4 (2.6 ppm)			
ETC229	6/20/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC230	6/21/91	EMIR-93	STD. MINI-SURROGATE + PROPANE (25.3 ppm)			
ETC231	6/24/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC232	6/25/91	EMIR-93	STD. MINI-SURROGATE + ISO-C4 (20 PPM)			
ETC233	6/26/91	EMIR-93	STANDARD MINI-SURROGATE		No pre t=0 or t=0 m-xylene data. Initial m-xylene uncertain.	problems 9
ETC234	7/10/91	EMIR-93	STANDARD MINI-SURROGATE	<b>Chamber moved to new position.</b> For this and following runs, T consistently raises from 300 to 303 K during run.	Teco has elevated zero due to power outage before run started. Unusually high O3 zero.	problems 1
ETC235	7/11/91	EMIR-93 CMA-93	STD. MINI-SURROGATE + ETHANE (38 ppm)			
ETC236	7/12/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC237	7/15/91	EMIR-93	STD. MINI-SURROGATE + N-OCTANE (1.5ppm)	New NO storage bulb - not purified with molecular sieves.		
ETC238	7/16/91	EMIR-93	STANDARD MIN-SURROGATE		Negative O3 zero offset.	
ETC239	7/18/91	EMIR-93	STD. MINI-SURROGATE + OCTANE (1.57ppm)		Positive O3 zero offset	
ETC240	7/19/91	EMIR-93	STANDARD MINI-SURROGATE		Negative O3 zero offset until indicated otherwise.	
ETC241	7/22/91	EMIR-93	STD. MINI-SURROGATE + ISO-C4 (10 ppm)			
ETC242	7/23/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC243	7/24/91	EMIR-93 CMA-93	STD. MINI-SURROGATE + ACETONE (0.69ppm)			
ETC244	7/26/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC245	7/29/91	EMIR-93 CMA-93	STD. MINI-SURROGATE + ACETONE ( 2 PPM )	T increases steadily from 300 to 304 K for runs around this time.		
ETC246	7/30/91	EMIR-93	STD. MINI-SURROGATE			
ETC247	7/31/91	EMIR-93 CMA-93	STD. MINI-SURROGATE + ACETONE(3.65ppm)			
ETC248	8/1/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC249	8/2/91	EMIR-93	STD. MINI-SURROGATE + 135-TMB (0.04ppm)			

RunID	Date	Document-ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
ETC250	8/6/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC251	8/6/91	EMIR-93	STD. MINI-SURROGATE + 135-TMB (.04ppm)		O3 and NOx after t=4 look anomalous and are probably unreliable. Tend reduced to 4 hrs.	problems 1
ETC252	8/7/91	EMIR-93	STANDARD MINI-SURROGATE		Only pre t=0 ethene data	
ETC253	8/9/91	EMIR-93	STD. MINI-SURG + ISOBUTENE (.219 ppm)		Only pre t=0 n-C6 data	
ETC254	8/12/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC255	8/13/91	EMIR-93	STD. MINI-SURROGATE + I-C4= (.207 ppm)	T goes up to 306K.		
ETC256	8/14/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC257	8/15/91	EMIR-93	STD. MINI-SURROGATE + I-C4= (.112ppm)			
ETC258	8/16/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC259	8/19/91	EMIR-93	STD MINI-SURROGATE + O-XYLENE (1 UL)			
ETC260	8/20/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC261	8/21/91	EMIR-93	STD MINI-SURROGATE + O-XYLENE (1 UL)			
ETC262	8/22/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC263	8/23/91	EMIR-93	STD MINI-SURROGATE + BENZENE(57 UL)	Unusual in that it reaches a "true" O3 maximum. T goes up to 306K.		
ETC264	8/26/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC265	8/27/91	EMIR-93	STD MINI-SURROGATE + BENZENE	Unusual in that it reaches a "true" O3 maximum.		
ETC266	8/28/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC267	8/29/91	EMIR-93	STD MINI-SURROGATE + 124TMB(0.037PPM)			
ETC268	9/3/91	EMIR-93	STANDARD MINI-SURROGATE	T goes up to 305K.		
ETC269	9/4/91	EMIR-93	D MINI-SURROGATE + 124TMB(0.0413PPM) 4			
ETC270	9/5/91	EMIR-93	STANDARD MINI-SURROGATE		More negative O3 zero for this and following runs than those previous.	
ETC271	9/10/91	SOS-93 EMIR-93	STD MINI-SURROGATE + ISOPRENE(0.153PPM)			
ETC272	9/11/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC273	9/13/91	SOS-93 EMIR-93	STD MINI-SURROGATE + ISOPRENE(0.137PPM)			
ETC274	9/16/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC275	9/17/91	SOS-93 EMIR-93	STD. MINI-SURROGATE + ISOPRENE(0.11ppm)			
ETC276	9/18/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC277	9/19/91	SOS-93 EMIR-93	STD MINI-SURROGATE + ISOPRENE(.076ppm)			
ETC278	9/20/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC279	9/23/91	EMIR-93	STD MINI-SURROGATE + DME (3.98 ppm)			
ETC280	9/24/91	EMIR-93	STANDARD MINI-SURROGATE	T goes up to 306K.		
ETC281	9/25/91	EMIR-93	STD. MINI-SURROGATE + DME (3.41 ppm)			
ETC282	9/26/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC283	9/27/91	EMIR-93	STD. MINI-SURROGATE + DME (1.98 ppm)			
ETC284	9/30/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC285	10/1/91	EMIR-93	STD. MINI-SURROGATE + METHANOL(7.6 ppm)			
ETC286	10/3/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC287	10/4/91	EMIR-93	STD. MINI-SURROGATE + METHANOL(0.83 ppm)			
ETC288	10/8/91	EMIR-93	STANDARD MINI-SURROGATE	T goes up to 306K for this and following runs.		

RunID	Date	Document-ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
ETC289	10/9/91	EMIR-93	STD. MINI-SURROGATE + METHANOL(2.42ppm)		No pre t=0 O3 and NOx data	
ETC290	10/10/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC291	10/11/91	EMIR-93	STD. MINI-SURROGATE + ISO-C8 (11.1 ppm)			
ETC292	10/14/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC293	10/15/91	EMIR-93	STD. MINI-SURROGATE + ISO-C8 (10.67ppm)			
ETC294	10/16/91	EMIR-93	STANDRD MINI-SURROGATE 1			
ETC295	10/17/91	EMIR-93	STD. MINI-SURROGATE + DME (2.11ppm)			
ETC296	10/18/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC297	10/21/91	EMIR-93	STD. MINI-SURROGATE + 123-TMB(.043ppm)			
ETC298	10/22/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC299	10/23/91	EMIR-93	STD. MINI-SURROGATE + 123-TMB(.036ppm)			
ETC300	10/24/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC301	10/25/91	EMIR-93	STD. MINI-SURROGATE + M-XYL(.153ppm)			
ETC302	10/28/91	EMIR-93	STANDARD MINI-SURROGATE	New n-C6+m-Xyl solution for surrogate injections.		
ETC303	10/29/91	EMIR-93	STD. MINI-SURROGATE + ISO-C4 (6.67ppm)			
ETC304	10/30/91	EMIR-93	STANDARD MINI-SURROGATE	New n-C6+m-Xyl solution for surrogate injections.		
ETC305	10/31/91	EMIR-93	STD. MINI-SURROGATE + PROPANE (21ppm)			
ETC306	11/4/91	EMIR-93	STANDARD MINI-SURROGATE		<b>New NIST NO Span bottle</b>	
ETC307	11/5/91	EMIR-93	STD MINI-SURROGATE + TRANS-2-BUTENE			
ETC308	11/6/91	EMIR-93	STANDARD MINI-SURROGATE	T goes up to 304K.		
ETC309	11/7/91	EMIR-93	STD. MINI-SURROGATE + T-2-BUTENE(.066ppm)			
ETC310	11/8/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC311	11/11/91	EMIR-93	STD. MINI-SURRGATE + C2-BENZENE(.110ppm)	Lower than normal T (297-299) for runs around this time		
ETC312	11/12/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC313	11/13/91	EMIR-93	STD. MINI-SURROGATE + C2-BENZNE(.113ppm)			
ETC314	11/15/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC315	11/18/91	EMIR-93	STD. MINI-SURROGATE + C2-BENZENE(.200ppm)			
ETC316	11/19/91	EMIR-93	STANDARD MINI-SURROGATE			
ETC317	11/20/91	EMIR-93	TRACER-NOX		Isobutene data too scattered for OH estimate	
ETC318	11/21/91	EMIR-93	BUTANE-NOX			
ETC319	11/22/91	EMIR-93	ACETALDEHYDE-PURE AIR			
ETC320	11/25/91	EMIR-93	PURE-AIR PHOTOLYSIS			
ETC321	11/26/91	EMIR-93	PROPENE-NOX			
ETC323	1/17/92	EMIR-93	STANDARD MINI-SURROGATE	<b>Chamber moved to new modular building by the outdoor chamber</b> Unusually high and scattered temperature (303-306K).	Zero offset for O3 is now nearly zero.	
ETC324	1/21/92	EMIR-93	STANDARD MINI-SURROGATE	Temp. around 303.		
ETC325	1/22/92	EMIR-93	STANDARD MINI-SURROGATE			
ETC326	1/24/92	EMIR-93	STANDARD MINI-SURROGATE		Negative zero drift on columbia noticed to start around now.	
ETC327	2/3/92	EMIR-93	STANDARD MINI-SURROGATE			
ETC328	2/4/92	EMIR-93	STANDARD MINI-SURROGATE			
ETC329	2/5/92	EMIR-93	STD. MINI-SURROGATE + Cl TRACER (.45ppb)	First run with chloroisobutene tracer		

RunID	Date	Document-ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
ETC330	2/6/92	EMIR-93	STD. MINI-SURROGATE + CI TRACER(1.85ppb)			
ETC331	2/7/92	EMIR-93	STANDARD MINI-SURROGATE	Temp goes up as high as 305K for these runs		
ETC332	2/10/92	EMIR-93	STD. MINI-SURROGATE + TRACER + ETHANE			
ETC333	2/11/92	EMIR-93	STANDARD MINI-SURROGATE + TRACER + ETHAN			
ETC334	2/12/92	EMIR-93	STANDARD MINI-SURROGATE			
ETC335	2/14/92	EMIR-93	STD. MINI-SURROGATE + ACETALD (.7ppm)	Acetaldehyde vapor transferred in Faucett		
ETC336	2/18/92	EMIR-93	STANDARD MINI-SURROGATE			
ETC338	2/19/92	EMIR-93	STD. MINI-SURROGATE + ACETALD (1.3ppb)			
ETC339	2/20/92	EMIR-93	STANDARD MINI-SURROGATE + TRACER (2ppb)	Pure air sytem out. Used med. air to flush bag. GC samples show higher background than usual.		
ETC342	2/25/92	EMIR-93	STD. MINI-SURROGATE + C=C-CCl2 (100ppb)			
ETC343	2/26/92	EMIR-93	STD. MINI-SURROGATE + TRACER(100ppb)			
ETC344	2/27/92	EMIR-93	STD. MINI-SURROGATE + M-XYL (178.2ppb)	Two lamps noticed to be out.		
ETC345	3/2/92	EMIR-93	STANDARD MINI-SURROGATE			
ETC346	3/3/92	EMIR-93	STD. MINI-SURROGATE + P-XYLENE (80.4ppb)		P-xylene and m-xylene co-elute. P-xylene injected first to get t0 conc, then m-xylene t0 estimated by subtracting p-xylene area. No factor for formald. data.	
ETC347	3/4/92	EMIR-93	STANDARD MINI-SURROGATE			
ETC348	3/5/92	EMIR-93	STD. MINI-SURROGATE + P-XYLENE		See ETC346. No factor for formald. data.	
ETC349	3/6/92	EMIR-93	STANDARD MINI-SURROGATE			
ETC350	3/9/92	EMIR-93	STD. MINI-SURROGATE + TRACER (129ppb)			
ETC351	3/10/92	EMIR-93	STANDARD MINI-SUROGATE			
ETC352	3/11/92	EMIR-93	STD. MINI-SURROGATE + HCHO (100 ppb)			
ETC353	3/12/92	EMIR-93	STANDARD MINI-SURROGATE	Note: apparent dilution rate is 1%/hr.		
ETC354	3/13/92	EMIR-93	DARK DECAY-NO LIGHTS, NO NOX-	Dark run, no NOx added. Result species decay at 3.3 %/hr.	No T or NOx data	Do not model 9
ETC355	3/17/92	EMIR-93	DILUTION EFFECTS	Dark run, no NOx added. Result Apparent dilution rate = 1%/hr		
ETC356	3/18/92	EMIR-93	STANDARD MINI-SURROGATE +TRACER+CCI4			
ETC357	3/19/92	EMIR-93	STD. MINI-SURROGATE + CCl4 + HCHO			
ETC372	4/27/92	EMIR-93	STANDARD MINI-SURROGATE	Apparent contamination of air system around time of ETC358. <b>New bag installed.</b> Medical air used to flush and fill bag until noted otherwise. Temperature extremely high (312K).	Temperature data look unreasonable and may not be valid.	Do not model 9
ETC373	4/28/92	EMIR-93	STANDARD MINI-SURROGATE	Temperature extremely high (315K).		
ETC374	5/12/92	EMIR-93 ERCT-94	PURE-AIR PHOTOLYSIS	After the run, the O3 decay rate was measured to be $2.7 \times 10^{-4} \text{ min}^{-1}$ .		
ETC375	5/18/92	EMIR-93 ERCT-94	PROPENE - NOX		No O3 or NOx data after t=2.5. T data for 90 min only.	Do not model 9

RunID	Date	Document-ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
ETC376	5/19/92	EMIR-93	STANDARD MINI-SURROGATE			
ETC377	5/20/92	EMIR-93	ETHENE - NOX			
ETC378	5/21/92	EMIR-93	HCHO - 1/2 NOX			
ETC379	5/22/92	EMIR-93	TRACERS-HCHO			
ETC380	5/26/92	EMIR-93 ERCT-94	TRACERS - NOX			
ETC381	5/27/92	EMIR-93 ERCT-94	ETHENE - NOX			
ETC382	5/28/92	EMIR-93	ACETALDHYDE - AIR			
ETC385	6/8/92	EMIR-93	TRACERS-HCHO	Follows PAN calibration attempt in chamber		
ETC386	6/9/92		METHACROLEIN-NOX			
ETC387	6/11/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC388	6/15/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC389	6/17/92	DOW-92	LOW NOx MINI-SURROGATE + BUTANE (4ppm)		n-C6 increases at end of run. Bad data or interferences.	problems 1
ETC390	6/18/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC391	6/19/92	DOW-92	MINI-SURROGATE + HEXASIOX (4ppm)		NO2 data for first hour.	
ETC392	6/22/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC393	6/23/92	DOW-92	MINI-SURROGATE + BUTANE (4ppm)		n-C6 increases at end of run. interferences.	problems 1
ETC395	6/25/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC396	6/26/92	DOW-92	MINI-SURROGATE + HEXASIOX		Only initial NO2 data for this and following siloxane runs.	
ETC397	6/29/92	DOW-92	LOW NOx MINI-SURROGATE		No temperature data except pre t=0.	probmems 2
ETC398	7/2/92	DOW-92	MINI-SURROGATE + OCTASIOX (2.5ppm)			
ETC399	7/6/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC400	7/7/92	DOW-92	MINI-SURROGATE + SI2MEOH (2.6ppm)			
ETC401	7/8/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC402	7/9/92	DOW-92	MINI-SURROGATE + (SIOME)4 (1.77ppm)			
ETC403	7/13/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC404	7/14/92	DOW-92	MINI-SURROGATE + SIOHME5 (1.19 ppm)			
ETC405	7/15/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC406	7/16/92	DOW-92	MINI-SURROGATE + (SIOME)4 (1.34ppm)			
ETC407	7/17/92	DOW-92	LOW NOx MINI-SURROGATE			
ETC408	7/20/92	DOW-92 EMIR-93	STD. MINI-SURROGATE (HIGHER NOX LEVELS)	Chamber not flushed -- series of dumps and fills		
ETC409	7/21/92	DOW-92 EMIR-93	STD. MINI-SURROGATE + SIOHME5 (2.16ppm)		Extremely high positive zero on O3 (25 ppb)	poroblems 3
ETC411	7/23/92	DOW-92 EMIR-93	STD. MINI-SURROGATE			
ETC412	7/24/92	DOW-92 EMIR-93	STD. MINI-SURROGATE + SIOHME5(0.70ppm)			
ETC413	7/27/92	DOW-92 EMIR-93	STANDARD MINI-SURROGATE			
ETC414	7/29/92	EMIR-93	STD. MINI-SURROGATE + CO (138 ppm)			
ETC415	7/31/92	DOW-92 EMIR-93	STANDARD MINI-SURROGATE			

RunID	Date	Document- ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
ETC416	8/4/92	EMIR-93	STD. MINI-SURROGATE + CO (ca. 130 ppm)			
ETC417	8/5/92	EMIR-92	STANDARD MINI-SURROGATE		No temperature data. Low quality CL2IBUTE data.	
ETC418	8/10/92	EMIR-93	MINI-SURROGATE + CO (110PPM)			
ETC419	8/11/92	EMIR-94	STANDARD MINI-SURROGATE			
ETC420	8/12/92		A-PINENE - NOX	Poor T control 298-303K.		
ETC421	8/13/92		B-PINENE - NOX		O3 flat at 25 ppb for first part of run. O3 data questionable.	Problems 3
ETC422	8/14/92		G-TERPINENE - NOX		No terpinene data	Can't model 9
ETC423	8/17/92		SABINENE - NOX			
ETC424	8/18/92		3-CARENE - NOX			
ETC425	8/20/92		D-LIMONENE - NOX			
ETC426	8/21/92		A-PINENE + NOx	Only bottom lights on	Only NOx data. Around this time it was decided that CL2IBUTE data not reliable, and switched to using CycC6 as the tracer.	Can't model 9
ETC433	9/17/92		B-PINENE(.3ppm) + NOx(.25ppm)			
ETC434	9/18/92		B-PINENE(1ppm) + NOx (.25ppm)			
ETC435	9/22/92		B-PINENE(.3PPM) + NOx(.125PPM)			
ETC436	9/24/92		SABINENE(.3PPM) + NOx(.25PPM)			
ETC437	9/25/92		SABINENE(.3PPM) + NOx(.5PPM)			
ETC438	9/28/92		SABINENE(.3PPM) + NOx(.125PPM)			
ETC439	9/29/92		ETHENE + NOx			
ETC440	10/1/92		PROPENE + NOx			
ETC441	10/2/92		HCHO(.5PPM) + NOx(.25PPM)			
ETC442	10/7/92		B-PINENE + NOx (.25PPM)			
ETC443	10/9/92		A-PINENE + NOx(.25PPM)			
ETC444	10/12/92		A-PINENE(.3PPM) + NOx(.25PPM)			
ETC445	10/13/92	CMA-93	ACETONE(8PPM) + NOx(.125PPM)			
ETC446	10/14/92		A-PINENE (.3PPM) + NOx (.5PPM)			
ETC447	10/15/92		A-PINENE(.3PPM) + NOx(.125PPM)			
ETC449	10/19/92		PROPENE + NOx			
ETC450	10/23/92		D-LIMONENE + NOx(.25PPM)			
ETC451	10/26/92		D-LIMONENE + NOx(.5PPM)			
ETC452	10/27/92		D-LIMONENE + NOx(.125PPM)			
ETC454	10/30/92		NEW-SURROGATE		Missing O3 data for first 2 hrs.	problems 2
ETC455	11/2/92	ERCT-94	NEW-SURROGATE			
ETC456	11/4/92		3-CARENE + NOx (.25PPM)			
ETC457	11/6/92		3-CARENE + NOx(.125PPM)			
ETC458	11/9/92	ERCT-94	PURE-AIR IRRADIATION		Columbia drift noticable	
ETC459	11/11/92		3-CARENE + NOx (.5PPM)			
ETC460	11/12/92	ERCT-94	NEW-SURROGATE + NOx			
ETC462	11/13/92	ERCT-94	TRACER-NOx			
ETC463	11/16/92	ERCT-94	NEW-SURROGATE + NOx			
ETC464	11/20/92	ERCT-94	ETHENE + NOx	New pure air system used		
ETC466	11/23/92	ERCT-94	ETHENE + NOx			
ETC467	11/25/92	ERCT-94	ETHENE + NOx			
ETC468	12/1/92	ERCT-94	ETHENE-HCHO(.100PPM)			
ETC469	12/2/92	ERCT-94	ETHENE			

RunID	Date	Document-ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
ETC470	12/3/92	ERCT-94	ETHENE-HCHO			
ETC471	12/4/92	ERCT-94	ETHENE			
ETC472	12/7/92	ERCT-94	ETHENE + N-C8			
ETC473	12/8/92	ERCT-94	ETHENE + NOx			
ETC474	12/9/92	ERCT-94	ETHENE + n-C8			
ETC475	12/14/92	ERCT-94	PROPENE-NOX			
ETC476	12/15/92	ERCT-94	ETHENE.			
ETC477	12/16/92	ERCT-94	ETHENE + M-XYLENE			
ETC478	12/17/92	ERCT-94	ETHENE + M-XYLENE.			
ETC479	12/18/92	CMA-93 ERCT-94	ETHENE + NOx			
ETC480	12/21/92	CMA-93	ETHENE + ACETONE			
ETC481	12/22/92	CMA-93	ETHENE + ACETONE			
ETC482	1/5/93	CMA-93 ERCT-94	ETHENE-NOX			
ETC483	1/6/93	ERCT-94	ETHENE-NOX + CO (150 PPM)			
ETC484	1/7/93	ERCT-94	ETHENE-NOX + N-C4 (15 PPM)			
ETC485	1/8/93	ERCT-94	PURE-AIR IRRADIATION			
ETC486	1/11/93	CMA-93 ERCT-94	ETHENE-NOX			
ETC487	1/12/93	ERCT-94	ETHENE-NOx + CO (100 PPM)			
ETC488	1/13/93	ERCT-94	ETHENE-NOx + N-BUTANE (10PPM)			
ETC489	1/14/93	ERCT-94	ETHENE-NOX + HCHO (.250 PPM)	Power for bottom lights off between t=5 to t=25 min.		Problems 3
ETC490	1/15/93	CMA-93	ETHENE + ACETONE (7PPM)			
ETC492	1/21/93		ETHYLENE + A-PINENE			
ETC493	1/22/93		ETHENE-NOX + t-2-BUTENE			
ETC494	1/25/93		ETHENE-NOX + b-PINENE (.120 PPM)			
ETC495	1/26/93		ETHENE + ISOPRENE			
ETC496	1/27/93		PROPYLENE+ETHYLENE			
ETC497	1/28/93	CMA-93 ERCT-94	ETHENE-NOX			
ETC499	2/2/93	ERCT-94	ETHENE-NOX + M-XYLENE (.150 PPM)			
ETC500	2/3/93	ERCT-94	ETHENE-NOx + PROPENE			
ETC501	2/4/93	ERCT-94	ETHENE-NOX + T-2-BUTENE (.050 PPM)			
ETC502	2/5/93	ERCT-94	ETHENE + NOx			
ETC503	2/8/93	ERCT-94	ETHENE + NOx		CycC6 data bad - goes up in middle of run	
ETC504	2/10/93		NEW SURROGATE		No VOC data	Can't model 9
ETC505	2/16/93	CMA-93 ERCT-94	ETHENE-NOX	Chamber flushed with lights on night before.		
ETC506	2/17/93	CMA-93 ERCT-94	ETHENE-NOX + ETHANE (50 PPM)			
ETC507	2/19/93		ETHENE + B-PINENE		No ethene data	Can't model 9
ETC508	2/10/93		ETHENE + A-PINENE			
ETC510	2/25/93		ETHENE-NOX + ISOPRENE (0.2 PPM)			



Table A-5

## Listing of Spreadsheet DTC-USE

5/21/95

RunID	Date	Document- ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
DTC011	3/5/93	ERCT-94	HIGH NOx SURROGATE + NOx	Bag flushed overnight. Dry AADCO air. Gas and liquid mixtures used for surrogate. Good side equivalency seen.		
DTC012	3/10/93	ERCT-94	HIGH NOx SURROGATE + NOx		Initial NO and NO2 somewhat uncertain.	problems 1
DTC013	3/11/93	ERCT-94	HIGH NOx SURROGATE + NOx			
DTC014	3/12/93	ERCT-94	NEW SURROGATE + CO (150 PPM)			
DTC015	3/16/93	ERCT-94	HIGH NOx SURROGATE + CO(150PPM, B)		Problems with temperature data. Bad points at end rejected. Data uncertain	problems 1
DTC016	3/17/93	ERCT-94	HIGH NOx SURROGATE + CO (75PPM;A)			
DTC017	3/18/93	ERCT-94	HIGH NOx SURROGATE + ETHENE (A)			
DTC018	3/22/93	ERCT-94	HIGH NOx SURROGATE + PROPENE(A)			
DTC019	3/24/93	ERCT-94	HIGH NOx SURROGATE + N-C4 (B)		t-2-Bute data noisy	
DTC020	3/25/93	ERCT-94	HIGH NOx SURROGATE + CO (B)	Formaldehyde not injected.	No initial formaldehyde data. Only data at end of run.	problems 1
DTC021	3/26/93	ERCT-94	HIGH NOx SURROGATE + T-2-BUTE (B)			
DTC022	3/29/93	ERCT-94	HIGH NOx SURROGATE + HCHO (B)			
DTC023	3/30/93	ERCT-94	HIGH NOx SURROGATE + TOLUENE (A)		O3 takes 9 ppb jump just before t-0. This happens for following runs also.	
DTC024	3/31/93	ERCT-94	HIGH NOx SURROGATE + N-C8 (B)			
DTC025	4/1/93	ERCT-94	HIGH NOx SURROGATE + M-XYLENE (A)	Poor T control. Goes up to 304.		
DTC026	4/6/93	ERCT-94	PROPENE + NOX			
DTC027	4/7/93	ERCT-94	LOW NOx SURROGATE		No valid O3 data for first hour	minor problems 1
DTC028	4/8/93	CMA-93 ERCT-94	HIGH NOx SURROGATE + ACETONE (A)		More negative O3 zero than previous	
DTC029	4/9/93	ERCT-94	LOW NOx SURROGATE + CO (A)			
DTC030	4/12/93	ERCT-94	LOW NOx SURROGATE + TOLUENE (B)			
DTC031	4/13/93	ERCT-94	LOW NOx SURROGATE + N-C4 (A)		Trans-2-butene data high on n-butane side.	problems 1
DTC032	4/15/93	ERCT-94	LOW NOx SURROGATE + PROPENE (B)			
DTC033	4/16/93	ERCT-94	LOW NOx SURROGATE + T-2-BUTE (A)			
DTC034	4/19/93	ERCT-94	LOW NOx SURROGATE + A-PINENE (B)			
DTC035	4/20/93	ERCT-94	LOW NOx SURROGATE + M-XYLENE (A)			
DTC036	4/21/93	ERCT-94	LOW NOx SURROGATE + FORMALD (A)			
DTC037	4/22/93	ERCT-94	LOW NOx SURROGATE + N-C8 (B)			
DTC038	4/26/93	ERCT-94	LOW NOx SURROGATE + ETHENE (A)		Anomalous T points at end ignored.	
DTC039	4/27/93	ERCT-94	LOW NOx SURROGATE + BENZENE (B)		No ethene data	problems 2
DTC040	4/30/93	ERCT-94	SURROGATE, NO NOx			
DTC041	5/3/93	ERCT-94	LOW NOx ETHYLENE + T-2-BUTE (A)			
DTC042	5/5/93	ERCT-94	TOLUENE + NOx: VARY CONC.			
DTC043	5/6/93	ERCT-94	HIGH NOx ETHYLENE + T-2-BUTE (B)			
DTC044	5/7/93	ERCT-94	LOW NOx ETHYLENE + A-PINENE (A)			
DTC045	5/10/93	ERCT-94	HIGH NOx ETHYLENE + A-PINENE (B)			

Table A-5

## Listing of Spreadsheet DTC-USE

5/21/95

RunID	Date	Document- ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status
DTC046	5/12/93	ERCT-94	LOW NO <sub>x</sub> ETHYLENE + ISOPRENE (A)		Formaldehyde instrument sample line shortened.	
DTC047	5/13/93	ERCT-94	HIGH NO <sub>x</sub> ETHYLENE + ISOPRENE (B)			
DTC048	5/14/93	ERCT-94	LOW NO <sub>x</sub> ETHYLENE + B-PINENE (A)			
DTC049	5/17/93	ERCT-94	PURE - AIR	Bag not divided		
DTC050	5/18/93	ERCT-94	LOW NO <sub>x</sub> ETHYLENE + ISOPRENE (B)			
DTC051	5/19/93	ERCT-94	HIGH NO <sub>x</sub> ETHYLENE + B-PINENE (B)			
DTC052	5/25/93	ERCT-94	PROPENE-NO <sub>x</sub> (A), ISOBUTEN-NO <sub>x</sub> (B)			
DTC053	5/27/93	ERCT-94	ISOPRENE-NO <sub>x</sub> (VARY NO <sub>x</sub> )			
DTC054	5/28/93	CMA-93 ERCT-94	PROPENE-NO <sub>x</sub> (A) + ACETONE-NO <sub>x</sub> (B)			
DTC055	6/1/93	CMA-93 ERCT-94	ACETONE-NO <sub>x</sub> (A) + ACETALD-NO <sub>x</sub> (B)			
DTC056	6/2/93		ISOPRENE-NO <sub>x</sub> (VARY ISOPRENE)			
DTC057	6/4/93		NO <sub>x</sub> + METHACRO	Extremely high reactivity. Suspect contaminated metharcolein. Injected as liquid.	PAN sampling system changed (not that it did any good)	do not model 9
DTC058	6/7/93	NREL-94	NO <sub>x</sub> + N-C4			
DTC059	6/8/93	NREL-94	TRACER - NO <sub>x</sub>	Only isobutene tracer		
DTC060	6/9/93	NREL-94	PROPENE-NO <sub>x</sub> (VARY NO <sub>x</sub> )			
DTC061	6/10/93	NREL-94	NO <sub>x</sub> + PROPENE (50% RH.)	Water vapor injected 1.5 hrs. before start.		
DTC062	6/11/93	NREL-94	TRACER - NO <sub>x</sub> (50% RH.)	Not stated how humidified. Probably like last run.		
DTC063	7/14/93	NREL-94	PROPENE + NO <sub>x</sub>		Missing O3 data 2nd-3rd hr.	problems 1
DTC064	7/15/93	CMA-93 ERCT-94	HIGH NO <sub>x</sub> SURROGATE + ACETONE (B)			
DTC065	7/17/93	ERCT-94	HIGH NO <sub>x</sub> SURROGATE + ACETALD (A)		Only pre t=0 n-C4 and t-2-Bute data on side A.	
DTC066	7/19/93	ERCT-94	LOW NO <sub>x</sub> SURROGATE + ACETALD (B)		Only pre t=0 n-C4 and t-2-Bute data on side B.	
DTC067	7/20/93	ERCT-94	LOW NO <sub>x</sub> SURROGATE + M-XYLENE (B)			
DTC068	7/21/93	ERCT-94	HIGH NO <sub>x</sub> SURROGATE + M-XYLENE (B)			
DTC069	7/23/93	ERCT-94	HIGH NO <sub>x</sub> SURROGATE + T-2-BUTE (A)			
DTC070	7/26/93	ERCT-94	HIGH NO <sub>x</sub> SURROGATE + N-C8 (A)			
DTC071	7/27/93	ERCT-94	LOW NO <sub>x</sub> SURROGATE + N-C8 (B)			
DTC072	7/28/93	ERCT-94	HIGH NO <sub>x</sub> ETHENE + N-C6 (A)			
DTC073	7/29/93	NREL-94	M-XYLENE (A) , M-XYLENE + N-C8 (B)		Only pre t=0 n-C8	
DTC074	7/30/93		BIACETYL PHOTOLYSIS		Only biacetyl data on run.	can't model 9
DTC075	8/3/93		METHACRO + NO <sub>x</sub> (VARY BOTH)			
DTC076	8/4/93	NREL-94	M-XYLENE (B), M-XYLENE + N-C8 (A)			

RunID	Date	Document- ation	Title on CHADPRO	Run conditions	Data quality comments	Data base status	
XTC081	8/23/93	NREL-94	PROPENE + NOx	New Teflon bag, then pure air run. All runs dry unless noted.	Temperature corrected until noted.		
XTC082	8/24/93	NREL-94	PROPENE + NOx		O3 zero offsets are slightly negative for this and following runs until noted.		
XTC083	8/25/93	CMA-93 NREL-94	ACETALD + NOx	Probably can be assumed to have same T profile as other XTC runs.	Measured temperature in chamber inconsistent with other runs, temperature in sample probes.		
XTC084	8/26/93	CMA-93	ACETONE + NOx				
XTC085	8/27/93	NREL-94	N-BUTANE + NOx				
XTC086	8/30/93	NREL-94	FORMALD + NOx		n-C8 decays before t=0 at same rate as afterwards.		
XTC090	9/10/93	CMA-93	ACETONE + NOx	Follows temperature studies in chamber, then k1	Large negative zero offset for O3. Temperature monitored using unshielded probe.	problems	1
XTC091	9/14/93	NREL-94	FORMALDEHYDE + NOx		Temperature monitored using unshielded probe.	problems	1
XTC092	9/15/93	CMA-93 NREL-94	ACETALD + NOx				
XTC093	9/16/93		ISOPRENE + NOx	Hc decay indicates higher than usual dilution.			
XTC094	9/20/93		METHACRO + NOx	Hc decay indicates higher than usual dilution.			
XTC095	9/21/93		A-PINENE +NOx	Hc decay indicates higher than usual dilution.			
XTC096	9/22/93	NREL-94	FORMALD + NOx	Hc decay indicates higher than usual dilution. Tear in bag found and fixed after run.	No temperature correction	Problems	2
XTC097	9/23/93	NREL-94	PROPENE + NOx		No temperature correction		
XTC098	9/24/93	NREL-94	N-BUTANE + NOx				
XTC099	9/27/93		B-PINENE + NOx				
XTC101	10/4/93		ISOPRENE + NOx	Follows k1	No LiCor Data.		
XTC102	10/8/93		METHACROLEIN + NOx				
XTC103	10/11/93	NREL-94	135-TMB + NOx				
XTC104	10/12/93	NREL-94	MINI-SURROGATE + NOx				
XTC105	10/14/93	NREL-94	ETHENE + NOx				
XTC106	10/15/93	NREL-94	TOLUENE + NOx				
XTC107	10/18/93	NREL-94	M-XYLENE + NOx		Bad NO zero	Problems	1
XTC109	10/22/93	NREL-94	FULL-SURROGATE + NOx	Lower than usual temperature			
XTC111	10/27/93	NREL-94	ETHENE + NOx	Poor temperature control			
XTC112	10/28/93	NREL-94	ETHENE + NOx				
XTC113	11/4/93	NREL-94	PROPENE + NOx	n-C4 decay data indicate higher than usual dilution.	Temp. data unusually noisy for this run and those following.		
XTC114	11/8/93	NREL-94	FULL-SURROGATE + HIGH NOx				
XTC116	11/10/93	NREL-94	FULL-SURROGATE + NOx				
XTC120	11/16/93		MVK + NOx	Follows k1,biacetyl photolysis,k1.			
XTC121	11/17/93		MVK + NOx		Temperature shows regular cycling.		

## **APPENDIX B**

### **NO<sub>x</sub> AND GC CALIBRATION TABULATIONS**

This Appendix contains the tables of calibration data for all the NO<sub>x</sub> and the gas chromatographic instruments, which are not included in the main body of the report because of their size. Table 1 contains all the NO span calibration data; Table 2 contains the converter efficiency check data, and Table 3 contains the GC calibration data. These tables are discussed in sections 4.2.3, 4.2.4, and 4.3.3 of Volume 1, respectively. The format of the data on these tables are similar to that of Table 11 in Volume 1 as discussed in Section 4.1.3.

Table B-1 Summary of NO calibration data for all NOx monitoring instruments.

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
Instrument 1510 (Teco 14B-1)														
03/19/75	1904	1.000	0.0%	0	1	A	0.999	0%	0%	14	0.999	0%		
10/07/75	2106	0.998	0.0%	202	1		0.999	0%	0%					
10/07/75	2106	0.998	0.0%	0	2	L	0.998	4%	0%	5	0.998	3%	0.28E-02	11%
01/19/76	2210	1.306	0.0%	104	2		1.288	4%	1%					
01/21/76	2212	1.275	0.0%	106	2		1.293	3%	-1%					
01/21/76	2212	1.016	0.0%	0	3	L	1.016	6%	0%		1.016	0%	0.14E-01	0%
01/27/76	2218	1.102	0.0%	6	3		1.102	6%	0%					
01/27/76	2218	1.004	0.0%	0	4		1.004		0%	14	1.004			
04/08/76	2290	1.013	0.0%	0	5		1.013		0%	21	1.013			
06/11/76	2354	1.049	0.0%	0	6	L	1.049	4%	0%		1.049	0%	0.18E-01	0%
06/14/76	2357	1.104	0.0%	3	6		1.104	4%	0%					
06/14/76	2357	0.992	0.0%	0	7	L	0.992	3%	0%		0.992	0%	0.47E-01	0%
06/15/76	2358	1.039	0.0%	1	7		1.039	3%	0%					
06/15/76	2358	1.044	0.0%	0	8	L	1.044	1%	0%		1.044	0%	0.15E-02	0%
06/21/76	2364	1.053	0.0%	6	8		1.053	1%	0%					
06/21/76	2364	1.004	0.0%	0	9	L	1.004	12%	0%	2	1.004	0%	0.14E-02	0%
10/20/76	2485	1.174	0.0%	121	9		1.174	12%	0%					
10/20/76	2485	1.035	0.0%	0	10	L	1.035	11%	0%		1.035	0%	0.32E-02	0%
12/08/76	2534	1.194	0.0%	49	10		1.194	11%	0%					
12/08/76	2534	0.993	0.0%	0	11	L	0.993	4%	0%		0.993	0%	-0.13E-02	0%
01/20/77	2577	0.936	0.0%	43	11		0.936	4%	0%					
01/20/77	2577	1.023	0.0%	0	12	L	1.023	13%	0%		1.023	0%	0.76E-02	0%
02/13/77	2601	1.205	0.0%	24	12		1.205	13%	0%					
02/13/77	2601	1.002	0.0%	0	13	L	1.009	1%	-1%	2	1.009	1%	0.26E-02	14%
02/15/77	2603	1.022	0.0%	2	13		1.014	1%	1%					
03/23/77	2639	1.106	0.0%	38	13		1.106	1%	0%					
03/23/77	2639	1.002	0.0%	0	14	L	1.007	1%	-1%	23	1.007	1%	-0.22E-03	12%
03/25/77	2641	1.012	0.0%	2	14		1.007	1%	1%					
03/10/78	2991	0.929	0.0%	352	14		0.929	1%	0%					
03/10/78	2991	1.000	0.0%	0	15	L	1.000	10%	0%	26	1.000	0%	0.75E-03	0%
09/13/78	3178	1.141	0.0%	187	15		1.141	10%	0%					
09/13/78	3178	1.019	0.0%	0	16	L	1.022	1%	0%	31	1.022	0%	0.17E-02	3%
10/30/78	3225	1.104	0.0%	47	16		1.100	1%	0%					
01/26/79	3313	1.246	0.0%	135	16		1.247	1%	0%					
01/26/79	3313	1.036	0.0%	0	17	L	0.996	14%	4%	29	0.996	10%	0.17E-02	92%
03/19/79	3365	0.997	0.0%	52	17		1.083	14%	-9%					
05/03/79	3410	1.205	0.0%	97	17		1.159	13%	4%					
05/03/79	3410	0.994	0.0%	0	18	L	0.994	15%	0%	1	0.994	0%	0.21E+00	0%
05/04/79	3411	1.205	0.0%	1	18		1.205	15%	0%					
05/04/79	3411	0.994	0.0%	0	19	L	1.026	6%	-3%	14	1.026	3%	-0.21E-03	100%
05/15/79	3422	1.057	0.0%	11	19		1.024	6%	3%					
02/08/80	3691	0.967	0.0%	280	19		0.968	6%	0%					
02/08/80	3691	0.961	0.0%	0	20	L	0.961	22%	0%		0.961	0%	-0.43E-01	0%
02/15/80	3698	0.657	0.0%	7	20		0.657	22%	0%					
02/15/80	3698	0.958	0.0%	0	21	L	0.958	1%	0%		0.958	0%	0.14E-02	0%
02/20/80	3703	0.965	0.0%	5	21		0.965	1%	0%					
02/20/80	3703	0.979	0.0%	0	22	L	0.979	5%	0%		0.979	0%	-0.34E-03	0%
09/15/80	3911	0.908	0.0%	208	22		0.908	5%	0%					
09/15/80	3911	0.975	0.0%	0	23	L	0.863	26%	11%	4	0.863	16%	0.19E-02	54%
10/29/80	3955	0.809	0.0%	44	23		0.947	26%	-17%					
05/04/81	4142	1.331	0.0%	231	23		1.305	24%	2%					
05/04/81	4142	1.006	0.0%	0	24	L	1.006	1%	0%	15	1.006	0%	0.11E-03	0%
08/07/81	4237	1.016	0.0%	95	24		1.016	1%	0%					
08/07/81	4237	1.016	0.0%	0	25	L	1.016	7%	0%	10	1.016	0%	-0.58E-03	0%
01/19/82	4402	0.921	0.0%	165	25		0.921	7%	0%					
01/19/82	4402	1.007	0.0%	0	26	L	1.007	2%	0%	25	1.007	0%	-0.61E-03	0%
03/04/82	4446	0.980	0.0%	44	26		0.980	2%	0%					
03/04/82	4446	1.002	0.0%	0	27	L	1.002	1%	0%	25	1.002	0%	-0.34E-03	0%
04/20/82	4493	0.986	0.0%	47	27		0.986	1%	0%					
04/20/82	4493	0.983	0.0%	0	28	L	0.966	3%	2%	28	0.966	2%	0.57E-02	8%
04/21/82	4494	0.982	0.0%	1	28		0.972	3%	1%					
04/26/82	4499	0.971	0.0%	6	28		1.000	3%	-3%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
06/22/82	4556	1.327	0.0%	63	28		1.324	3%	0%					
06/22/82	4556	0.996	0.0%	0	29	L	0.996	1%	0%		0.996	0%	-0.80E-03	0%
07/12/82	4576	0.980	0.0%	20	29		0.980	1%	0%					
07/12/82	4576	0.989	0.0%	0	30	L	0.989	0%	0%		0.989	0%	-0.20E-04	0%
10/20/82	4676	0.987	0.0%	100	30		0.987	0%	0%					
10/20/82	4676	0.996	0.0%	0	31	L	0.995	0%	0%	33	0.995	0%	0.24E-03	13%
11/04/82	4691	0.998	0.0%	15	31		0.999	0%	0%					
12/10/82	4727	1.008	0.0%	51	31		1.008	0%	0%					
12/10/82	4727	0.994	0.0%	0	32	L	0.994	27%	0%	25	0.994	0%	0.67E-02	0%
02/04/83	4783	1.369	0.0%	56	32		1.369	27%	0%					
02/04/83	4783	1.283	0.0%	0	33	L	1.283	25%	0%	7	1.283	0%	-0.32E-01	0%
02/18/83	4797	0.830	0.0%	14	33		0.830	25%	0%					
02/18/83	4797	1.005	0.0%	0	34	L	1.005	0%	0%	6	1.005	0%	-0.29E-03	0%
03/07/83	4814	1.000	0.0%	17	34		1.000	0%	0%					
03/07/83	4814	0.994	0.0%	0	35	L	0.994	9%	0%	10	0.994	0%	-0.59E-02	0%
03/29/83	4836	0.864	0.0%	22	35		0.864	9%	0%					
03/29/83	4836	1.009	0.0%	0	36	L	1.009	9%	0%	9	1.009	0%	0.45E-02	0%
04/25/83	4863	1.131	0.0%	27	36		1.131	9%	0%					
04/25/83	4863	1.000	0.0%	0	37	L	1.000	9%	0%	14	1.000	0%	0.12E-02	0%
08/10/83	4970	1.128	0.0%	107	37		1.128	9%	0%					
08/10/83	4970	0.991	0.0%	0	38	L	0.992	0%	0%	16	0.992	0%	0.38E-05	482%
10/17/83	5038	0.994	0.0%	68	38		0.992	0%	0%					
11/28/83	5080	0.993	0.0%	110	38		0.992	0%	0%					
12/19/83	5101	0.991	0.0%	131	38		0.992	0%	0%					
12/19/83	5101	0.991	0.0%	0	39	L	0.991	4%	0%	5	0.991	0%	0.39E-02	0%
01/03/84	5116	1.050	0.0%	15	39		1.050	4%	0%					
01/03/84	5116	1.002	0.0%	0	40	L	1.002	4%	0%	1	1.002	0%	0.62E-02	0%
01/12/84	5125	1.058	0.0%	9	40		1.058	4%	0%					
01/12/84	5125	1.006	0.0%	0	41	L	1.006	1%	0%	3	1.006	0%	0.27E-03	0%
02/21/84	5165	1.017	0.0%	40	41		1.017	1%	0%					
02/21/84	5165	1.015	0.0%	0	42	L	1.015	2%	0%	3	1.015	0%	0.83E-03	0%
03/27/84	5200	1.044	0.0%	35	42		1.044	2%	0%					
03/27/84	5200	1.022	0.0%	0	43	L	1.022	10%	0%	18	1.022	0%	0.33E-02	0%
05/08/84	5242	1.161	0.0%	42	43		1.161	10%	0%					
05/08/84	5242	1.023	0.0%	0	44	L	1.023	1%	0%	16	1.023	0%	0.50E-03	0%
06/05/84	5270	1.037	0.0%	28	44		1.037	1%	0%					
06/05/84	5270	1.003	0.0%	0	45	L	1.003	0%	0%	5	1.003	0%	0.00E+00	0%
07/30/84	5325	1.003	0.0%	55	45		1.003	0%	0%					
07/30/84	5325	1.003	0.0%	0	46	L	1.003	1%	0%	10	1.003	0%	0.18E-03	0%
11/01/84	5419	1.020	0.0%	94	46		1.020	1%	0%					
11/01/84	5419	1.001	0.0%	0	47	L	1.001	5%	0%	10	1.001	0%	-0.17E-02	0%
12/13/84	5461	0.929	0.0%	42	47		0.929	5%	0%					
12/13/84	5461	0.988	0.0%	0	48	L	0.988	4%	0%	1	0.988	0%	0.25E-02	0%
01/02/85	5481	1.038	0.0%	20	48		1.038	4%	0%					
01/02/85	5481	1.004	0.0%	0	49	L	1.004	1%	0%	3	1.004	0%	-0.11E-02	0%
01/17/85	5496	0.988	0.0%	15	49		0.988	1%	0%					
01/17/85	5496	0.988	0.0%	0	50	L	0.988	3%	0%	6	0.988	0%	0.23E-02	0%
02/06/85	5516	1.034	0.0%	20	50		1.034	3%	0%					
02/06/85	5516	1.010	0.0%	0	51	L	1.010	1%	0%		1.010	0%	-0.10E-03	0%
05/17/85	5616	1.000	0.0%	100	51		1.000	1%	0%					
05/17/85	5616	1.000	0.0%	0	52	L	1.000	3%	0%		1.000	0%	0.98E-03	0%
06/28/85	5658	1.041	0.0%	42	52		1.041	3%	0%					
06/28/85	5658	1.013	0.0%	0	53		1.013		0%	2	1.013			
04/17/86	5951	1.091	0.0%	0	54	L	1.091	5%	0%	1	1.091	0%	-0.51E-04	0%
09/17/90	7565	1.008	0.0%	1614	54		1.008	5%	0%					
09/17/90	7565	0.968	0.0%	0	55	L	0.968	4%	0%		0.968	0%	-0.57E-01	0%
09/18/90	7566	0.911	0.0%	1	55		0.911	4%	0%					
09/18/90	7566	0.989	0.0%	0	56	L	0.989	13%	0%		0.989	0%	-0.54E-02	0%
10/22/90	7600	0.804	0.0%	34	56		0.804	13%	0%					
10/22/90	7600	1.106	0.0%	0	57	L	1.106	19%	0%	1	1.106	0%	-0.72E-01	0%
10/26/90	7604	0.816	0.0%	4	57		0.816	19%	0%					
10/26/90	7604	0.976	0.0%	0	58	L	0.976	3%	0%		0.976	0%	0.14E-01	0%
10/29/90	7607	1.019	0.0%	3	58		1.019	3%	0%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
10/29/90	7607	1.021	0.0%	0	59	L	1.021	0%	0%	5	1.021	0%	-0.25E-03	0%
11/14/90	7623	1.017	0.0%	16	59		1.017	0%	0%					
11/14/90	7623	1.017	0.0%	0	60	L	0.986	0%	3%		0.986	0%	0.00E+00	
11/14/90	7623	0.955	0.0%	0	60		0.986	0%	-3%					
11/14/90	7623	1.002	0.0%	0	61	L	1.002	1%	0%	1	1.002	0%	-0.36E-02	0%
11/19/90	7628	0.984	0.0%	5	61		0.984	1%	0%					
11/19/90	7628	0.990	0.0%	0	62	L	0.990	4%	0%		0.990	0%	0.11E-02	0%
01/07/91	7677	1.046	0.0%	49	62		1.046	4%	0%					
01/07/91	7677	1.008	0.0%	0	63	L	1.008	0%	0%	1	1.008	0%	-0.30E-02	0%
01/09/91	7679	1.002	0.0%	2	63		1.002	0%	0%					
01/09/91	7679	0.996	0.0%	0	64	L	0.996	1%	0%	3	0.996	0%	0.16E-02	0%
01/14/91	7684	1.004	0.0%	5	64		1.004	1%	0%					
01/14/91	7684	1.012	0.0%	0	65	L	1.012	1%	0%	5	1.012	0%	0.89E-03	0%
01/23/91	7693	1.020	0.0%	9	65		1.020	1%	0%					
01/23/91	7693	1.010	0.0%	0	66	L	1.010	2%	0%	6	1.010	0%	-0.18E-02	0%
02/08/91	7709	0.981	0.0%	16	66		0.981	2%	0%					
02/08/91	7709	0.988	0.0%	0	67	L	0.988	3%	0%	3	0.988	0%	0.69E-02	0%
02/15/91	7716	1.036	0.0%	7	67		1.036	3%	0%					
02/15/91	7716	0.988	0.0%	0	68	L	0.988	3%	0%	6	0.988	0%	0.28E-02	0%
02/28/91	7729	1.024	0.0%	13	68		1.024	3%	0%					
02/28/91	7729	1.004	0.0%	0	69	L	1.004	2%	0%		1.004	0%	-0.19E-02	0%
03/14/91	7743	0.977	0.0%	14	69		0.977	2%	0%					
03/14/91	7743	1.006	0.0%	0	70	L	1.006	0%	0%	4	1.006	0%	-0.18E-03	0%
03/25/91	7754	1.004	0.0%	11	70		1.004	0%	0%					
03/25/91	7754	0.998	0.0%	0	71	L	0.959	9%	4%	4	0.959	6%	0.53E-02	252%
03/27/91	7756	0.916	0.0%	2	71		0.970	9%	-6%					
04/01/91	7761	1.012	0.0%	7	71		0.997	9%	2%					
04/01/91	7761	1.006	0.0%	0	72	L	1.006	11%	0%	4	1.006	0%	-0.15E-01	0%
04/11/91	7771	0.854	0.0%	10	72		0.854	11%	0%					
04/11/91	7771	0.984	0.0%	0	73	L	0.984	12%	0%	8	0.984	8%	0.92E-02	76%
04/24/91	7784	1.027	0.0%	13	73		1.104	12%	-7%					
04/24/91	7784	1.182	0.0%	13	73		1.104	11%	7%					
04/24/91	7784	1.003	0.0%	13	73		1.104	11%	-10%					
04/24/91	7784	1.171	0.0%	13	73		1.104	11%	6%					
04/24/91	7784	1.137	0.0%	13	73		1.104	11%	3%					
04/24/91	7784	1.010	0.0%	0	74	L	1.078	7%	-7%	13	1.078	4%	-0.17E-02	137%
04/24/91	7784	1.163	0.0%	0	74		1.078	7%	7%					
05/06/91	7796	1.024	0.0%	12	74		1.058	7%	-3%					
05/17/91	7807	1.024	0.0%	23	74		1.038	7%	-1%					
05/17/91	7807	1.074	0.0%	23	74		1.038	7%	3%					
05/17/91	7807	1.035	0.0%	23	74		1.038	7%	0%					
05/17/91	7807	1.006	0.0%	0	75	L	1.006	1%	0%	5	1.006	1%	0.26E-02	22%
05/29/91	7819	1.033	0.0%	12	75		1.037	1%	0%					
05/29/91	7819	1.041	0.0%	12	75		1.037	1%	0%					
05/29/91	7819	0.998	0.0%	0	76	L	1.010	1%	-1%	7	1.010	1%	0.90E-03	109%
05/29/91	7819	1.014	0.0%	0	76		1.010	1%	0%					
05/29/91	7819	1.019	0.0%	0	76		1.010	1%	1%					
06/11/91	7832	1.022	0.0%	13	76		1.022	1%	0%					
06/11/91	7832	1.002	0.0%	0	77	L	1.000	1%	0%	11	1.000	1%	-0.14E-02	31%
06/11/91	7832	1.016	0.0%	0	77		1.000	1%	2%					
06/11/91	7832	0.980	0.0%	0	77		1.000	1%	-2%					
06/11/91	7832	1.000	0.0%	0	77		1.000	1%	0%					
07/08/91	7859	0.966	0.0%	27	77		0.963	1%	0%					
07/08/91	7859	0.960	0.0%	27	77		0.963	2%	0%					
07/08/91	7859	0.998	0.0%	0	78	L	0.998	0%	0%		0.998	0%	0.20E-01	0%
07/08/91	7859	0.998	0.0%	0	78		0.998	0%	0%					
07/09/91	7860	1.018	0.0%	1	78		1.018	0%	0%					
07/09/91	7860	1.004	0.0%	0	79	L	1.006	1%	0%	5	1.006	1%	0.51E-02	21%
07/11/91	7862	1.008	0.0%	2	79		1.016	1%	-1%					
07/12/91	7863	1.026	0.0%	3	79		1.021	1%	0%					
07/15/91	7866	1.058	0.0%	6	79		1.037	1%	2%					
07/16/91	7867	1.042	0.0%	7	79		1.042	1%	0%					
07/17/91	7868	1.041	0.0%	8	79		1.047	1%	-1%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev	
07/17/91	7868	1.036	0.0%	8	79	1.047	1%	-1%						
07/17/91	7868	1.042	0.0%	8	79	1.047	1%	0%						
07/17/91	7868	1.049	0.0%	8	79	1.047	1%	0%						
07/17/91	7868	1.049	0.0%	8	79	1.047	1%	0%						
07/17/91	7868	0.990	0.0%	0	80	L	0.997	3%	-1%	5	0.997	1%	0.11E-01	26%
07/17/91	7868	0.983	0.0%	0	80		0.997	3%	-1%					
07/17/91	7868	0.975	0.0%	0	80		0.997	3%	-2%					
07/18/91	7869	1.026	0.0%	1	80		1.008	3%	2%					
07/19/91	7870	1.027	0.0%	2	80		1.020	3%	1%					
07/22/91	7873	1.117	0.0%	5	80		1.053	3%	6%					
07/24/91	7875	1.066	0.0%	7	80		1.075	3%	-1%					
07/25/91	7876	1.068	0.0%	8	80		1.086	3%	-2%					
07/25/91	7876	1.068	0.0%	8	80		1.086	3%	-2%					
07/25/91	7876	0.982	0.0%	0	81	L	0.996	7%	-1%	26	0.996	2%	0.13E-02	70%
07/25/91	7876	1.008	0.0%	0	81		0.996	7%	1%					
07/26/91	7877	1.090	0.0%	1	81		0.997	7%	9%					
07/29/91	7880	1.105	0.0%	4	81		1.001	7%	9%					
07/30/91	7881	1.083	0.0%	5	81		1.002	7%	7%					
07/31/91	7882	0.846	0.0%	6	81		1.004	7%	-19%					
08/01/91	7883	0.982	0.0%	7	81		1.005	7%	-2%					
08/02/91	7884	0.978	0.0%	8	81		1.006	7%	-3%					
08/05/91	7887	1.012	0.0%	11	81		1.010	7%	0%					
08/06/91	7888	0.986	0.0%	12	81		1.012	7%	-3%					
08/07/91	7889	0.981	0.0%	13	81		1.013	7%	-3%					
08/08/91	7890	0.990	0.0%	14	81		1.014	7%	-2%					
08/08/91	7890	0.998	0.0%	14	81		1.014	7%	-2%					
08/16/91	7898	1.044	0.0%	22	81		1.025	7%	2%					
08/19/91	7901	1.000	0.0%	25	81		1.029	7%	-3%					
08/20/91	7902	1.018	0.0%	26	81		1.030	7%	-1%					
08/20/91	7902	1.000	0.0%	26	81		1.030	7%	-3%					
08/21/91	7903	1.008	0.0%	27	81		1.031	7%	-2%					
08/21/91	7903	1.030	0.0%	27	81		1.031	7%	0%					
08/22/91	7904	1.085	0.0%	28	81		1.033	7%	5%					
08/23/91	7905	1.091	0.0%	29	81		1.034	7%	5%					
08/26/91	7908	1.099	0.0%	32	81		1.038	7%	6%					
08/26/91	7908	1.004	0.0%	32	81		1.038	7%	-3%					
08/27/91	7909	1.014	0.0%	33	81		1.039	7%	-2%					
08/28/91	7910	1.021	0.0%	34	81		1.041	7%	-2%					
08/29/91	7911	1.010	0.0%	35	81		1.042	7%	-3%					
08/30/91	7912	0.988	0.0%	36	81		1.043	7%	-6%					
09/03/91	7916	0.986	0.0%	40	81		1.049	7%	-6%					
09/04/91	7917	1.004	0.0%	41	81		1.050	7%	-5%					
09/05/91	7918	1.260	0.0%	42	81		1.051	7%	17%					
09/05/91	7918	0.982	0.0%	0	82	L	1.063	6%	-8%	1	1.063	3%	-0.74E-01	24%
09/06/91	7919	1.051	0.0%	1	82		0.988	6%	6%					
09/06/91	7919	1.000	0.0%	1	82		0.988	6%	1%					
09/06/91	7919	1.000	0.0%	1	82		0.988	6%	1%					
09/06/91	7919	1.010	0.0%	1	82		0.988	6%	2%					
09/09/91	7922	0.739	0.0%	4	82		0.766	6%	-4%					
09/09/91	7922	1.000	0.0%	0	83	L	0.988	4%	1%	51	0.988	1%	0.32E-03	71%
09/10/91	7923	0.998	0.0%	1	83		0.988	4%	1%					
09/11/91	7924	0.978	0.0%	2	83		0.988	4%	-1%					
09/12/91	7925	0.971	0.0%	3	83		0.989	4%	-2%					
09/13/91	7926	0.968	0.0%	4	83		0.989	4%	-2%					
09/16/91	7929	0.951	0.0%	7	83		0.990	4%	-4%					
09/17/91	7930	0.971	0.0%	8	83		0.990	4%	-2%					
09/18/91	7931	0.950	0.0%	9	83		0.991	4%	-4%					
09/19/91	7932	0.965	0.0%	10	83		0.991	4%	-3%					
09/20/91	7933	0.979	0.0%	11	83		0.991	4%	-1%					
09/23/91	7936	0.969	0.0%	14	83		0.992	4%	-2%					
09/24/91	7937	0.958	0.0%	15	83		0.993	4%	-4%					
09/25/91	7938	0.984	0.0%	16	83		0.993	4%	-1%					
09/26/91	7939	0.975	0.0%	17	83		0.993	4%	-2%					



Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
09/27/91	7940	0.954	0.0%	18	83	0.994	4%	-4%					
09/30/91	7943	0.969	0.0%	21	83	0.995	4%	-3%					
10/01/91	7944	0.966	0.0%	22	83	0.995	4%	-3%					
10/02/91	7945	0.992	0.0%	23	83	0.995	4%	0%					
10/02/91	7945	1.000	0.0%	23	83	0.995	4%	0%					
10/02/91	7945	0.986	0.0%	23	83	0.995	4%	-1%					
10/02/91	7945	0.992	0.0%	23	83	0.995	4%	0%					
10/03/91	7946	1.004	0.0%	24	83	0.996	4%	1%					
10/04/91	7947	1.002	0.0%	25	83	0.996	4%	1%					
10/08/91	7951	0.994	0.0%	29	83	0.997	4%	0%					
10/09/91	7952	1.012	0.0%	30	83	0.997	4%	1%					
10/10/91	7953	1.020	0.0%	31	83	0.998	4%	2%					
10/11/91	7954	1.055	0.0%	32	83	0.998	4%	5%					
10/14/91	7957	1.072	0.0%	35	83	0.999	4%	7%					
10/15/91	7958	1.059	0.0%	36	83	0.999	4%	6%					
10/16/91	7959	1.066	0.0%	37	83	1.000	4%	6%					
10/17/91	7960	1.079	0.0%	38	83	1.000	4%	7%					
10/18/91	7961	1.084	0.0%	39	83	1.000	4%	8%					
10/21/91	7964	1.097	0.0%	42	83	1.001	4%	9%					
10/22/91	7965	1.112	0.0%	43	83	1.002	4%	10%					
10/23/91	7966	1.000	0.0%	44	83	1.002	4%	0%					
10/24/91	7967	0.990	0.0%	45	83	1.002	4%	-1%					
10/25/91	7968	1.002	0.0%	46	83	1.003	4%	0%					
10/28/91	7971	0.994	0.0%	49	83	1.004	4%	-1%					
10/29/91	7972	0.996	0.0%	50	83	1.004	4%	-1%					
10/30/91	7973	0.977	0.0%	51	83	1.004	4%	-3%					
10/31/91	7974	0.964	0.0%	52	83	1.004	4%	-4%					
11/01/91	7975	1.004	0.0%	53	83	1.005	4%	0%					
11/01/91	7975	1.030	0.0%	53	83	1.005	4%	2%					
11/04/91	7978	0.976	0.0%	56	83	1.006	4%	-3%					
11/05/91	7979	1.011	0.0%	57	83	1.006	4%	0%					
11/06/91	7980	1.011	0.0%	58	83	1.006	4%	0%					
11/07/91	7981	1.019	0.0%	59	83	1.007	4%	1%					
11/08/91	7982	1.021	0.0%	60	83	1.007	4%	1%					
11/11/91	7985	1.008	0.0%	63	83	1.008	4%	0%					
11/12/91	7986	0.979	0.0%	64	83	1.008	4%	-3%					
11/13/91	7987	0.994	0.0%	65	83	1.009	4%	-1%					
11/15/91	7989	0.977	0.0%	67	83	1.009	4%	-3%					
11/18/91	7992	0.990	0.0%	70	83	1.010	4%	-2%					
11/19/91	7993	0.957	0.0%	71	83	1.011	4%	-6%					
11/20/91	7994	0.960	0.0%	72	83	1.011	4%	-5%					
11/21/91	7995	0.959	0.0%	73	83	1.011	4%	-5%					
11/26/91	8000	1.017	0.0%	78	83	1.013	4%	0%					
01/08/92	8043	0.983	0.0%	0	84	0.983		0%		0.983			
01/16/92	8051	1.010	0.0%	0	85	1.010		0%	1	1.010			
01/21/92	8056	0.988	0.0%	0	86	L 1.004	2%	-2%	15	1.004	1%	-0.62E-04	938%
01/22/92	8057	1.010	0.0%	1	86	1.004	2%	1%					
01/24/92	8059	1.006	0.0%	3	86	1.004	2%	0%					
02/03/92	8069	0.977	0.0%	13	86	1.003	2%	-3%					
02/04/92	8070	1.028	0.0%	14	86	1.003	2%	2%					
02/05/92	8071	1.030	0.0%	15	86	1.003	2%	3%					
02/06/92	8072	0.984	0.0%	16	86	1.003	2%	-2%					
02/07/92	8073	1.006	0.0%	17	86	1.003	2%	0%					
02/10/92	8076	1.013	0.0%	20	86	1.003	2%	1%					
02/11/92	8077	1.023	0.0%	21	86	1.003	2%	2%					
02/12/92	8078	1.013	0.0%	22	86	1.003	2%	1%					
02/14/92	8080	0.974	0.0%	24	86	1.003	2%	-3%					
02/18/92	8084	0.966	0.0%	28	86	1.002	2%	-4%					
02/19/92	8085	1.015	0.0%	29	86	1.002	2%	1%					
02/20/92	8086	1.013	0.0%	30	86	1.002	2%	1%					
02/21/92	8087	0.996	0.0%	0	87	0.996		0%		0.996			
02/25/92	8091	1.002	0.0%	0	88	L 1.002	2%	0%	2	1.002	0%	-0.26E-01	0%
02/26/92	8092	0.976	0.0%	1	88	0.976	2%	0%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
02/27/92	8093	1.002	0.0%	0	89	L	1.002	2%	0%	3	1.002	0%	0.52E-02	0%
03/03/92	8098	1.028	0.0%	5	89		1.028	2%	0%					
03/04/92	8099	0.988	0.0%	0	90	L	0.992	2%	0%	13	0.992	1%	0.60E-03	32%
03/05/92	8100	0.988	0.0%	1	90		0.993	2%	-1%					
03/06/92	8101	0.956	0.0%	2	90		0.994	2%	-4%					
03/09/92	8104	1.021	0.0%	5	90		0.995	2%	2%					
03/10/92	8105	1.021	0.0%	6	90		0.996	2%	2%					
03/11/92	8106	1.000	0.0%	7	90		0.997	2%	0%					
03/12/92	8107	1.006	0.0%	8	90		0.997	2%	1%					
03/13/92	8108	0.994	0.0%	9	90		0.998	2%	0%					
03/18/92	8113	0.992	0.0%	14	90		1.001	2%	-1%					
03/19/92	8114	1.008	0.0%	15	90		1.002	2%	1%					
03/23/92	8118	1.002	0.0%	19	90		1.004	2%	0%					
03/25/92	8120	1.006	0.0%	21	90		1.005	2%	0%					
03/26/92	8121	1.004	0.0%	22	90		1.006	2%	0%					
03/27/92	8122	0.992	0.0%	23	90		1.006	2%	-1%					
03/31/92	8126	1.019	0.0%	27	90		1.009	2%	1%					
04/01/92	8127	1.025	0.0%	28	90		1.009	2%	2%					
04/09/92	8135	1.017	0.0%	36	90		1.014	2%	0%					
04/10/92	8136	1.054	0.0%	37	90		1.015	2%	4%					
04/13/92	8139	0.990	0.0%	40	90		1.017	2%	-3%					
04/14/92	8140	0.982	0.0%	41	90		1.017	2%	-4%					
04/20/92	8146	0.984	0.0%	47	90		1.021	2%	-4%					
04/23/92	8149	1.028	0.0%	50	90		1.023	2%	1%					
04/27/92	8153	1.037	0.0%	54	90		1.025	2%	1%					
04/28/92	8154	1.066	0.0%	55	90		1.026	2%	4%					
05/04/92	8160	1.000	0.0%	61	90		1.029	2%	-3%					
05/05/92	8161	1.029	0.0%	62	90		1.030	2%	0%					
05/11/92	8167	1.013	0.0%	68	90		1.034	2%	-2%					
05/12/92	8168	1.067	0.0%	69	90		1.034	2%	3%					
05/14/92	8170	0.988	0.0%	0	91	L	1.028	4%	-4%	123	1.028	1%	-0.51E-04	88%
05/18/92	8174	0.969	0.0%	4	91		1.028	4%	-6%					
05/19/92	8175	0.990	0.0%	5	91		1.028	4%	-4%					
05/20/92	8176	0.990	0.0%	6	91		1.028	4%	-4%					
05/22/92	8178	1.050	0.0%	8	91		1.028	4%	2%					
05/26/92	8182	0.969	0.0%	12	91		1.027	4%	-6%					
05/27/92	8183	1.020	0.0%	13	91		1.027	4%	-1%					
05/28/92	8184	1.031	0.0%	14	91		1.027	4%	0%					
06/03/92	8190	0.994	0.0%	20	91		1.027	4%	-3%					
06/08/92	8195	0.977	0.0%	25	91		1.027	4%	-5%					
06/09/92	8196	0.969	0.0%	26	91		1.027	4%	-6%					
06/11/92	8198	0.989	0.0%	28	91		1.027	4%	-4%					
06/14/92	8201	0.978	0.0%	31	91		1.026	4%	-5%					
06/17/92	8204	1.011	0.0%	34	91		1.026	4%	-2%					
06/18/92	8205	0.995	0.0%	35	91		1.026	4%	-3%					
06/19/92	8206	1.033	0.0%	36	91		1.026	4%	1%					
06/22/92	8209	1.056	0.0%	39	91		1.026	4%	3%					
06/23/92	8210	1.050	0.0%	40	91		1.026	4%	2%					
06/25/92	8212	1.067	0.0%	42	91		1.026	4%	4%					
06/26/92	8213	1.055	0.0%	43	91		1.026	4%	3%					
06/29/92	8216	1.032	0.0%	46	91		1.026	4%	1%					
07/01/92	8218	1.033	0.0%	48	91		1.026	4%	1%					
07/02/92	8219	1.080	0.0%	49	91		1.025	4%	5%					
07/06/92	8223	1.098	0.0%	53	91		1.025	4%	7%					
07/07/92	8224	1.055	0.0%	54	91		1.025	4%	3%					
07/08/92	8225	1.086	0.0%	55	91		1.025	4%	6%					
07/09/92	8226	1.074	0.0%	56	91		1.025	4%	5%					
07/13/92	8230	1.079	0.0%	60	91		1.025	4%	5%					
07/14/92	8231	1.044	0.0%	61	91		1.025	4%	2%					
07/15/92	8232	1.038	0.0%	62	91		1.025	4%	1%					
07/16/92	8233	1.005	0.0%	63	91		1.025	4%	-2%					
07/20/92	8237	0.984	0.0%	67	91		1.025	4%	-4%					
07/21/92	8238	1.004	0.0%	68	91		1.024	4%	-2%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
07/22/92	8239	1.026	0.0%	69	91	1.024	4%	0%					
07/23/92	8240	1.118	0.0%	70	91	1.024	4%	8%					
07/24/92	8241	1.024	0.0%	71	91	1.024	4%	0%					
07/31/92	8248	1.108	0.0%	78	91	1.024	4%	8%					
08/04/92	8252	0.986	0.0%	82	91	1.024	4%	-4%					
08/05/92	8253	0.998	0.0%	83	91	1.024	4%	-3%					
08/11/92	8259	1.022	0.0%	89	91	1.023	4%	0%					
08/12/92	8260	0.993	0.0%	90	91	1.023	4%	-3%					
08/13/92	8261	1.010	0.0%	91	91	1.023	4%	-1%					
08/14/92	8262	1.021	0.0%	92	91	1.023	4%	0%					
08/17/92	8265	1.039	0.0%	95	91	1.023	4%	2%					
08/18/92	8266	1.021	0.0%	96	91	1.023	4%	0%					
08/20/92	8268	0.964	0.0%	98	91	1.023	4%	-6%					
08/21/92	8269	1.000	0.0%	99	91	1.023	4%	-2%					
08/24/92	8272	1.000	0.0%	102	91	1.023	4%	-2%					
08/25/92	8273	1.019	0.0%	103	91	1.023	4%	0%					
08/26/92	8274	1.019	0.0%	104	91	1.023	4%	0%					
09/01/92	8280	1.000	0.0%	110	91	1.022	4%	-2%					
09/09/92	8288	1.055	0.0%	118	91	1.022	4%	3%					
09/09/92	8288	1.024	0.0%	118	91	1.022	4%	0%					
09/09/92	8288	1.012	0.0%	118	91	1.022	4%	-1%					
09/11/92	8290	0.978	0.0%	120	91	1.022	4%	-4%					
09/17/92	8296	1.076	0.0%	126	91	1.022	4%	5%					
09/18/92	8297	1.129	0.0%	127	91	1.021	4%	10%					
09/21/92	8300	1.135	0.0%	130	91	1.021	4%	10%					
09/24/92	8303	1.097	0.0%	133	91	1.021	4%	7%					
09/25/92	8304	1.090	0.0%	134	91	1.021	4%	6%					
09/28/92	8307	1.113	0.0%	137	91	1.021	4%	8%					
09/29/92	8308	1.136	0.0%	138	91	1.021	4%	10%					
10/01/92	8310	0.979	0.0%	140	91	1.021	4%	-4%					
10/02/92	8311	1.027	0.0%	141	91	1.021	4%	1%					
10/07/92	8316	0.983	0.0%	146	91	1.021	4%	-4%					
10/09/92	8318	1.004	0.0%	148	91	1.020	4%	-2%					
10/12/92	8321	1.018	0.0%	151	91	1.020	4%	0%					
10/13/92	8322	1.027	0.0%	152	91	1.020	4%	1%					
10/14/92	8323	1.018	0.0%	153	91	1.020	4%	0%					
10/15/92	8324	1.060	0.0%	154	91	1.020	4%	4%					
10/23/92	8332	1.009	0.0%	162	91	1.020	4%	-1%					
10/26/92	8335	1.037	0.0%	165	91	1.020	4%	2%					
10/27/92	8336	1.004	0.0%	166	91	1.020	4%	-2%					
10/28/92	8337	1.018	0.0%	167	91	1.019	4%	0%					
10/30/92	8339	1.000	0.0%	169	91	1.019	4%	-2%					
11/02/92	8342	1.009	0.0%	172	91	1.019	4%	-1%					
11/04/92	8344	1.004	0.0%	174	91	1.019	4%	-2%					
11/05/92	8345	0.996	0.0%	175	91	1.019	4%	-2%					
11/09/92	8349	0.996	0.0%	179	91	1.019	4%	-2%					
11/11/92	8351	0.958	0.0%	181	91	1.019	4%	-6%					
11/12/92	8352	0.954	0.0%	182	91	1.019	4%	-7%					
11/13/92	8353	0.958	0.0%	183	91	1.019	4%	-6%					
11/16/92	8356	0.983	0.0%	186	91	1.019	4%	-4%					
11/20/92	8360	0.957	0.0%	190	91	1.018	4%	-6%					
11/23/92	8363	1.045	0.0%	193	91	1.018	4%	3%					
11/25/92	8365	0.970	0.0%	195	91	1.018	4%	-5%					
12/02/92	8372	0.970	0.0%	202	91	1.018	4%	-5%					
12/03/92	8373	0.983	0.0%	203	91	1.018	4%	-4%					
12/04/92	8374	0.978	0.0%	204	91	1.018	4%	-4%					
12/08/92	8378	0.996	0.0%	208	91	1.017	4%	-2%					
12/09/92	8379	0.962	0.0%	209	91	1.017	4%	-6%					
12/14/92	8384	1.026	0.0%	214	91	1.017	4%	1%					
12/15/92	8385	1.049	0.0%	215	91	1.017	4%	3%					
12/16/92	8386	1.013	0.0%	216	91	1.017	4%	0%					
12/17/92	8387	1.035	0.0%	217	91	1.017	4%	2%					
12/18/92	8388	1.049	0.0%	218	91	1.017	4%	3%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
12/21/92	8391	1.049	0.0%	221	91	1.017	4%	3%					
12/22/92	8392	1.031	0.0%	222	91	1.017	4%	1%					
01/05/93	8406	1.027	0.0%	236	91	1.016	4%	1%					
01/06/93	8407	1.036	0.0%	237	91	1.016	4%	2%					
01/07/93	8408	1.000	0.0%	238	91	1.016	4%	-2%					
01/11/93	8412	1.045	0.0%	242	91	1.016	4%	3%					
01/12/93	8413	1.032	0.0%	243	91	1.016	4%	2%					
01/13/93	8414	1.009	0.0%	244	91	1.016	4%	-1%					
01/14/93	8415	1.022	0.0%	245	91	1.016	4%	1%					
01/15/93	8416	1.013	0.0%	246	91	1.015	4%	0%					
01/20/93	8421	1.036	0.0%	251	91	1.015	4%	2%					
01/21/93	8422	1.022	0.0%	252	91	1.015	4%	1%					
01/22/93	8423	0.996	0.0%	253	91	1.015	4%	-2%					
01/25/93	8426	0.987	0.0%	256	91	1.015	4%	-3%					
01/26/93	8427	0.991	0.0%	257	91	1.015	4%	-2%					
01/27/93	8428	0.987	0.0%	258	91	1.015	4%	-3%					
01/28/93	8429	0.996	0.0%	259	91	1.015	4%	-2%					
02/02/93	8434	0.974	0.0%	264	91	1.015	4%	-4%					
02/03/93	8435	0.974	0.0%	265	91	1.014	4%	-4%					
02/04/93	8436	0.974	0.0%	266	91	1.014	4%	-4%					
02/05/93	8437	0.991	0.0%	267	91	1.014	4%	-2%					
02/08/93	8440	1.037	0.0%	270	91	1.014	4%	2%					
02/10/93	8442	1.157	0.0%	272	91	1.014	4%	12%					
02/16/93	8448	1.117	0.0%	278	91	1.014	4%	9%					
02/17/93	8449	0.983	0.0%	279	91	1.014	4%	-3%					
02/19/93	8451	1.013	0.0%	281	91	1.014	4%	0%					
02/22/93	8454	1.004	0.0%	284	91	1.014	4%	-1%					
02/23/93	8455	1.018	0.0%	285	91	1.013	4%	0%					
02/25/93	8457	0.987	0.0%	287	91	1.013	4%	-3%					

Instrument 1520 (Teco 14B-E)

01/16/79	3303	1.000	0.0%	0	1	L	1.000	9%	0%	5	1.000	0%	0.13E-01	0%
01/26/79	3313	1.127	0.0%	10	1		1.127	9%	0%					
01/26/79	3313	0.992	0.0%	0	2	L	1.007	5%	-2%	43	1.007	3%	-0.49E-04	397%
03/19/79	3365	0.981	0.0%	52	2		1.005	5%	-2%					
05/15/79	3422	1.057	0.0%	109	2		1.002	5%	5%					
11/28/79	3619	0.977	0.0%	306	2		0.992	6%	-2%					
11/28/79	3619	1.007	0.0%	0	3	L	1.023	10%	-2%		1.023	7%	-0.47E-03	285%
01/18/80	3670	1.055	0.0%	51	3		0.999	10%	5%					
02/08/80	3691	0.950	0.0%	72	3		0.989	10%	-4%					
02/08/80	3691	0.953	0.0%	0	4	L	0.953	32%	0%		0.953	0%	0.61E-01	0%
02/15/80	3698	1.378	0.0%	7	4		1.378	32%	0%					
02/15/80	3698	0.989	0.0%	0	5	L	0.989	8%	0%		0.989	0%	-0.22E-01	0%
02/20/80	3703	0.877	0.0%	5	5		0.877	8%	0%					
02/20/80	3703	1.009	0.0%	0	6	L	1.009	22%	0%		1.009	0%	0.48E-02	0%
04/24/80	3767	1.316	0.0%	64	6		1.316	22%	0%					
04/24/80	3767	1.000	0.0%	0	7	L	1.000	45%	0%		1.000	0%	0.24E-01	0%
05/20/80	3793	1.637	0.0%	26	7		1.637	45%	0%					
05/20/80	3793	1.028	0.0%	0	8	L	1.028	0%	0%		1.028	0%	-0.89E-06	0%
07/14/86	6039	1.026	0.0%	2246	8		1.026	0%	0%					
07/14/86	6039	1.026	0.0%	0	9	L	1.026	0%	0%	13	1.026	0%	-0.50E-05	0%
08/20/87	6441	1.024	0.0%	402	9		1.024	0%	0%					
08/20/87	6441	1.024	0.0%	0	10	L	1.024	6%	0%		1.024	0%	-0.46E-03	0%
02/26/88	6631	0.936	0.0%	190	10		0.936	6%	0%					
02/26/88	6631	0.979	0.0%	0	11	L	0.979	3%	0%		0.979	0%	-0.18E-03	0%
10/18/88	6866	0.936	0.0%	235	11		0.936	3%	0%					
10/18/88	6866	0.993	0.0%	0	12	L	0.993	0%	0%		0.993	0%	-0.34E-04	0%
11/16/88	6895	0.992	0.0%	29	12		0.992	0%	0%					
11/16/88	6895	0.992	0.0%	0	13	L	0.992	3%	0%		0.992	0%	0.20E-03	0%
07/19/89	7140	1.041	0.0%	245	13		1.041	3%	0%					
07/19/89	7140	1.019	0.0%	0	14	L	1.019	19%	0%		1.019	0%	0.49E-02	0%
09/12/89	7195	1.289	0.0%	55	14		1.289	19%	0%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
09/12/89	7195	1.010	0.0%	0	15	L	1.010	4%	0%	2	1.010	0%	-0.23E-02	0%
10/04/89	7217	0.960	0.0%	22	15		0.960	4%	0%					
10/04/89	7217	0.960	0.0%	0	16	L	0.960	8%	0%	9	0.960	0%	-0.11E-02	0%
01/04/90	7309	0.858	0.0%	92	16		0.858	8%	0%					
01/04/90	7309	0.996	0.0%	0	17	L	0.996	6%	0%		0.996	0%	-0.20E-02	0%
02/15/90	7351	0.910	0.0%	42	17		0.910	6%	0%					
02/15/90	7351	0.996	0.0%	0	18		0.996		0%		0.996			
Instrument 1530 (Teco 14B-3), and														
Instrument 1531 (Teco 14B-3 with Nylon Filter)														
02/08/80	3691	1.070	0.0%	0	1		1.070		0%		1.070			
02/08/80	3691	1.025	0.0%	0	2	L	1.025	15%	0%	10	1.025	0%	-0.81E-03	0%
10/30/80	3956	0.810	0.0%	265	2		0.810	15%	0%					
02/04/81	4053	0.460	0.0%	0	3		0.460		0%		0.460			
02/04/81	4053	0.958	0.0%	0	4	L	0.958	13%	0%	45	0.958	0%	0.11E-02	0%
07/08/81	4207	1.129	0.0%	154	4		1.129	13%	0%					
07/08/81	4207	1.006	0.0%	0	5	L	1.006	1%	0%		1.006	0%	-0.50E-03	0%
08/07/81	4237	0.991	0.0%	30	5		0.991	1%	0%					
08/07/81	4237	1.003	0.0%	0	6	L	1.003	5%	0%	5	1.003	0%	0.20E-02	0%
09/14/81	4275	1.079	0.0%	38	6		1.079	5%	0%					
09/14/81	4275	0.965	0.0%	0	7		0.965		0%	6	0.965			
09/23/81	4284	0.997	0.0%	0	8	L	0.997	13%	0%	2	0.997	0%	0.23E-01	0%
10/01/81	4292	1.185	0.0%	8	8		1.185	13%	0%					
10/01/81	4292	0.990	0.0%	0	9	L	0.990	9%	0%	13	0.990	0%	0.32E-02	0%
11/09/81	4331	1.116	0.0%	39	9		1.116	9%	0%					
11/09/81	4331	1.023	0.0%	0	10	L	1.023	15%	0%	15	1.023	0%	-0.63E-02	0%
12/14/81	4366	0.803	0.0%	35	10		0.803	15%	0%					
12/14/81	4366	0.990	0.0%	0	11	L	0.990	18%	0%	6	0.990	0%	0.72E-02	0%
01/19/82	4402	1.249	0.0%	36	11		1.249	18%	0%					
01/19/82	4402	1.027	0.0%	0	12	L	1.027	3%	0%	22	1.027	0%	-0.91E-03	0%
03/04/82	4446	0.987	0.0%	44	12		0.987	3%	0%					
03/04/82	4446	1.005	0.0%	0	13	L	1.005	6%	0%	7	1.005	0%	-0.20E-02	0%
04/20/82	4493	0.913	0.0%	47	13		0.913	6%	0%					
04/20/82	4493	0.991	0.0%	0	14	L	0.987	3%	0%	19	0.987	1%	0.16E-02	25%
04/21/82	4494	1.007	0.0%	1	14		0.989	3%	2%					
04/26/82	4499	0.973	0.0%	6	14		0.997	3%	-2%					
06/22/82	4556	1.092	0.0%	63	14		1.090	3%	0%					
06/22/82	4556	0.994	0.0%	0	15	L	0.994	10%	0%	2	0.994	0%	0.71E-02	0%
07/12/82	4576	1.137	0.0%	20	15		1.137	10%	0%					
07/12/82	4576	0.980	0.0%	0	16	L	0.980	11%	0%	14	0.980	0%	0.15E-02	0%
10/20/82	4676	1.135	0.0%	100	16		1.135	11%	0%					
10/20/82	4676	1.006	0.0%	0	17	L	1.006	10%	0%		1.006	0%	-0.27E-02	0%
12/10/82	4727	0.868	0.0%	51	17		0.868	10%	0%					
12/10/82	4727	0.991	0.0%	0	18	L	0.991	7%	0%	4	0.991	0%	0.17E-02	0%
02/04/83	4783	1.085	0.0%	56	18		1.085	7%	0%					
02/04/83	4783	0.978	0.0%	0	19		0.978		0%	5	0.978			
Instrument 1540 (Teco Model 42)														
07/10/92	8227	1.000	0.0%	0	1	L	0.996	3%	0%	26	0.996	1%	0.16E-03	54%
07/28/92	8245	1.000	0.0%	18	1		0.999	3%	0%					
08/05/92	8253	1.008	0.0%	26	1		1.000	3%	1%					
08/07/92	8255	1.039	0.0%	28	1		1.001	3%	4%					
10/21/92	8330	0.983	0.0%	103	1		1.012	3%	-3%					
10/23/92	8332	1.009	0.0%	105	1		1.013	3%	0%					
11/03/92	8343	0.979	0.0%	116	1		1.014	3%	-4%					
01/21/93	8422	1.000	0.0%	195	1		1.027	3%	-3%					
01/27/93	8428	1.027	0.0%	201	1		1.028	3%	0%					
02/11/93	8443	0.983	0.0%	216	1		1.030	3%	-5%					
02/18/93	8450	1.032	0.0%	223	1		1.031	3%	0%					
03/02/93	8462	1.070	0.0%	235	1		1.033	3%	3%					
03/04/93	8464	1.065	0.0%	237	1		1.033	3%	3%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
03/05/93	8465	1.056	0.0%	238	1		1.033	3%	2%					
03/05/93	8465	1.056	0.0%	0	2	L	1.059	3%	0%	4	1.059	2%	-0.19E-01	24%
03/10/93	8470	0.979	0.0%	5	2		0.963	3%	2%					
03/11/93	8471	0.930	0.0%	6	2		0.944	3%	-1%					
03/11/93	8471	0.930	0.0%	0	3	L	0.942	2%	-1%	8	0.942	1%	0.73E-02	30%
03/12/93	8472	0.966	0.0%	1	3		0.949	2%	2%					
03/16/93	8476	0.974	0.0%	5	3		0.978	2%	0%					
03/17/93	8477	0.978	0.0%	6	3		0.986	2%	-1%					
03/18/93	8478	1.000	0.0%	7	3		0.993	2%	1%					
03/18/93	8478	1.000	0.0%	0	4	L	1.003	1%	0%	14	1.003	1%	0.61E-02	15%
03/22/93	8482	1.027	0.0%	4	4		1.027	1%	0%					
03/24/93	8484	1.041	0.0%	6	4		1.039	1%	0%					
03/25/93	8485	1.049	0.0%	7	4		1.045	1%	0%					
03/26/93	8486	1.057	0.0%	8	4		1.051	1%	1%					
03/29/93	8489	1.049	0.0%	11	4		1.069	1%	-2%					
03/30/93	8490	1.089	0.0%	12	4		1.076	1%	1%					
03/31/93	8491	1.080	0.0%	13	4		1.082	1%	0%					
03/31/93	8491	1.080	0.0%	0	5	L	1.111	2%	-3%	14	1.111	1%	0.18E-03	952%
04/01/93	8492	1.136	0.0%	1	5		1.111	2%	2%					
04/07/93	8498	1.110	0.0%	7	5		1.112	2%	0%					
04/08/93	8499	1.130	0.0%	8	5		1.112	2%	2%					
04/09/93	8500	1.121	0.0%	9	5		1.112	2%	1%					
04/12/93	8503	1.099	0.0%	12	5		1.113	2%	-1%					
04/13/93	8504	1.108	0.0%	13	5		1.113	2%	0%					
04/13/93	8504	1.108	0.0%	0	6	L	1.108	8%	0%	2	1.108	0%	-0.62E-01	0%
04/15/93	8506	0.985	0.0%	2	6		0.985	8%	0%					
04/15/93	8506	0.985	0.0%	0	7	L	0.999	1%	-1%	50	0.999	1%	0.31E-03	57%
04/16/93	8507	1.004	0.0%	1	7		0.999	1%	0%					
04/19/93	8510	1.008	0.0%	4	7		1.000	1%	1%					
04/20/93	8511	0.996	0.0%	5	7		1.001	1%	0%					
04/22/93	8513	0.985	0.0%	7	7		1.001	1%	-2%					
04/26/93	8517	0.992	0.0%	11	7		1.002	1%	-1%					
04/27/93	8518	0.977	0.0%	12	7		1.003	1%	-3%					
04/30/93	8521	1.012	0.0%	15	7		1.004	1%	1%					
05/03/93	8524	1.008	0.0%	18	7		1.005	1%	0%					
05/05/93	8526	1.008	0.0%	20	7		1.005	1%	0%					
05/06/93	8527	1.016	0.0%	21	7		1.006	1%	1%					
05/07/93	8528	1.043	0.0%	22	7		1.006	1%	4%					
05/10/93	8531	1.016	0.0%	25	7		1.007	1%	1%					
05/12/93	8533	1.012	0.0%	27	7		1.007	1%	0%					
05/13/93	8534	1.000	0.0%	28	7		1.008	1%	-1%					
05/14/93	8535	1.012	0.0%	29	7		1.008	1%	0%					
05/17/93	8538	1.028	0.0%	32	7		1.009	1%	2%					
05/18/93	8539	1.012	0.0%	33	7		1.009	1%	0%					
05/19/93	8540	1.008	0.0%	34	7		1.010	1%	0%					
05/25/93	8546	1.016	0.0%	40	7		1.011	1%	0%					
05/27/93	8548	1.012	0.0%	42	7		1.012	1%	0%					
05/28/93	8549	1.008	0.0%	43	7		1.012	1%	0%					
06/01/93	8553	1.012	0.0%	47	7		1.014	1%	0%					
06/02/93	8554	0.996	0.0%	48	7		1.014	1%	-2%					
06/03/93	8555	1.000	0.0%	49	7		1.014	1%	-1%					
06/03/93	8555	1.019	0.0%	0	8	L	1.006	1%	1%	66	1.006	0%	0.76E-03	18%
06/03/93	8555	1.017	0.0%	0	8		1.006	1%	1%					
06/03/93	8555	1.015	0.0%	0	8		1.006	1%	1%					
06/03/93	8555	1.013	0.0%	0	8		1.006	1%	1%					
06/04/93	8556	1.035	0.0%	1	8		1.007	1%	3%					
06/07/93	8559	1.004	0.0%	4	8		1.009	1%	0%					
06/08/93	8560	0.996	0.0%	5	8		1.010	1%	-1%					
06/09/93	8561	1.004	0.0%	6	8		1.011	1%	-1%					
06/10/93	8562	1.013	0.0%	7	8		1.011	1%	0%					
06/11/93	8563	1.004	0.0%	8	8		1.012	1%	-1%					
06/17/93	8569	1.017	0.0%	14	8		1.017	1%	0%					
06/18/93	8570	1.017	0.0%	15	8		1.017	1%	0%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev	
06/21/93	8573	1.025	0.0%	18	8	1.020	1%	1%						
06/24/93	8576	1.012	0.0%	21	8	1.022	1%	-1%						
06/25/93	8577	0.992	0.0%	22	8	1.023	1%	-3%						
06/28/93	8580	1.021	0.0%	25	8	1.025	1%	0%						
06/29/93	8581	1.016	0.0%	26	8	1.026	1%	-1%						
07/14/93	8596	1.046	0.0%	41	8	1.037	1%	1%						
07/15/93	8597	1.042	0.0%	42	8	1.038	1%	0%						
07/19/93	8601	1.012	0.0%	46	8	1.041	1%	-3%						
07/20/93	8602	1.042	0.0%	47	8	1.042	1%	0%						
07/21/93	8603	1.036	0.0%	48	8	1.042	1%	-1%						
08/11/93	8624	1.081	0.0%	69	8	1.058	1%	2%						
08/12/93	8625	1.071	0.0%	70	8	1.059	1%	1%						
08/16/93	8629	1.024	0.0%	0	9	L	1.005	2%	2%	10	1.005	1%	0.20E-02	90%
08/17/93	8630	0.996	0.0%	1	9		1.007	2%	-1%					
08/18/93	8631	0.996	0.0%	2	9		1.009	2%	-1%					
08/20/93	8633	1.016	0.0%	4	9		1.013	2%	0%					
08/23/93	8636	1.020	0.0%	7	9		1.019	2%	0%					
08/24/93	8637	1.024	0.0%	8	9		1.021	2%	0%					
08/25/93	8638	0.973	0.0%	0	10	L	1.012	3%	-4%	63	1.012	1%	0.55E-03	31%
08/26/93	8639	0.966	0.0%	1	10		1.012	3%	-5%					
08/30/93	8643	0.981	0.0%	5	10		1.014	3%	-3%					
08/31/93	8644	0.977	0.0%	6	10		1.015	3%	-4%					
09/01/93	8645	0.985	0.0%	7	10		1.015	3%	-3%					
09/02/93	8646	0.988	0.0%	8	10		1.016	3%	-3%					
09/03/93	8647	0.973	0.0%	9	10		1.017	3%	-4%					
09/07/93	8651	0.981	0.0%	13	10		1.019	3%	-4%					
09/07/93	8651	1.068	0.0%	13	10		1.019	3%	5%					
09/07/93	8651	0.983	0.0%	13	10		1.019	3%	-4%					
09/07/93	8651	0.999	0.0%	13	10		1.019	3%	-2%					
09/08/93	8652	0.973	0.0%	14	10		1.019	3%	-5%					
09/09/93	8653	1.014	0.0%	15	10		1.020	3%	-1%					
09/10/93	8654	1.055	0.0%	16	10		1.020	3%	3%					
09/13/93	8657	1.067	0.0%	19	10		1.022	3%	4%					
09/14/93	8658	1.077	0.0%	20	10		1.023	3%	5%					
09/15/93	8659	1.078	0.0%	21	10		1.023	3%	5%					
09/16/93	8660	1.074	0.0%	22	10		1.024	3%	5%					
09/20/93	8664	1.063	0.0%	26	10		1.026	3%	3%					
09/21/93	8665	1.071	0.0%	27	10		1.026	3%	4%					
09/22/93	8666	1.058	0.0%	28	10		1.027	3%	3%					
09/23/93	8667	1.051	0.0%	29	10		1.028	3%	2%					
09/24/93	8668	1.058	0.0%	30	10		1.028	3%	3%					
09/27/93	8671	1.032	0.0%	33	10		1.030	3%	0%					
09/28/93	8672	1.039	0.0%	34	10		1.030	3%	1%					
09/29/93	8673	1.025	0.0%	35	10		1.031	3%	-1%					
09/30/93	8674	1.021	0.0%	36	10		1.031	3%	-1%					
10/01/93	8675	1.029	0.0%	37	10		1.032	3%	0%					
10/04/93	8678	1.040	0.0%	40	10		1.034	3%	1%					
10/06/93	8680	1.032	0.0%	42	10		1.035	3%	0%					
10/07/93	8681	1.051	0.0%	43	10		1.035	3%	1%					
10/08/93	8682	1.047	0.0%	44	10		1.036	3%	1%					
10/11/93	8685	1.054	0.0%	47	10		1.037	3%	2%					
10/12/93	8686	1.082	0.0%	48	10		1.038	3%	4%					
10/13/93	8687	1.051	0.0%	49	10		1.039	3%	1%					
10/14/93	8688	1.039	0.0%	50	10		1.039	3%	0%					
10/15/93	8689	1.036	0.0%	51	10		1.040	3%	0%					
10/18/93	8692	1.050	0.0%	54	10		1.041	3%	1%					
10/20/93	8694	1.036	0.0%	56	10		1.042	3%	-1%					
10/21/93	8695	1.047	0.0%	57	10		1.043	3%	0%					
10/22/93	8696	1.047	0.0%	58	10		1.043	3%	0%					
10/25/93	8699	1.032	0.0%	61	10		1.045	3%	-1%					
10/26/93	8700	1.029	0.0%	62	10		1.046	3%	-2%					
10/27/93	8701	1.040	0.0%	63	10		1.046	3%	-1%					
10/28/93	8702	1.047	0.0%	64	10		1.047	3%	0%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
11/11/93	8716	1.059	0.0%	78	10		1.054	3%	0%					
11/12/93	8717	0.983	0.0%	79	10		1.055	3%	-7%					
11/15/93	8720	1.063	0.0%	82	10		1.057	3%	1%					
11/15/93	8720	1.047	0.0%	82	10		1.057	3%	-1%					
11/16/93	8721	1.054	0.0%	83	10		1.057	3%	0%					
11/17/93	8722	1.032	0.0%	84	10		1.058	3%	-2%					
11/19/93	8724	1.043	0.0%	86	10		1.059	3%	-2%					
Instrument 1625 (Columbia 1600A)														
02/08/80	3691	0.950	0.0%	0	1		0.950		0%		0.950			
02/08/80	3691	0.958	0.0%	0	2	L	0.958	0%	0%		0.958	0%	-0.29E-03	0%
02/15/80	3698	0.956	0.0%	7	2		0.956	0%	0%					
02/15/80	3698	0.991	0.0%	0	3	L	0.991	2%	0%		0.991	0%	-0.62E-02	0%
02/20/80	3703	0.960	0.0%	5	3		0.960	2%	0%					
02/20/80	3703	1.021	0.0%	0	4	L	1.021	1%	0%	99	1.021	0%	0.17E-04	0%
08/10/83	4970	1.042	0.0%	1267	4		1.042	1%	0%					
08/10/83	4970	1.037	0.0%	0	5	L	1.037	0%	0%	23	1.037	0%	-0.71E-03	0%
09/27/83	5018	1.003	0.0%	48	5		1.003	0%	0%					
10/17/83	5038	0.989	0.0%	68	5		0.989	0%	0%					
10/17/83	5038	0.999	0.0%	0	6	L	1.002	0%	0%	2	1.002	0%	-0.31E-03	15%
11/09/83	5061	0.997	0.0%	23	6		0.994	0%	0%					
11/28/83	5080	0.990	0.0%	42	6		0.988	0%	0%					
01/12/84	5125	0.973	0.0%	87	6		0.974	0%	0%					
01/12/84	5125	0.999	0.0%	0	7		0.999		0%	2	0.999			
Instrument 1626 (Columbia 1600B)														
12/10/82	4727	0.935	0.0%	0	1		0.935		0%		0.935			
12/10/82	4727	0.996	0.0%	0	2	L	0.996	3%	0%		0.996	0%	0.12E-03	0%
12/19/83	5101	1.041	0.0%	374	2		1.041	3%	0%					
12/19/83	5101	1.002	0.0%	0	3	L	1.002	6%	0%	22	1.002	0%	0.13E-02	0%
02/21/84	5165	1.086	0.0%	64	3		1.086	6%	0%					
02/21/84	5165	1.023	0.0%	0	4	L	1.023	3%	0%	22	1.023	0%	-0.11E-02	0%
03/27/84	5200	0.984	0.0%	35	4		0.984	3%	0%					
03/27/84	5200	0.999	0.0%	0	5	L	0.999	4%	0%	17	0.999	0%	0.13E-03	0%
05/22/85	5621	1.053	0.0%	421	5		1.053	4%	0%					
05/22/85	5621	1.007	0.0%	0	6	L	1.007	5%	0%	16	1.007	0%	-0.19E-02	0%
06/27/85	5657	0.940	0.0%	36	6		0.940	5%	0%					
06/27/85	5657	0.986	0.0%	0	7	L	0.986	0%	0%	12	0.986	0%	-0.10E-03	0%
07/26/85	5686	0.983	0.0%	29	7		0.983	0%	0%					
07/26/85	5686	1.032	0.0%	0	8	L	1.032	17%	0%	13	1.032	0%	0.59E-02	0%
09/05/85	5727	1.275	0.0%	41	8		1.275	17%	0%					
09/05/85	5727	1.019	0.0%	0	9	L	1.019	2%	0%	11	1.019	0%	-0.14E-02	0%
09/30/85	5752	0.985	0.0%	25	9		0.985	2%	0%					
09/30/85	5752	0.985	0.0%	0	10	L	0.985	2%	0%	13	0.985	0%	0.86E-03	0%
11/04/85	5787	1.015	0.0%	35	10		1.015	2%	0%					
11/04/85	5787	1.015	0.0%	0	11	L	1.015	2%	0%	4	1.015	0%	-0.19E-02	0%
11/20/85	5803	0.985	0.0%	16	11		0.985	2%	0%					
11/20/85	5803	0.983	0.0%	0	12	L	0.983	2%	0%	4	0.983	0%	0.56E-03	0%
01/02/86	5846	1.007	0.0%	43	12		1.007	2%	0%					
01/02/86	5846	1.007	0.0%	0	13	L	1.007	8%	0%		1.007	0%	0.12E-02	0%
04/08/86	5942	1.118	0.0%	96	13		1.118	8%	0%					
04/08/86	5942	1.036	0.0%	0	14	L	1.036	3%	0%		1.036	0%	-0.17E-02	0%
05/02/86	5966	0.996	0.0%	24	14		0.996	3%	0%					
05/02/86	5966	0.967	0.0%	0	15		0.967		0%		0.967			
07/05/86	6030	1.010	0.0%	0	16	L	1.010	4%	0%		1.010	0%	0.62E-03	0%
10/07/86	6124	1.068	0.0%	94	16		1.068	4%	0%					
10/07/86	6124	1.019	0.0%	0	17	L	1.019	6%	0%		1.019	0%	-0.27E-03	0%
08/20/87	6441	0.934	0.0%	317	17		0.934	6%	0%					
08/20/87	6441	1.019	0.0%	0	18	L	1.019	2%	0%		1.019	0%	-0.15E-03	0%
01/26/88	6600	0.995	0.0%	159	18		0.995	2%	0%					
01/26/88	6600	1.014	0.0%	0	19	L	1.014	5%	0%		1.014	0%	-0.21E-02	0%



Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
02/26/88	6631	0.948	0.0%	31	19		0.948	5%	0%					
02/26/88	6631	0.987	0.0%	0	20	L	0.987	3%	0%		0.987	0%	0.15E-03	0%
10/18/88	6866	1.023	0.0%	235	20		1.023	3%	0%					
10/18/88	6866	1.023	0.0%	0	21	L	1.023	1%	0%		1.023	0%	0.15E-03	0%
01/17/89	6957	1.037	0.0%	91	21		1.037	1%	0%					
01/17/89	6957	1.027	0.0%	0	22		1.027		0%	6	1.027			
02/02/89	6973	0.998	0.0%	0	23	L	0.998	3%	0%	5	0.998	0%	-0.20E-02	0%
02/21/89	6992	0.960	0.0%	19	23		0.960	3%	0%					
02/21/89	6992	0.977	0.0%	0	24		0.977		0%	1	0.977			
02/23/89	6994	1.002	0.0%	0	25	L	1.002	1%	0%	11	1.002	0%	0.50E-03	0%
03/29/89	7028	1.019	0.0%	34	25		1.019	1%	0%					
03/29/89	7028	1.019	0.0%	0	26	L	1.019	0%	0%	7	1.019	0%	0.47E-05	0%
10/30/89	7243	1.020	0.0%	215	26		1.020	0%	0%					
10/30/89	7243	1.020	0.0%	0	27	L	1.020	0%	0%	5	1.020	0%	-0.28E-04	0%
12/05/89	7279	1.019	0.0%	36	27		1.019	0%	0%					
12/05/89	7279	1.019	0.0%	0	28	L	1.019	1%	0%	4	1.019	0%	-0.54E-03	0%
01/02/90	7307	1.004	0.0%	28	28		1.004	1%	0%					
01/02/90	7307	1.004	0.0%	0	29	L	1.004	3%	0%	31	1.004	0%	0.56E-03	0%
03/27/90	7391	1.051	0.0%	84	29		1.051	3%	0%					
03/27/90	7391	1.008	0.0%	0	30	L	1.008	2%	0%	21	1.008	0%	0.39E-03	0%
06/14/90	7470	1.039	0.0%	79	30		1.039	2%	0%					
06/14/90	7470	1.039	0.0%	0	31	L	1.039	1%	0%	14	1.039	0%	0.44E-03	0%
07/09/90	7495	1.050	0.0%	25	31		1.050	1%	0%					
07/09/90	7495	1.050	0.0%	0	32	L	1.050	6%	0%	9	1.050	0%	0.13E-02	0%
09/18/90	7566	1.140	0.0%	71	32		1.140	6%	0%					
09/18/90	7566	1.048	0.0%	0	33	L	1.048	15%	0%		1.048	0%	0.64E-02	0%
10/22/90	7600	1.264	0.0%	34	33		1.264	15%	0%					
10/22/90	7600	1.095	0.0%	0	34	L	1.095	16%	0%	1	1.095	0%	-0.64E-01	0%
10/26/90	7604	0.840	0.0%	4	34		0.840	16%	0%					
10/26/90	7604	0.992	0.0%	0	35	L	0.992	1%	0%		0.992	0%	0.27E-02	0%
10/29/90	7607	1.000	0.0%	3	35		1.000	1%	0%					
10/29/90	7607	0.994	0.0%	0	36	L	0.994	1%	0%	5	0.994	0%	0.62E-03	0%
11/14/90	7623	1.004	0.0%	16	36		1.004	1%	0%					
11/14/90	7623	1.004	0.0%	0	37	L	0.994	0%	1%		0.994	0%	0.00E+00	
11/14/90	7623	0.984	0.0%	0	37		0.994	0%	-1%					
11/14/90	7623	0.982	0.0%	0	38	L	0.982	0%	0%	1	0.982	0%	0.00E+00	
11/19/90	7628	0.982	0.0%	5	38		0.982	0%	0%					
11/19/90	7628	0.979	0.0%	0	39	L	0.979	2%	0%	1	0.979	0%	-0.61E-03	0%
01/09/91	7679	0.948	0.0%	51	39		0.948	2%	0%					
01/09/91	7679	1.002	0.0%	0	40	L	1.002	3%	0%	3	1.002	0%	-0.98E-02	0%
01/14/91	7684	0.953	0.0%	5	40		0.953	3%	0%					
01/14/91	7684	1.012	0.0%	0	41	L	1.012	3%	0%	5	1.012	0%	0.56E-02	0%
01/23/91	7693	1.062	0.0%	9	41		1.062	3%	0%					
01/23/91	7693	1.020	0.0%	0	42	L	1.020	1%	0%	6	1.020	0%	0.62E-03	0%
02/08/91	7709	1.030	0.0%	16	42		1.030	1%	0%					
02/08/91	7709	1.008	0.0%	0	43	L	1.008	1%	0%	3	1.008	0%	-0.17E-02	0%
02/15/91	7716	0.996	0.0%	7	43		0.996	1%	0%					
02/15/91	7716	1.004	0.0%	0	44	L	1.004	5%	0%	6	1.004	0%	-0.52E-02	0%
02/28/91	7729	0.937	0.0%	13	44		0.937	5%	0%					
02/28/91	7729	1.000	0.0%	0	45	L	1.000	2%	0%		1.000	0%	0.25E-02	0%
03/14/91	7743	1.035	0.0%	14	45		1.035	2%	0%					
03/14/91	7743	1.010	0.0%	0	46	L	1.010	2%	0%	4	1.010	0%	-0.28E-02	0%
03/25/91	7754	0.979	0.0%	11	46		0.979	2%	0%					
03/25/91	7754	0.996	0.0%	0	47	L	0.982	3%	1%	4	0.982	2%	-0.59E-02	83%
03/27/91	7756	0.950	0.0%	2	47		0.970	3%	-2%					
04/01/91	7761	0.946	0.0%	7	47		0.940	3%	1%					
04/01/91	7761	1.018	0.0%	0	48	L	1.018	3%	0%	4	1.018	0%	0.46E-02	0%
04/11/91	7771	1.064	0.0%	10	48		1.064	3%	0%					
04/11/91	7771	0.974	0.0%	0	49	L	0.974	3%	0%	8	0.974	2%	0.79E-03	196%
04/24/91	7784	0.976	0.0%	13	49		0.984	3%	-1%					
04/24/91	7784	1.010	0.0%	13	49		0.984	3%	3%					
04/24/91	7784	0.982	0.0%	13	49		0.984	3%	0%					
04/24/91	7784	0.969	0.0%	13	49		0.984	3%	-2%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
04/24/91	7784	0.998	0.0%	0	50	L	0.992	3%	1%	6	0.992	1%	-0.36E-02	66%
04/24/91	7784	0.964	0.0%	0	50		0.992	3%	-3%					
04/24/91	7784	1.013	0.0%	0	50		0.992	3%	2%					
05/06/91	7796	0.948	0.0%	12	50		0.948	3%	0%					
05/06/91	7796	0.994	0.0%	0	51	L	0.994	2%	0%	7	0.994	2%	-0.29E-02	54%
05/17/91	7807	0.948	0.0%	11	51		0.962	2%	-1%					
05/17/91	7807	0.978	0.0%	11	51		0.962	2%	2%					
05/17/91	7807	0.960	0.0%	11	51		0.962	2%	0%					
05/17/91	7807	0.992	0.0%	0	52	L	0.992	1%	0%	5	0.992	1%	0.27E-02	22%
05/29/91	7819	1.028	0.0%	12	52		1.024	1%	0%					
05/29/91	7819	1.020	0.0%	12	52		1.024	1%	0%					
05/29/91	7819	1.000	0.0%	0	53	L	1.016	2%	-2%	7	1.016	1%	-0.13E-02	113%
05/29/91	7819	1.017	0.0%	0	53		1.016	2%	0%					
05/29/91	7819	1.032	0.0%	0	53		1.016	2%	2%					
06/11/91	7832	1.000	0.0%	13	53		1.000	2%	0%					
06/11/91	7832	0.994	0.0%	0	54	L	0.998	0%	0%		0.998	0%	0.00E+00	
06/11/91	7832	1.002	0.0%	0	54		0.998	0%	0%					
06/11/91	7832	0.971	0.0%	0	55	L	0.984	2%	-1%	11	0.984	1%	0.40E-02	13%
06/11/91	7832	0.980	0.0%	0	55		0.984	2%	0%					
06/11/91	7832	1.000	0.0%	0	55		0.984	2%	2%					
07/08/91	7859	1.103	0.0%	27	55		1.092	2%	1%					
07/08/91	7859	1.080	0.0%	27	55		1.092	2%	-1%					
07/08/91	7859	1.004	0.0%	0	56	L	1.002	0%	0%		1.002	0%	0.40E-02	87%
07/08/91	7859	1.000	0.0%	0	56		1.002	0%	0%					
07/09/91	7860	1.006	0.0%	1	56		1.006	0%	0%					
07/09/91	7860	0.992	0.0%	0	57	L	0.992	2%	0%	1	0.992	0%	-0.12E-01	0%
07/11/91	7862	0.969	0.0%	2	57		0.969	2%	0%					
07/11/91	7862	0.998	0.0%	0	58	L	1.009	2%	-1%	4	1.009	1%	-0.47E-02	43%
07/12/91	7863	1.006	0.0%	1	58		1.004	2%	0%					
07/15/91	7866	1.021	0.0%	4	58		0.991	2%	3%					
07/16/91	7867	0.984	0.0%	5	58		0.986	2%	0%					
07/17/91	7868	0.983	0.0%	6	58		0.981	2%	0%					
07/17/91	7868	0.972	0.0%	6	58		0.981	2%	-1%					
07/17/91	7868	0.974	0.0%	6	58		0.981	2%	-1%					
07/17/91	7868	0.974	0.0%	6	58		0.981	2%	-1%					
07/17/91	7868	0.984	0.0%	6	58		0.981	2%	0%					
07/17/91	7868	1.000	0.0%	0	59	L	0.992	2%	1%	5	0.992	1%	0.11E-01	19%
07/17/91	7868	0.990	0.0%	0	59		0.992	2%	0%					
07/17/91	7868	0.981	0.0%	0	59		0.992	2%	-1%					
07/18/91	7869	0.978	0.0%	1	59		1.004	2%	-3%					
07/19/91	7870	1.048	0.0%	2	59		1.015	2%	3%					
07/22/91	7873	1.067	0.0%	5	59		1.048	2%	2%					
07/24/91	7875	1.044	0.0%	7	59		1.070	2%	-3%					
07/25/91	7876	1.094	0.0%	8	59		1.081	2%	1%					
07/25/91	7876	1.075	0.0%	8	59		1.081	2%	-1%					
07/25/91	7876	1.006	0.0%	0	60	L	0.991	2%	2%	24	0.991	1%	0.37E-03	77%
07/25/91	7876	1.006	0.0%	0	60		0.991	2%	2%					
07/26/91	7877	0.982	0.0%	1	60		0.991	2%	-1%					
07/29/91	7880	1.044	0.0%	4	60		0.992	2%	5%					
07/30/91	7881	0.986	0.0%	5	60		0.993	2%	-1%					
07/31/91	7882	0.980	0.0%	6	60		0.993	2%	-1%					
08/01/91	7883	0.973	0.0%	7	60		0.993	2%	-2%					
08/02/91	7884	0.969	0.0%	8	60		0.994	2%	-3%					
08/05/91	7887	0.992	0.0%	11	60		0.995	2%	0%					
08/06/91	7888	0.961	0.0%	12	60		0.995	2%	-4%					
08/07/91	7889	0.981	0.0%	13	60		0.996	2%	-1%					
08/08/91	7890	0.998	0.0%	14	60		0.996	2%	0%					
08/08/91	7890	1.004	0.0%	14	60		0.996	2%	1%					
08/16/91	7898	1.027	0.0%	22	60		0.999	2%	3%					
08/19/91	7901	0.984	0.0%	25	60		1.000	2%	-2%					
08/20/91	7902	0.989	0.0%	26	60		1.000	2%	-1%					
08/20/91	7902	1.004	0.0%	26	60		1.000	2%	0%					
08/21/91	7903	1.002	0.0%	27	60		1.001	2%	0%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev	
08/21/91	7903	1.006	0.0%	27	60	1.001	2%	1%						
08/22/91	7904	1.014	0.0%	28	60	1.001	2%	1%						
08/23/91	7905	1.016	0.0%	29	60	1.002	2%	1%						
08/26/91	7908	1.016	0.0%	32	60	1.003	2%	1%						
08/26/91	7908	1.006	0.0%	32	60	1.003	2%	0%						
08/27/91	7909	1.000	0.0%	33	60	1.003	2%	0%						
08/28/91	7910	0.992	0.0%	34	60	1.003	2%	-1%						
08/29/91	7911	0.998	0.0%	35	60	1.004	2%	-1%						
08/30/91	7912	1.002	0.0%	36	60	1.004	2%	0%						
09/03/91	7916	0.972	0.0%	0	61	L	0.982	2%	-1%	3	0.982	1%	0.56E-02	64%
09/04/91	7917	0.980	0.0%	1	61		0.987	2%	-2%					
09/05/91	7918	0.978	0.0%	2	61		0.993	2%	-2%					
09/06/91	7919	0.996	0.0%	3	61		0.998	2%	0%					
09/06/91	7919	0.998	0.0%	3	61		0.998	2%	0%					
09/06/91	7919	1.003	0.0%	3	61		0.998	2%	0%					
09/06/91	7919	1.021	0.0%	3	61		0.998	2%	2%					
09/06/91	7919	1.025	0.0%	3	61		0.998	2%	3%					
09/09/91	7922	0.996	0.0%	6	61		1.015	2%	-2%					
09/09/91	7922	0.986	0.0%	0	62	L	0.979	2%	1%	1	0.979	2%	0.12E-01	96%
09/10/91	7923	0.978	0.0%	1	62		0.991	2%	-1%					
09/11/91	7924	1.010	0.0%	2	62		1.003	2%	1%					
09/11/91	7924	0.986	0.0%	0	63	L	0.980	3%	1%	50	0.980	1%	0.11E-02	18%
09/13/91	7926	0.988	0.0%	2	63		0.982	3%	1%					
09/16/91	7929	0.980	0.0%	5	63		0.985	3%	-1%					
09/17/91	7930	1.002	0.0%	6	63		0.986	3%	2%					
09/18/91	7931	0.974	0.0%	7	63		0.987	3%	-1%					
09/19/91	7932	0.982	0.0%	8	63		0.988	3%	-1%					
09/20/91	7933	0.973	0.0%	9	63		0.989	3%	-2%					
09/23/91	7936	0.986	0.0%	12	63		0.993	3%	-1%					
09/24/91	7937	0.971	0.0%	13	63		0.994	3%	-2%					
09/25/91	7938	0.973	0.0%	14	63		0.995	3%	-2%					
09/26/91	7939	0.969	0.0%	15	63		0.996	3%	-3%					
09/27/91	7940	0.975	0.0%	16	63		0.997	3%	-2%					
09/30/91	7943	0.984	0.0%	19	63		1.000	3%	-2%					
10/01/91	7944	0.982	0.0%	20	63		1.001	3%	-2%					
10/02/91	7945	1.002	0.0%	21	63		1.002	3%	0%					
10/02/91	7945	1.025	0.0%	21	63		1.002	3%	2%					
10/02/91	7945	1.014	0.0%	21	63		1.002	3%	1%					
10/02/91	7945	1.025	0.0%	21	63		1.002	3%	2%					
10/03/91	7946	1.002	0.0%	22	63		1.003	3%	0%					
10/04/91	7947	1.010	0.0%	23	63		1.004	3%	1%					
10/08/91	7951	1.008	0.0%	27	63		1.008	3%	0%					
10/09/91	7952	1.010	0.0%	28	63		1.009	3%	0%					
10/10/91	7953	1.000	0.0%	29	63		1.011	3%	-1%					
10/11/91	7954	1.008	0.0%	30	63		1.012	3%	0%					
10/14/91	7957	1.020	0.0%	33	63		1.015	3%	1%					
10/15/91	7958	1.039	0.0%	34	63		1.016	3%	2%					
10/16/91	7959	1.041	0.0%	35	63		1.017	3%	2%					
10/17/91	7960	1.043	0.0%	36	63		1.018	3%	2%					
10/18/91	7961	1.035	0.0%	37	63		1.019	3%	2%					
10/21/91	7964	1.064	0.0%	40	63		1.022	3%	4%					
10/22/91	7965	1.038	0.0%	41	63		1.023	3%	1%					
10/23/91	7966	1.061	0.0%	42	63		1.024	3%	3%					
10/24/91	7967	1.050	0.0%	43	63		1.025	3%	2%					
10/25/91	7968	1.056	0.0%	44	63		1.026	3%	3%					
10/28/91	7971	1.092	0.0%	47	63		1.029	3%	6%					
10/29/91	7972	1.102	0.0%	48	63		1.031	3%	6%					
10/30/91	7973	0.990	0.0%	49	63		1.032	3%	-4%					
10/31/91	7974	1.000	0.0%	50	63		1.033	3%	-3%					
11/01/91	7975	1.018	0.0%	51	63		1.034	3%	-2%					
11/01/91	7975	1.040	0.0%	51	63		1.034	3%	1%					
11/04/91	7978	1.011	0.0%	54	63		1.037	3%	-3%					
11/05/91	7979	1.035	0.0%	55	63		1.038	3%	0%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
11/06/91	7980	1.024	0.0%	56	63	1.039	3%	-1%					
11/07/91	7981	1.002	0.0%	57	63	1.040	3%	-4%					
11/08/91	7982	0.994	0.0%	58	63	1.041	3%	-5%					
11/11/91	7985	1.015	0.0%	61	63	1.044	3%	-3%					
11/12/91	7986	0.996	0.0%	62	63	1.045	3%	-5%					
11/13/91	7987	1.017	0.0%	63	63	1.046	3%	-3%					
11/15/91	7989	1.026	0.0%	65	63	1.048	3%	-2%					
11/19/91	7993	1.037	0.0%	69	63	1.053	3%	-2%					
11/20/91	7994	1.063	0.0%	70	63	1.054	3%	1%					
11/21/91	7995	1.049	0.0%	71	63	1.055	3%	-1%					
11/26/91	8000	1.139	0.0%	76	63	1.060	3%	7%					
Instrument 1627 (Columbia 1600C)													
12/10/82	4727	0.896	0.0%	0	1	0.896		0%		0.896			
12/10/82	4727	1.006	0.0%	0	2 L	1.006	3%	0%		1.006	0%	-0.16E-03	0%
09/06/83	4997	0.962	0.0%	270	2	0.962	3%	0%					
09/06/83	4997	0.981	0.0%	0	3 L	0.981	3%	0%		0.981	0%	0.78E-04	0%
05/14/85	5613	1.029	0.0%	616	3	1.029	3%	0%					
05/14/85	5613	1.029	0.0%	0	4 L	1.029	3%	0%	4	1.029	0%	-0.14E-02	0%
06/13/85	5643	0.987	0.0%	30	4	0.987	3%	0%					
06/13/85	5643	0.987	0.0%	0	5 L	0.987	7%	0%	20	0.987	0%	0.30E-03	0%
04/17/86	5951	1.080	0.0%	308	5	1.080	7%	0%					
04/17/86	5951	1.085	0.0%	0	6 L	1.085	4%	0%	8	1.085	0%	-0.39E-02	0%
05/02/86	5966	1.027	0.0%	15	6	1.027	4%	0%					
05/02/86	5966	1.013	0.0%	0	7 L	1.013	3%	0%	45	1.013	0%	0.27E-03	0%
10/03/86	6120	1.054	0.0%	154	7	1.054	3%	0%					
10/03/86	6120	1.046	0.0%	0	8 L	1.046	4%	0%		1.046	0%	-0.46E-03	0%
02/05/87	6245	0.989	0.0%	125	8	0.989	4%	0%					
02/05/87	6245	0.989	0.0%	0	9	0.989		0%		0.989			
Instrument 1628 (Columbia 1600D)													
01/08/92	8043	0.987	0.0%	0	1	0.987		0%	1	0.987			
01/21/92	8056	0.964	0.0%	0	2 L	0.966	1%	0%	15	0.966	1%	0.29E-03	90%
01/22/92	8057	0.955	0.0%	1	2	0.966	1%	-1%					
01/24/92	8059	0.976	0.0%	3	2	0.967	1%	1%					
02/03/92	8069	0.983	0.0%	13	2	0.970	1%	1%					
02/04/92	8070	0.956	0.0%	14	2	0.970	1%	-1%					
02/05/92	8071	0.968	0.0%	15	2	0.971	1%	0%					
02/06/92	8072	0.982	0.0%	16	2	0.971	1%	1%					
02/07/92	8073	0.974	0.0%	17	2	0.971	1%	0%					
02/10/92	8076	0.964	0.0%	20	2	0.972	1%	-1%					
02/11/92	8077	0.984	0.0%	21	2	0.972	1%	1%					
02/12/92	8078	0.968	0.0%	22	2	0.973	1%	0%					
02/14/92	8080	0.980	0.0%	24	2	0.973	1%	1%					
02/18/92	8084	0.962	0.0%	28	2	0.974	1%	-1%					
02/19/92	8085	0.976	0.0%	29	2	0.975	1%	0%					
02/20/92	8086	0.974	0.0%	30	2	0.975	1%	0%					
02/21/92	8087	0.984	0.0%	0	3	0.984		0%		0.984			
02/25/92	8091	1.010	0.0%	0	4 L	1.010	2%	0%	2	1.010	0%	-0.28E-01	0%
02/26/92	8092	0.982	0.0%	1	4	0.982	2%	0%					
02/27/92	8093	0.986	0.0%	0	5 L	0.986	1%	0%	3	0.986	0%	-0.26E-02	0%
03/03/92	8098	0.973	0.0%	5	5	0.973	1%	0%					
03/04/92	8099	0.986	0.0%	0	6 L	1.003	1%	-2%	16	1.003	0%	0.44E-04	272%
03/05/92	8100	0.988	0.0%	1	6	1.003	1%	-1%					
03/06/92	8101	0.994	0.0%	2	6	1.003	1%	-1%					
03/09/92	8104	0.992	0.0%	5	6	1.003	1%	-1%					
03/10/92	8105	1.004	0.0%	6	6	1.003	1%	0%					
03/11/92	8106	1.015	0.0%	7	6	1.003	1%	1%					
03/12/92	8107	1.017	0.0%	8	6	1.003	1%	1%					
03/13/92	8108	1.000	0.0%	9	6	1.003	1%	0%					
03/18/92	8113	1.015	0.0%	14	6	1.003	1%	1%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev	
03/23/92	8118	1.049	0.0%	19	6	1.004	1%	4%						
03/25/92	8120	0.998	0.0%	21	6	1.004	1%	-1%						
03/26/92	8121	1.017	0.0%	22	6	1.004	1%	1%						
03/27/92	8122	1.000	0.0%	23	6	1.004	1%	0%						
03/31/92	8126	0.992	0.0%	27	6	1.004	1%	-1%						
04/01/92	8127	1.010	0.0%	28	6	1.004	1%	1%						
04/09/92	8135	1.006	0.0%	36	6	1.004	1%	0%						
04/10/92	8136	0.990	0.0%	37	6	1.004	1%	-1%						
04/13/92	8139	1.006	0.0%	40	6	1.004	1%	0%						
04/14/92	8140	0.994	0.0%	41	6	1.004	1%	-1%						
04/20/92	8146	0.994	0.0%	47	6	1.005	1%	-1%						
04/23/92	8149	1.009	0.0%	50	6	1.005	1%	0%						
04/27/92	8153	1.013	0.0%	54	6	1.005	1%	1%						
04/28/92	8154	1.002	0.0%	55	6	1.005	1%	0%						
05/04/92	8160	0.993	0.0%	61	6	1.005	1%	-1%						
05/05/92	8161	0.994	0.0%	62	6	1.005	1%	-1%						
05/11/92	8167	1.009	0.0%	68	6	1.006	1%	0%						
05/12/92	8168	1.021	0.0%	69	6	1.006	1%	1%						
05/14/92	8170	1.019	0.0%	0	7	L	1.012	2%	1%	50	1.012	1%	-0.92E-05	1538%
05/18/92	8174	0.969	0.0%	4	7		1.012	2%	-4%					
05/19/92	8175	1.021	0.0%	5	7		1.012	2%	1%					
05/20/92	8176	1.009	0.0%	6	7		1.012	2%	0%					
05/22/92	8178	0.996	0.0%	8	7		1.012	2%	-2%					
05/26/92	8182	1.015	0.0%	12	7		1.012	2%	0%					
05/27/92	8183	0.996	0.0%	13	7		1.012	2%	-2%					
05/28/92	8184	0.989	0.0%	14	7		1.012	2%	-2%					
06/03/92	8190	1.009	0.0%	20	7		1.012	2%	0%					
06/08/92	8195	1.022	0.0%	25	7		1.012	2%	1%					
06/09/92	8196	1.017	0.0%	26	7		1.012	2%	1%					
06/11/92	8198	1.006	0.0%	28	7		1.012	2%	-1%					
06/14/92	8201	1.040	0.0%	31	7		1.012	2%	3%					
06/17/92	8204	1.033	0.0%	34	7		1.012	2%	2%					
06/18/92	8205	1.022	0.0%	35	7		1.012	2%	1%					
06/19/92	8206	1.016	0.0%	36	7		1.012	2%	0%					
06/22/92	8209	1.061	0.0%	39	7		1.012	2%	5%					
06/23/92	8210	1.038	0.0%	40	7		1.012	2%	3%					
06/25/92	8212	0.984	0.0%	42	7		1.012	2%	-3%					
06/29/92	8216	1.038	0.0%	46	7		1.012	2%	3%					
07/01/92	8218	1.027	0.0%	48	7		1.012	2%	2%					
07/02/92	8219	0.990	0.0%	49	7		1.012	2%	-2%					
07/06/92	8223	1.061	0.0%	53	7		1.012	2%	5%					
07/07/92	8224	1.021	0.0%	54	7		1.012	2%	1%					
07/08/92	8225	0.990	0.0%	55	7		1.012	2%	-2%					
07/09/92	8226	0.979	0.0%	56	7		1.012	2%	-3%					
07/13/92	8230	1.061	0.0%	60	7		1.011	2%	5%					
07/14/92	8231	1.011	0.0%	61	7		1.011	2%	0%					
07/15/92	8232	0.995	0.0%	62	7		1.011	2%	-2%					
07/16/92	8233	0.995	0.0%	63	7		1.011	2%	-2%					
07/17/92	8234	1.005	0.0%	64	7		1.011	2%	-1%					
07/20/92	8237	0.981	0.0%	67	7		1.011	2%	-3%					
07/21/92	8238	0.990	0.0%	68	7		1.011	2%	-2%					
07/22/92	8239	1.004	0.0%	69	7		1.011	2%	-1%					
07/23/92	8240	0.996	0.0%	70	7		1.011	2%	-2%					
07/24/92	8241	0.986	0.0%	71	7		1.011	2%	-3%					
07/28/92	8245	1.056	0.0%	75	7		1.011	2%	4%					
08/04/92	8252	1.000	0.0%	82	7		1.011	2%	-1%					
08/05/92	8253	0.990	0.0%	83	7		1.011	2%	-2%					
08/11/92	8259	1.032	0.0%	89	7		1.011	2%	2%					
08/12/92	8260	1.003	0.0%	90	7		1.011	2%	-1%					
08/13/92	8261	1.014	0.0%	91	7		1.011	2%	0%					
08/14/92	8262	1.007	0.0%	0	8	L	1.031	2%	-2%	11	1.031	1%	0.74E-03	48%
08/17/92	8265	1.073	0.0%	3	8		1.033	2%	4%					
08/18/92	8266	1.031	0.0%	4	8		1.034	2%	0%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev	
08/20/92	8268	1.024	0.0%	6	8	1.035	2%	-1%						
08/21/92	8269	1.028	0.0%	7	8	1.036	2%	-1%						
08/24/92	8272	1.039	0.0%	10	8	1.038	2%	0%						
08/25/92	8273	1.054	0.0%	11	8	1.039	2%	1%						
08/26/92	8274	1.059	0.0%	12	8	1.040	2%	2%						
09/01/92	8280	1.000	0.0%	18	8	1.044	2%	-4%						
09/09/92	8288	1.082	0.0%	26	8	1.050	2%	3%						
09/09/92	8288	1.055	0.0%	26	8	1.050	2%	0%						
09/09/92	8288	1.021	0.0%	26	8	1.050	2%	-3%						
09/11/92	8290	1.041	0.0%	28	8	1.052	2%	-1%						
09/17/92	8296	1.086	0.0%	34	8	1.056	2%	3%						
09/18/92	8297	1.051	0.0%	35	8	1.057	2%	-1%						
09/21/92	8300	1.066	0.0%	38	8	1.059	2%	1%						
09/24/92	8303	1.076	0.0%	41	8	1.061	2%	1%						
09/25/92	8304	1.060	0.0%	42	8	1.062	2%	0%						
09/28/92	8307	1.041	0.0%	45	8	1.064	2%	-2%						
09/29/92	8308	1.037	0.0%	0	9	L	1.077	2%	-4%	39	1.077	1%	-0.13E-02	15%
10/01/92	8310	1.065	0.0%	2	9		1.074	2%	-1%					
10/02/92	8311	1.045	0.0%	3	9		1.073	2%	-3%					
10/07/92	8316	1.091	0.0%	8	9		1.067	2%	2%					
10/09/92	8318	1.051	0.0%	10	9		1.064	2%	-1%					
10/12/92	8321	1.065	0.0%	13	9		1.060	2%	0%					
10/13/92	8322	1.070	0.0%	14	9		1.059	2%	1%					
10/14/92	8323	1.060	0.0%	15	9		1.058	2%	0%					
10/15/92	8324	1.079	0.0%	16	9		1.057	2%	2%					
10/21/92	8330	1.055	0.0%	22	9		1.049	2%	1%					
10/23/92	8332	1.046	0.0%	24	9		1.046	2%	0%					
10/26/92	8335	1.066	0.0%	27	9		1.043	2%	2%					
10/27/92	8336	1.051	0.0%	28	9		1.041	2%	1%					
10/28/92	8337	1.023	0.0%	29	9		1.040	2%	-2%					
10/30/92	8339	1.023	0.0%	31	9		1.038	2%	-1%					
11/02/92	8342	1.037	0.0%	34	9		1.034	2%	0%					
11/03/92	8343	1.027	0.0%	35	9		1.033	2%	-1%					
11/04/92	8344	1.018	0.0%	36	9		1.031	2%	-1%					
11/05/92	8345	1.036	0.0%	37	9		1.030	2%	1%					
11/09/92	8349	1.041	0.0%	41	9		1.025	2%	2%					
11/11/92	8351	1.041	0.0%	43	9		1.022	2%	2%					
11/12/92	8352	1.027	0.0%	44	9		1.021	2%	1%					
11/13/92	8353	1.036	0.0%	45	9		1.020	2%	2%					
11/16/92	8356	1.018	0.0%	48	9		1.016	2%	0%					
11/20/92	8360	1.028	0.0%	52	9		1.011	2%	2%					
11/23/92	8363	1.045	0.0%	55	9		1.007	2%	4%					
11/25/92	8365	0.991	0.0%	57	9		1.005	2%	-1%					
12/01/92	8371	1.032	0.0%	63	9		0.997	2%	3%					
12/02/92	8372	0.979	0.0%	64	9		0.996	2%	-2%					
12/03/92	8373	0.978	0.0%	65	9		0.995	2%	-2%					
12/04/92	8374	0.978	0.0%	66	9		0.993	2%	-2%					
12/08/92	8378	0.931	0.0%	70	9		0.988	2%	-6%					
12/09/92	8379	0.958	0.0%	0	10	L	0.979	3%	-2%	32	0.979	1%	0.23E-03	25%
12/18/92	8388	1.013	0.0%	9	10		0.981	3%	3%					
12/21/92	8391	1.000	0.0%	12	10		0.982	3%	2%					
12/22/92	8392	0.971	0.0%	13	10		0.982	3%	-1%					
01/05/93	8406	1.070	0.0%	27	10		0.985	3%	8%					
01/06/93	8407	1.009	0.0%	28	10		0.985	3%	2%					
01/07/93	8408	0.978	0.0%	29	10		0.985	3%	-1%					
01/11/93	8412	1.013	0.0%	33	10		0.986	3%	3%					
01/12/93	8413	0.974	0.0%	34	10		0.987	3%	-1%					
01/13/93	8414	0.983	0.0%	35	10		0.987	3%	0%					
01/14/93	8415	0.974	0.0%	36	10		0.987	3%	-1%					
01/15/93	8416	0.983	0.0%	37	10		0.987	3%	0%					
01/20/93	8421	1.018	0.0%	42	10		0.988	3%	3%					
01/21/93	8422	0.979	0.0%	43	10		0.989	3%	-1%					
01/22/93	8423	0.970	0.0%	44	10		0.989	3%	-2%					

Table B-1 (continued)

Date	DayNo	Factor	Sdev	Days	Asn. Cd	F(fit)	Unc.	Diff.	Runs	Avg/Intc	Sdev	Slope	Sdev
01/25/93	8426	1.009	0.0%	47	10	0.989	3%	2%					
01/26/93	8427	0.974	0.0%	48	10	0.990	3%	-2%					
01/27/93	8428	0.970	0.0%	49	10	0.990	3%	-2%					
01/28/93	8429	0.970	0.0%	50	10	0.990	3%	-2%					
02/02/93	8434	0.974	0.0%	55	10	0.991	3%	-2%					
02/03/93	8435	0.970	0.0%	56	10	0.992	3%	-2%					
02/04/93	8436	0.983	0.0%	57	10	0.992	3%	-1%					
02/05/93	8437	0.979	0.0%	58	10	0.992	3%	-1%					
02/08/93	8440	1.027	0.0%	61	10	0.993	3%	3%					
02/10/93	8442	0.966	0.0%	63	10	0.993	3%	-3%					
02/16/93	8448	1.027	0.0%	69	10	0.994	3%	3%					
02/17/93	8449	0.987	0.0%	70	10	0.995	3%	-1%					
02/19/93	8451	0.979	0.0%	72	10	0.995	3%	-2%					
02/22/93	8454	0.950	0.0%	75	10	0.996	3%	-5%					
02/23/93	8455	0.962	0.0%	76	10	0.996	3%	-4%					
02/25/93	8457	1.009	0.0%	78	10	0.996	3%	1%					
07/16/93	8598	1.027	0.0%	219	10	1.028	3%	0%					
08/19/93	8632	1.093	0.0%	253	10	1.036	3%	5%					
11/04/93	8709	1.040	0.0%	330	10	1.054	3%	-1%					
11/15/93	8720	1.047	0.0%	341	10	1.056	3%	-1%					

Table B-2 Summary of NO<sub>2</sub> converter efficiency data for all NO<sub>x</sub> monitoring instruments.

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	FitErr	Runs	F(fit)	Sdev	Slope	Sdev
Instrument 1510 (Teco 14B-1)												
03/19/75	1904	1.004	0.0%	0	1	L	1%	522	0.999	1%	-3.45E-06	61%
10/07/75	2106	1.004	0.0%	202	1		1%		0.998			
01/27/76	2218	0.990	0.0%	314	1		-1%		0.998			
01/27/76	2218	0.990	0.0%	314	1		-1%		0.998			
04/08/76	2290	0.996	0.0%	386	1		0%		0.997			
04/08/76	2290	0.996	0.0%	386	1		0%		0.997			
05/03/76	2315	0.986	0.0%	411	1		-1%		0.997			
06/15/76	2358	1.008	0.0%	454	1		1%		0.997			
02/15/77	2603	1.031	0.0%	699	1		3%		0.996			
03/10/78	2991	0.989	0.0%	1087	1		-1%		0.995			
03/10/78	2991	0.989	0.0%	1087	1		-1%		0.995			
09/13/78	3178	1.000	0.0%	1274	1		1%		0.994			
09/13/78	3178	1.000	0.0%	1274	1		1%		0.994			
05/04/79	3411	1.029	0.0%	1507	1		3%		0.994			
09/12/80	3908	0.603	0.0%	2004	0	X						
09/15/80	3911	1.006	0.0%	2007	1		1%		0.992			
09/16/80	3912	0.960	0.0%	2008	1		-3%		0.992			
07/08/81	4207	1.013	0.0%	2303	1		2%		0.991			
08/07/81	4237	0.975	0.0%	2333	1		-2%		0.991			
08/07/81	4237	0.975	0.0%	2333	1		-2%		0.991			
12/19/81	4371	1.006	0.0%	2467	1		2%		0.990			
04/20/82	4493	0.970	0.0%	2589	1		-2%		0.990			
04/20/82	4493	0.970	0.0%	2589	1		-2%		0.990			
04/26/82	4499	1.050	0.0%	2595	1		6%		0.990			
07/12/82	4576	0.942	0.0%	2672	1		-5%		0.989			
07/12/82	4576	0.942	0.0%	2672	1		-5%		0.989			
08/22/82	4617	1.033	0.0%	2713	1		4%		0.989			
10/20/82	4676	0.897	0.0%	2772	1		-10%		0.989			
10/20/82	4676	0.897	0.0%	2772	1		-10%		0.989			
12/10/82	4727	0.972	0.0%	2823	1		-2%		0.989			
12/10/82	4727	0.972	0.0%	2823	1		-2%		0.989			
02/18/83	4797	1.000	0.0%	2893	1		1%		0.989			
03/07/83	4814	1.010	0.0%	2910	1		2%		0.989			
03/29/83	4836	0.993	0.0%	2932	1		0%		0.989			
04/25/83	4863	1.009	0.0%	2959	1		2%		0.988			
08/10/83	4970	1.008	0.0%	3066	1		2%		0.988			
10/17/83	5038	0.991	0.0%	3134	1		0%		0.988			
11/28/83	5080	0.996	0.0%	3176	1		1%		0.988			
12/19/83	5101	0.984	0.0%	3197	1		0%		0.988			
01/03/84	5116	1.017	0.0%	3212	1		3%		0.988			
01/12/84	5125	1.000	0.0%	3221	1		1%		0.988			
02/21/84	5165	0.992	0.0%	3261	1		0%		0.987			
03/27/84	5200	0.987	0.0%	3296	1		0%		0.987			
05/08/84	5242	0.991	0.0%	3338	1		0%		0.987			
06/05/84	5270	0.997	0.0%	3366	1		1%		0.987			
07/30/84	5325	0.984	0.0%	3421	1		0%		0.987			
11/01/84	5419	0.997	0.0%	3515	1		1%		0.987			
12/13/84	5461	1.000	0.0%	3557	1		1%		0.986			
02/06/85	5516	0.994	0.0%	3612	1		1%		0.986			
05/17/85	5616	0.967	0.0%	3712	1		-2%		0.986			
06/28/85	5658	0.980	0.0%	3754	1		-1%		0.986			
04/17/86	5951	1.044	0.0%	4047	1		6%		0.985			
09/17/90	7565	0.991	0.0%	5661	1		1%		0.979			
09/18/90	7566	0.975	0.0%	5662	1		0%		0.979			
10/23/90	7601	1.000	0.0%	5697	1		2%		0.979			
10/26/90	7604	0.991	0.0%	5700	1		1%		0.979			
10/29/90	7607	0.963	0.0%	5703	1		-2%		0.979			
11/14/90	7623	0.950	0.0%	5719	1		-3%		0.979			
01/07/91	7677	0.997	0.0%	5773	1		2%		0.979			
01/07/91	7677	0.997	0.0%	5773	1		2%		0.979			
01/14/91	7684	0.988	0.0%	5780	1		1%		0.979			
02/15/91	7716	0.945	0.0%	5812	1		-4%		0.979			



Table B-2 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	FitErr	Runs	F(fit)	Sdev	Slope	Sdev
02/28/91	7729	0.960	0.0%	5825	1		-2%		0.979			
03/21/91	7750	(undefined)										
03/26/91	7755	0.314	0.0%	0	2	L	0%	1	0.314	0%	1.78E-01	0%
03/27/91	7756	0.492	0.0%	1	2		0%		0.492			
03/27/91	7756	(undefined)										
04/01/91	7761	0.984	0.0%	6	0	X						
04/01/91	7761	0.660	0.0%	6	0	X						
04/01/91	7761	0.811	0.0%	6	0	X						
04/04/91	7764	1.009	0.0%	0	3	L	12%	46	0.892	4%	1.23E-03	52%
04/11/91	7771	0.874	0.0%	7	3		-3%		0.901			
04/24/91	7784	0.802	0.0%	20	3		-14%		0.917			
05/06/91	7796	0.991	0.0%	32	3		6%		0.932			
05/06/91	7796	0.917	0.0%	32	3		-2%		0.932			
05/06/91	7796	0.862	0.0%	32	3		-8%		0.932			
05/06/91	7796	0.829	0.0%	32	3		-12%		0.932			
05/17/91	7807	0.985	0.0%	43	3		4%		0.945			
05/17/91	7807	0.995	0.0%	43	3		5%		0.945			
05/17/91	7807	0.962	0.0%	43	3		2%		0.945			
05/29/91	7819	0.977	0.0%	55	3		2%		0.960			
05/29/91	7819	0.991	0.0%	55	3		3%		0.960			
05/29/91	7819	0.994	0.0%	55	3		3%		0.960			
05/29/91	7819	0.948	0.0%	55	3		-1%		0.960			
06/11/91	7832	0.949	0.0%	68	3		-3%		0.976			
06/11/91	7832	0.990	0.0%	68	3		1%		0.976			
07/09/91	7860	1.000	0.0%	96	3		-1%		1.010			
07/09/91	7860	1.000	0.0%	0	4	L	0%	246	0.998	1%	-2.51E-05	81%
07/17/91	7868	0.991	0.0%	8	4		-1%		0.998			
07/17/91	7868	1.000	0.0%	8	4		0%		0.998			
07/17/91	7868	0.989	0.0%	8	4		-1%		0.998			
07/17/91	7868	1.000	0.0%	8	4		0%		0.998			
07/17/91	7868	0.988	0.0%	8	4		-1%		0.998			
07/17/91	7868	1.000	0.0%	8	4		0%		0.998			
07/25/91	7876	1.121	0.0%	16	0	X						
07/25/91	7876	0.776	0.0%	16	0	X						
08/08/91	7890	1.004	0.0%	30	4		1%		0.998			
09/06/91	7919	1.000	0.0%	59	4		0%		0.997			
09/06/91	7919	0.990	0.0%	59	4		-1%		0.997			
10/02/91	7945	1.000	0.0%	85	4		0%		0.996			
11/01/91	7975	1.003	0.0%	115	4		1%		0.995			
01/08/92	8043	0.990	0.0%	183	4		0%		0.994			
09/09/92	8288	1.006	0.0%	428	4		2%		0.988			
09/09/92	8288	0.997	0.0%	428	4		1%		0.988			
11/16/92	8356	0.995	0.0%	496	4		1%		0.986			
02/09/93	8441	0.921	0.0%	581	4		-7%		0.984			
02/09/93	8441	0.974	0.0%	581	4		-1%		0.984			
02/10/93	8442	1.027	0.0%	582	4		4%		0.984			
Instrument 1520 (Teco 14B-E)												
07/14/86	6039	0.988	0.0%	0	1	L	0%	13	0.988	0%	-2.47E-06	179%
08/20/87	6441	0.989	0.0%	402	1		0%		0.987			
02/26/88	6631	0.986	0.0%	592	1		0%		0.987			
10/18/88	6866	1.007	0.0%	0	2	L	0%	11	1.011	1%	-5.64E-05	52%
09/12/89	7195	1.004	0.0%	329	2		1%		0.992			
10/04/89	7217	0.993	0.0%	351	2		0%		0.991			
10/04/89	7217	0.993	0.0%	351	2		0%		0.991			
01/04/90	7309	0.974	0.0%	443	2		-1%		0.986			
Instrument 1530 (Teco 14B-3), and Instrument 1531 (Teco 14B-3 with Nylon filter)												
10/30/80	3956	0.993	0.0%	0	1		0%	3	0.993			
02/04/81	4053	0.851	0.0%	0	2	A	-9%	45	0.928	12%		

Table B-2 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	FitErr	Runs	F(fit)	Sdev	Slope	Sdev
08/07/81	4237	1.004	0.0%	184	2		8%		0.928			
08/07/81	4237	1.004	0.0%	0	3	A	1%	105	0.998	2%		
09/14/81	4275	1.045	0.0%	38	3		4%		0.998			
12/14/81	4366	0.996	0.0%	129	3		0%		0.998			
12/19/81	4371	0.998	0.0%	134	3		0%		0.998			
04/20/82	4493	0.994	0.0%	256	3		0%		0.998			
04/26/82	4499	0.962	0.0%	262	3		-4%		0.998			
07/12/82	4576	0.998	0.0%	339	3		0%		0.998			
08/22/82	4617	0.997	0.0%	380	3		0%		0.998			
10/20/82	4676	1.003	0.0%	439	3		0%		0.998			
11/04/82	4691	0.979	0.0%	454	3		-2%		0.998			
12/10/82	4727	0.995	0.0%	490	3		0%		0.998			
02/04/83	4783	1.005	0.0%	546	3		1%		0.998			
Instrument 1540 (Teco Model 42)												
04/02/93	8493	0.994	0.0%	0	1	A	0%	201	0.996	1%		
04/02/93	8493	0.989	0.0%	0	1		-1%		0.996			
04/14/93	8505	1.015	0.0%	12	1		2%		0.996			
04/14/93	8505	1.000	0.0%	12	1		0%		0.996			
05/11/93	8532	1.000	0.0%	39	1		0%		0.996			
06/03/93	8555	1.004	0.0%	62	1		1%		0.996			
06/03/93	8555	1.000	0.0%	62	1		0%		0.996			
06/03/93	8555	0.997	0.0%	62	1		0%		0.996			
06/03/93	8555	0.995	0.0%	62	1		0%		0.996			
06/03/93	8555	0.986	0.0%	62	1		-1%		0.996			
09/07/93	8651	0.981	0.0%	158	1		-1%		0.996			
09/07/93	8651	0.930	0.0%	158	0	X						
09/07/93	8651	0.990	0.0%	158	1		-1%		0.996			
09/07/93	8651	0.991	0.0%	158	1		0%		0.996			
Instrument 1625 (Columbia A)												
09/27/83	5018	0.949	0.0%	0	1	L	0%	8	0.949	0%	1.40E-03	0%
10/17/83	5038	0.977	0.0%	20	1		0%		0.977			
10/17/83	5038	0.977	0.0%	0	2	A	0%	4	0.977	0%		
11/09/83	5061	0.977	0.0%	23	2		0%		0.977			
11/28/83	5080	0.973	0.0%	42	2		0%		0.977			
01/12/84	5125	0.979	0.0%	87	2		0%		0.977			
Instrument 1626 (Columbia B)												
12/10/82	4727	0.974	0.0%	0	1	L	-1%	161	0.981	1%	2.41E-06	224%
12/19/83	5101	0.962	0.0%	374	1		-2%		0.982			
02/21/84	5165	0.973	0.0%	438	1		-1%		0.982			
03/27/84	5200	0.979	0.0%	473	1		0%		0.982			
05/22/85	5621	0.996	0.0%	894	1		1%		0.983			
06/27/85	5657	1.000	0.0%	930	1		2%		0.983			
07/26/85	5686	0.996	0.0%	959	1		1%		0.983			
09/05/85	5727	1.008	0.0%	1000	1		2%		0.983			
09/30/85	5752	0.989	0.0%	1025	1		1%		0.983			
11/04/85	5787	0.993	0.0%	1060	1		1%		0.983			
11/20/85	5803	0.978	0.0%	1076	1		-1%		0.984			
01/02/86	5846	0.987	0.0%	1119	1		0%		0.984			
04/08/86	5942	1.003	0.0%	1215	1		2%		0.984			
05/02/86	5966	0.930	0.0%	1239	1		-6%		0.984			
07/05/86	6030	0.979	0.0%	1303	1		-1%		0.984			
10/07/86	6124	0.993	0.0%	1397	1		1%		0.984			
01/26/88	6600	1.000	0.0%	1873	1		1%		0.985			
02/10/88	6615	0.980	0.0%	1888	1		-1%		0.985			
02/26/88	6631	0.990	0.0%	1904	1		0%		0.986			
10/18/88	6866	0.986	0.0%	2139	1		0%		0.986			
01/17/89	6957	0.945	0.0%	2230	1		-4%		0.986			

Table B-2 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	FitErr	Runs	F(fit)	Sdev	Slope	Sdev
02/02/89	6973	0.991	0.0%	2246	1		0%		0.986			
02/21/89	6992	0.984	0.0%	2265	1		0%		0.986			
02/23/89	6994	0.996	0.0%	2267	1		1%		0.986			
03/29/89	7028	0.992	0.0%	2301	1		1%		0.986			
08/20/89	7172	1.000	0.0%	0	2	L	2%	119	0.982	1%	-4.47E-05	85%
12/05/89	7279	0.982	0.0%	107	2		0%		0.978			
01/02/90	7307	0.972	0.0%	135	2		0%		0.976			
03/27/90	7391	0.975	0.0%	219	2		0%		0.973			
06/14/90	7470	0.960	0.0%	298	2		-1%		0.969			
07/09/90	7495	0.947	0.0%	323	2		-2%		0.968			
09/18/90	7566	0.963	0.0%	394	2		0%		0.965			
10/23/90	7601	0.896	0.0%	429	2		-7%		0.963			
10/26/90	7604	0.976	0.0%	432	2		1%		0.963			
10/29/90	7607	0.968	0.0%	435	2		1%		0.963			
11/14/90	7623	0.986	0.0%	451	2		2%		0.962			
01/14/91	7684	0.966	0.0%	512	2		1%		0.959			
02/15/91	7716	0.979	0.0%	544	2		2%		0.958			
02/28/91	7729	0.967	0.0%	557	2		1%		0.957			
03/21/91	7750			0	3	A		8	0.768	20%		
03/26/91	7755	0.652	0.0%	5	3		-18%		0.768			
03/27/91	7756	0.835	0.0%	6	3		8%		0.768			
04/01/91	7761	0.635	0.0%	11	3		-21%		0.768			
04/01/91	7761	0.952	0.0%	11	3		19%		0.768			
04/04/91	7764	0.959	0.0%	0	4	L	0%	134	0.961	1%	-1.89E-04	67%
04/11/91	7771	0.958	0.0%	7	4		0%		0.960			
04/24/91	7784	0.976	0.0%	20	4		2%		0.957			
05/06/91	7796	0.958	0.0%	32	4		0%		0.955			
05/06/91	7796	0.884	0.0%	32	4		-8%		0.955			
05/06/91	7796	0.925	0.0%	32	4		-3%		0.955			
05/06/91	7796	0.974	0.0%	32	4		2%		0.955			
05/06/91	7796	0.958	0.0%	32	4		0%		0.955			
05/17/91	7807	0.975	0.0%	43	4		2%		0.953			
05/17/91	7807	0.908	0.0%	43	4		-5%		0.953			
05/29/91	7819	0.980	0.0%	55	4		3%		0.951			
05/29/91	7819	0.969	0.0%	55	4		2%		0.951			
05/29/91	7819	0.958	0.0%	55	4		1%		0.951			
05/29/91	7819	0.924	0.0%	55	4		-3%		0.951			
06/11/91	7832	0.986	0.0%	68	4		4%		0.948			
06/11/91	7832	0.944	0.0%	68	4		0%		0.948			
07/09/91	7860	0.901	0.0%	96	4		-5%		0.943			
07/17/91	7868	0.978	0.0%	104	4		4%		0.941			
07/17/91	7868	0.951	0.0%	104	4		1%		0.941			
07/17/91	7868	0.912	0.0%	104	4		-3%		0.941			
07/17/91	7868	0.953	0.0%	104	4		1%		0.941			
07/17/91	7868	0.958	0.0%	104	4		2%		0.941			
07/17/91	7868	0.937	0.0%	104	4		0%		0.941			
07/25/91	7876	0.870	0.0%	112	4		-8%		0.940			
07/25/91	7876	0.667	0.0%	112	0	X						
07/25/91	7876	1.028	0.0%	112	4		9%		0.940			
08/08/91	7890	1.021	0.0%	126	4		8%		0.937			
09/06/91	7919	0.886	0.0%	155	4		-5%		0.932			
09/06/91	7919	0.908	0.0%	155	4		-3%		0.932			
09/06/91	7919	0.929	0.0%	155	4		0%		0.932			
09/11/91	7924	0.969	0.0%	160	4		4%		0.931			
10/02/91	7945	0.878	0.0%	181	4		-6%		0.927			
11/01/91	7975	0.921	0.0%	211	4		0%		0.921			
Instrument = 1627 (Columbia C)												
12/10/82	4727	1.003	0.0%	0	1	A	0%	77	1.002	2%		
06/13/85	5643	0.990	0.0%	916	1		-1%		1.002			
04/17/86	5951	1.032	0.0%	1224	1		3%		1.002			
05/02/86	5966	0.991	0.0%	1239	1		-1%		1.002			

Table B-2 (continued)

Date	DayNo	Factor	Sdev	Days	Asn.	Cd	FitErr	Runs	F(fit)	Sdev	Slope	Sdev
10/03/86	6120	0.996	0.0%	1393	1		-1%		1.002			
Instrument = 1628 (Columbia D)												
01/08/92	8043	0.994	0.0%	0	1	A	1%	169	0.984	1%		
09/09/92	8288	0.982	0.0%	245	1		0%		0.984			
09/09/92	8288	0.984	0.0%	245	1		0%		0.984			
11/16/92	8356	0.983	0.0%	313	1		0%		0.984			
02/09/93	8441	0.974	0.0%	398	1		-1%		0.984			
02/09/93	8441	0.984	0.0%	398	1		0%		0.984			
02/10/93	8442	0.989	0.0%	399	1		1%		0.984			
04/14/93	8505	0.978	0.0%	462	1		-1%		0.984			
04/14/93	8505	0.984	0.0%	462	1		0%		0.984			

Table B-3. Summary of calibration data and assignments for the GC instruments.

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2290</b>													
N-C4 (Loop/mv) (MinUnc = 5%)													
03/19/84	5192				0	1	A	7%		1	9.270E-02	7%	
04/17/84	5221	8.800E-02	0.6%	8.27	29	1		7%	-5%				
11/05/84	5423	9.740E-02	0.9%	8.30	231	1		7%	5%				
N-C4 (Trap/mv) (MinUnc = 5%)													
02/21/82	4435				0	2	A	2%		51	2.410E-03	2%	
04/19/82	4492	2.440E-03	1.5%	8.64	57	2		2%	1%				
10/18/82	4674	2.440E-03	0.0%	8.54	239	2		2%	1%				
11/05/84	5423	2.350E-03	0.6%	8.60	988	2		2%	-3%				
2-ME-C3 (Trap/mv) (MinUnc = 5%)													
04/05/82	4478				0	6	A	2%		45	1.980E-03	2%	
04/19/82	4492	2.010E-03	1.4%	7.32	14	6		2%	1%				
11/05/84	5423	1.950E-03	0.4%	7.31	945	6		2%	-2%				
PROPANE (Trap/mv) (MinUnc = 5%)													
01/27/82	4410				0	9	A	1%		46	1.875E-03	1%	
04/19/82	4492	1.890E-03	1.3%	5.90	82	9		1%	1%				
11/05/84	5423	1.860E-03	0.4%	5.91	1013	9		1%	-1%				
PROPENE (Trap/mv) (MinUnc = 5%)													
02/21/82	4435				0	11	A	1%		54	2.327E-03	1%	
04/19/82	4492	2.340E-03	1.6%	6.75	57	11		1%	1%				
10/18/82	4674	2.340E-03	0.0%	6.67	239	11		1%	1%				
09/26/83	5017	2.340E-03	0.0%	6.74	582	11		1%	1%				
11/05/84	5423	2.290E-03	0.5%	6.73	988	11		1%	-2%				
T-2-BUTE (Trap/mv) (MinUnc = 5%)													
10/18/82	4674	3.930E-03	0.0%	12.96	0	13	A	5%	3%	1	3.795E-03	5%	
11/05/84	5423	3.660E-03	3.7%	12.95	749	13		5%	-4%				
<b>Instrument 2291</b>													
N-C4 (Loop/mv) (MinUnc = 5%)													
11/16/89	7260	5.570E-01	0.0%	11.85	0	1	A	13%	9%	4	5.095E-01	13%	
01/22/90	7327	4.620E-01	0.0%	10.04	67	1		13%	-10%				
N-C4 (Loop/are) (MinUnc = 5%)													
11/16/89	7260	4.100E-06	0.0%	11.85	0	2	A	14%	9%	3	3.740E-06	14%	
01/22/90	7327	3.380E-06	0.0%	10.04	67	2		14%	-11%				
N-C4 (Trap/mv) (MinUnc = 5%)													
11/16/89	7260	7.560E-03	0.0%	11.95	0	3	A	14%	9%	4	6.895E-03	14%	
01/22/90	7327	6.230E-03	0.0%	10.10	67	3		14%	-11%				
N-C4 (Trap/are) (MinUnc = 5%)													
11/16/89	7260	5.930E-08	0.0%	11.95	0	4	A	5%	4%	1	5.720E-08	5%	
01/22/90	7327	5.510E-08	0.0%	10.10	67	4		5%	-4%				
04/11/91	7771	3.879E-08	0.0%	9.60	0	5	L	8%	-12%	7	4.344E-08	4%	-1.87E-04 206%
04/11/91	7771	4.625E-08	0.0%	9.60	0	5		8%	6%				
05/16/91	7806	4.461E-08	0.0%	0.00	35	5		8%	3%				
07/08/91	7859	4.142E-08	0.0%	0.00	88	5		8%	-3%				
07/08/91	7859	4.508E-08	0.0%	0.00	88	5		8%	5%				
11/20/91	7994	4.100E-08	0.0%	12.10	223	5		9%	-2%				
ISOBUTEN (Loop/mv) (MinUnc = 5%)													
11/16/89	7260	5.930E-01	0.0%	10.83	0	6	A	17%	11%	0	5.285E-01	17%	
01/22/90	7327	4.640E-01	0.0%	9.19	67	6		17%	-14%				
ISOBUTEN (Loop/are) (MinUnc = 5%)													
11/16/89	7260	4.390E-06	0.0%	10.83	0	7	A	11%	7%	0	4.080E-06	11%	
01/22/90	7327	3.770E-06	0.0%	9.19	67	7		11%	-8%				
ISOBUTEN (Trap/mv) (MinUnc = 5%)													
11/16/89	7260	8.090E-03	0.0%	10.93	0	0	X						
01/22/90	7327	6.100E-03	0.0%	9.26	0	8	*		0%	2	6.100E-03		
ISOBUTEN (Trap/are) (MinUnc = 5%)													
11/16/89	7260	6.290E-08	0.0%	10.93	0	9	A	11%	7%	1	5.850E-08	11%	
01/22/90	7327	5.410E-08	0.0%	9.26	67	9		11%	-8%				
04/11/91	7771	4.629E-08	0.0%	8.80	0	10	L	7%	-1%	7	4.686E-08	4%	-4.43E-04 74%
04/11/91	7771	4.600E-08	0.0%	8.80	0	10		7%	-2%				
05/16/91	7806	5.023E-08	0.0%	0.00	35	10		7%	8%				
07/08/91	7859	4.095E-08	0.0%	0.00	88	10		8%	-10%				
08/14/91	7896	4.526E-08	0.0%	8.60	125	10		8%	2%				
11/20/91	7994	4.263E-08	0.0%	11.10	223	10		8%	1%				
2-ME-C3 (Trap/are) (MinUnc = 5%)													
06/19/91	7840	3.984E-08	0.0%	8.65	0	11	A	7%	-4%	3	4.138E-08	7%	
06/25/91	7846	4.217E-08	0.0%	0.00	6	11		7%	2%				
07/09/91	7860	4.484E-08	0.0%	0.00	20	11		7%	8%				

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2291 (continued)</b>												
07/22/91	7873	3.865E-08	0.0%	9.00	33	11	7% -7%					
ETHANE (Trap/are) (MinUnc = 5%)												
07/08/91	7859	8.006E-08	0.0%	0.00	0	12	A 5% -4%	1	8.320E-08	5%		
07/09/91	7860	8.634E-08	0.0%	0.00	1	12	5% 4%					
ETHENE (Trap/are) (MinUnc = 5%)												
07/08/91	7859	9.108E-08	0.0%	0.00	0	13	A 8% 5%	1	8.618E-08	8%		
07/09/91	7860	8.129E-08	0.0%	0.00	1	13	8% -6%					
PROPANE (Trap/are) (MinUnc = 5%)												
01/16/90	7321	1.190E+00	0.0%	11.20	0	14	A 10% 7%	0	1.110E+00	10%		
01/22/90	7327	1.030E+00	0.0%	8.54	6	14	10% -8%					
PROPANE (Trap2/ar) (MinUnc = 5%)												
06/17/91	7838				0	15	A 5%	2	5.886E-08	5%		
07/08/91	7859	6.079E-08	0.0%	0.00	21	15	5% 3%					
07/09/91	7860	5.692E-08	0.0%	0.00	22	15	5% -3%					
PROPENE (Trap/mv) (MinUnc = 5%)												
01/22/90	7327	7.360E-03	0.0%	8.67	0	16	* 0%	1	7.360E-03			
PROPENE (Trap/are) (MinUnc = 5%)												
01/22/90	7327	8.250E-08	0.0%	8.67	0	17	* 0%	5	8.250E-08			
07/14/90	7500	(undefined)										
11/26/91	8000	5.108E-08	0.0%	0.00	0	18	* 0%	1	5.108E-08			
ISOPRENE (Trap/are) (MinUnc = 5%)												
08/29/91	7911	4.290E-08	0.0%	6.60	0	19	A 20% 12%	3	3.756E-08	20%		
09/19/91	7932	3.221E-08	0.0%	0.00	21	19	20% -17%					
ME-O-ME (Trap/are) (MinUnc = 5%)												
09/18/91	7931	1.450E-07	0.0%	6.08	0	20	* 0%	4	1.450E-07			
T-2-BUTE (Trap/are) (MinUnc = 5%)												
11/01/91	7975	3.958E-08	0.0%	10.80	0	21	* 0%	2	3.958E-08			
<b>Instrument 2200</b>												
1-BUTENE (Loop#1) (MinUnc = 5%)												
11/12/75	2142	3.970E-01	0.0%	9.75	0	1	L 9% -3%	7	4.073E-01	5%	-4.83E-05	669%
12/10/75	2170	3.800E-01	0.0%	0.00	28	1	9% -7%					
01/29/76	2220	4.460E-01	0.0%	9.87	78	1	9% 9%					
02/20/76	2242	4.320E-01	0.0%	0.00	100	1	9% 6%					
04/07/76	2289	3.790E-01	0.0%	9.22	147	1	9% -7%					
09/01/76	2436	3.970E-01	0.0%	9.89	294	1	9% -1%					
1-BUTENE (Loop#2) (MinUnc = 10%)												
03/14/77	2630	1.120E-01	0.0%	9.93	0	2	L 6% 2%	0	1.102E-01	4%	-1.00E-04	42%
04/16/79	3393	9.790E-02	0.0%	9.75	763	2	6% -4%					
02/19/81	4068	9.640E-02	0.0%	9.85	1438	2	7% 2%					
08/10/82	4605				0	3	* 0%	2	9.870E-02			
04/04/86	5938	9.870E-02	0.7%	8.58	1333	3	0%					
04/09/86	5943	(undefined)										
04/24/86	5958	5.100E-02	2.2%	9.69	0	4	* 0%	0	5.100E-02			
N-C4 (Loop#1) (MinUnc = 5%)												
11/12/75	2142	2.920E-01	0.0%	7.73	0	9	L 7% -5%	8	3.058E-01	3%	-1.23E-04	145%
12/05/75	2165	2.970E-01	0.0%	0.00	23	9	7% -3%					
12/10/75	2170	2.890E-01	0.0%	0.00	28	9	7% -5%					
01/29/76	2220	3.310E-01	0.0%	7.86	78	9	8% 9%					
03/15/76	2266	3.230E-01	0.0%	0.00	124	9	8% 7%					
04/15/76	2297	2.770E-01	0.0%	7.51	155	9	8% -8%					
05/07/76	2319	3.180E-01	0.0%	7.86	177	9	8% 6%					
09/01/76	2436	3.010E-01	0.0%	7.90	294	9	8% 2%					
12/14/76	2540	2.760E-01	0.0%	7.81	398	9	8% -5%					
N-C4 (Loop#2) (MinUnc = 5%)												
03/14/77	2630	7.690E-02	0.0%	7.98	0	10	L 4% 2%	13	7.564E-02	3%	-1.13E-05	183%
04/16/79	3393	7.320E-02	0.0%	7.90	763	10	4% -2%					
02/19/81	4068	7.220E-02	0.0%	8.04	1438	10	4% -3%					
09/28/81	4289	7.700E-02	0.3%	8.03	1659	10	4% 4%					
05/24/82	4527	7.400E-02	0.8%	8.02	1897	10	4% 0%					
08/10/82	4605				0	11	A 3%	5	8.320E-02	3%		
10/18/85	5770	8.170E-02	1.0%	7.59	1165	11	3% -2%					
04/04/86	5938	8.470E-02	0.5%	7.17	1333	11	3% 2%					
04/09/86	5943	(undefined)										
04/24/86	5958	4.035E-02	1.7%	8.13	1353	0	X					
09/19/86	6106	7.510E-02	2.7%	8.11	0	12	* 0%	0	7.510E-02			
07/10/87	6400				0	13	A 1%	2	7.630E-02	1%		
08/20/87	6441	7.580E-02	0.1%	8.14	41	13	1% -1%					
01/05/89	6945	7.680E-02	0.5%	8.09	545	13	1% 1%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2200 (continued)</b>													
03/06/89	7005				0	14	*		1	6.580E-02			
03/08/89	7007	6.580E-02	0.6%	7.04	2	14		0%					
N-C5 (Loop#1) (MinUnc = 5%)													
11/12/75	2142	5.210E-01	0.0%	14.65	0	24	A	8%	-2%	1	5.323E-01	8%	
04/07/76	2289	5.780E-01	0.0%	0.00	147	24		8%	8%				
09/01/76	2436	4.980E-01	0.0%	14.82	294	24		8%	-7%				
PROPENE (Loop#1) (MinUnc = 5%)													
11/12/75	2142	2.840E-01	0.0%	6.16	0	31	L	11%	-10%	12	3.114E-01	5%	-1.15E-04 229%
12/05/75	2165	2.900E-01	0.0%	0.00	23	31		11%	-7%				
12/10/75	2170	2.800E-01	0.0%	0.00	28	31		11%	-11%				
01/29/76	2220	3.240E-01	0.0%	6.28	78	31		11%	5%				
02/20/76	2242	3.310E-01	0.0%	6.26	100	31		11%	7%				
03/15/76	2266	3.720E-01	0.0%	0.00	124	31		11%	17%				
04/07/76	2289	3.030E-01	0.0%	6.10	147	31		11%	-1%				
05/07/76	2319	3.120E-01	0.0%	6.29	177	31		11%	2%				
09/01/76	2436	2.960E-01	0.0%	6.31	294	31		11%	-2%				
12/14/76	2540	2.730E-01	0.0%	6.24	398	31		12%	-9%				
PROPENE (Loop#2) (MinUnc = 5%)													
03/14/77	2630	7.600E-02	0.0%	6.41	0	32	L	5%	2%	16	7.455E-02	3%	5.28E-06 433%
04/16/79	3393	7.250E-02	0.0%	6.47	763	32		5%	-3%				
02/19/81	4068	7.330E-02	0.0%	6.47	1438	32		5%	-2%				
09/28/81	4289	7.830E-02	0.6%	6.49	1659	32		5%	4%				
05/24/82	4527	7.490E-02	1.0%	6.45	1897	32		5%	-1%				
08/10/82	4605				0	33	*			0	0.000E+00		
04/09/86	5943				0	34	*			0	4.190E-02		
04/24/86	5958	4.190E-02	1.4%	6.59	15	34			0%				
09/19/86	6106	7.950E-02	2.7%	6.58	0	35	*		0%	0	7.950E-02		
07/10/87	6400				0	36	A	2%		2	8.080E-02	2%	
08/20/87	6441	7.940E-02	0.2%	6.59	41	36		2%	-2%				
01/05/89	6945	8.220E-02	0.7%	6.56	545	36		2%	2%				
03/06/89	7005				0	37	*			0	7.030E-02		
03/08/89	7007	7.030E-02	0.5%	5.70	2	37			0%				
04/03/89	7033				0	38	*			4	6.270E-02		
09/26/89	7209	6.270E-02	2.1%	5.60	176	38			0%				
T-2-BUTE (Loop#1) (MinUnc = 5%)													
11/12/75	2142	4.880E-01	0.0%	11.49	0	39	L	9%	-7%	7	5.199E-01	5%	1.09E-04 299%
12/10/75	2170	5.080E-01	0.0%	0.00	28	39		9%	-3%				
01/29/76	2220	5.710E-01	0.0%	11.65	78	39		9%	8%				
02/20/76	2242	5.670E-01	0.0%	0.00	100	39		9%	7%				
04/07/76	2289	4.930E-01	0.0%	10.76	147	39		9%	-7%				
09/01/76	2436	5.290E-01	0.0%	11.63	294	39		9%	-1%				
1-BUTENE (Trap#1) (MinUnc = 5%)													
06/03/75	1980	9.430E-03	0.0%	10.25	0	1	*		0%	0	9.430E-03		
11/12/75	2142	1.050E-02	0.0%	10.17	0	2	L	8%	-3%	7	1.082E-02	4%	3.28E-05 840%
12/09/75	2169	1.040E-02	0.0%	0.00	27	2		8%	-4%				
12/11/75	2171	1.040E-02	0.0%	0.00	29	2		8%	-4%				
01/29/76	2220	1.160E-02	0.0%	10.21	78	2		8%	6%				
04/07/76	2289	1.090E-02	0.0%	9.57	147	2		8%	0%				
04/15/76	2297	1.200E-02	0.0%	9.82	155	2		8%	9%				
09/01/76	2436	1.020E-02	0.0%	9.89	294	2		8%	-7%				
1-BUTENE (Trap#2) (MinUnc = 5%)													
03/14/77	2630	2.740E-03	0.0%	9.75	0	3	*		0%	0	2.740E-03		
11/06/77	2867	(undefined)											
12/08/77	2899				0	4	A	3%		30	2.303E-03	3%	
04/16/79	3393	2.280E-03	0.0%	9.54	494	4		3%	-1%				
06/18/80	3822	2.250E-03	0.0%	9.08	923	4		3%	-2%				
02/19/81	4068	2.380E-03	0.0%	9.75	1169	4		3%	3%				
08/10/82	4605				0	5	A	6%		53	2.044E-03	6%	
03/23/83	4830	1.980E-03	1.0%	8.88	225	5		6%	-3%				
06/13/83	4912	2.130E-03	2.7%	8.79	307	5		6%	4%				
10/25/83	5046	2.120E-03	0.4%	8.88	441	5		6%	4%				
10/15/84	5402	2.010E-03	2.5%	8.76	797	5		6%	-2%				
03/21/85	5559	1.990E-03	0.8%	8.79	954	5		6%	-3%				
08/30/85	5721	2.240E-03	2.6%	8.98	1116	5		6%	9%				
12/16/85	5829	1.840E-03	0.9%	8.71	1224	5		6%	-11%				
04/09/86	5943	(undefined)											
04/14/86	5948				0	6	*			5	2.315E-03		
04/24/86	5958	2.315E-03	1.3%	10.02	10	6			0%				
06/04/86	5999	(undefined)											
06/05/86	6000	4.630E-03	0.0%	0.00	0	7	*		0%	6	4.630E-03		
09/19/86	6106	2.510E-03	0.6%	9.80	0	8	*		0%	0	2.510E-03		
07/10/87	6400				0	9	*			0	2.600E-03		
07/25/88	6781	2.600E-03	0.8%	9.64	381	9			0%				
13-BUTDE (Trap#1) (MinUnc = 5%)													
06/03/75	1980	1.920E-02	0.0%	17.80	0	10	L	17%	-11%	0	2.136E-02	10%	1.73E-05 1822%

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev		
<b>Instrument 2200 (continued)</b>														
11/12/75	2142	2.220E-02	0.0%	17.77	162	10	17%	4%						
02/25/76	2247	2.440E-02	0.0%	17.98	267	10	17%	12%						
01/04/77	2561	2.000E-02	0.0%	17.46	581	10	17%	-8%						
13-BUTDE (Trap#2) (MinUnc = 10%)														
03/14/77	2630	5.640E-03	0.0%	16.49	0	11	*	0%	0	5.640E-03				
11/06/77	2867	(undefined)												
12/08/77	2899				0	12	A	0%	0	4.620E-03	0%			
04/16/79	3393	4.610E-03	0.0%	16.44	494	12		0%						
03/12/81	4089	4.630E-03	0.0%	16.49	1190	12		0%						
08/10/82	4605				0	13	*		0	3.380E-03				
01/08/86	5852	3.380E-03	3.0%	14.33	1247	13								
04/09/86	5943	(undefined)												
04/25/86	5959	3.425E-03	5.9%	16.19	0	14	*	0%	0	3.425E-03				
06/04/86	5999	(undefined)												
06/05/86	6000	6.850E-03	0.0%	0.00	0	15	*	0%	4	6.850E-03				
09/15/86	6102	5.535E-03	3.0%	15.90	102	0	X							
09/19/86	6106				0	16	*		0	4.885E-03				
09/25/86	6112	4.885E-03	3.9%	15.82	6	16		0%						
ACETYLEN (Trap#1) (MinUnc = 5%)														
06/03/75	1980	1.060E-02	0.0%	8.90	0	17	L	17%	-9%	0	1.155E-02	11%	4.54E-04	82%
11/12/75	2142	1.140E-02	0.0%	8.80	162	17		16%	-9%					
01/29/76	2220	1.390E-02	0.0%	8.97	240	17		15%	8%					
02/25/76	2247	1.470E-02	0.0%	9.03	267	17		15%	12%					
04/15/76	2297	1.390E-02	0.0%	8.69	317	17		15%	5%					
05/07/76	2319	1.390E-02	0.0%	8.89	339	17		15%	4%					
09/01/76	2436	1.180E-02	0.0%	8.78	456	17		14%	-18%					
ACETYLEN (Trap#2) (MinUnc = 10%)														
03/14/77	2630	3.940E-03	0.0%	8.51	0	18	*	0%	0	3.940E-03				
11/06/77	2867	(undefined)												
12/08/77	2899				0	19	A	2%	139	3.403E-03	2%			
04/16/79	3393	3.360E-03	0.0%	8.35	494	19		2%	-1%					
02/20/81	4069	3.350E-03	0.0%	8.51	1170	19		2%	-2%					
08/04/82	4599	3.500E-03	2.2%	8.42	1700	19		2%	3%					
08/10/82	4605				0	20	A	5%	316	3.285E-03	5%			
08/17/82	4612	4.020E-03	3.3%	7.94	7	0	X							
11/19/82	4706	3.150E-03	1.0%	8.13	101	20		5%	-4%					
03/23/83	4830	3.140E-03	1.1%	7.70	225	20		5%	-5%					
06/13/83	4912	3.230E-03	3.6%	7.61	307	20		5%	-2%					
10/25/83	5046	3.280E-03	0.8%	7.71	441	20		5%	0%					
10/15/84	5402	3.300E-03	3.0%	7.60	797	20		5%	0%					
03/21/85	5559	3.610E-03	1.8%	7.64	954	20		5%	9%					
08/30/85	5721	4.470E-03	5.0%	7.73	0	21	A	6%	4%	33	4.280E-03	6%		
12/16/85	5829	4.090E-03	8.4%	7.58	108	21		6%	-5%					
04/09/86	5943	(undefined)												
04/24/86	5958	4.590E-03	2.5%	8.69	0	22	*	0%	10	4.590E-03				
06/04/86	5999	(undefined)												
06/05/86	6000	9.180E-03	0.0%	0.00	0	23	A	46%	25%	41	6.917E-03	46%		
09/16/86	6103	4.655E-03	0.7%	8.53	103	23		46%	-49%					
09/19/86	6106				0	24	*			0	4.000E-03			
09/25/86	6112	4.000E-03	1.3%	8.46	6	24			0%					
07/10/87	6400				0	25	*			0	0.000E+00			
07/25/88	6781	3.360E-03	4.2%	8.27	381	0	X							
N-C4 (Trap#1) (MinUnc = 5%)														
06/03/75	1980	7.040E-03	0.0%	8.10	0	26	A	4%	-3%	0	7.250E-03	4%		
11/12/75	2142	7.460E-03	0.0%	7.98	162	26		4%	3%					
11/12/75	2142	7.460E-03	0.0%	7.98	0	27	L	3%	2%	8	7.334E-03	1%	1.67E-03	8%
12/05/75	2165	7.350E-03	0.0%	0.00	23	27		2%	-4%					
12/09/75	2169	7.630E-03	0.0%	0.00	27	27		2%	0%					
12/11/75	2171	7.720E-03	0.0%	0.00	29	27		2%	0%					
01/29/76	2220	8.480E-03	0.0%	8.14	78	27		2%	2%					
04/15/76	2297	9.260E-03	0.0%	7.98	155	27		2%	0%					
05/07/76	2319	9.430E-03	0.0%	8.13	177	27		2%	-1%					
09/01/76	2436	7.520E-03	0.0%	8.12	294	0	X							
N-C4 (Trap#2) (MinUnc = 5%)														
03/14/77	2630	1.980E-03	0.0%	7.88	0	28	A	4%	3%	0	1.923E-03	4%		
07/14/77	2752	1.830E-03	0.0%	7.96	122	28		4%	-5%					
10/21/77	2851	1.960E-03	0.0%	7.96	221	28		4%	2%					
11/06/77	2867	(undefined)												
12/08/77	2899				0	29	A	11%		196	1.698E-03	11%		
11/08/78	3234	1.800E-03	0.0%	7.96	335	29		11%	6%					
04/16/79	3393	1.690E-03	0.0%	7.69	494	29		11%	0%					
06/18/80	3822	1.650E-03	0.0%	7.41	923	29		11%	-3%					
02/19/81	4068	1.740E-03	0.0%	7.96	1169	29		11%	2%					
09/28/81	4289	1.930E-03	2.3%	7.95	1390	29		11%	12%					
08/04/82	4599	1.380E-03	1.3%	6.95	1700	29		11%	-23%					
08/10/82	4605				0	30	A	7%		368	1.589E-03	7%		
08/17/82	4612	1.770E-03	0.9%	7.52	7	30		7%	10%					



Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit)		Runs	Avg/Intc	Sdev	Slope	Sdev
							Unc.	Diff					
<b>Instrument 2200 (continued)</b>													
11/18/82	4705	1.570E-03	2.1%	7.61	100	30	7%	-1%					
03/23/83	4830	1.530E-03	2.2%	7.29	225	30	7%	-4%					
06/13/83	4912	1.680E-03	1.6%	7.21	307	30	7%	5%					
10/21/83	5042	1.570E-03	3.6%	7.30	437	30	7%	-1%					
07/17/84	5312	1.550E-03	2.0%	7.24	707	30	7%	-3%					
10/15/84	5402	1.470E-03	0.9%	7.27	797	30	7%	-8%					
03/21/85	5559	1.550E-03	2.1%	7.27	954	30	7%	-3%					
08/29/85	5720	1.760E-03	1.5%	7.41	1115	30	7%	10%					
12/16/85	5829	1.440E-03	1.3%	7.28	1224	30	7%	-10%					
04/09/86	5943	(undefined)											
04/14/86	5948				0	31	*		15	1.785E-03			
04/24/86	5958	1.785E-03	2.2%	8.41	10	31		0%					
06/04/86	5999	(undefined)											
06/05/86	6000	3.570E-03	0.0%	0.00	0	32	A	32%	19%	42	2.905E-03	32%	
09/16/86	6103	2.240E-03	0.4%	8.34	103	32		32%	-30%				
09/19/86	6106	1.975E-03	0.8%	8.23	0	33	*		0%	0	1.975E-03		
07/10/87	6400				0	34	A	0%		2	2.050E-03	0%	
07/25/88	6781	2.050E-03	2.1%	8.14	381	34		0%	0%				
01/11/89	6951	2.050E-03	3.1%	8.19	551	34		0%	0%				
03/06/89	7005				0	35	*			1	1.720E-03		
03/08/89	7007	1.720E-03	4.3%	7.09	2	35			0%				
04/03/89	7033				0	36	A	2%		3	1.455E-03	2%	
04/11/89	7041	1.430E-03	0.3%	6.46	8	36		2%	-2%				
10/04/89	7217	1.480E-03	0.8%	0.00	184	36		2%	2%				
<b>2-ME-C3 (Trap#1) (MinUnc = 5%)</b>													
06/03/75	1980	5.710E-03	0.0%	6.95	0	37	L	20%	-9%	0	6.206E-03	13%	1.89E-04 239%
11/12/75	2142	6.250E-03	0.0%	7.00	162	37		19%	-2%				
02/25/76	2247	7.250E-03	0.0%	7.06	267	37		19%	10%				
04/15/76	2297	7.520E-03	0.0%	6.90	317	37		19%	13%				
09/01/76	2436	5.710E-03	0.0%	6.89	456	37		18%	-18%				
<b>2-ME-C3 (Trap#2) (MinUnc = 5%)</b>													
03/14/77	2630	1.600E-03	0.0%	6.77	0	38	*		0%	0	1.600E-03		
11/06/77	2867	(undefined)											
12/08/77	2899				0	39	A	9%		136	1.516E-03	9%	
04/16/79	3393	1.360E-03	0.0%	6.65	494	39		9%	-11%				
06/18/80	3822	1.430E-03	0.0%	6.50	923	39		9%	-6%				
02/19/81	4068	1.480E-03	0.0%	6.90	1169	39		9%	-2%				
09/28/81	4289	1.630E-03	3.4%	6.90	1390	39		9%	7%				
08/04/82	4599	1.680E-03	1.0%	7.99	1700	39		9%	10%				
08/10/82	4605				0	40	A	9%		350	1.367E-03	9%	
08/17/82	4612	1.350E-03	0.9%	6.53	7	40		9%	-1%				
11/18/82	4705	1.310E-03	0.9%	6.63	100	40		9%	-4%				
03/23/83	4830	1.260E-03	1.9%	6.34	225	40		9%	-8%				
06/13/83	4912	1.420E-03	1.5%	6.29	307	40		9%	4%				
10/25/83	5046	1.330E-03	1.3%	6.39	441	40		9%	-3%				
10/15/84	5402	1.270E-03	3.6%	6.37	797	40		9%	-8%				
03/21/85	5559	1.270E-03	1.8%	6.35	954	40		9%	-8%				
08/29/85	5720	1.470E-03	1.2%	6.49	1115	40		9%	7%				
12/16/85	5829	1.620E-03	9.5%	6.43	1224	40		9%	16%				
04/09/86	5943	(undefined)											
04/25/86	5959	1.140E-03	6.4%	7.46	0	41	*		0%	9	1.140E-03		
06/04/86	5999	(undefined)											
06/05/86	6000	2.280E-03	0.0%	0.00	0	42	A	16%	10%	42	2.052E-03	16%	
09/16/86	6103	1.825E-03	3.8%	7.39	103	42		16%	-12%				
09/19/86	6106	1.665E-03	0.3%	7.27	0	43	*		0%	0	1.665E-03		
07/10/87	6400				0	44	*			0	1.790E-03		
07/25/88	6781	1.790E-03	1.8%	7.16	381	44			0%				
03/06/89	7005				0	45	*			0	1.460E-03		
03/08/89	7007	1.460E-03	8.4%	6.28	2	45			0%				
04/03/89	7033				0	46	*			0	2.070E-03		
10/04/89	7217	2.070E-03	0.3%	0.00	184	46			0%				
<b>2-ME-C4 (Trap#1) (MinUnc = 5%)</b>													
06/03/75	1980	1.000E-02	0.0%	12.50	0	47	L	30%	-13%	0	1.133E-02	19%	7.07E-04 98%
11/12/75	2142	1.280E-02	0.0%	12.57	162	47		27%	1%				
02/25/76	2247	1.640E-02	0.0%	12.73	267	47		25%	18%				
09/01/76	2436	1.320E-02	0.0%	12.41	456	47		23%	-13%				
<b>2-ME-C4 (Trap#2) (MinUnc = 5%)</b>													
03/14/77	2630	3.750E-03	0.0%	12.25	0	48	*		0%	0	3.750E-03		
11/06/77	2867	(undefined)											
12/08/77	2899				0	49	A	26%		19	2.845E-03	26%	
04/16/79	3393	3.360E-03	0.0%	11.89	494	49		26%	15%				
02/19/81	4068	2.330E-03	0.0%	12.25	1169	49		26%	-22%				
08/10/82	4605				0	50	*			1	0.000E+00		
04/09/86	5943				0	51	*			4	1.550E-03		
05/02/86	5966	1.550E-03	5.1%	12.68	23	51			0%				
06/04/86	5999				0	52	*			2	0.000E+00		
09/19/86	6106	0.000E+00	0.0%	0.00	107	0	X						
09/19/86	6106				0	53	*			0	2.330E-03		

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2200 (continued)</b>												
09/26/86	6113	2.330E-03	3.9%	12.55	7	53	0%					
ISOBUTEN (Trap#1)		(MinUnc = 5%)										
06/03/75	1980	9.800E-03	0.0%	10.60	0	54	L 21%	-10%	0	1.081E-02	13%	2.33E-04 198%
11/12/75	2142	1.120E-02	0.0%	10.49	162	54	20%	0%				
02/25/76	2247	1.280E-02	0.0%	10.73	267	54	19%	10%				
04/15/76	2297	1.320E-02	0.0%	10.40	317	54	19%	12%				
09/01/76	2436	1.010E-02	0.0%	10.26	456	54	19%	-18%				
ISOBUTEN (Trap#2)		(MinUnc = 5%)										
03/14/77	2630	2.820E-03	0.0%	10.15	0	55	*	0%	0	2.820E-03		
11/06/77	2867	(undefined)										
12/08/77	2899				0	56	A	2%	71	2.415E-03	2%	
04/16/79	3393	2.410E-03	0.0%	9.93	494	56		2%				
06/18/80	3822	2.350E-03	0.0%	9.45	923	56		2%				
02/20/81	4069	2.440E-03	0.0%	10.15	1170	56		2%				
08/04/82	4599	2.460E-03	0.6%	10.06	1700	56		2%				
08/10/82	4605				0	57	A	8%	268	2.405E-03	8%	
08/17/82	4612	2.310E-03	7.0%	9.50	7	57		8%				
11/19/82	4706	2.430E-03	1.6%	9.67	101	57		8%				
03/23/83	4830	2.330E-03	0.7%	9.21	225	57		8%				
06/13/83	4912	2.440E-03	0.6%	9.10	307	57		8%				
10/21/83	5042	2.710E-03	4.0%	9.18	437	57		8%				
07/17/84	5312	2.680E-03	1.0%	9.07	707	57		8%				
10/15/84	5402	2.370E-03	1.1%	9.05	797	57		8%				
03/21/85	5559	2.040E-03	0.8%	9.11	954	57		8%				
08/30/85	5721	2.280E-03	2.5%	9.30	1116	57		8%				
12/16/85	5829	2.460E-03	8.8%	9.09	1224	57		8%				
04/09/86	5943	(undefined)										
04/25/86	5959	1.805E-03	5.9%	10.42	0	58	*	0%	3	1.805E-03		
06/04/86	5999				0	59	*		0	0.000E+00		
09/15/86	6102	3.125E-03	1.6%	10.23	103	0	X					
09/19/86	6106				0	60	*		0	2.755E-03		
09/25/86	6112	2.755E-03	6.4%	10.21	6	60		0%				
07/10/87	6400				0	61	*		0	2.630E-03		
07/25/88	6781	2.630E-03	0.8%	9.98	381	61		0%				
N-C5 (Trap#1)		(MinUnc = 5%)										
06/03/75	1980	1.350E-02	0.0%	15.20	0	62	L	22%	1	1.439E-02	14%	-1.19E-05 4225%
11/12/75	2142	1.390E-02	0.0%	15.09	162	62		22%				
02/25/76	2247	1.720E-02	0.0%	15.35	267	62		22%				
09/01/76	2436	1.280E-02	0.0%	15.08	456	62		22%				
N-C5 (Trap#2)		(MinUnc = 5%)										
03/14/77	2630	3.480E-03	0.0%	14.70	0	63	*	0%	0	3.480E-03		
11/06/77	2867	(undefined)										
12/08/77	2899				0	64	A	7%	14	2.840E-03	7%	
04/16/79	3393	3.050E-03	0.0%	14.40	494	64		7%				
03/02/81	4079	2.790E-03	0.0%	14.70	1180	64		7%				
08/04/82	4599	2.680E-03	1.5%	14.64	1700	64		7%				
08/10/82	4605				0	65	A	10%	118	2.482E-03	10%	
03/21/83	4828	2.690E-03	0.9%	13.45	223	65		10%				
06/13/83	4912	2.510E-03	1.2%	13.32	307	65		10%				
07/17/84	5312	2.050E-03	1.4%	13.30	707	65		10%				
10/15/84	5402	2.790E-03	0.8%	13.43	797	65		10%				
03/22/85	5560	2.470E-03	1.1%	13.48	955	65		10%				
08/22/85	5713	3.490E-03	0.6%	13.47	1108	0	X					
12/18/85	5831	2.380E-03	1.7%	13.30	1226	65		10%				
04/09/86	5943	(undefined)										
04/10/86	5944	1.860E-03	1.5%	14.89	0	66	*	0%	0	1.860E-03		
06/04/86	5999	(undefined)										
09/19/86	6106				0	67	*		0	2.685E-03		
09/26/86	6113	2.685E-03	4.0%	14.94	7	67		0%				
PROPANE (Trap#1)		(MinUnc = 5%)										
06/03/75	1980	5.710E-03	0.0%	5.75	0	68	L	13%	0	6.021E-03	8%	1.11E-04 260%
11/12/75	2142	6.020E-03	0.0%	5.65	162	68		13%				
02/25/76	2247	6.990E-03	0.0%	5.83	267	68		12%				
04/15/76	2297	6.410E-03	0.0%	5.71	317	68		12%				
09/01/76	2436	5.780E-03	0.0%	5.69	456	68		12%				
PROPANE (Trap#2)		(MinUnc = 5%)										
03/14/77	2630	1.560E-03	0.0%	5.58	0	69	*	0%	0	1.560E-03		
11/06/77	2867	(undefined)										
12/08/77	2899				0	70	A	5%	187	1.402E-03	5%	
04/16/79	3393	1.380E-03	0.0%	5.72	494	70		5%				
06/18/80	3822	1.330E-03	0.0%	5.45	923	70		5%				
02/19/81	4068	1.390E-03	0.0%	5.73	1169	70		5%				
09/28/81	4289	1.530E-03	2.1%	5.72	1390	70		5%				
08/04/82	4599	1.380E-03	1.7%	5.79	1700	70		5%				
08/10/82	4605				0	71	A	9%	346	1.333E-03	9%	
08/17/82	4612	1.360E-03	1.1%	5.43	7	71		9%				

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2200 (continued)</b>													
11/18/82	4705	1.330E-03	1.6%	5.53	100	71	9%	0%					
03/23/83	4830	1.240E-03	1.4%	5.29	225	71	9%	-8%					
06/13/83	4912	1.480E-03	0.8%	5.23	307	71	9%	10%					
10/21/83	5042	1.320E-03	3.2%	5.30	437	71	9%	-1%					
10/15/84	5402	1.210E-03	0.5%	5.32	797	71	9%	-10%					
03/21/85	5559	1.270E-03	1.8%	5.32	954	71	9%	-5%					
04/29/85	5598	1.550E-03	0.8%	5.44	993	71	9%	14%					
12/16/85	5829	1.240E-03	1.4%	5.38	1224	71	9%	-8%					
04/09/86	5943	(undefined)											
04/25/86	5959	1.180E-03	6.9%	6.27	0	72	*	0%	9	1.180E-03			
06/04/86	5999	(undefined)											
06/05/86	6000	2.350E-03	0.0%	0.00	0	73	*	0%	42	2.350E-03			
09/15/86	6102	2.250E-03	2.4%	6.17	0	74	A	12% 8%	0	2.077E-03	12%		
09/16/86	6103	1.905E-03	4.0%	6.19	1	74	*	12% -9%					
09/19/86	6106	1.755E-03	0.9%	6.12	0	75	*	0%	0	1.755E-03			
07/10/87	6400				0	76	*		0	1.850E-03			
07/25/88	6781	1.850E-03	1.2%	6.07	381	76		0%					
03/06/89	7005				0	77	*		0	1.530E-03			
03/08/89	7007	1.530E-03	5.3%	5.27	2	77		0%					
<b>PROPENE (Trap#1) (MinUnc = 5%)</b>													
06/03/75	1980	6.540E-03	0.0%	6.50	0	78	L	1% 0%	9	6.539E-03	1%	4.72E-04	14%
11/12/75	2142	7.040E-03	0.0%	6.37	162	78		1% 0%					
12/05/75	2165	7.040E-03	0.0%	0.00	185	78		1% -1%					
12/09/75	2169	7.190E-03	0.0%	0.00	189	78		1% 1%					
12/11/75	2171	7.070E-03	0.0%	0.00	0	79	L	4% -3%	8	7.271E-03	3%	1.49E-03	22%
01/29/76	2220	8.000E-03	0.0%	6.50	49	79		4% 2%					
02/25/76	2247	8.330E-03	0.0%	6.56	76	79		4% 3%					
04/07/76	2289	8.330E-03	0.0%	6.34	118	79		4% -3%					
04/15/76	2297	8.620E-03	0.0%	6.31	126	79		4% 0%					
05/07/76	2319	8.850E-03	0.0%	6.54	0	80	L	0% 0%	0	8.850E-03	0%	-1.65E-03	0%
09/01/76	2436	7.140E-03	0.0%	6.47	117	80		0% 0%					
<b>PROPENE (Trap#2) (MinUnc = 5%)</b>													
03/14/77	2630	1.880E-03	0.0%	6.78	0	81	A	4% 3%	0	1.820E-03	4%		
07/14/77	2752	1.740E-03	0.0%	6.38	122	81		4% -5%					
10/21/77	2851	1.840E-03	0.0%	6.38	221	81		4% 1%					
11/06/77	2867	(undefined)											
12/08/77	2899				0	82	A	6% 2%	228	1.692E-03	6%		
11/08/78	3234	1.720E-03	0.0%	6.38	335	82		6% 2%					
04/16/79	3393	1.600E-03	0.0%	6.16	494	82		6% -6%					
06/18/80	3822	1.600E-03	0.0%	6.04	923	82		6% -6%					
02/19/81	4068	1.710E-03	0.0%	6.38	1169	82		6% 1%					
09/28/81	4289	1.850E-03	1.9%	6.34	1390	82		6% 9%					
08/04/82	4599	1.670E-03	0.9%	6.40	1700	82		6% -1%					
08/10/82	4605				0	83	A	7% 7%	375	1.631E-03	7%		
08/17/82	4612	1.760E-03	1.0%	6.02	7	83		7% 7%					
11/18/82	4705	1.610E-03	1.8%	6.10	100	83		7% -1%					
01/10/83	4758	1.580E-03	0.6%	5.77	153	83		7% -3%					
03/23/83	4830	1.570E-03	1.6%	5.83	225	83		7% -4%					
06/13/83	4912	1.770E-03	1.0%	5.80	307	83		7% 8%					
10/21/83	5042	1.680E-03	4.9%	5.85	437	83		7% 3%					
07/17/84	5312	1.660E-03	1.8%	5.82	707	83		7% 2%					
10/15/84	5402	1.540E-03	0.8%	5.83	797	83		7% -6%					
03/21/85	5559	1.530E-03	1.1%	5.85	954	83		7% -7%					
08/29/85	5720	1.820E-03	0.9%	5.98	1115	83		7% 10%					
12/16/85	5829	1.420E-03	1.3%	5.88	1224	83		7% -15%					
04/09/86	5943	(undefined)											
04/24/86	5958	1.825E-03	3.0%	6.80	0	84	*	0%	10	1.825E-03			
06/04/86	5999	(undefined)											
06/05/86	6000	3.650E-03	0.0%	0.00	0	85	*	0%	43	3.650E-03			
09/16/86	6103	2.325E-03	1.4%	6.73	103	0	X						
09/19/86	6106	2.000E-03	0.9%	6.68	0	86	A	1% -1%	0	2.020E-03	1%		
09/25/86	6112	2.040E-03	5.0%	6.69	6	86		1% 1%					
07/10/87	6400				0	87	A	0% 0%	2	2.120E-03	0%		
07/25/88	6781	2.120E-03	1.5%	6.58	381	87		0% 0%					
01/11/89	6951	2.120E-03	2.5%	6.63	551	87		0% 0%					
03/06/89	7005				0	88	*		1	1.810E-03			
03/08/89	7007	1.810E-03	4.5%	5.72	2	88		0%					
04/03/89	7033				0	89	*		1	1.410E-03			
04/11/89	7041	1.410E-03	1.8%	5.07	8	89		0%					
<b>T-2-BUTE (Trap#1) (MinUnc = 5%)</b>													
06/03/75	1980	1.220E-02	0.0%	11.95	0	90	L	2% 0%	0	1.218E-02	1%	5.00E-04	17%
11/12/75	2142	1.300E-02	0.0%	12.00	162	90		2% -1%					
12/09/75	2169	1.330E-02	0.0%	0.00	189	90		2% 0%					
12/11/75	2171	1.350E-02	0.0%	0.00	191	90		2% 1%					
12/11/75	2171	1.350E-02	0.0%	0.00	0	91	A	6% -6%	7	1.436E-02	6%		
01/29/76	2220	1.490E-02	0.0%	12.03	49	91		6% 4%					
04/07/76	2289	1.430E-02	0.0%	11.17	118	91		6% 0%					
04/15/76	2297	1.540E-02	0.0%	11.52	126	91		6% 7%					
09/01/76	2436	1.370E-02	0.0%	11.90	265	91		6% -5%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2200 (continued)</b>													
T-2-BUTE (Trap#2) (MinUnc = 5%)													
03/14/77	2630	3.520E-03	0.0%	11.39	0	92	A	4%	3%	0	3.400E-03	4%	
07/14/77	2752	3.230E-03	0.0%	11.39	122	92		4%	-5%				
10/21/77	2851	3.450E-03	0.0%	11.39	221	92		4%	1%				
11/06/77	2867	(undefined)											
12/08/77	2899				0	93	A	5%		56	3.007E-03	5%	
11/08/78	3234	3.140E-03	0.0%	11.39	335	93		5%	4%				
04/16/79	3393	2.830E-03	0.0%	11.19	494	93		5%	-6%				
02/19/81	4068	3.050E-03	0.0%	11.39	1169	93		5%	1%				
08/10/82	4605				0	94	A	5%		42	2.608E-03	5%	
01/10/83	4758	2.570E-03	0.2%	10.23	153	94		5%	-1%				
03/23/83	4830	2.530E-03	0.8%	10.33	225	94		5%	-3%				
06/13/83	4912	2.650E-03	0.7%	10.20	307	94		5%	2%				
10/25/83	5046	2.570E-03	0.3%	10.31	441	94		5%	-1%				
10/15/84	5402	2.540E-03	2.3%	10.18	797	94		5%	-3%				
03/21/85	5559	2.510E-03	2.3%	10.20	954	94		5%	-4%				
08/30/85	5721	2.560E-03	3.4%	10.46	1116	94		5%	-2%				
12/16/85	5829	2.930E-03	8.5%	10.13	1224	94		5%	11%				
04/09/86	5943	(undefined)											
04/25/86	5959	2.190E-03	5.9%	11.58	0	95	*		0%	0	2.190E-03		
06/04/86	5999	(undefined)											
06/05/86	6000	4.380E-03	0.0%	0.00	0	96	*		0%	16	4.380E-03		
09/19/86	6106				0	97	*			0	3.275E-03		
09/25/86	6112	3.275E-03	5.7%	11.33	6	97			0%				
07/10/87	6400				0	98	*			0	3.120E-03		
07/25/88	6781	3.120E-03	1.0%	11.07	381	98			0%				
<b>Instrument 2920</b>													
BUTYRALD (Trap/mv) (MinUnc = 10%)													
11/19/75	2149	2.762E-03	0.0%	0.00	0	1	L	7%	-3%	29	2.844E-03	4%	-5.11E-04 77%
01/15/76	2206	2.880E-03	0.0%	0.00	57	1		7%	4%				
05/21/76	2333	2.540E-03	5.5%	0.00	184	1		8%	-1%				
06/14/76	2357	2.400E-03	1.9%	2.12	0	2	A	2%	1%	2	2.370E-03	2%	
10/18/76	2483	2.340E-03	0.8%	2.09	126	2		2%	-1%				
05/04/77	2681	(undefined)											
05/17/77	2694				0	3	A	7%		25	2.120E-03	7%	
06/01/77	2709	2.230E-03	0.8%	1.99	15	3		7%	5%				
11/24/81	4346	2.010E-03	6.0%	1.87	1652	3		7%	-5%				
07/13/82	4577	(undefined)											
07/29/82	4593				0	4	*			2	1.910E-03		
03/06/84	5179	1.910E-03	3.6%	1.92	586	4			0%				
03/04/89	7003	2.300E-03	6.8%	1.90	0	5	*		0%	0	2.300E-03		
ACROLEIN (Trap/Are) (MinUnc = 10%)													
12/16/85	5829	1.260E-03	2.4%	1.49	0	9	*		0%	0	1.260E-03		
ACETONE (Trap/mv) (MinUnc = 10%)													
11/19/75	2149	2.625E-03	0.0%	0.00	0	11	L	7%	3%	35	2.542E-03	5%	-2.25E-04 173%
01/12/76	2203	2.398E-03	0.0%	0.00	54	11		7%	-5%				
06/04/76	2347	2.460E-03	0.0%	0.00	198	11		8%	1%				
06/14/76	2357				0	12	*			2	2.170E-03		
10/18/76	2483	2.170E-03	0.0%	0.00	126	12			0%				
05/04/77	2681	(undefined)											
05/12/77	2689	(undefined)											
05/17/77	2694				0	13	A	15%		256	1.774E-03	15%	
06/01/77	2709	1.710E-03	0.0%	0.00	15	13		15%	-4%				
06/07/77	2715	1.690E-03	5.1%	0.00	21	13		15%	-5%				
11/01/77	2862	1.695E-03	0.0%	0.00	168	13		15%	-5%				
02/09/79	3327	2.020E-03	4.5%	0.00	633	13		15%	12%				
04/18/79	3395	1.430E-03	1.5%	1.30	701	13		15%	-24%				
02/02/81	4051	1.630E-03	4.6%	1.33	1357	13		15%	-9%				
11/25/81	4347	2.240E-03	3.8%	1.35	1653	13		15%	21%				
07/13/82	4577	(undefined)											
07/29/82	4593				0	14	A	15%		282	2.230E-03	15%	
03/23/83	4830	2.150E-03	0.9%	1.36	237	14		15%	-4%				
09/27/83	5018	1.730E-03	5.0%	1.35	425	14		15%	-29%				
10/15/84	5402	2.620E-03	1.9%	1.32	809	14		15%	15%				
01/16/86	5860	2.260E-03	1.3%	1.40	1267	14		15%	1%				
09/29/86	6116	2.560E-03	2.8%	1.44	1523	14		15%	13%				
03/10/89	7009	2.060E-03	4.6%	1.35	2416	14		15%	-8%				
04/19/89	7049	(undefined)											
05/29/91	7819	2.843E-03	0.0%	1.40	0	15	A	31%	18%	0	2.334E-03	31%	
06/11/91	7832	1.826E-03	0.0%	1.32	13	15		31%	-28%				
ACETONE (Trap/Are) (MinUnc = 10%)													
03/10/89	7009	6.130E-08	4.7%	1.33	0	16	L	0%	0%	0	6.130E-08	0%	2.60E-05 0%
05/29/91	7819	8.925E-08	0.0%	1.40	810	0	X						
06/11/91	7832	6.261E-08	0.0%	1.32	823	16		0%	0%				
07/11/91	7862	2.996E-08	0.0%	1.40	0	17	A	24%	-31%	3	3.926E-08	24%	
07/17/91	7868	3.889E-08	0.0%	1.40	6	17		24%	-1%				
07/25/91	7876	4.893E-08	0.0%	1.40	14	17		24%	20%				

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2920 (continued)</b>												
2-C4ONO2 (Trap/mv) (MinUnc = 10%)												
03/08/76	2259	7.190E-03	3.8%	0.00	0	18	*	0%	4	7.190E-03		
06/14/76	2357	(undefined)			0	19	*		1	6.670E-03		
10/18/76	2483	6.670E-03	1.7%	6.42	126	19		0%				
05/04/77	2681	(undefined)			0	20	L	9%	14	4.873E-03	4%	-7.00E-05 59%
05/17/77	2694	(undefined)			0	20		9%				
06/01/77	2709	4.720E-03	0.0%	0.00	15	20		9%				
02/24/78	2977	5.311E-03	0.0%	0.00	283	20		9%				
08/03/78	3137	4.746E-03	0.0%	0.00	443	20		9%				
10/23/78	3218	5.220E-03	0.0%	0.00	524	20		10%				
11/27/78	3253	4.360E-03	0.0%	0.00	559	20		10%				
11/28/78	3254	4.000E-03	0.0%	0.00	560	20		10%				
12/13/78	3269	8.230E-03	0.0%	0.00	575	0	X					
08/03/81	4233	4.550E-03	0.0%	0.00	1539	20		10%				
08/07/81	4237	4.250E-03	0.0%	0.00	1543	20		10%				
08/10/81	4240	4.220E-03	0.0%	0.00	1546	20		10%				
03/26/82	4468	4.360E-03	2.9%	5.41	1774	20		10%				
2-C3ONO2 (Trap/mv) (MinUnc = 10%)												
06/07/77	2715	3.600E-03	1.3%	3.36	0	21	A	9%	7	3.390E-03	9%	
03/31/82	4473	3.180E-03	2.0%	3.17	1758	21		9%				
135-TMB (Trap/mv) (MinUnc = 10%)												
09/15/78	3180	8.390E-03	0.0%	0.00	0	22	*	0%	0	8.390E-03		
07/13/82	4577	(undefined)			0	23	A	7%	8	8.660E-03	7%	
07/29/82	4593	(undefined)			0	23		7%				
06/30/83	4929	8.240E-03	6.3%	24.11	336	23		7%				
11/21/83	5073	9.080E-03	4.3%	24.08	480	23		7%				
04/19/89	7049	(undefined)			0	24	*		0	2.229E-03		
07/29/91	7880	(undefined)			0	24						
08/08/91	7890	2.229E-03	0.0%	0.00	10	24		0%				
135-TMB (Trap/Are) (MinUnc = 10%)												
08/01/91	7883	4.359E-07	0.0%	0.00	0	26	A	5%	2	4.154E-07	5%	
08/08/91	7890	4.120E-07	0.0%	0.00	7	26		5%				
11/14/91	7988	3.982E-07	0.0%	16.65	105	26		5%				
C2ONO2 (Trap/mv) (MinUnc = 10%)												
11/19/75	2149	8.065E-03	3.6%	3.27	0	27	*	0%	4	8.065E-03		
06/14/76	2357	(undefined)			0	28	L	2%	8	4.479E-03	1%	9.80E-05 12%
05/17/77	2694	(undefined)			0	28		2%				
06/01/77	2709	4.530E-03	1.1%	2.84	15	28		2%				
02/24/78	2977	4.550E-03	0.3%	2.66	283	28		2%				
04/06/82	4479	5.270E-03	2.3%	2.66	1785	28		2%				
3-C5-KET (Trap/mv) (MinUnc = 10%)												
03/21/83	4828	3.150E-03	3.5%	3.44	0	29	L	0%	20	3.146E-03	0%	1.51E-04 3%
10/15/84	5402	3.410E-03	3.8%	3.48	574	29		0%				
01/16/86	5860	3.640E-03	2.9%	3.57	1032	29		0%				
03/04/89	7003	2.650E-03	9.8%	3.36	0	30	L	0%	0	2.650E-03	0%	-4.15E-02 0%
03/06/89	7005	2.430E-03	2.2%	3.30	2	30		0%				
2-C5ONO2 (Trap/mv) (MinUnc = 10%)												
01/12/76	2203	1.235E-02	0.0%	0.00	0	32	A	7%	1	1.180E-02	7%	
03/08/76	2259	1.124E-02	0.0%	0.00	56	32		7%				
04/18/76	2300	(undefined)			0	33	L	10%	0	7.281E-03	5%	-4.34E-05 138%
06/14/76	2357	(undefined)			0	33		10%				
05/17/77	2694	(undefined)			0	33		10%				
06/01/77	2709	7.502E-03	0.0%	0.00	15	33		10%				
02/24/78	2977	7.806E-03	0.0%	0.00	283	33		10%				
08/03/78	3137	6.890E-03	0.0%	0.00	443	33		10%				
08/07/78	3141	6.400E-03	0.0%	0.00	447	33		10%				
03/23/82	4465	6.870E-03	0.0%	0.00	1771	33		10%				
03/23/82	4465	6.870E-03	0.0%	0.00	0	34	L	0%	7	6.870E-03	0%	-1.69E-03 0%
07/01/82	4565	5.710E-03	0.0%	0.00	100	34		0%				
07/13/82	4577	(undefined)			0	35	L	5%	24	6.851E-03	3%	3.96E-04 10%
07/29/82	4593	(undefined)			0	35		5%				
07/30/82	4594	6.620E-03	4.9%	10.94	1	35		4%				
03/22/83	4829	7.750E-03	1.6%	10.38	236	35		4%				
10/15/84	5402	9.110E-03	5.5%	10.72	809	35		4%				
01/16/86	5860	1.020E-02	3.7%	11.18	1267	35		3%				
3-C5ONO2 (Trap/mv) (MinUnc = 10%)												
01/12/76	2203	1.111E-02	0.0%	0.00	0	36	A	5%	1	1.071E-02	5%	
03/08/76	2259	1.031E-02	0.0%	0.00	56	36		5%				
04/18/76	2300	(undefined)			0	37	L	15%	0	7.243E-03	8%	-1.09E-04 88%
06/14/76	2357	(undefined)			0	37		15%				
05/17/77	2694	(undefined)			0	37		15%				
06/01/77	2709	8.292E-03	0.0%	0.00	15	37		16%				
02/24/78	2977	7.170E-03	0.0%	0.00	283	37		16%				
08/03/78	3137	6.380E-03	0.0%	0.00	443	37		16%				
08/07/78	3141	5.830E-03	0.0%	0.00	447	37		16%				

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev		
<b>Instrument 2920 (continued)</b>														
03/23/82	4465	6.210E-03	0.0%	0.00	1771	37	19%	6%						
03/23/82	4465	6.210E-03	0.0%	0.00	0	38	0%	0%	7	6.210E-03	0%	-1.40E-03	0%	
07/01/82	4565	5.340E-03	0.0%	0.00	100	38	0%	0%						
07/13/82	4577	(undefined)												
07/29/82	4593				0	39	2%		24	6.212E-03	1%	4.43E-04	4%	
07/30/82	4594	6.110E-03	4.4%	10.94	1	39	2%	-2%						
03/22/83	4829	6.960E-03	2.1%	9.48	236	39	2%	1%						
10/15/84	5402	8.510E-03	5.3%	9.79	809	39	2%	1%						
01/16/86	5860	9.640E-03	3.0%	10.20	1267	39	2%	-1%						
<b>M-XYLENE (Trap/Are) (MinUnc = 10%)</b>														
08/02/91	7884				0	42	7%		70	3.677E-07	3%	4.69E-04	70%	
08/05/91	7887	3.376E-07	0.0%	11.80	3	42	7%	-9%						
08/08/91	7890	3.981E-07	0.0%	12.00	6	42	7%	7%						
08/27/91	7909	3.908E-07	0.0%	12.10	25	42	7%	5%						
09/06/91	7919	3.725E-07	0.0%	12.10	35	42	7%	0%						
10/02/91	7945	3.598E-07	0.0%	12.01	61	42	7%	-5%						
10/16/91	7959	3.792E-07	0.0%	12.10	75	42	7%	0%						
11/01/91	7975	4.026E-07	0.0%	11.87	91	42	6%	5%						
11/25/91	7999	3.567E-07	0.0%	11.80	115	42	6%	-9%						
11/27/91	8001	3.910E-07	0.0%	11.85	117	42	6%	1%						
12/13/91	8017	4.812E-07	0.0%	11.78	133	0	X							
12/16/91	8020	4.477E-07	0.0%	11.60	136	0	X							
01/06/92	8041	3.858E-07	0.0%	11.57	157	42	6%	-2%						
01/16/92	8051	4.181E-07	0.0%	11.59	167	42	6%	5%						
<b>M-XYLENE (Trap/mv) (MinUnc = 10%)</b>														
05/26/77	2703	3.130E-03	1.3%	11.20	0	43	L	11%	-11%	79	3.477E-03	5%	1.09E-04	59%
06/09/77	2717	3.670E-03	0.4%	11.20	14	43		11%	5%					
10/26/77	2856	3.860E-03	1.3%	0.00	153	43		10%	8%					
02/09/79	3327	3.500E-03	0.2%	0.00	624	43		10%	-6%					
01/12/82	4395	4.167E-03	0.0%	11.80	1692	43		9%	1%					
07/13/82	4577	(undefined)												
07/29/82	4593				0	44	L	10%		37	4.186E-03	7%	-2.01E-04	74%
10/19/82	4675	4.125E-03	0.0%	11.20	82	44		10%	0%					
03/21/83	4828	4.150E-03	2.1%	11.30	235	44		10%	4%					
11/21/83	5073	3.430E-03	3.7%	11.30	480	44		11%	-10%					
07/17/84	5312	3.760E-03	1.5%	11.20	719	44		12%	5%					
10/01/84	5388				0	45	L	2%		34	4.551E-03	1%	3.04E-05	43%
10/15/84	5402	4.520E-03	1.6%	11.70	14	45		2%	-1%					
12/18/85	5831	4.660E-03	2.4%	12.20	443	45		2%	1%					
08/01/88	6788	4.730E-03	5.6%	11.10	1400	45		2%	0%					
03/03/89	7002				0	46	A	24%		5	1.890E-03	24%		
11/09/89	7253	1.570E-03	0.0%	5.43	251	46		24%	-20%					
12/08/89	7282	2.210E-03	0.0%	0.00	280	46		24%	14%					
01/11/90	7316				0	47	L	7%		154	3.786E-03	4%	-2.42E-04	36%
01/11/90	7316	4.830E-03	6.9%	11.10	0	0	X							
01/30/90	7335	3.870E-03	6.9%	11.00	19	47		7%	3%					
02/26/90	7362	4.090E-03	0.6%	11.00	46	47		7%	8%					
06/08/90	7464	3.580E-03	4.1%	0.00	148	47		7%	-2%					
10/26/90	7604	3.030E-03	3.7%	0.00	288	47		8%	-16%					
11/07/90	7616	3.330E-03	6.2%	11.90	300	47		8%	-5%					
01/08/91	7678	3.570E-03	2.6%	12.00	362	47		8%	3%					
02/22/91	7723	3.144E-03	2.3%	11.60	407	47		8%	-9%					
03/11/91	7740	3.251E-03	4.5%	11.40	424	47		8%	-4%					
04/08/91	7768	3.643E-03	9.1%	11.60	452	47		8%	7%					
05/06/91	7796	3.155E-03	0.0%	11.60	480	47		8%	-6%					
05/24/91	7814	2.550E-03	0.0%	11.70	498	0	X							
05/29/91	7819	3.360E-03	0.0%	11.75	503	47		8%	1%					
06/11/91	7832	3.298E-03	0.0%	11.50	516	47		8%	0%					
07/03/91	7854	3.294E-03	0.0%	12.30	538	47		8%	0%					
07/08/91	7859	3.462E-03	0.0%	0.00	543	47		8%	5%					
07/25/91	7876	3.290E-03	0.0%	12.20	560	47		8%	1%					
08/08/91	7890	3.558E-03	0.0%	12.00	574	47		8%	8%					
<b>MEK (Trap/mv) (MinUnc = 10%)</b>														
11/19/75	2149	2.646E-03	0.0%	0.00	0	48	L	6%	-2%	19	2.698E-03	3%	-5.12E-04	62%
12/23/75	2183	2.645E-03	0.0%	0.00	34	48		6%	0%					
03/08/76	2259	2.688E-03	0.0%	0.00	110	48		6%	5%					
05/21/76	2333	2.360E-03	0.0%	0.00	184	48		6%	-4%					
06/14/76	2357				0	49	A	2%		4	2.235E-03	2%		
10/18/76	2483	2.200E-03	0.0%	0.00	126	49		2%	-2%					
03/24/77	2640	2.270E-03	0.0%	0.00	283	49		2%	2%					
05/04/77	2681	(undefined)												
05/17/77	2694				0	50	A	2%		35	2.143E-03	2%		
08/03/78	3137	2.177E-03	0.0%	0.00	443	50		2%	2%					
02/12/79	3330	2.110E-03	0.3%	0.00	636	50		2%	-2%					
04/18/79	3395	1.890E-03	1.0%	2.00	0	51	L	20%	4%	121	1.820E-03	14%	1.95E-04	106%
02/02/81	4051	1.840E-03	2.3%	2.08	656	51		18%	-12%					
12/24/81	4376	2.310E-03	0.8%	2.07	981	51		17%	6%					
07/13/82	4577	(undefined)												
07/29/82	4593				0	52	A	10%		150	2.233E-03	10%		

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2920 (continued)</b>													
03/21/83	4828	2.110E-03	0.8%	2.08	235	52		10%	-6%				
10/15/84	5402	2.500E-03	1.8%	2.08	809	52		10%	11%				
01/16/86	5860	2.090E-03	1.5%	2.16	1267	52		10%	-7%				
09/29/86	6116	2.810E-03	2.1%	2.20	1523	0	X						
08/01/88	6788	1.840E-03	3.6%	2.07	0	53	A	0%	0%	0	1.835E-03	0%	
03/06/89	7005	1.830E-03	2.1%	2.04	217	53		0%	0%				
MVK	(Loop/Are)	(MinUnc = 25%)											
05/14/84	5248	1.770E-02	4.0%	2.29	0	55	*	0%		4	1.770E-02		
MVK	(Trap/Are)	(MinUnc = 25%)											
04/10/81	4118	4.630E-04	2.4%	2.39	0	57	L	0%	0%	12	4.630E-04	0%	-7.60E-04 0%
06/02/82	4536	3.160E-04	3.5%	2.27	418	57		0%	0%				
07/13/82	4577	(undefined)											
07/29/82	4593				0	58	*			2	5.010E-04		
05/14/84	5248	5.010E-04	3.0%	2.34	655	58		0%					
N-C8	(Trap/mv)	(MinUnc = 10%)											
01/02/86	5846	1.210E-03	14.2%	3.32	0	60	L	2%	-1%	4	1.225E-03	1%	9.23E-04 9%
01/10/86	5854	1.250E-03	3.3%	3.33	8	60		2%	1%				
09/29/86	6116	1.530E-03	3.9%	3.45	270	60		2%	0%				
N-C8	(Trap/Are)	(MinUnc = 10%)											
06/11/91	7832	1.229E-08	0.0%	3.60	0	61	*	0%		2	1.229E-08		
PROPALD	(Trap/mv)	(MinUnc = 10%)											
11/19/75	2149	2.252E-03	0.0%	0.00	0	63	A	10%	-7%	32	2.416E-03	10%	
01/15/76	2206	2.490E-03	0.0%	0.00	57	63		10%	3%				
05/21/76	2333	2.200E-03	3.4%	0.00	184	63		10%	-10%				
06/04/76	2347	2.720E-03	0.0%	0.00	198	63		10%	11%				
06/14/76	2357	(undefined)											
06/14/76	2357	2.090E-03	3.7%	1.36	0	64	A	1%	0%	2	2.080E-03	1%	
10/18/76	2483	2.070E-03	1.5%	1.34	126	64		1%	0%				
05/04/77	2681	(undefined)											
05/12/77	2689	(undefined)											
05/17/77	2694				0	65	A	8%		61	1.873E-03	8%	
06/01/77	2709	1.750E-03	0.9%	1.30	15	65		8%					
10/05/78	3200	1.830E-03	8.9%	0.00	506	65		8%	-2%				
02/09/79	3327	2.040E-03	0.3%	0.00	633	65		8%	8%				
07/13/82	4577	(undefined)											
07/29/82	4593				0	66	L	34%		20	2.577E-03	29%	-1.90E-05 831%
03/26/85	5564	2.150E-03	1.3%	1.27	971	66		35%	-18%				
03/18/86	5921	2.980E-03	1.7%	1.29	1328	66		35%	16%				
10/01/86	6118	6.880E-03	6.5%	1.29	1525	0	X						
10/03/86	6120	7.060E-03	3.3%	1.30	1527	0	X						
08/01/88	6788	2.650E-03	8.1%	1.25	2195	66		36%	7%				
03/07/89	7006	2.190E-03	0.0%	0.00	2413	66		36%	-12%				
04/19/89	7049	(undefined)											
STYRENE	(Trap/mv)	(MinUnc = 10%)											
01/09/86	5853	9.490E-03	0.0%	19.51	0	67	*	0%		0	9.490E-03		
TOLUENE	(Loop/mv)	(MinUnc = 10%)											
06/08/82	4542	4.740E-02	0.0%	5.40	0	68	*	0%		0	4.740E-02		
07/13/82	4577	(undefined)											
07/29/82	4593				0	69	A	9%		1	5.190E-02	9%	
08/25/87	6446	5.510E-02	1.2%	5.04	1853	69		9%	6%				
04/21/88	6686	4.870E-02	0.1%	4.80	2093	69		9%	-7%				
04/19/89	7049	(undefined)											
11/08/89	7252	3.140E-02	0.0%	3.01	0	70	L	9%	5%	0	2.988E-02	6%	2.24E-03 14%
12/08/89	7282	3.020E-02	0.0%	0.00	30	70		9%	-6%				
09/10/90	7558	5.050E-02	0.0%	5.05	306	70		6%	0%				
TOLUENE	(Trap/mv)	(MinUnc = 10%)											
05/26/77	2703	1.758E-03	0.8%	5.41	0	71	L	5%	1%	53	1.745E-03	2%	-7.34E-07 4142%
06/09/77	2717	1.770E-03	0.6%	5.41	14	71		5%	1%				
10/26/77	2856	1.860E-03	0.3%	0.00	153	71		5%	6%				
05/26/78	3068	1.790E-03	0.7%	0.00	365	71		5%	3%				
07/06/78	3109	1.653E-03	1.0%	0.00	406	71		5%	-6%				
09/15/78	3180	1.760E-03	3.2%	5.34	477	71		5%	1%				
01/08/79	3295	1.580E-03	2.8%	0.00	592	71		5%	-10%				
02/09/79	3327	1.780E-03	0.4%	0.00	624	71		5%	2%				
04/18/79	3395	1.700E-03	0.2%	5.20	692	71		5%	-3%				
07/01/80	3835	1.710E-03	0.3%	5.67	1132	71		5%	-2%				
01/12/82	4395	1.824E-03	0.0%	5.60	1692	71		5%	4%				
07/13/82	4577	(undefined)											
07/29/82	4593				0	72	L	14%		31	1.749E-03	7%	2.87E-05 229%
08/25/82	4620	1.582E-03	0.7%	5.43	27	72		14%	-11%				
03/21/83	4828	1.810E-03	1.4%	5.47	235	72		13%	3%				
11/21/83	5073	1.650E-03	3.7%	5.49	480	72		13%	-7%				
07/17/84	5312	1.720E-03	0.8%	5.41	719	72		13%	-4%				
10/15/84	5402	2.160E-03	1.1%	5.60	809	72		13%	17%				

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev		
<b>Instrument 2920 (continued)</b>														
12/18/85	5831	1.880E-03	1.7%	5.80	1238	72	13%	4%						
09/29/86	6116	2.930E-03	3.9%	5.93	1523	0	X							
08/01/88	6788	1.730E-03	1.3%	5.39	2195	72	13%	-7%						
04/19/89	7049	(undefined)												
11/09/89	7253	8.600E-04	0.0%	3.02	2660	0	X							
12/18/89	7292	9.860E-04	0.0%	0.00	2699	0	X							
01/11/90	7316	2.130E-03	0.0%	5.38	0	73	L	5%	2%	5	2.078E-03	3%	-4.18E-04	22%
02/26/90	7362	1.980E-03	0.0%	5.30	46	73		5%	-3%					
06/11/91	7832	1.635E-03	0.0%	5.55	516	73		6%	0%					
VALERALD (Trap/mv) (MinUnc = 10%)														
03/18/86	5921	5.580E-03	1.7%	3.72	0	75	A	14%	9%	28	5.070E-03	14%		
09/29/86	6116	4.560E-03	4.5%	3.77	195	75		14%	-11%					
BENZENE (Loop/mv) (MinUnc = 10%)														
06/08/82	4542	2.900E-02	0.3%	2.80	0	76	*		0%	0	2.900E-02			
07/13/82	4577	(undefined)												
07/29/82	4593				0	77	*			3	3.010E-02			
08/13/83	4973	3.010E-02	0.6%	2.85	380	77			0%					
BENZENE (Trap/mv) (MinUnc = 10%)														
05/26/77	2703	9.402E-04	0.0%	0.00	0	78	L	1%	0%	30	9.384E-04	1%	5.23E-05	16%
06/09/77	2717	9.330E-04	0.0%	0.00	14	78		1%	-1%					
09/15/78	3180	9.690E-04	0.0%	0.00	477	78		1%	1%					
07/01/80	3835	9.910E-04	0.0%	0.00	1132	78		1%	0%					
07/13/82	4577	(undefined)												
07/29/82	4593				0	79	*			2	0.000E+00			
05/22/84	5256	1.080E-03	2.9%	2.80	0	80	L	10%	0%	3	1.081E-03	7%	3.01E-04	42%
02/12/85	5522	1.250E-03	3.0%	2.96	266	80		9%	7%					
10/01/85	5753	1.240E-03	2.4%	2.95	497	80		9%	0%					
11/11/85	5794	1.200E-03	4.4%	2.91	538	80		9%	-5%					
11/16/85	5799	1.210E-03	3.3%	2.92	543	80		9%	-4%					
01/07/86	5851	1.180E-03	6.6%	3.05	595	80		9%	-8%					
06/25/86	6020	1.450E-03	2.5%	0.00	764	80		8%	8%					
BENZENE (Trap/Are) (MinUnc = 10%)														
08/23/91	7905				0	81	*			2	6.645E-07			
08/27/91	7909	6.645E-07	0.0%	3.00	4	81			0%					
METHACRO (Loop/Are) (MinUnc = 10%)														
02/04/84	5148	1.230E-02	7.0%	1.79	0	82	*		0%	0	1.230E-02			
METHACRO (Trap/Are) (MinUnc = 10%)														
12/31/80	4018	3.180E-04	0.0%	1.84	0	83	A	6%	2%	12	3.123E-04	6%		
10/28/81	4319	3.270E-04	0.0%	1.82	301	83		6%	4%					
02/22/82	4436	2.920E-04	1.4%	1.76	418	83		6%	-7%					
07/13/82	4577	(undefined)												
07/29/82	4593				0	84	*			0	3.720E-04			
02/04/84	5148	3.720E-04	2.0%	1.83	555	84			0%					
ACETALD (Trap/mv) (MinUnc = 10%)														
11/19/75	2149	4.098E-03	0.0%	0.00	0	89	L	12%	2%	34	4.029E-03	7%	8.62E-04	56%
12/23/75	2183	4.060E-03	0.0%	0.00	34	89		11%	-2%					
05/21/76	2333	5.025E-03	0.0%	0.00	184	89		10%	7%					
05/26/76	2338	4.180E-03	0.0%	0.00	189	89		10%	-12%					
06/04/76	2347	4.880E-03	0.0%	0.00	198	89		10%	3%					
06/14/76	2357	(undefined)												
10/18/76	2483				0	90	L	22%		2	2.247E-03	13%	4.40E-03	36%
10/18/76	2483	5.020E-03	0.0%	0.00	0	0	X							
11/09/76	2505	2.830E-03	0.0%	0.00	22	90		20%	13%					
11/17/76	2513	2.140E-03	0.0%	0.00	30	90		19%	-19%					
12/06/76	2532	2.750E-03	0.0%	0.00	49	90		18%	1%					
03/24/77	2640	3.820E-03	0.0%	0.00	157	90		13%	1%					
05/04/77	2681	(undefined)												
05/12/77	2689	(undefined)												
05/17/77	2694				0	91	L	12%		230	3.594E-03	5%	1.83E-05	334%
06/09/77	2717	3.970E-03	0.0%	0.00	23	91		12%	9%					
10/05/77	2835	3.530E-03	0.0%	0.00	141	91		12%	-2%					
11/01/77	2862	3.860E-03	0.0%	0.00	168	91		12%	7%					
12/15/77	2906	3.890E-03	0.0%	0.00	212	91		12%	7%					
12/19/77	2910	3.410E-03	0.0%	0.00	216	91		12%	-6%					
01/12/78	2934	3.160E-03	0.0%	0.00	240	91		12%	-14%					
10/02/78	3197	3.550E-03	0.0%	0.00	503	91		12%	-2%					
02/09/79	3327	4.820E-03	0.0%	0.00	633	0	X							
02/09/79	3327	3.970E-03	0.0%	0.00	633	91		12%	8%					
02/12/79	3330	4.690E-03	0.0%	0.00	636	0	X							
04/18/79	3395	3.270E-03	0.0%	0.00	701	91		12%	-11%					
02/02/81	4051	3.090E-03	0.0%	0.00	1357	91		12%	-19%					
05/17/82	4520	4.230E-03	0.0%	0.00	1826	91		12%	12%					
07/13/82	4577	(undefined)												
07/29/82	4593				0	92	A	1%		208	4.140E-03	1%		
08/19/82	4614	4.120E-03	0.0%	0.00	21	92		1%	0%					



Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2920 (continued)</b>												
06/24/83	4923	4.160E-03	0.0%	0.00	330	92	1%	0%				
09/19/84	5376				0	93	29%		103	3.795E-03	19%	-4.23E-05 355%
10/15/84	5402	7.310E-03	0.0%	0.00	26	0	X					
03/26/85	5564	4.740E-03	0.0%	0.00	188	93	30%	21%				
01/09/86	5853	2.680E-03	0.0%	0.00	477	93	30%	-39%				
09/29/86	6116	3.690E-03	0.0%	0.00	740	93	30%	0%				
08/01/88	6788	2.530E-03	0.0%	0.00	1412	93	31%	-41%				
02/15/89	6986	4.140E-03	0.0%	0.00	1610	93	32%	15%				
03/03/89	7002	3.530E-03	0.0%	0.00	1626	93	32%	0%				
03/20/89	7019	4.020E-03	0.0%	0.00	1643	93	32%	12%				
ACETALD (Trap/Are) (MinUnc = 10%)												
02/09/89	6980				0	94	A	16%	4	1.031E-07	16%	
02/15/89	6986	1.210E-07	7.1%	0.93	6	94		16%			15%	
03/03/89	7002	9.950E-08	10.0%	0.95	22	94		16%			-4%	
03/22/89	7021	8.890E-08	6.0%	0.92	41	94		16%			-16%	
ACETALD (Trap/Are) (MinUnc = 10%)												
11/14/91	7988	3.328E-06	0.0%	0.96	0	95	*	0%	2	3.328E-06		
N-C6 (Trap/Are) (MinUnc = 10%)												
12/06/89	7280				0	97	A	2%	1	1.737E-08	2%	
12/18/89	7292	1.700E-08	0.0%	0.00	12	97		2%			-2%	
01/11/90	7316	1.770E-08	0.0%	1.13	36	97		2%			2%	
01/30/90	7335	1.740E-08	0.0%	1.13	55	97		2%			0%	
N-C6 (Trap/Are) (MinUnc = 10%)												
08/02/91	7884				0	98	L	2%	67	5.165E-07	1%	-4.25E-04 35%
08/05/91	7887	5.165E-07	0.0%	1.25	3	98		2%			0%	
08/08/91	7890	5.194E-07	0.0%	1.22	6	98		2%			1%	
08/27/91	7909	5.097E-07	0.0%	1.22	25	98		2%			0%	
09/06/91	7919	4.989E-07	0.0%	1.22	35	98		2%			-2%	
10/02/91	7945	5.450E-07	0.0%	1.22	61	0	X					
10/16/91	7959	5.107E-07	0.0%	1.22	75	98		2%			2%	
11/01/91	7975	4.931E-07	0.0%	1.22	91	98		2%			-1%	
11/25/91	7999	5.031E-07	0.0%	1.20	115	98		2%			2%	
11/27/91	8001	4.779E-07	0.0%	1.20	117	98		2%			-3%	
12/11/91	8015	(undefined)										
12/13/91	8017	5.660E-07	0.0%	1.19	133	0	X					
01/06/92	8041	4.867E-07	0.0%	1.16	0	99	A	4%	3	4.998E-07	4%	
01/16/92	8051	5.129E-07	0.0%	1.15	10	99		4%			3%	
N-C6 (Trap/mv) (MinUnc = 10%)												
11/11/81	4333				0	100	*		6	3.920E-04		
12/02/81	4354	3.920E-04	0.0%	0.00	21	100		0%				
07/13/82	4577	(undefined)										
07/29/82	4593				0	101	L	37%	156	4.541E-04	36%	-3.28E-05 359%
11/09/89	7253	3.170E-04	0.0%	0.95	2660	101		41%			-31%	
12/18/89	7292	3.810E-04	0.0%	0.00	2699	101		41%			-9%	
01/11/90	7316	4.400E-04	0.0%	1.13	2723	101		41%			6%	
01/30/90	7335	4.720E-04	0.0%	1.13	2742	101		41%			12%	
02/26/90	7362	4.430E-04	0.0%	1.10	2769	101		41%			7%	
06/08/90	7464	4.100E-04	0.0%	0.00	2871	101		41%			0%	
10/26/90	7604	4.850E-04	0.0%	0.00	3011	101		41%			16%	
11/07/90	7616	4.590E-04	0.0%	1.20	3023	101		41%			11%	
01/08/91	7678	4.040E-04	0.0%	1.20	3085	101		41%			-1%	
02/22/91	7723	4.174E-04	0.0%	1.15	3130	101		41%			2%	
03/11/91	7740	4.003E-04	0.0%	1.10	3147	101		41%			-2%	
03/25/91	7754	3.330E-04	0.0%	1.12	3161	101		41%			-22%	
04/08/91	7768	3.590E-04	0.0%	1.10	3175	101		41%			-13%	
05/06/91	7796	4.096E-04	0.0%	1.15	3203	101		41%			1%	
05/24/91	7814	3.868E-04	0.0%	1.15	3221	101		41%			-5%	
07/03/91	7854	4.615E-04	0.0%	1.22	3261	0	X					
07/08/91	7859	4.194E-04	0.0%	1.20	3266	101		41%			3%	
07/25/91	7876	4.212E-04	0.0%	1.20	3283	101		41%			4%	
08/08/91	7890	4.884E-04	0.0%	1.22	3297	0	X					
I-C3-OH (Trap/mv) (MinUnc = 10%)												
11/05/90	7614	2.060E-03	0.0%	0.00	0	102	A	23%	4	2.431E-03	23%	
11/07/90	7616	2.160E-03	0.0%	2.10	2	102		23%			-13%	
01/10/91	7680	3.073E-03	0.0%	2.10	66	102		23%			21%	
124-TMB (Trap/Are) (MinUnc = 10%)												
08/27/91	7909	3.812E-07	0.0%	19.00	0	103	*	0%	2	3.812E-07		
123-TMB (Trap/Are) (MinUnc = 10%)												
10/02/91	7945	2.788E-07	0.0%	20.55	0	104	*	0%	2	2.788E-07		
C2-BENZ (Trap/mv) (MinUnc = 10%)												
10/07/91	7950	4.727E-07	0.0%	10.60	0	105	A	15%	3	4.276E-07	15%	
11/14/91	7988	3.825E-07	0.0%	10.70	38	105		15%			-12%	

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2920 (continued)</b>													
O-XYLENE (Loop/mv) (MinUnc = 10%)													
08/04/82	4599	1.080E-01	0.0%	0.00	0	106	A	1%	4	1.070E-01	1%		
01/04/84	5117	1.060E-01	0.0%	0.00	518	106		1%					
O-XYLENE (Trap/mv) (MinUnc = 10%)													
10/26/77	2856	5.510E-03	0.0%	0.00	0	107	L	9%	2	5.028E-03	5%	-2.54E-04	39%
05/05/78	3047	4.550E-03	0.0%	0.00	191	107		9%					
07/06/78	3109	4.440E-03	0.0%	0.00	253	107		9%					
09/15/78	3180	4.470E-03	0.0%	0.00	324	107		9%					
07/01/80	3835	3.940E-03	0.0%	0.00	979	107		12%					
07/01/80	3835	3.940E-03	0.0%	0.00	0	108	*	0%	1	3.940E-03			
07/13/82	4577	(undefined)											
07/29/82	4593				0	109	*		0	4.300E-03			
09/18/82	4644	4.300E-03	0.0%	0.00	51	109		0%					
12/27/82	4744	(undefined)											
01/09/86	5853	6.480E-03	0.0%	0.00	0	110	*	0%	0	6.480E-03			
O-XYLENE (Trap/Are) (MinUnc = 10%)													
08/19/91	7901				0	111	*		2	3.850E-07			
09/06/91	7919	3.850E-07	0.0%	14.80	18	111		0%					
ISOPRENE (Trap/Are) (MinUnc = 10%)													
09/06/91	7919	5.783E-07	0.0%	1.00	0	112	A	1%	4	5.813E-07	1%		
09/19/91	7932	5.843E-07	0.0%	0.00	13	112		1%					
224TM-C5 (Trap/Are) (MinUnc = 10%)													
10/07/91	7950	4.599E-07	0.0%	1.78	0	113	*	0%	2	4.599E-07			
<b>Instrument 2925</b>													
ACETONE (Trap/mv) (MinUnc = 5%)													
08/30/82	4625				0	1	*		27	2.210E-03			
08/31/82	4626	2.210E-03	0.0%	1.14	1	1		0%					
06/15/83	4914	(undefined)											
06/20/83	4919				0	2	*		34	2.760E-03			
06/22/83	4921	2.760E-03	0.0%	3.22	2	2		0%					
10/22/84	5409	(undefined)											
03/13/85	5551				0	3	A	5%	58	2.797E-03	5%		
03/25/85	5563	2.710E-03	2.4%	3.03	12	3		5%					
06/14/85	5644	2.720E-03	1.6%	3.04	93	3		5%					
08/23/85	5714	3.010E-03	9.7%	2.99	163	3		5%					
12/05/85	5818	2.750E-03	4.7%	2.53	267	3		5%					
MEK (Trap/mv) (MinUnc = 5%)													
08/30/82	4625				0	4	*		27	2.050E-03			
08/31/82	4626	2.050E-03	0.0%	1.61	1	4		0%					
06/15/83	4914	(undefined)											
06/20/83	4919				0	5	*		31	2.730E-03			
06/22/83	4921	2.730E-03	0.0%	4.84	2	5		0%					
10/22/84	5409	(undefined)											
03/13/85	5551				0	6	A	8%	59	2.918E-03	8%		
03/25/85	5563	2.810E-03	1.6%	4.50	12	6		8%					
06/14/85	5644	2.900E-03	4.3%	4.59	93	6		8%					
08/23/85	5714	3.240E-03	5.0%	4.29	163	6		8%					
12/05/85	5818	2.720E-03	2.7%	3.55	267	6		8%					
TOLUENE (Trap/mv) (MinUnc = 5%)													
08/30/82	4625				0	7	*		16	1.270E-03			
08/31/82	4626	1.270E-03	0.0%	2.90	1	7		0%					
06/15/83	4914	(undefined)											
06/20/83	4919				0	8	L	0%	24	2.490E-03	0%	-5.91E-05	0%
06/22/83	4921	2.490E-03	0.0%	9.42	2	8		0%					
08/29/83	4989	2.480E-03	0.0%	9.30	70	8		0%					
10/22/84	5409	(undefined)											
03/13/85	5551				0	9	A	7%	51	2.367E-03	7%		
03/22/85	5560	4.470E-03	1.3%	8.30	9	0	X						
06/14/85	5644	2.470E-03	0.0%	8.65	93	9		7%					
08/22/85	5713	2.460E-03	1.6%	7.51	162	9		7%					
12/04/85	5817	2.170E-03	1.4%	5.67	266	9		7%					
M-XYLENE (Trap/mv) (MinUnc = 5%)													
08/30/82	4625				0	10	*		14	2.190E-03			
08/31/82	4626	2.190E-03	0.0%	5.09	1	10		0%					
06/15/83	4914	(undefined)											
06/20/83	4919				0	11	A	3%	23	3.990E-03	3%		
06/22/83	4921	4.070E-03	0.0%	16.89	2	11		3%					
08/29/83	4989	3.910E-03	0.0%	16.30	70	11		3%					
10/22/84	5409	(undefined)											
03/13/85	5551				0	12	A	3%	37	4.755E-03	3%		
03/22/85	5560	7.590E-03	0.8%	14.83	9	0	X						
08/22/85	5713	4.840E-03	4.4%	13.21	162	12		3%					
12/04/85	5817	4.670E-03	2.8%	9.52	266	12		3%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2925 (continued)</b>													
ACETALD (Trap/mv) (MinUnc = 5%)													
08/30/82	4625				0	13	*		14	6.420E-03			
08/31/82	4626	6.420E-03	0.0%	0.74	1	13		0%					
06/15/83	4914	(undefined)											
06/20/83	4919				0	14	*		33	7.750E-03			
06/28/83	4927	7.750E-03	0.0%	1.95	8	14		0%					
10/22/84	5409	(undefined)											
03/13/85	5551				0	15	*		5	7.500E-03			
03/29/85	5567	7.500E-03	1.2%	1.83	16	15		0%					
3-C5-KET (Trap/mv) (MinUnc = 5%)													
08/30/82	4625				0	16	*		12	1.990E-03			
08/31/82	4626	1.990E-03	0.0%	2.34	1	16		0%					
06/15/83	4914	(undefined)											
06/20/83	4919				0	17	*		24	3.580E-03			
06/22/83	4921	3.580E-03	0.0%	7.34	2	17		0%					
10/22/84	5409	(undefined)											
03/13/85	5551				0	18	A	10%	43	3.795E-03	10%		
03/25/85	5563	3.650E-03	0.8%	6.71	12	18		10%					
06/14/85	5644	4.060E-03	4.3%	6.90	93	18		10%					
08/23/85	5714	4.160E-03	3.5%	6.25	163	18		10%					
12/05/85	5818	3.310E-03	2.4%	4.81	267	18		10%					
3-C5ONO2 (Trap/mv) (MinUnc = 5%)													
03/25/85	5563	2.610E-03	5.3%	13.72	0	19	*	0%	3	2.610E-03			
3-C5ONO2 (Trap/mv) (MinUnc = 5%)													
08/30/82	4625				0	20	*		0	8.730E-03			
08/31/82	4626	8.730E-03	0.0%	4.55	1	20		0%					
06/15/83	4914	(undefined)											
06/20/83	4919				0	21	*		22	9.600E-03			
06/22/83	4921	9.600E-03	0.0%	14.90	2	21		0%					
10/22/84	5409	(undefined)											
03/13/85	5551				0	22	A	26%	16	1.129E-02	26%		
06/14/85	5644	9.260E-03	5.0%	14.42	93	22		26%					
08/23/85	5714	1.470E-02	9.8%	12.68	163	22		26%					
12/05/85	5818	9.920E-03	3.6%	9.13	267	22		26%					
2-C5ONO2 (Trap/mv) (MinUnc = 5%)													
03/25/85	5563	5.940E-03	3.3%	15.12	0	23	*	0%	1	5.940E-03			
2-C5ONO2 (Trap/mv) (MinUnc = 5%)													
08/30/82	4625				0	24	*		0	1.890E-03			
08/31/82	4626	1.890E-03	0.0%	4.99	1	24		0%					
06/15/83	4914	(undefined)											
06/20/83	4919				0	25	*		18	9.610E-03			
06/22/83	4921	9.610E-03	0.0%	16.34	2	25		0%					
10/22/84	5409	(undefined)											
03/13/85	5551				0	26	A	15%	2	1.104E-02	15%		
06/14/85	5644	1.100E-02	18.0%	15.77	93	26		15%					
08/23/85	5714	1.270E-02	4.2%	13.89	163	26		15%					
12/05/85	5818	9.420E-03	14.9%	9.94	267	26		15%					
<b>Instrument 2930</b>													
3-C6ONO2 (Trap/mv) (MinUnc = 5%)													
03/16/82	4458	1.327E-03	0.0%	1.87	0	1	A	7%	1	1.399E-03	7%		
03/19/82	4461	1.470E-03	0.0%	1.84	3	1		7%					
08/12/82	4607				0	2	*		4	1.550E-03			
12/10/82	4727	1.550E-03	0.0%	1.71	120	2		0%					
2-C6ONO2 (Trap/mv) (MinUnc = 5%)													
03/16/82	4458	1.673E-03	0.0%	2.17	0	4	A	7%	1	1.756E-03	7%		
03/19/82	4461	1.840E-03	0.0%	2.15	3	4		7%					
08/12/82	4607				0	5	*		4	1.910E-03			
12/10/82	4727	1.910E-03	0.0%	2.00	120	5		0%					
M-TOLALD (Trap/mv) (MinUnc = 5%)													
11/28/78	3254	1.053E-04	0.0%	17.48	-1353	0	X						
12/06/78	3262	9.901E-03	0.0%	17.29	0	12	A	8%	1	1.069E-02	8%		
12/07/78	3263	1.163E-02	0.0%	17.37	1	12		8%					
12/18/78	3274	1.053E-02	0.0%	17.35	12	12		8%					
ACETALD (Trap/mv) (MinUnc = 5%)													
02/09/79	3327	2.020E-03	0.0%	0.42	0	13	A	8%	21	1.845E-03	8%		
02/12/79	3330	1.770E-03	0.0%	0.36	3	13		8%					
04/18/79	3395	1.745E-03	0.0%	0.36	68	13		8%					
12/06/79	3627	2.347E-03	0.0%	0.45	0	14	A	0%	0	2.347E-03	0%		
02/15/80	3698	2.347E-03	0.0%	0.45	71	14		0%					
ACETONE (Trap/mv) (MinUnc = 5%)													
02/09/79	3327	7.184E-04	0.0%	0.50	0	15	A	3%	23	6.957E-04	3%		

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc.	Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2930 (continued)</b>														
02/12/79	3330	6.794E-04	0.0%	0.51	3	15		3%	-2%					
04/18/79	3395	6.892E-04	0.0%	0.36	68	15		3%	-1%					
02/15/80	3698	6.680E-04	0.0%	0.60	0	16	*		0%	0	6.680E-04			
PROPALD (Trap/mv) (MinUnc = 5%)														
02/09/79	3327	9.653E-04	0.0%	0.45	0	17	A	3%	3%	22	9.377E-04	3%		
02/12/79	3330	9.141E-04	0.0%	0.45	3	17		3%	-3%					
02/15/80	3698	9.337E-04	0.0%	0.50	371	17		3%	0%					
BENZALD (Trap/mv) (MinUnc = 5%)														
11/10/78	3236	4.854E-03	0.0%	3.96	0	18	*		0%	0	4.854E-03			
11/14/78	3240				0	19	A	11%		16	6.036E-03	11%		
11/21/78	3247	6.944E-03	0.0%	10.50	7	19		11%	13%					
12/06/78	3262	5.465E-03	0.0%	10.55	22	19		11%	-10%					
12/07/78	3263	5.747E-03	0.0%	10.57	23	19		11%	-5%					
12/14/78	3270	5.988E-03	0.0%	10.50	30	19		11%	-1%					
01/09/79	3296				0	20	A	18%		1	8.371E-03	18%		
07/17/79	3485	7.307E-03	0.0%	21.58	189	20		18%	-15%					
09/24/79	3554	9.434E-03	0.0%	9.14	258	20		18%	11%					
01/28/81	4046	(undefined)												
11/04/81	4326				0	21	A	31%		1	1.166E-02	31%		
03/16/82	4458	9.117E-03	0.0%	7.57	132	21		31%	-28%					
03/19/82	4461	1.420E-02	0.0%	7.49	135	21		31%	18%					
08/12/82	4607				0	22	*			0	9.600E-03			
08/24/82	4619	9.600E-03	0.0%	6.48	12	22			0%					
BENZALD (Loop/mv) (MinUnc = 5%)														
02/16/82	4430	1.910E-01	0.0%	7.75	0	23	A	11%	-8%	5	2.065E-01	11%		
03/18/82	4460	2.220E-01	0.0%	7.21	30	23		11%	7%					
TOLUENE (Trap/mv) (MinUnc = 5%)														
11/14/78	3240	3.338E-04	0.0%	1.05	0	24	*		0%	0	3.338E-04			
11/14/78	3240				0	25	*			9	3.307E-04			
11/21/78	3247	3.307E-04	0.0%	1.06	7	25			0%					
01/09/79	3296				0	26	A	15%		1	4.088E-04	15%		
02/09/79	3327	3.964E-04	0.0%	0.95	31	26		15%	-3%					
02/20/79	3338	3.566E-04	0.0%	0.95	42	26		15%	-15%					
04/18/79	3395	4.733E-04	0.0%	0.95	99	26		15%	14%					
M-XYLENE (Trap/mv) (MinUnc = 5%)														
11/28/78	3254	5.051E-04	0.0%	1.61	0	31	A	4%	1%	8	4.978E-04	4%		
11/29/78	3255	4.764E-04	0.0%	1.65	1	31		4%	-4%					
11/30/78	3256	4.885E-04	0.0%	1.63	2	31		4%	-2%					
12/01/78	3257	5.211E-04	0.0%	1.60	3	31		4%	4%					
3-C7ONO2 (Trap/mv) (MinUnc = 5%)														
03/08/82	4450	2.078E-03	0.0%	3.05	0	36	A	34%	-32%	0	2.734E-03	34%		
03/19/82	4461	3.390E-03	0.0%	3.00	11	36		34%	19%					
08/12/82	4607				0	37	*			5	3.090E-03			
10/21/82	4677	3.090E-03	0.0%	2.82	70	37			0%					
3-C8ONO2 (Trap/mv) (MinUnc = 5%)														
03/08/82	4450	4.114E-03	0.0%	5.22	0	39	A	62%	-78%	0	7.307E-03	62%		
03/19/82	4461	1.050E-02	0.0%	5.22	11	39		62%	30%					
08/12/82	4607				0	40	*			1	1.110E-02			
11/30/82	4717	1.110E-02	0.0%	4.85	110	40			0%					
<b>Instrument 1403</b>														
PROPALD (TRAP#1(M)) (MinUnc = 10%)														
07/14/75	2021	1.840E-01	0.0%	0.00	0	1	A	13%	18%	2	1.504E-01	13%		
07/25/75	2032	1.380E-01	0.0%	0.00	11	1		13%	-9%					
02/02/76	2224	1.380E-01	0.0%	0.00	203	1		13%	-9%					
05/21/76	2333	1.500E-01	0.0%	0.00	312	1		13%	0%					
06/14/76	2357	1.420E-01	0.0%	0.00	336	1		13%	-6%					
11/09/76	2505	(undefined)												
05/12/77	2689				0	2	*			0	1.178E-01			
06/02/77	2710	1.178E-01	0.0%	0.00	21	2			0%					
MEK (TRAP#1(M)) (MinUnc = 10%)														
07/14/75	2021	1.620E-01	0.0%	0.00	0	4	A	10%	16%	23	1.362E-01	10%		
11/19/75	2149	1.280E-01	0.0%	0.00	128	4		10%	-6%					
12/23/75	2183	1.280E-01	0.0%	0.00	162	4		10%	-6%					
02/02/76	2224	1.280E-01	0.0%	0.00	203	4		10%	-6%					
06/04/76	2347	1.420E-01	0.0%	0.00	326	4		10%	4%					
06/09/76	2352	1.290E-01	0.0%	0.00	331	4		10%	-6%					
11/09/76	2505	(undefined)												
05/12/77	2689				0	5	*			0	1.416E-01			
05/27/77	2704	1.416E-01	0.0%	0.00	15	5			0%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 1403 (continued)</b>												
3-C5-KET (TRAP#1(M) (MinUnc = 10%))												
07/14/75	2021	1.510E-01	0.0%	0.00	0	7	A	7%	5%	1	1.435E-01	7%
02/02/76	2224	1.360E-01	0.0%	0.00	203	7		7%	-6%			
BUTYRALD (TRAP#1(M) (MinUnc = 10%))												
07/14/75	2021	6.900E-02	0.0%	0.00	0	8	A	34%	-102%	33	1.392E-01	34%
02/02/76	2224	1.520E-01	0.0%	0.00	203	8		34%	8%			
05/21/76	2333	1.690E-01	0.0%	0.00	312	8		34%	18%			
06/14/76	2357	1.670E-01	0.0%	0.00	336	8		34%	17%			
ACETONE (TRAP#1(M) (MinUnc = 10%))												
07/14/75	2021	2.520E-01	0.0%	0.00	0	9	A	7%	7%	1	2.333E-01	7%
02/02/76	2224	2.240E-01	0.0%	0.00	203	9		7%	-4%			
04/05/76	2287	2.240E-01	0.0%	0.00	266	9		7%	-4%			
2-C4ONO2 (TRAP#1(M) (MinUnc = 10%))												
12/12/75	2172	7.300E-02	0.0%	0.00	0	11	A	2%	-2%	8	7.440E-02	2%
01/12/76	2203	7.500E-02	0.0%	0.00	31	11		2%	1%			
02/02/76	2224	7.400E-02	0.0%	0.00	52	11		2%	-1%			
06/09/76	2352	7.400E-02	0.0%	0.00	180	11		2%	-1%			
10/18/76	2483	7.600E-02	0.0%	0.00	311	11		2%	2%			
11/09/76	2505	(undefined)										
05/12/77	2689				0	12	*			0	9.070E-02	
06/02/77	2710	9.070E-02	0.0%	0.00	21	12			0%			
10/27/77	2857				0	13	*			1	9.940E-02	
02/24/78	2977	9.940E-02	0.0%	0.00	120	13			0%			
2-C5ONO2 (TRAP#1(M) (MinUnc = 10%))												
12/15/75	2175	4.900E-02	0.0%	0.00	0	14	A	8%	-7%	1	5.250E-02	8%
01/12/76	2203	4.900E-02	0.0%	0.00	28	14		8%	-7%			
02/02/76	2224	5.600E-02	0.0%	0.00	49	14		8%	6%			
03/23/76	2274	5.600E-02	0.0%	0.00	99	14		8%	6%			
11/09/76	2505	(undefined)										
05/12/77	2689				0	15	*			0	6.120E-02	
06/02/77	2710	6.120E-02	0.0%	0.00	21	15			0%			
10/27/77	2857				0	16	*			0	6.590E-02	
02/24/78	2977	6.590E-02	0.0%	0.00	120	16			0%			
3-C5ONO2 (TRAP#1(M) (MinUnc = 10%))												
12/23/75	2183	6.100E-02	0.0%	0.00	0	17	A	8%	0%	1	6.075E-02	8%
01/12/76	2203	5.400E-02	0.0%	0.00	20	17		8%	-12%			
02/02/76	2224	6.400E-02	0.0%	0.00	41	17		8%	5%			
03/23/76	2274	6.400E-02	0.0%	0.00	91	17		8%	5%			
11/09/76	2505	(undefined)										
05/12/77	2689				0	18	*			0	6.260E-02	
06/02/77	2710	6.260E-02	0.0%	0.00	21	18			0%			
10/27/77	2857				0	19	*			0	7.560E-02	
02/24/78	2977	7.560E-02	0.0%	0.00	120	19			0%			
N-C9 (TRAP#1(M) (MinUnc = 10%))												
03/24/76	2275	1.930E-01	0.0%	0.00	0	20	*		0%	1	1.930E-01	
N-C9 (LOOP#1(M) (MinUnc = 10%))												
03/29/76	2280	1.354E+01	0.0%	0.00	0	21	A	3%	0%	0	1.355E+01	3%
03/30/76	2281	1.313E+01	0.0%	0.00	1	21		3%	-3%			
04/01/76	2283	1.399E+01	0.0%	0.00	3	21		3%	3%			
04/21/76	2303	1.990E+01	0.0%	0.00	0	22	*		0%	1	1.990E+01	
ACETALD (TRAP#2(M) (MinUnc = 10%))												
07/14/75	2021	7.500E-02	0.0%	0.00	0	39	A	21%	29%	8	5.322E-02	21%
11/19/75	2149	5.100E-02	0.0%	0.00	128	39		21%	-4%			
12/23/75	2183	3.800E-02	0.0%	0.00	162	39		21%	-40%			
02/02/76	2224	5.900E-02	0.0%	0.00	203	39		21%	10%			
04/08/76	2290	5.900E-02	0.0%	0.00	269	39		21%	10%			
05/19/76	2331	3.900E-02	0.0%	0.00	310	39		21%	-36%			
05/21/76	2333	5.000E-02	0.0%	0.00	312	39		21%	-6%			
06/04/76	2347	5.100E-02	0.0%	0.00	326	39		21%	-4%			
06/09/76	2352	5.700E-02	0.0%	0.00	331	39		21%	7%			
11/09/76	2505	(undefined)										
05/12/77	2689				0	40	*			0	4.200E-02	
05/27/77	2704	4.200E-02	0.0%	0.00	15	40			0%			
ACETONE (TRAP#2(M) (MinUnc = 10%))												
07/14/75	2021	1.250E-01	0.0%	0.00	0	42	A	18%	24%	8	9.500E-02	18%
11/19/75	2149	8.300E-02	0.0%	0.00	128	42		18%	-14%			
01/12/76	2203	8.800E-02	0.0%	0.00	182	42		18%	-8%			
02/02/76	2224	8.600E-02	0.0%	0.00	203	42		18%	-10%			
06/07/76	2350	9.300E-02	0.0%	0.00	329	42		18%	-2%			
11/09/76	2505	(undefined)										
05/12/77	2689				0	43	*			0	8.560E-02	
06/07/77	2715	8.560E-02	0.0%	0.00	26	43			0%			

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev		
<b>Instrument 1403 (continued)</b>														
M-XYLENE (TRAP#2(M) (MinUnc = 10%)														
05/02/75	1948	1.570E-01	0.0%	0.00	0	52	L	11%	2%	0	1.545E-01	6%	-5.67E-04	38%
05/08/75	1954	1.400E-01	0.0%	0.00	6	52		11%	-10%					
07/01/75	2008	1.680E-01	0.0%	0.00	60	52		12%	11%					
02/02/76	2224	1.190E-01	0.0%	0.00	276	52		14%	-10%					
10/13/76	2478	1.120E-01	0.0%	0.00	530	52		16%	3%					
11/09/76	2505	(undefined)												
02/22/77	2610				0	53	*			0	1.604E-01			
03/03/77	2619	1.604E-01	0.0%	0.00	9	53			0%					
05/04/77	2681	(undefined)												
05/12/77	2689				0	54	A	9%		0	1.525E-01	9%		
05/26/77	2703	1.626E-01	0.0%	0.00	14	54		9%	6%					
06/09/77	2717	1.424E-01	0.0%	0.00	28	54		9%	-7%					
10/27/77	2857	1.900E-01	0.0%	0.00	0	55	A	0%	0%	2	1.904E-01	0%		
05/05/78	3047	1.908E-01	0.0%	0.00	190	55		0%	0%					
O-XYLENE (TRAP#2(M) (MinUnc = 10%)														
05/08/75	1954	1.010E-01	0.0%	0.00	0	60	L	15%	-11%	0	1.124E-01	9%	-4.66E-04	65%
07/01/75	2008	1.250E-01	0.0%	0.00	54	60		16%	12%					
02/02/76	2224	9.300E-02	0.0%	0.00	270	60		18%	-6%					
10/13/76	2478	8.600E-02	0.0%	0.00	524	60		20%	1%					
11/09/76	2505	(undefined)												
02/22/77	2610				0	61	*			0	1.231E-01			
03/03/77	2619	1.231E-01	0.0%	0.00	9	61			0%					
05/04/77	2681	(undefined)												
10/27/77	2857				0	62	*			2	1.472E-01			
05/05/78	3047	1.472E-01	0.0%	0.00	190	62			0%					
<b>Instrument 2100</b>														
ETHANE (Loop#1) (MinUnc = 5%)														
05/25/75	1971	3.320E-01	3.9%	0.00	0	1	L	4%	-6%	39	3.507E-01	2%	-1.40E-04	10%
09/19/75	2088	3.400E-01	0.7%	0.95	117	1		4%	-1%					
10/22/75	2121	3.770E-01	0.8%	1.01	150	1		4%	9%					
01/12/76	2203	3.480E-01	0.4%	1.08	232	1		4%	3%					
01/19/76	2210	3.440E-01	1.1%	0.11	239	1		4%	1%					
03/23/76	2274	3.400E-01	0.4%	1.06	303	1		4%	1%					
06/21/76	2364	3.360E-01	1.3%	1.10	393	1		5%	1%					
01/12/77	2569	2.950E-01	0.4%	1.02	598	1		5%	-9%					
06/01/77	2709	2.200E-01	0.3%	1.04	738	0	X							
08/03/77	2772	3.030E-01	0.9%	1.01	801	1		5%	-3%					
10/31/77	2861	2.930E-01	0.2%	1.01	890	1		5%	-5%					
04/14/78	3026	2.060E-01	0.3%	0.97	1055	0	X							
04/24/78	3036	2.120E-01	0.1%	0.00	1065	0	X							
04/27/78	3039	2.110E-01	0.9%	0.00	1068	0	X							
09/29/78	3194	2.140E-01	1.2%	0.99	1223	0	X							
05/18/79	3425	2.830E-01	0.4%	0.99	1454	1		5%	1%					
12/21/79	3642	2.710E-01	0.6%	0.00	1671	1		6%	1%					
12/21/79	3642	2.740E-01	0.6%	0.00	1671	1		6%	2%					
01/07/80	3659	2.710E-01	0.5%	0.99	1688	1		6%	1%					
03/04/80	3716	2.700E-01	0.2%	0.00	1745	1		6%	2%					
01/27/81	4045	2.440E-01	0.1%	0.00	2074	1		6%	-2%					
ETHANE (Loop#2) (MinUnc = 5%)														
09/25/81	4286	6.740E-02	0.6%	0.92	0	2	L	14%	6%	7	6.317E-02	7%	2.57E-04	26%
10/08/81	4299	7.310E-02	0.0%	0.91	13	2		14%	13%					
01/17/83	4765	6.780E-02	0.2%	0.80	479	2		12%	-5%					
03/24/83	4831	6.500E-02	0.6%	0.92	545	2		12%	-11%					
01/30/84	5143	6.510E-02	0.1%	0.91	857	2		11%	-18%					
10/15/84	5402	8.270E-02	1.4%	0.98	1116	2		11%	2%					
01/02/85	5481	7.770E-02	0.1%	0.97	1195	2		11%	-6%					
01/10/86	5854	9.370E-02	0.2%	1.02	1568	2		10%	5%					
08/04/86	6060	9.870E-02	2.9%	0.00	1774	2		10%	7%					
08/12/86	6068	6.480E-02	0.2%	0.90	0	3	L	9%	5%	9	6.173E-02	5%	3.37E-04	21%
01/05/87	6214	6.190E-02	0.7%	0.84	146	3		9%	-5%					
08/18/87	6439	7.020E-02	0.1%	0.97	371	3		8%	1%					
01/10/89	6950	7.790E-02	0.5%	0.91	882	3		7%	-3%					
01/12/89	6952	7.500E-02	0.1%	0.94	884	3		7%	-7%					
06/12/89	7103	9.110E-02	1.4%	0.92	1035	3		7%	9%					
06/13/89	7104	8.190E-02	0.3%	0.84	1036	3		7%	-2%					
10/04/89	7217	6.530E-02	0.5%	0.88	0	4	L	0%	0%	8	6.530E-02	0%	1.99E-04	0%
01/02/91	7672	7.120E-02	0.0%	1.17	455	4		0%	0%					
01/11/91	7681	4.838E-02	0.0%	0.82	464	0	X							
ETHANE (Loop/are) (MinUnc = 5%)														
02/17/93	8449	3.962E-05	0.0%	1.35	0	5	*	0%		1	3.962E-05			
ETHANE (Trap#1) (MinUnc = 5%)														
05/25/75	1971	7.810E-03	1.1%	1.13	0	6	L	6%	-8%	61	8.410E-03	2%	-1.64E-04	12%
09/19/75	2088	8.770E-03	0.0%	1.05	117	6		6%	6%					
10/22/75	2121	9.090E-03	2.6%	1.08	150	6		6%	10%					
01/12/76	2203	8.260E-03	5.2%	1.15	232	6		6%	2%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2100 (continued)</b>												
01/19/76	2210	8.000E-03	1.0%	1.18	239	6	6%	-1%				
03/23/76	2274	8.000E-03	0.0%	1.11	303	6	6%	0%				
06/21/76	2364	7.810E-03	1.2%	1.17	393	6	6%	-1%				
01/12/77	2569	7.040E-03	2.0%	1.10	598	6	6%	-8%				
06/01/77	2709	5.160E-03	0.8%	1.12	738	0	X					
08/03/77	2772	7.040E-03	2.1%	1.10	801	6	6%	-4%				
10/31/77	2861	6.700E-03	2.1%	1.11	890	6	6%	-7%				
04/14/78	3026	4.810E-03	1.6%	0.00	1055	0	X					
04/24/78	3036	4.870E-03	2.8%	0.00	1065	0	X					
04/27/78	3039	4.870E-03	0.4%	0.00	1068	0	X					
09/29/78	3194	4.910E-03	1.5%	1.02	1223	0	X					
05/18/79	3425	6.500E-03	0.3%	1.03	1454	6	7%	1%				
03/04/80	3716	6.280E-03	1.8%	0.00	1745	6	8%	4%				
01/27/81	4045	5.780E-03	6.0%	1.00	2074	6	8%	4%				
02/04/81	4053	5.380E-03	3.7%	0.98	2082	6	8%	-3%				
<b>ETHANE (Trap#2) (MinUnc = 5%)</b>												
09/23/81	4284				0	7	L	17%	400	1.449E-03	9%	5.51E-05 250%
09/25/81	4286	1.430E-03	0.1%	0.94	2	7		17%				
10/08/81	4299	1.600E-03	1.0%	0.93	15	7		17%				
01/17/83	4765	1.990E-03	2.2%	0.84	481	0	X					
03/24/83	4831	1.310E-03	1.9%	0.97	547	7		16%				
01/30/84	5143	1.370E-03	4.8%	0.91	859	7		16%				
10/15/84	5402	1.740E-03	1.0%	1.03	1118	7		16%				
01/10/86	5854	2.250E-03	0.7%	1.03	0	8	L	0%	58	2.250E-03	0%	1.38E-03 0%
08/04/86	6060	2.890E-03	6.1%	1.01	206	8		0%				
08/12/86	6068				0	9	L	21%	10	1.216E-03	13%	5.20E-04 40%
08/25/86	6081	1.280E-03	1.8%	0.93	13	9		21%				
01/05/87	6214	1.160E-03	0.8%	0.88	146	9		20%				
06/25/88	6751	1.860E-03	1.3%	0.93	683	9		16%				
06/12/89	7103	1.750E-03	0.5%	0.87	1035	9		14%				
<b>ACETYLEN (Loop#1) (MinUnc = 5%)</b>												
05/25/75	1971	4.420E-01	5.5%	1.63	0	10	L	7%	0	4.383E-01	5%	8.14E-04 55%
09/19/75	2088	4.630E-01	0.0%	1.55	117	10		6%				
10/22/75	2121	5.050E-01	0.7%	1.63	150	10		6%				
01/12/76	2203	3.440E-01	0.2%	1.69	0	11	L	14%	70	3.370E-01	5%	-1.30E-04 39%
01/19/76	2210	3.450E-01	1.1%	1.74	7	11		14%				
03/23/76	2274	3.480E-01	0.3%	1.66	71	11		14%				
03/23/76	2274	3.480E-01	0.2%	0.00	71	11		14%				
03/25/76	2276	3.440E-01	0.4%	0.00	73	11		14%				
06/04/76	2347	3.890E-01	0.1%	1.65	144	11		14%				
06/21/76	2364	3.650E-01	2.4%	1.74	161	11		14%				
08/20/76	2424	3.620E-01	1.0%	1.73	221	11		15%				
01/12/77	2569	2.990E-01	0.8%	1.63	366	11		15%				
06/01/77	2709	2.360E-01	0.6%	1.68	506	11		15%				
08/03/77	2772	3.230E-01	1.5%	1.63	569	11		15%				
10/31/77	2861	3.090E-01	0.2%	1.63	658	11		16%				
04/14/78	3026	2.090E-01	0.5%	1.55	823	11		16%				
04/27/78	3039	2.210E-01	0.4%	0.00	836	11		16%				
09/29/78	3194	2.190E-01	1.0%	1.60	991	11		16%				
05/18/79	3425	2.850E-01	0.6%	1.60	1222	11		17%				
12/21/79	3642	3.150E-01	0.6%	0.00	1439	11		17%				
12/21/79	3642	3.200E-01	0.3%	0.00	1439	11		17%				
01/07/80	3659	3.010E-01	0.9%	1.59	1456	11		17%				
03/04/80	3716	2.810E-01	1.0%	0.00	1513	11		18%				
01/27/81	4045	2.840E-01	0.5%	0.00	1842	11		19%				
<b>ACETYLEN (Loop#2) (MinUnc = 5%)</b>												
09/25/81	4286	7.310E-02	0.9%	1.47	0	12	L	12%	7	7.286E-02	5%	3.03E-06 943%
10/08/81	4299	7.640E-02	0.0%	1.46	13	12		12%				
01/17/83	4765	6.740E-02	0.6%	1.26	479	12		12%				
03/24/83	4831	6.930E-02	0.4%	1.43	545	12		12%				
01/30/84	5143	6.520E-02	0.1%	1.41	857	12		12%				
10/15/84	5402	8.400E-02	1.2%	1.65	1116	12		12%				
01/02/85	5481	7.940E-02	0.5%	1.57	1195	12		12%				
01/10/86	5854	9.840E-02	0.0%	1.67	1568	0	X					
08/12/86	6068	7.120E-02	0.2%	1.47	1782	12		12%				
01/05/87	6214	6.650E-02	0.1%	1.36	1928	12		12%				
08/18/87	6439	7.850E-02	0.0%	1.61	2153	12		12%				
01/12/89	6952	7.740E-02	0.3%	1.55	2666	12		12%				
07/12/89	7133	8.480E-02	1.6%	1.05	2847	12		12%				
07/13/89	7134	7.450E-02	0.0%	1.40	2848	12		12%				
10/04/89	7217	5.700E-02	0.2%	1.43	2931	12		12%				
<b>ACETYLEN (Trap#1) (MinUnc = 5%)</b>												
05/25/75	1971	1.040E-02	7.4%	1.67	-2315	0	X					
09/19/75	2088	1.240E-02	0.0%	1.60	-2198	0	X					
10/22/75	2121	1.210E-02	3.4%	1.69	-2165	0	X					
01/12/76	2203	8.580E-03	5.5%	1.81	0	13	L	6%	151	8.611E-03	2%	-1.33E-04 16%
01/19/76	2210	8.260E-03	1.4%	1.83	7	13		6%				
03/23/76	2274	8.480E-03	0.6%	1.73	71	13		6%				

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2100 (continued)</b>													
06/04/76	2347	9.350E-03	2.5%	1.76	144	13	6%	10%					
06/21/76	2364	9.010E-03	1.9%	1.83	161	13	6%	6%					
08/20/76	2424	8.260E-03	0.6%	1.85	221	13	6%	-1%					
10/20/76	2485	8.400E-03	0.7%	0.00	282	13	6%	1%					
01/12/77	2569	7.410E-03	3.7%	1.76	366	13	6%	-11%					
06/01/77	2709	5.770E-03	0.6%	1.79	506	0	X						
08/03/77	2772	8.070E-03	2.4%	1.75	569	13	6%	1%					
10/31/77	2861	7.490E-03	0.9%	1.76	658	13	6%	-5%					
04/14/78	3026	4.950E-03	1.3%	1.60	823	0	X						
04/27/78	3039	5.130E-03	0.6%	0.00	836	0	X						
09/29/78	3194	5.060E-03	0.5%	1.64	991	0	X						
05/18/79	3425	6.680E-03	0.8%	1.65	1222	13	7%	-8%					
03/04/80	3716	6.910E-03	3.1%	0.00	1513	13	7%	1%					
01/27/81	4045	6.750E-03	4.6%	1.60	1842	13	7%	4%					
02/04/81	4053	6.680E-03	3.6%	1.58	1850	13	7%	3%					
09/22/81	4283				0	14	L	24%	466	1.725E-03	11%	1.33E-05	535%
09/25/81	4286	1.620E-03	0.2%	1.51	3	14		24%					-6%
10/08/81	4299	1.710E-03	1.3%	1.50	16	14		24%					-1%
01/17/83	4765	2.150E-03	1.7%	1.32	482	14		24%					19%
03/24/83	4831	1.490E-03	2.0%	1.53	548	14		24%					-17%
01/30/84	5143	1.450E-03	5.0%	1.42	860	14		24%					-20%
10/15/84	5402	1.860E-03	0.9%	1.70	1119	14		24%					6%
01/10/86	5854	2.520E-03	0.9%	1.69	1571	14		24%					30%
07/09/86	6034	0.000E+00	0.0%	0.00	1751	0	X						
08/25/86	6081	1.470E-03	1.3%	1.50	1798	14		24%					-20%
01/05/87	6214	1.330E-03	2.6%	1.39	1931	14		24%					-33%
07/25/88	6781	2.000E-03	1.4%	1.58	2498	14		24%					11%
07/12/89	7133	1.690E-03	0.5%	1.44	2850	14		23%					-6%
<b>ETHENE (Loop#1) (MinUnc = 5%)</b>													
05/25/75	1971	2.700E-01	3.2%	0.83	0	15	L	4%	55	2.817E-01	2%	-1.45E-04	10%
09/19/75	2088	2.790E-01	0.4%	0.75	117	15		4%					1%
10/22/75	2121	3.050E-01	1.1%	0.83	150	15		4%					10%
01/12/76	2203	2.790E-01	0.1%	0.91	232	15		5%					2%
01/19/76	2210	2.750E-01	1.0%	0.95	239	15		5%					1%
03/23/76	2274	2.700E-01	0.5%	0.90	303	15		5%					0%
05/03/76	2315	2.650E-01	0.0%	0.00	344	15		5%					-1%
06/21/76	2364	2.690E-01	1.4%	0.94	393	15		5%					1%
01/12/77	2569	2.310E-01	0.8%	0.87	598	15		5%					-11%
06/01/77	2709	1.740E-01	0.5%	0.89	738	0	X						
08/03/77	2772	2.420E-01	1.2%	0.87	801	15		5%					-3%
10/31/77	2861	2.340E-01	0.2%	0.87	890	15		5%					-5%
04/14/78	3026	1.650E-01	0.5%	0.83	1055	0	X						
04/24/78	3036	1.700E-01	0.3%	0.00	1065	0	X						
04/27/78	3039	1.700E-01	0.5%	0.00	1068	0	X						
09/29/78	3194	1.690E-01	0.9%	0.85	1223	0	X						
05/18/79	3425	2.230E-01	0.3%	0.85	1454	15		6%					0%
12/21/79	3642	2.150E-01	0.4%	0.00	1671	15		6%					1%
12/21/79	3642	2.170E-01	0.3%	0.00	1671	15		6%					2%
01/07/80	3659	2.170E-01	0.5%	0.85	1688	15		6%					2%
04/04/80	3747	2.140E-01	0.4%	0.00	1776	15		6%					2%
01/27/81	4045	1.970E-01	5.5%	0.00	2074	15		6%					0%
<b>ETHENE (Loop#2) (MinUnc = 5%)</b>													
09/25/81	4286	5.460E-02	0.6%	0.80	2315	0	X						
10/08/81	4299	5.960E-02	0.0%	0.79	2328	0	X						
12/19/82	4736				0	16	L	9%	5	5.079E-02	4%	4.70E-04	13%
01/17/83	4765	5.530E-02	0.2%	0.71	29	16		9%					7%
03/03/83	4810	5.350E-02	0.1%	0.72	74	16		9%					2%
03/24/83	4831	5.450E-02	0.6%	0.81	95	16		8%					3%
01/30/84	5143	5.390E-02	0.2%	0.81	407	16		7%					-12%
10/15/84	5402	6.750E-02	1.2%	0.85	666	16		7%					1%
01/02/85	5481	6.400E-02	0.2%	0.86	745	16		7%					-7%
01/10/86	5854	7.900E-02	0.4%	0.89	1118	16		6%					2%
08/04/86	6060	8.510E-02	2.4%	0.88	1324	16		5%					3%
08/12/86	6068	5.410E-02	0.1%	0.80	0	17	L	13%	85	5.278E-02	7%	2.19E-04	36%
01/05/87	6214	5.210E-02	0.7%	0.76	146	17		13%					-5%
08/18/87	6439	5.620E-02	0.0%	0.87	371	17		12%					-2%
01/10/89	6950	6.320E-02	0.4%	0.81	882	17		11%					0%
01/12/89	6952	6.150E-02	0.3%	0.82	884	17		11%					-2%
06/12/89	7103	7.520E-02	1.2%	0.81	1035	17		11%					14%
06/13/89	7104	6.840E-02	0.1%	0.75	1036	17		11%					5%
10/04/89	7217	5.620E-02	0.4%	0.78	1149	17		10%					-18%
06/18/90	7474	6.800E-02	0.0%	0.00	1406	17		10%					-2%
10/26/90	7604	3.630E-02	0.0%	0.00	0	18	L	14%	16	4.088E-02	9%	6.63E-04	215%
11/05/90	7614	4.540E-02	0.0%	0.00	10	18		14%					9%
01/02/91	7672	4.510E-02	0.0%	1.02	68	18		14%					5%
01/11/91	7681	4.511E-02	0.0%	0.72	77	18		14%					5%
01/22/91	7692	3.906E-02	0.1%	0.79	88	18		14%					-11%
01/29/91	7699				0	19	L	22%	34	4.566E-02	18%	-4.03E-05	2988%
05/21/91	7811	5.756E-02	0.0%	0.75	112	19		22%					21%
05/28/91	7818	4.717E-02	0.1%	0.76	119	19		22%					4%



Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev		
<b>Instrument 2100 (continued)</b>														
05/29/91	7819	4.528E-02	0.0%	0.76	120	19	22%	0%						
05/31/91	7821	4.777E-02	0.0%	0.75	122	19	22%	5%						
06/03/91	7824	4.870E-02	0.1%	0.80	125	19	22%	7%						
06/06/91	7827	5.332E-02	0.1%	0.79	128	19	22%	15%						
06/12/91	7833	5.251E-02	0.1%	0.78	134	19	22%	14%						
06/13/91	7834	4.189E-02	0.0%	0.77	135	19	22%	-8%						
06/14/91	7835	4.245E-02	0.0%	0.75	136	19	22%	-7%						
06/17/91	7838	3.807E-02	0.0%	0.76	139	19	22%	-19%						
06/18/91	7839	3.823E-02	0.0%	0.77	140	19	22%	-19%						
06/19/91	7840	3.826E-02	0.0%	0.76	141	19	22%	-19%						
06/20/91	7841	3.912E-02	0.0%	0.75	142	19	22%	-16%						
06/21/91	7842	4.051E-02	0.0%	0.74	143	19	22%	-12%						
06/24/91	7845	4.147E-02	0.0%	0.75	146	19	22%	-9%						
06/24/91	7845	4.195E-02	0.0%	0.75	146	19	22%	-8%						
06/25/91	7846	3.902E-02	0.0%	0.76	147	19	22%	-16%						
07/08/91	7859	4.775E-02	0.0%	0.80	160	19	22%	5%						
07/19/91	7870	4.185E-02	0.0%	0.80	171	19	22%	-8%						
07/22/91	7873	4.759E-02	0.0%	0.80	174	19	22%	5%						
07/23/91	7874	4.866E-02	0.0%	0.79	175	19	22%	7%						
07/24/91	7875	5.210E-02	0.0%	0.84	176	19	22%	13%						
07/25/91	7876	5.006E-02	0.0%	0.79	177	19	22%	9%						
08/05/91	7887	4.816E-02	0.0%	0.80	188	19	22%	6%						
<b>ETHENE (Loop/are) (MinUnc = 5%)</b>														
08/02/91	7884				0	20	L	7%		76	5.061E-05	4%	-9.55E-04	28%
08/05/91	7887	4.589E-05	0.0%	0.80	3	20		7%	-10%					
09/09/91	7922	4.829E-05	0.0%	0.00	38	20		7%	-1%					
10/02/91	7945	5.036E-05	0.0%	0.00	61	20		7%	5%					
10/03/91	7946	5.027E-05	0.0%	0.00	62	20		7%	5%					
11/01/91	7975	5.402E-05	0.0%	0.00	91	0	X							
11/08/91	7982	4.765E-05	0.0%	0.00	98	20		8%	4%					
12/12/91	8016	4.379E-05	0.0%	0.00	132	20		8%	-1%					
12/18/91	8022	4.310E-05	0.0%	0.00	138	20		8%	-2%					
01/03/92	8038	4.643E-05	0.0%	0.00	154	20		8%	7%					
01/06/92	8041	4.532E-05	0.0%	0.00	157	20		8%	5%					
01/16/92	8051	4.310E-05	0.0%	0.78	167	20		8%	1%					
01/31/92	8066	3.601E-05	0.0%	0.80	182	20		8%	-16%					
02/03/92	8069	3.938E-05	0.0%	0.80	185	20		8%	-6%					
02/12/92	8078	4.238E-05	0.0%	0.78	194	20		8%	3%					
02/18/92	8084	5.687E-05	0.0%	0.78	0	21	L	5%	0%	62	5.668E-05	2%	-4.60E-04	42%
02/25/92	8091	5.447E-05	0.0%	0.79	7	21		5%	-4%					
02/28/92	8094	5.683E-05	0.0%	0.78	10	21		5%	1%					
03/12/92	8107	5.900E-05	0.0%	0.78	23	21		5%	5%					
04/01/92	8127	5.788E-05	0.0%	0.78	43	21		5%	4%					
04/15/92	8141	4.939E-05	0.0%	0.78	57	21		5%	-12%					
05/19/92	8175	5.509E-05	0.0%	0.77	91	21		5%	1%					
05/20/92	8176	5.486E-05	0.0%	0.77	92	21		5%	1%					
06/25/92	8212	5.481E-05	0.0%	0.77	128	21		5%	3%					
07/10/92	8227	5.212E-05	0.0%	0.78	143	21		5%	-2%					
07/30/92	8247	5.310E-05	0.0%	0.77	163	21		5%	1%					
08/27/92	8275	5.104E-05	0.0%	0.77	191	21		5%	-1%					
08/29/92	8277	4.305E-05	0.0%	0.77	0	22	L	6%	3%	125	4.166E-05	2%	-8.67E-05	121%
10/07/92	8316	4.355E-05	0.0%	0.77	39	22		6%	5%					
10/16/92	8325	4.330E-05	0.0%	0.76	48	22		6%	4%					
10/29/92	8338	3.609E-05	0.0%	0.77	61	22		6%	-15%					
11/18/92	8358	4.433E-05	0.0%	0.78	81	22		6%	7%					
11/24/92	8364	4.358E-05	0.0%	0.77	87	22		6%	5%					
12/03/92	8373	3.941E-05	0.0%	0.78	96	22		6%	-5%					
12/04/92	8374	3.952E-05	0.0%	0.79	97	22		6%	-5%					
12/11/92	8381	4.093E-05	0.0%	0.79	104	22		6%	-1%					
01/04/93	8405	4.431E-05	0.0%	0.79	128	22		6%	7%					
01/11/93	8412	4.333E-05	0.0%	0.79	135	22		6%	5%					
01/29/93	8430	4.004E-05	0.0%	0.78	153	22		6%	-3%					
02/02/93	8434	3.783E-05	0.0%	0.77	157	22		6%	-9%					
02/12/93	8444	4.497E-05	0.0%	0.77	167	22		6%	9%					
02/26/93	8458	3.964E-05	0.0%	0.77	181	22		6%	-3%					
03/19/93	8479	3.862E-05	0.0%	0.93	202	22		6%	-6%					
04/02/93	8493	4.371E-05	0.0%	0.77	216	22		6%	6%					
04/02/93	8493	3.950E-05	0.0%	0.78	216	22		6%	-3%					
04/05/93	8496	4.022E-05	0.0%	0.78	219	22		6%	-2%					
04/23/93	8514	3.858E-05	0.0%	0.78	237	22		6%	-6%					
05/11/93	8532	4.002E-05	0.0%	0.78	255	22		6%	-2%					
05/17/93	8538	3.850E-05	0.0%	0.78	261	22		6%	-6%					
05/20/93	8541	3.800E-05	0.0%	0.77	264	22		6%	-7%					
10/12/93	8686	4.124E-05	0.0%	0.77	409	22		7%	3%					
10/12/93	8686	4.100E-05	0.0%	0.77	409	22		7%	2%					
10/19/93	8693	4.310E-05	0.0%	0.75	416	22		7%	7%					
<b>ETHENE (Trap#1) (MinUnc = 5%)</b>														
05/25/75	1971	6.330E-03	0.4%	0.92	0	23	L	5%	-6%	77	6.684E-03	2%	-1.60E-04	12%
09/19/75	2088	7.190E-03	0.0%	0.85	117	23		6%	9%					
10/22/75	2121	6.990E-03	3.0%	0.90	150	23		6%	7%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2100 (continued)</b>													
01/12/76	2203	6.580E-03	0.3%	0.98	232	23	6%	2%					
01/19/76	2210	6.290E-03	1.4%	1.04	239	23	6%	-2%					
03/23/76	2274	6.250E-03	0.0%	0.95	303	23	6%	-2%					
06/21/76	2364	6.330E-03	1.4%	0.00	393	23	6%	1%					
10/21/76	2486	6.290E-03	0.8%	0.00	515	23	6%	3%					
01/12/77	2569	5.530E-03	2.0%	0.94	598	23	6%	-9%					
06/01/77	2709	4.070E-03	1.8%	0.96	738	0	X						
08/03/77	2772	5.530E-03	1.1%	0.95	801	23	6%	-5%					
10/31/77	2861	5.330E-03	0.7%	0.95	890	23	6%	-8%					
04/14/78	3026	3.790E-03	1.5%	0.86	1055	0	X						
04/24/78	3036	3.840E-03	4.3%	0.00	1065	0	X						
04/27/78	3039	3.820E-03	0.3%	0.00	1068	0	X						
09/29/78	3194	3.880E-03	2.7%	0.88	1223	0	X						
05/18/79	3425	5.010E-03	0.8%	0.88	1454	23	7%	-2%					
04/04/80	3747	5.120E-03	0.2%	0.00	1776	23	8%	7%					
01/27/81	4045	4.670E-03	0.7%	0.85	2074	23	8%	4%					
02/04/81	4053	4.360E-03	3.5%	0.85	2082	23	8%	-2%					
<b>ETHENE (Trap#2) (MinUnc = 5%)</b>													
09/23/81	4284				0	24	L	20%		464	1.234E-03	9%	1.06E-05 555%
09/25/81	4286	1.150E-03	0.1%	0.82	2	24		20%	-7%				
10/08/81	4299	1.290E-03	0.6%	0.81	15	24		20%	4%				
01/17/83	4765	1.600E-03	2.3%	0.75	481	24		20%	23%				
03/24/83	4831	1.060E-03	1.9%	0.87	547	24		20%	-17%				
01/30/84	5143	1.100E-03	4.2%	0.82	859	24		20%	-13%				
07/17/84	5312	1.340E-03	1.1%	0.93	1028	24		20%	7%				
10/15/84	5402	1.380E-03	1.0%	0.92	1118	24		20%	10%				
01/10/86	5854	1.860E-03	0.5%	0.90	1570	0	X						
08/04/86	6060	2.470E-03	7.1%	0.90	1776	0	X						
08/25/86	6081	1.020E-03	2.6%	0.82	1797	24		19%	-23%				
01/05/87	6214	9.400E-04	1.0%	0.79	1930	24		19%	-34%				
06/25/88	6751	1.450E-03	1.9%	0.81	2467	24		19%	13%				
06/12/89	7103	1.410E-03	0.4%	0.77	2819	24		19%	10%				
<b>METHANE (Loop#1) (MinUnc = 5%)</b>													
05/25/75	1971	2.600E-01	1.2%	0.25	0	25	L	4%	-4%	0	2.695E-01	2%	2.19E-04 40%
09/19/75	2088	2.700E-01	4.0%	0.25	117	25		4%	-2%				
10/22/75	2121	2.960E-01	0.2%	0.28	150	25		4%	6%				
01/12/76	2203	2.900E-01	0.5%	0.32	232	25		4%	2%				
01/19/76	2210	2.870E-01	1.5%	0.32	239	25		4%	1%				
03/23/76	2274	2.840E-01	0.5%	0.32	303	25		4%	-1%				
05/03/76	2315	2.870E-01	0.2%	0.00	344	25		4%	-1%				
06/04/76	2347	2.890E-01	0.4%	0.32	376	25		4%	-1%				
06/21/76	2364	2.890E-01	1.3%	0.32	393	25		4%	-1%				
01/12/77	2569	2.190E-01	0.5%	0.28	0	26	L	5%	-4%	60	2.280E-01	3%	-6.14E-05 49%
06/01/77	2709	1.730E-01	2.2%	0.29	140	0	X						
08/03/77	2772	2.320E-01	0.0%	0.29	203	26		5%	3%				
10/31/77	2861	2.320E-01	0.9%	0.29	292	26		5%	3%				
04/14/78	3026	1.610E-01	6.3%	0.28	457	0	X						
04/24/78	3036	1.670E-01	1.4%	0.00	467	0	X						
04/27/78	3039	1.630E-01	0.3%	0.00	470	0	X						
09/29/78	3194	1.720E-01	0.4%	0.28	625	0	X						
05/18/79	3425	2.160E-01	0.0%	0.28	856	26		5%	0%				
10/21/79	3581	2.130E-01	0.9%	0.00	1012	26		5%	0%				
12/21/79	3642	2.140E-01	0.5%	0.00	1073	26		5%	0%				
01/07/80	3659	2.160E-01	0.4%	0.29	1090	26		5%	2%				
03/04/80	3716	1.930E-01	3.4%	0.00	1147	26		5%	-10%				
01/27/81	4045	2.170E-01	5.0%	0.00	1476	26		6%	4%				
<b>METHANE (Loop#2) (MinUnc = 5%)</b>													
08/25/81	4255	5.210E-02	0.2%	0.30	0	27	L	8%	0%	461	5.190E-02	4%	3.16E-04 11%
10/08/81	4299	5.680E-02	0.2%	0.29	44	27		7%	7%				
01/17/83	4765	5.460E-02	0.4%	0.30	510	27		6%	-10%				
03/24/83	4831	6.420E-02	0.1%	0.32	576	27		6%	4%				
01/30/84	5143	6.430E-02	0.1%	0.32	888	27		6%	-3%				
10/15/84	5402	6.960E-02	0.4%	0.28	1147	27		6%	-2%				
01/02/85	5481	6.950E-02	0.3%	0.33	1226	27		5%	-4%				
01/10/86	5854	7.960E-02	0.5%	0.34	1599	27		5%	2%				
08/04/86	6060	8.430E-02	1.1%	0.31	1805	27		5%	3%				
08/12/86	6068	5.850E-02	0.0%	0.30	0	28	L	12%	10%	12	5.288E-02	7%	2.44E-04 35%
01/05/87	6214	5.370E-02	0.3%	0.30	146	28		12%	-2%				
08/18/87	6439	5.200E-02	1.0%	0.31	371	28		11%	-11%				
01/12/89	6952	5.800E-02	0.1%	0.30	884	28		10%	-11%				
07/12/89	7133	6.980E-02	0.1%	0.30	1065	28		10%	5%				
07/13/89	7134	7.180E-02	0.1%	0.27	1066	28		10%	7%				
10/04/89	7217	6.680E-02	0.2%	0.30	1149	28		10%	-1%				
<b>Instrument 2195</b>													
<b>ETHANE (Trap#1) (MinUnc = 5%)</b>													
08/02/82	4597	2.170E-03	0.0%	1.20	0	3	L	13%	10%	48	1.942E-03	7%	-1.92E-04 227%
08/24/82	4619	1.910E-03	0.0%	1.15	22	3		13%	-1%				

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev	
<b>Instrument 2195 (continued)</b>														
11/24/82	4711	1.670E-03	0.0%	1.04	114	3	13%	-14%						
12/01/82	4718	1.800E-03	0.0%	1.04	121	3	13%	-5%						
06/09/83	4908	1.950E-03	0.0%	1.05	311	3	14%	6%						
09/07/83	4998				0	4	*		15	3.520E-03				
09/09/83	5000	3.520E-03	0.0%	1.03	2	4		0%						
04/10/85	5579	1.460E-03	0.0%	0.99	581	0	X							
05/15/85	5614	3.010E-03	6.1%	1.20	0	5	*	0%	23	3.010E-03				
10/07/85	5759	6.140E-03	3.6%	1.03	0	6	*	0%	1	6.140E-03				
ACETYLEN (Trap#1) (MinUnc = 5%)														
08/02/82	4597	4.310E-03	0.0%	1.88	0	9	L	27%	22%	83	3.376E-03	12%	1.24E-03	22%
08/24/82	4619	3.450E-03	0.0%	1.75	22	9		26%	-1%					
11/24/82	4711	2.755E-03	0.0%	1.55	114	9		24%	-40%					
12/01/82	4718	3.460E-03	0.0%	1.61	121	9		23%	-12%					
06/09/83	4908	4.440E-03	0.0%	1.65	311	9		19%	-5%					
09/07/83	4998	0.000E+00	0.0%	0.00	401	0	X							
09/09/83	5000	6.050E-03	0.0%	1.66	403	9		18%	16%					
04/10/85	5579	2.880E-03	1.6%	1.52	982	0	X							
05/15/85	5614	7.490E-03	8.9%	1.91	1017	9		12%	-2%					
10/01/85	5753				0	10	*		4	0.000E+00				
10/07/85	5759	1.880E-02	25.5%	1.64	0	11	*	0%	1	1.880E-02				
ETHENE (Trap#1) (MinUnc = 5%)														
08/02/82	4597	1.710E-03	0.0%	1.00	0	14	A	9%	11%	52	1.518E-03	9%		
08/24/82	4619	1.530E-03	0.0%	1.00	22	14		9%	1%					
11/24/82	4711	1.320E-03	0.0%	0.93	114	14		9%	-15%					
12/01/82	4718	1.480E-03	0.0%	0.91	121	14		9%	-3%					
06/09/83	4908	1.550E-03	0.0%	0.91	311	14		9%	2%					
09/07/83	4998				0	15	L	0%		54	2.771E-03	0%	-2.70E-04	0%
09/09/83	5000	2.770E-03	0.0%	0.90	2	15		0%	0%					
04/10/85	5579	1.240E-03	2.4%	0.85	581	0	X							
05/15/85	5614	2.310E-03	6.0%	1.00	616	15		0%	0%					
10/07/85	5759	2.590E-03	13.8%	0.90	0	16	*	0%	8	2.590E-03				
METHANE (Loop#1) (MinUnc = 5%)														
08/02/82	4597	5.833E-02	0.0%	0.36	0	17	L	7%	0%	78	5.854E-02	3%	-2.46E-04	23%
08/20/82	4615	9.770E-02	0.0%	0.40	18	0	X							
08/24/82	4619	5.720E-02	0.0%	0.35	22	17		7%	-2%					
11/24/82	4711	5.820E-02	0.0%	0.38	114	17		7%	2%					
11/29/82	4716	5.810E-02	0.0%	0.38	119	17		7%	2%					
06/09/83	4908	5.280E-02	0.0%	0.37	311	17		8%	-2%					
09/09/83	5000	7.770E-02	0.0%	0.32	403	0	X							
04/10/85	5579	3.890E-02	1.4%	0.30	982	17		9%	-14%					
05/15/85	5614	4.930E-02	2.3%	0.31	1017	17		9%	11%					
10/07/85	5759	3.910E-02	1.3%	0.36	0	18	*	0%	1	3.910E-02				
<b>Instrument 2120</b>														
MEOH (Trap/are) (MinUnc = 5%)														
10/23/84	5410	2.200E-02	0.2%	2.99	0	14	A	20%	13%	7	1.925E-02	20%		
01/18/85	5497	1.650E-02	0.0%	3.09	87	14		20%	-17%					
ETOH (Loop/are) (MinUnc = 5%)														
07/13/90	7499	1.440E-07	0.0%	0.00	0	17	*	0%	3	1.440E-07				
<b>Instrument 1400</b>														
CYCC6 (Loop/mv) (MinUnc = 5%)														
03/10/81	4087	2.771E-02	0.0%	3.28	0	2	A	8%	-7%	0	2.970E-02	8%		
05/22/81	4160	3.240E-02	0.0%	3.28	73	2		8%	8%					
04/05/83	4843	2.900E-02	0.0%	3.21	756	2		8%	-2%					
10/26/83	5047	3.130E-02	0.0%	3.20	0	3	L	0%	0%	1	3.130E-02	0%	2.00E-03	0%
07/19/84	5314	4.800E-02	0.0%	3.15	267	3		0%	0%					
ISOPRENE (Loop/mv) (MinUnc = 5%)														
04/17/81	4125	2.390E-02	0.0%	2.46	0	4	L	10%	7%	9	2.233E-02	5%	2.83E-04	13%
04/22/82	4495	2.220E-02	0.0%	2.16	370	4		9%	-11%					
06/02/82	4536	2.410E-02	0.0%	2.18	411	4		9%	-3%					
05/14/84	5248	3.170E-02	0.0%	2.40	1123	4		8%	7%					
11/13/87	6526	3.720E-02	0.0%	2.35	2401	4		6%	-1%					
11/17/87	6530	3.730E-02	0.0%	2.35	2405	4		6%	-1%					
N-C6 (Loop/mv) (MinUnc = 5%)														
05/22/81	4160	1.970E-02	0.0%	2.30	0	5	A	3%	4%	4	1.900E-02	3%		
08/26/81	4256	1.966E-02	0.0%	2.30	96	5		3%	3%					
03/01/82	4443	1.840E-02	0.0%	2.12	283	5		3%	-3%					
03/29/82	4471	1.860E-02	0.0%	2.12	311	5		3%	-2%					
04/08/82	4481	1.931E-02	0.0%	2.12	321	5		3%	2%					
10/20/82	4676	1.830E-02	0.0%	2.07	516	5		3%	-4%					
07/11/83	4940	(undefined)												
03/16/89	7015	2.930E-02	0.0%	2.28	0	6	*	0%	0	2.930E-02				
01/10/90	7315				0	7	A	3%	0	4.575E-02	3%			

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F( fit ) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 1400 (continued)</b>													
05/21/90	7446	4.660E-02	0.0%	3.80	131	7		3%	2%				
02/28/91	7729	4.490E-02	0.0%	4.07	414	7		3%	-2%				
N-C4 (Loop/mv) (MinUnc = 5%)													
07/10/81	4209	2.025E-02	0.0%	1.75	0	8	A	5%	-8%	1	2.187E-02	5%	
08/26/81	4256	2.197E-02	0.0%	1.75	47	8		5%	0%				
03/19/82	4461	2.310E-02	0.0%	1.65	252	8		5%	5%				
03/26/82	4468	2.214E-02	0.0%	1.65	259	8		5%	1%				
10/19/82	4675	2.190E-02	0.0%	1.61	466	8		5%	0%				
N-C5 (Loop/mv) (MinUnc = 5%)													
07/14/81	4213	1.955E-02	0.0%	1.92	0	9	A	3%	2%	12	1.924E-02	3%	
09/08/81	4269	1.957E-02	0.0%	1.95	56	9		3%	2%				
03/23/82	4465	1.960E-02	0.0%	1.91	252	9		3%	2%				
07/01/82	4565	1.823E-02	0.0%	1.79	352	9		3%	-6%				
07/11/83	4940	(undefined)											
03/16/89	7015	2.970E-02	0.0%	1.98	0	10	A	4%	-5%	0	3.120E-02	4%	
03/20/89	7019	3.240E-02	0.0%	1.94	4	10		4%	4%				
03/21/89	7020	3.150E-02	0.0%	1.95	5	10		4%	1%				
01/10/90	7315	(undefined)			0	11	*			0	3.460E-02		
09/17/90	7565	3.460E-02	0.0%	2.43	250	11			0%				
N-C7 (Loop/mv) (MinUnc = 5%)													
09/11/81	4272	2.141E-02	0.0%	3.03	0	12	A	3%	-2%	21	2.178E-02	3%	
03/01/82	4443	2.160E-02	0.0%	2.80	171	12		3%	-1%				
03/29/82	4471	2.160E-02	0.0%	2.80	199	12		3%	-1%				
04/08/82	4481	2.191E-02	0.0%	2.80	209	12		3%	1%				
07/01/82	4565	2.288E-02	0.0%	2.79	293	12		3%	5%				
10/20/82	4676	2.130E-02	0.0%	2.71	404	12		3%	-2%				
07/11/83	4940	(undefined)											
03/16/89	7015	3.270E-02	0.0%	2.95	0	13	*		0%	0	3.270E-02		
N-C8 (Loop/mv) (MinUnc = 5%)													
09/11/81	4272	3.068E-02	0.0%	4.67	0	14	A	4%	-1%	15	3.086E-02	4%	
03/01/82	4443	3.220E-02	0.0%	4.27	171	14		4%	4%				
03/29/82	4471	3.080E-02	0.0%	4.25	199	14		4%	0%				
04/08/82	4481	3.225E-02	0.0%	4.25	209	14		4%	4%				
10/20/82	4676	2.970E-02	0.0%	4.10	404	14		4%	-4%				
03/02/84	5175	2.950E-02	0.0%	4.40	903	14		4%	-5%				
05/18/84	5252	(undefined)											
01/02/86	5846	3.920E-02	0.0%	4.49	0	15	A	6%	-4%	0	4.080E-02	6%	
03/16/89	7015	4.240E-02	0.0%	4.39	1169	15		6%	4%				
SI20ME6 (Loop/mv) (MinUnc = 5%)													
03/15/91	7744	7.365E-02	2.6%	0.00	0	20	A	2%	1%	2	7.262E-02	2%	
04/08/91	7768	7.159E-02	1.1%	0.00	24	20		2%	-1%				
FURAN (Loop/mv) (MinUnc = 5%)													
05/04/82	4507	5.726E-02	0.0%	3.21	0	21	A	8%	5%	5	5.423E-02	8%	
12/15/83	5097	5.120E-02	0.0%	3.44	590	21		8%	-6%				
05/18/84	5252	(undefined)											
02/17/88	6622	7.220E-02	0.0%	3.40	0	22	*		0%	0	7.220E-02		
224TM-C5 (Loop/mv) (MinUnc = 5%)													
01/20/83	4768	2.130E-02	0.0%	2.51	0	28	A	25%	-15%	0	2.443E-02	25%	
03/02/84	5175	2.040E-02	0.0%	2.79	407	28		25%	-20%				
08/30/84	5356	3.160E-02	0.0%	2.78	588	28		25%	23%				
MTBE (Loop/mv) (MinUnc = 10%)													
01/20/83	4768	4.290E-02	0.0%	2.45	0	31	*		0%	3	4.290E-02		
01/10/90	7315	(undefined)			0	32	A	7%		4	8.590E-02	7%	
05/21/90	7446	9.030E-02	0.0%	3.90	131	32		7%	5%				
06/14/90	7470	8.150E-02	0.0%	3.90	155	32		7%	-5%				
ME-CYCC6 (Loop/mv) (MinUnc = 5%)													
03/02/84	5175	3.110E-02	0.0%	3.82	0	39	*		0%	4	3.110E-02		
05/18/84	5252	(undefined)											
01/08/86	5852	4.640E-02	0.0%	3.90	0	40	*		0%	0	4.640E-02		
1-HEXENE (Loop/mv) (MinUnc = 10%)													
01/08/86	5852	3.290E-02	0.0%	2.50	0	42	*		0%	0	3.290E-02		
<b>Instrument 1401</b>													
ETOH (Loop/are) (MinUnc = 5%)													
7499	1.440E-07	0.0%	0.00	0	1	*	0%	0	1.440E-07				
<b>Instrument 1402</b>													
ETHENE (Loop#1) (MinUnc = 5%)													
02/06/91	7707	5.430E-02	0.0%	0.00	7707	0	X						
02/07/91	7708	1.960E-01	0.0%	0.00	0	1	L	4%	1%	7	1.942E-01	2%	-7.12E-03 28%

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 1402 (continued)</b>													
02/12/91	7713	1.890E-01	0.0%	0.00	5	1	4%	1%					
02/13/91	7714	1.790E-01	0.0%	0.00	6	1	4%	-4%					
02/20/91	7721	1.820E-01	0.0%	0.00	13	1	4%	3%					
02/25/91	7726	1.670E-01	0.0%	0.00	18	1	4%	-1%					
02/26/91	7727	8.954E-02	0.0%	0.00	0	2	27%	-39%	31	1.243E-01	27%		
03/13/91	7742	1.620E-01	0.4%	0.95	15	2	27%	23%					
03/15/91	7744	1.580E-01	0.7%	0.95	17	2	27%	21%					
03/18/91	7747	1.530E-01	0.5%	0.95	20	2	27%	19%					
03/19/91	7748	1.580E-01	0.0%	0.00	21	2	27%	21%					
03/20/91	7749	9.630E-02	0.0%	0.00	22	2	27%	-29%					
03/22/91	7751	1.520E-01	0.0%	0.00	24	2	27%	18%					
03/25/91	7754	7.800E-02	0.2%	0.95	27	2	27%	-59%					
03/26/91	7755	8.000E-02	0.0%	0.00	28	2	27%	-55%					
03/27/91	7756	8.900E-02	0.0%	0.00	29	2	27%	-40%					
03/28/91	7757	1.240E-01	0.0%	0.00	30	2	27%	0%					
03/29/91	7758	9.630E-02	0.0%	0.00	31	2	27%	-29%					
04/02/91	7762	8.900E-02	0.0%	0.00	35	2	27%	-40%					
04/03/91	7763	9.100E-02	0.1%	0.95	36	2	27%	-37%					
04/04/91	7764	9.000E-02	0.0%	0.00	37	2	27%	-38%					
04/05/91	7765	1.290E-01	0.0%	0.00	38	2	27%	4%					
04/10/91	7770	1.660E-01	0.2%	0.95	43	2	27%	25%					
04/16/91	7776	1.480E-01	0.4%	0.95	49	2	27%	16%					
04/19/91	7779	1.660E-01	0.0%	0.00	52	2	27%	25%					
04/22/91	7782	1.130E-01	0.4%	0.95	55	2	27%	-10%					
04/23/91	7783	9.500E-02	0.1%	0.95	56	2	27%	-31%					
04/29/91	7789	1.640E-01	0.2%	0.95	62	2	27%	24%					
05/08/91	7798	1.620E-01	0.1%	0.95	71	2	27%	23%					
05/10/91	7800	1.350E-01	0.1%	0.95	73	2	27%	8%					
05/14/91	7804	8.500E-02	0.1%	0.95	0	3	L	0%	4	8.500E-02	0%	-8.73E-03	0%
06/07/91	7828	6.720E-02	0.1%	0.00	24	3		0%					
<b>Instrument 2701</b>													
PYRROLE (Tenax/mv) (MinUnc = 5%)													
03/26/84	5199				0	1	*		2	2.650E-03			
03/28/84	5201	2.650E-03	0.0%	5.90	2	1		0%					
04/02/84	5206				0	2	*		2	2.630E-03			
05/08/84	5242	2.630E-03	0.1%	6.06	36	2		0%					
<b>Instrument 2702</b>													
23-DMN (Tenax/ar) (MinUnc = 10%)													
03/16/84	5189	2.480E-04	0.0%	8.09	0	1	*	0%	3	2.480E-04			
03/26/84	5199	(undefined)											
04/02/84	5206				0	2	*		11	3.070E-04			
04/04/84	5208	3.070E-04	0.0%	8.18	2	2		0%					
ME-NAPH (Tenax/ar) (MinUnc = 10%)													
04/04/84	5208	3.390E-04	0.0%	5.74	0	3	*	0%	10	3.390E-04			
05/08/84	5242	(undefined)											
NAPHTHAL (Tenax/ar) (MinUnc = 10%)													
02/22/84	5166	2.820E-04	0.0%	8.57	0	5	*	0%	3	2.820E-04			
03/26/84	5199	(undefined)											
04/02/84	5206				0	6	*		12	3.480E-04			
04/04/84	5208	3.480E-04	0.0%	4.13	2	6		0%					
TETRALIN (Tenax/ar) (MinUnc = 10%)													
04/05/84	5209				0	8	*		10	3.830E-04			
04/06/84	5210	3.830E-04	0.0%	1.97	1	8		0%					
<b>Instrument 2650</b>													
N-C9 (Loop2/ar) (MinUnc = 5%)													
04/13/81	4121	2.376E-07	0.0%	28.04	0	29	L	9%	0	2.487E-07	5%	-5.73E-04	96%
04/27/81	4135	2.603E-07	0.0%	28.04	14	29		9%					
05/04/81	4142	2.607E-07	0.0%	28.02	21	29		9%					
06/09/81	4178	2.112E-07	0.0%	28.01	57	29		9%					
07/27/81	4226	2.340E-07	0.0%	27.87	105	29		9%					
08/03/81	4233	2.498E-07	0.0%	27.85	112	29		9%					
08/31/81	4261	2.232E-07	0.0%	27.84	140	29		9%					
08/31/81	4261	2.232E-07	0.0%	27.84	0	30	*	0%	3	2.232E-07			
N-C10 (Loop/are) (MinUnc = 5%)													
01/26/81	4044	1.160E-06	0.0%	20.18	-217	0	X						
02/26/81	4075				0	38	A	3%	2	1.370E-06	3%		
03/11/81	4088	1.400E-06	0.0%	19.90	13	38		3%					
03/16/81	4093	1.339E-06	0.0%	19.86	18	38		3%					
N-C10 (Loop2/ar) (MinUnc = 5%)													
04/13/81	4121	2.133E-07	0.0%	31.77	0	39	L	12%	0	2.161E-07	6%	-1.15E-04	667%
04/27/81	4135	2.305E-07	0.0%	31.79	14	39		12%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit)		Runs	Avg/Intc	Sdev	Slope	Sdev
							Unc.	Diff					
<b>Instrument 2650 (continued)</b>													
05/04/81	4142	2.293E-07	0.0%	31.78	21	39	12%	6%					
06/09/81	4178	1.733E-07	0.0%	31.73	57	39	12%	-24%					
07/27/81	4226	2.089E-07	0.0%	31.61	105	39	12%	-2%					
08/03/81	4233	2.320E-07	0.0%	31.61	112	39	12%	8%					
08/31/81	4261	2.146E-07	0.0%	31.58	140	39	12%	1%					
08/31/81	4261	2.146E-07	0.0%	31.58	0	40	*	0%	3	2.146E-07			
N-C11 (Loop/are) (MinUnc = 5%)													
01/26/81	4044	7.420E-07	0.0%	23.16	-217	0	X						
02/26/81	4075				0	41	A	1%	2	1.372E-06	1%		
03/11/81	4088	1.380E-06	0.0%	22.91	13	41		1%					
03/16/81	4093	1.364E-06	0.0%	22.88	18	41		1%					
N-C11 (Loop2/ar) (MinUnc = 5%)													
04/13/81	4121	2.411E-07	0.0%	34.77	0	42	L	11%	5%	0	2.282E-07	6%	-4.63E-04 150%
04/27/81	4135	2.327E-07	0.0%	34.80	14	42		11%	3%				
05/04/81	4142	2.288E-07	0.0%	34.78	21	42		11%	1%				
06/09/81	4178	1.799E-07	0.0%	34.75	57	42		11%	-23%				
07/27/81	4226	2.216E-07	0.0%	34.59	105	42		12%	2%				
08/03/81	4233	2.325E-07	0.0%	34.60	112	42		12%	7%				
08/31/81	4261	2.133E-07	0.0%	34.57	140	42		12%	0%				
08/31/81	4261	2.133E-07	0.0%	34.57	0	43	*	0%	3	2.133E-07			
N-C12 (Loop/are) (MinUnc = 5%)													
01/26/81	4044	7.170E-07	0.0%	25.79	-217	0	X						
02/26/81	4075				0	44	A	8%	2	1.268E-06	8%		
03/11/81	4088	1.340E-06	0.0%	25.58	13	44		8%	5%				
03/16/81	4093	1.195E-06	0.0%	25.58	18	44		8%	-6%				
N-C12 (Loop2/ar) (MinUnc = 5%)													
04/13/81	4121	2.585E-07	0.0%	37.43	0	45	L	6%	5%	0	2.445E-07	3%	-2.65E-04 170%
04/27/81	4135	2.274E-07	0.0%	37.46	14	45		6%	-7%				
05/04/81	4142	2.430E-07	0.0%	37.43	21	45		6%	0%				
06/09/81	4178	2.420E-07	0.0%	37.39	57	45		6%	0%				
08/31/81	4261	2.366E-07	0.0%	37.21	140	45		6%	0%				
08/31/81	4261	2.366E-07	0.0%	37.21	0	46	*	0%	3	2.366E-07			
N-C13 (Loop/are) (MinUnc = 5%)													
01/26/81	4044	6.640E-07	0.0%	28.19	-217	0	X						
02/26/81	4075				0	47	A	6%	2	1.699E-06	6%		
03/11/81	4088	1.770E-06	0.0%	28.01	13	47		6%	4%				
03/16/81	4093	1.628E-06	0.0%	27.96	18	47		6%	-4%				
N-C13 (Loop2/ar) (MinUnc = 5%)													
04/13/81	4121	4.167E-07	0.0%	39.84	46	0	X						
04/27/81	4135	3.144E-07	0.0%	39.89	0	48	L	4%	-4%	0	3.258E-07	2%	-7.63E-04 48%
05/04/81	4142	3.285E-07	0.0%	39.85	7	48		4%	1%				
06/09/81	4178	3.259E-07	0.0%	39.80	43	48		5%	3%				
08/31/81	4261	2.905E-07	0.0%	39.62	126	48		5%	-1%				
08/31/81	4261	2.905E-07	0.0%	39.62	0	49	*	0%	3	2.905E-07			
N-C14 (Loop2/ar) (MinUnc = 5%)													
04/13/81	4121	8.574E-07	0.0%	41.71	-140	0	X						
04/27/81	4135	4.089E-07	0.0%	41.74	0	51	L	4%	-1%	0	4.149E-07	2%	-9.29E-04 32%
05/04/81	4142	6.400E-07	0.0%	41.71	7	0	X						
06/09/81	4178	4.074E-07	0.0%	41.65	43	51		4%	2%				
08/31/81	4261	3.632E-07	0.0%	41.53	126	51		4%	-1%				
08/31/81	4261	3.632E-07	0.0%	41.53	0	52	*	0%	2	3.632E-07			
<b>Instrument 2750</b>													
BENZENE (Loop/are) (MinUnc = 5%)													
02/05/81	4054	8.217E-06	0.0%	7.22	0	1	A	5%	-1%	12	8.320E-06	5%	
02/17/81	4066	7.987E-06	0.0%	7.23	12	1		5%	-4%				
04/30/81	4138	8.757E-06	0.0%	7.62	84	1		5%	5%				
BENZENE (Loop2/ar) (MinUnc = 5%)													
09/01/81	4262	2.042E-05	0.0%	9.70	0	2	*	0%	7	2.042E-05			
08/03/82	4598				0	3	*		0	9.010E-07			
05/18/83	4886	9.010E-07	0.0%	10.06	288	3		0%					
C2-BENZ (Loop/are) (MinUnc = 5%)													
02/05/81	4054	6.425E-06	0.0%	15.27	0	9	A	2%	0%	14	6.398E-06	2%	
02/17/81	4066	6.250E-06	0.0%	15.28	12	9		2%	-2%				
04/30/81	4138	6.519E-06	0.0%	15.88	84	9		2%	2%				
N-C3-BEN (Loop/are) (MinUnc = 5%)													
02/05/81	4054	6.244E-06	0.0%	19.47	0	12	A	1%	0%	14	6.253E-06	1%	
02/17/81	4066	6.349E-06	0.0%	19.48	12	12		1%	2%				
04/30/81	4138	6.165E-06	0.0%	20.10	84	12		1%	-1%				

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2750 (continued)</b>													
N-C5 (Loop/are) (MinUnc = 5%)													
03/21/83	4828	1.357E-06	0.0%	4.83	0	14	*	0%	6	1.357E-06			
N-C6 (Loop/are) (MinUnc = 5%)													
02/05/81	4054	9.367E-06	0.0%	5.47	0	15	A	12%	-16%	14	1.091E-05	12%	
02/17/81	4066	1.174E-05	0.0%	5.47	12	15		12%	7%				
04/30/81	4138	1.161E-05	0.0%	5.78	84	15		12%	6%				
N-C6 (Loop2/ar) (MinUnc = 5%)													
09/01/81	4262	2.673E-05	0.0%	7.80	0	16	*	0%	7	2.673E-05			
N-C7 (Loop/are) (MinUnc = 5%)													
02/05/81	4054	8.043E-06	0.0%	8.53	0	18	A	4%	-5%	14	8.407E-06	4%	
02/17/81	4066	8.508E-06	0.0%	8.57	12	18		4%	1%				
04/30/81	4138	8.670E-06	0.0%	9.00	84	18		4%	3%				
N-C7 (Loop2/ar) (MinUnc = 5%)													
09/01/81	4262	1.877E-05	0.0%	10.90	0	19	*	0%	7	1.877E-05			
N-C8 (Loop/are) (MinUnc = 5%)													
02/05/81	4054	6.975E-06	0.0%	12.57	0	20	A	3%	-3%	14	7.175E-06	3%	
02/17/81	4066	7.379E-06	0.0%	12.60	12	20		3%	3%				
04/30/81	4138	7.170E-06	0.0%	13.15	84	20		3%	0%				
N-C8 (Loop2/ar) (MinUnc = 5%)													
09/01/81	4262	1.515E-05	0.0%	13.70	0	21	*	0%	7	1.515E-05			
N-C9 (Loop/are) (MinUnc = 5%)													
02/05/81	4054	6.011E-06	0.0%	17.07	0	22	A	4%	-2%	15	6.133E-06	4%	
02/17/81	4066	6.393E-06	0.0%	17.08	12	22		4%	4%				
04/30/81	4138	5.996E-06	0.0%	17.68	84	22		4%	-2%				
N-C9 (Loop2/ar) (MinUnc = 5%)													
09/01/81	4262	1.285E-05	0.0%	16.30	0	23	*	0%	7	1.285E-05			
N-C10 (Loop/are) (MinUnc = 10%)													
02/05/81	4054	5.020E-06	0.0%	21.55	0	24	A	6%	-1%	15	5.075E-06	6%	
02/17/81	4066	5.403E-06	0.0%	21.57	12	24		6%	6%				
04/30/81	4138	4.803E-06	0.0%	21.88	84	24		6%	-6%				
N-C10 (Loop2/ar) (MinUnc = 10%)													
09/01/81	4262	1.030E-05	0.0%	18.60	0	25	*	0%	7	1.030E-05			
N-C11 (Loop/are) (MinUnc = 10%)													
02/05/81	4054	3.846E-06	0.0%	25.87	0	26	L	10%	-6%	15	4.059E-06	6%	-1.48E-03 85%
02/17/81	4066	4.235E-06	0.0%	25.88	12	26		10%	6%				
04/30/81	4138	3.518E-06	0.0%	26.45	84	26		12%	-1%				
N-C11 (Loop2/ar) (MinUnc = 10%)													
09/01/81	4262	7.717E-06	0.0%	18.60	0	27	*	0%	7	7.717E-06			
N-C12 (Loop/are) (MinUnc = 10%)													
02/05/81	4054	2.942E-06	0.0%	29.93	0	28	L	4%	2%	11	2.880E-06	3%	-1.06E-03 48%
02/17/81	4066	2.772E-06	0.0%	29.95	12	28		4%	-3%				
04/30/81	4138	2.634E-06	0.0%	30.48	84	28		5%	0%				
N-C12 (Loop2/ar) (MinUnc = 10%)													
09/01/81	4262	5.320E-06	0.0%	18.60	0	29	*	0%	7	5.320E-06			
N-C13 (Loop/are) (MinUnc = 15%)													
02/05/81	4054	4.692E-06	0.0%	33.73	0	30	*	0%	3	4.692E-06			
02/17/81	4066	3.506E-06	0.0%	33.75	0	31	A	1%	1%	11	3.470E-06	1%	
04/30/81	4138	3.434E-06	0.0%	34.27	72	31		1%	-1%				
N-C13 (Loop2/ar) (MinUnc = 15%)													
09/01/81	4262	4.632E-06	0.0%	18.60	0	32	*	0%	7	4.632E-06			
N-C14 (Loop/are) (MinUnc = 20%)													
02/05/81	4054	1.479E-05	0.0%	33.73	0	33	*	0%	0	1.479E-05			
02/17/81	4066	9.414E-06	0.0%	34.00	0	34	A	0%	0%	1	9.424E-06	0%	
04/30/81	4138	9.434E-06	0.0%	37.82	72	34		0%	0%				
N-C14 (Loop2/ar) (MinUnc = 20%)													
09/01/81	4262	2.662E-05	0.0%	18.60	0	35	*	0%	6	2.662E-05			
224TM-C5 (Loop/are) (MinUnc = 5%)													
03/21/83	4828	8.458E-07	0.0%	10.83	0	37	*	0%	6	8.458E-07			
I-C3-BEN (Loop/are) (MinUnc = 5%)													
02/05/81	4054	5.956E-06	0.0%	18.15	0	38	A	1%	0%	14	5.964E-06	1%	
02/17/81	4066	6.026E-06	0.0%	18.17	12	38		1%	1%				
04/30/81	4138	5.911E-06	0.0%	18.78	84	38		1%	-1%				

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2750 (continued)</b>													
I-C3-BEN (Loop2/ar) (MinUnc = 5%)													
09/01/81	4262	1.308E-05	0.0%	17.00	0	39	*	0%	7	1.308E-05			
ME-CYCC6 (Loop/are) (MinUnc = 5%)													
02/05/81	4054	7.914E-06	0.0%	9.27	0	42	A	5% -4%	14	8.234E-06	5%		
02/17/81	4066	8.131E-06	0.0%	9.30	12	42		5% -1%					
04/30/81	4138	8.657E-06	0.0%	9.75	84	42		5% 5%					
ME-CYCC6 (Loop2/ar) (MinUnc = 5%)													
09/01/81	4262	1.785E-05	0.0%	11.50	0	43	*	0%	7	1.785E-05			
124-TMB (Loop/are) (MinUnc = 5%)													
02/05/81	4054	5.956E-06	0.0%	21.25	0	46	A	1% -1%	14	5.991E-06	1%		
02/17/81	4066	6.026E-06	0.0%	21.28	12	46		1% 1%					
04/30/81	4138	8.401E-06	0.0%	21.83	84	0	X						
04/30/81	4138	(undefined)											
124-TMB (Loop2/ar) (MinUnc = 5%)													
09/01/81	4262	1.282E-05	0.0%	18.60	0	47	*	0%	7	1.282E-05			
TOLUENE (Loop/are) (MinUnc = 5%)													
02/05/81	4054	7.200E-06	0.0%	11.10	0	57	A	4% 0%	10	7.213E-06	4%		
02/17/81	4066	6.924E-06	0.0%	11.13	12	57		4% -4%					
04/30/81	4138	7.514E-06	0.0%	11.65	84	57		4% 4%					
TOLUENE (Loop2/ar) (MinUnc = 5%)													
07/13/81	4212				0	58	*		8	1.683E-05			
09/01/81	4262	1.683E-05	0.0%	12.80	50	58		0%					
TOLUENE (Loop3/ar) (MinUnc = 5%)													
03/21/83	4828	9.763E-07	0.0%	13.17	0	59	*	0%	6	9.763E-07			
M-XYLENE (Loop/are) (MinUnc = 5%)													
02/05/81	4054	6.925E-06	0.0%	15.62	0	60	A	1% 0%	14	6.925E-06	1%		
02/17/81	4066	6.995E-06	0.0%	15.65	12	60		1% 1%					
04/30/81	4138	6.855E-06	0.0%	16.23	84	60		1% -1%					
M-XYLENE (Loop2/ar) (MinUnc = 5%)													
07/13/81	4212				0	61	*		11	1.556E-05			
09/01/81	4262	1.556E-05	0.0%	15.60	50	61		0%					
M-XYLENE (Loop3/ar) (MinUnc = 5%)													
03/21/83	4828	9.951E-07	0.0%	15.94	0	62	*	0%	3	9.951E-07			
O-XYLENE (Loop/are) (MinUnc = 5%)													
02/05/81	4054	6.825E-06	0.0%	16.68	0	63	A	1% -1%	14	6.860E-06	1%		
02/17/81	4066	6.899E-06	0.0%	16.70	12	63		1% 1%					
04/30/81	4138	6.855E-06	0.0%	17.30	84	63		1% 0%					
O-XYLENE (Loop2/ar) (MinUnc = 5%)													
09/01/81	4262	1.524E-05	0.0%	16.20	0	64	*	0%	7	1.524E-05			
<b>Instrument 2850</b>													
N-C5 (Loop/mv) (MinUnc = 5%)													
08/12/82	4607	4.921E-02	0.0%	10.12	0	1	*	0%	4	4.921E-02			
12/15/82	4732	(undefined)											
06/06/83	4905				0	2	*		0	2.600E-02			
06/17/83	4916	2.600E-02	0.0%	9.45	11	2		0%					
07/17/84	5312	(undefined)											
07/17/84	5312	4.870E-02	0.0%	8.62	407	0	X		2	2.867E-02	37%		
10/08/84	5395	1.790E-02	0.0%	8.68	0	3	A	37% -60%					
10/23/84	5410	2.910E-02	0.0%	8.66	15	3		37% 1%					
03/22/85	5560	3.900E-02	0.0%	5.59	165	3		37% 26%					
N-C5 (Loop/are) (MinUnc = 5%)													
08/12/82	4607	2.220E-06	0.0%	10.12	0	4	*	0%	6	2.220E-06			
12/15/82	4732	(undefined)											
06/06/83	4905				0	5	*		25	1.190E-06			
06/17/83	4916	1.190E-06	0.0%	9.45	11	5		0%					
07/17/84	5312	(undefined)											
07/17/84	5312	2.290E-06	0.0%	8.62	407	0	X		0	8.390E-07			
10/08/84	5395	8.390E-07	0.0%	8.68	0	6	*	0%					
N-C5 (Loop2/ar) (MinUnc = 5%)													
10/02/84	5389				0	7	L	14%	61	1.145E-03	8%	-5.04E-04	46%
10/23/84	5410	1.350E-03	0.0%	8.66	21	7		14% 16%					
11/20/84	5438	1.010E-03	0.0%	6.13	49	7		15% -11%					
03/22/85	5560	1.560E-03	0.0%	5.59	171	0	X						
05/30/85	5629	9.120E-04	0.0%	5.49	240	7		16% -10%					
07/26/85	5686	8.440E-04	0.0%	10.16	297	7		17% -15%					
08/22/85	5713	9.660E-04	0.0%	10.11	324	7		17% 1%					



Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2850 (continued)</b>													
12/18/85	5831	9.130E-04	0.0%	5.97	442	7	18%	3%					
05/28/86	5992	8.770E-04	0.0%	5.89	603	7	20%	9%					
TOLUENE (Loop/mv) (MinUnc = 5%)													
08/12/82	4607	3.530E-02	0.0%	19.89	0	8 *		0%	4	3.530E-02			
12/15/82	4732	(undefined)											
06/06/83	4905				0	9 *			0	1.730E-02			
06/17/83	4916	1.730E-02	0.0%	19.12	11	9		0%					
07/17/84	5312	(undefined)											
07/17/84	5312	2.690E-02	0.0%	18.10	407	0 X							
10/08/84	5395	2.300E-02	0.0%	18.18	0	10 A	16%	10%	2	2.070E-02	16%		
10/23/84	5410	1.740E-02	0.0%	18.15	15	0 X							
03/22/85	5560	1.840E-02	0.0%	14.38	165	10	16%	-12%					
TOLUENE (Loop/are) (MinUnc = 5%)													
08/12/82	4607	1.570E-06	0.0%	19.89	0	11 *		0%	6	1.570E-06			
12/15/82	4732	(undefined)											
06/06/83	4905				0	12 *			11	8.030E-07			
06/17/83	4916	8.030E-07	0.0%	19.12	11	12		0%					
TOLUENE (Loop2/ar) (MinUnc = 5%)													
01/04/84	5117	1.150E-03	0.0%	17.87	0	13 L	0%	0%	16	1.150E-03	0%	-3.51E-04	0%
04/12/84	5216	1.110E-03	0.0%	18.03	99	13		0%					
04/12/84	5216	6.990E-04	0.0%	16.12	99	0 X							
07/17/84	5312	(undefined)											
07/17/84	5312	1.320E-03	0.0%	18.10	195	0 X							
10/01/84	5388				0	14 L	18%		73	9.089E-04	9%	-4.57E-04	62%
10/08/84	5395	1.120E-03	0.0%	18.18	7	14	18%	19%					
10/23/84	5410	8.460E-04	0.0%	18.15	22	14	18%	-6%					
11/20/84	5438	7.780E-04	0.0%	15.07	50	14	19%	-14%					
03/22/85	5560	8.530E-04	0.0%	14.38	172	14	20%	2%					
05/30/85	5629	6.940E-04	0.0%	14.28	241	14	21%	-17%					
06/14/85	5644	8.380E-04	0.0%	14.33	256	14	21%	4%					
07/26/85	5686	9.740E-04	0.0%	19.93	298	14	21%	19%					
08/22/85	5713	5.620E-04	0.0%	19.84	325	14	21%	-38%					
12/18/85	5831	6.520E-04	0.0%	14.85	443	14	23%	-11%					
05/29/86	5993	7.660E-04	0.0%	14.72	605	14	25%	14%					
M-XYLENE (Loop/mv) (MinUnc = 5%)													
08/12/82	4607	3.130E-02	0.0%	23.00	0	15 *		0%	4	3.130E-02			
12/15/82	4732	(undefined)											
06/06/83	4905				0	16 *			0	1.700E-02			
06/17/83	4916	1.700E-02	0.0%	22.21	11	16		0%					
07/17/84	5312	(undefined)											
07/17/84	5312	2.820E-02	0.0%	21.15	407	0 X							
10/08/84	5395	2.150E-02	0.0%	21.23	0	17 L	14%	7%	2	1.999E-02	8%	-1.41E-03	62%
10/23/84	5410	1.790E-02	0.0%	21.20	15	17	14%	-9%					
03/22/85	5560	1.550E-02	0.0%	17.25	165	17	18%	1%					
M-XYLENE (Loop/are) (MinUnc = 5%)													
08/12/82	4607	1.340E-06	0.0%	23.00	0	18 *		0%	6	1.340E-06			
12/15/82	4732	(undefined)											
06/06/83	4905				0	19 *			25	7.640E-07			
06/17/83	4916	7.640E-07	0.0%	22.21	11	19		0%					
07/17/84	5312	(undefined)											
07/17/84	5312	1.330E-06	0.0%	21.15	407	0 X							
10/08/84	5395	1.020E-06	0.0%	21.23	0	20 *		0%	0	1.020E-06			
M-XYLENE (Loop2/ar) (MinUnc = 5%)													
10/23/84	5410	7.970E-04	0.0%	21.20	0	21 L	15%	10%	73	7.140E-04	8%	2.21E-05	1134%
11/20/84	5438	7.630E-04	0.0%	17.99	28	21	15%	6%					
03/22/85	5560	7.240E-04	0.0%	17.25	150	21	15%	1%					
05/30/85	5629	5.940E-04	0.0%	17.14	219	21	15%	-21%					
06/14/85	5644	7.600E-04	0.0%	17.20	234	21	15%	6%					
07/26/85	5686	6.850E-04	0.0%	23.04	276	21	15%	-5%					
08/22/85	5713	5.740E-04	0.0%	22.95	303	21	15%	-25%					
12/18/85	5831	7.350E-04	0.0%	17.73	421	21	15%	2%					
05/29/86	5993	8.290E-04	0.0%	17.61	583	21	15%	13%					
224TM-C5 (Loop/mv) (MinUnc = 5%)													
08/12/82	4607	2.800E-02	0.0%	17.16	0	25 *		0%	4	2.800E-02			
12/15/82	4732	(undefined)											
06/06/83	4905				0	26 *			0	1.770E-02			
06/17/83	4916	1.770E-02	0.0%	16.43	11	26		0%					
07/17/84	5312	(undefined)											
07/17/84	5312	2.730E-02	0.0%	15.45	407	0 X							
10/08/84	5395	1.720E-02	0.0%	15.53	0	27 A	1%	-1%	2	1.740E-02	1%		
10/23/84	5410	1.740E-02	0.0%	15.50	15	27	1%	0%					
03/22/85	5560	1.760E-02	0.0%	11.96	165	27	1%	1%					
224TM-C5 (Loop/are) (MinUnc = 5%)													
08/12/82	4607	1.210E-06	0.0%	17.16	0	28 *		0%	6	1.210E-06			

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2850 (continued)</b>													
12/15/82	4732	(undefined)											
06/06/83	4905				0	29	*		25	7.710E-07			
06/17/83	4916	7.710E-07	0.0%	16.43	11	29		0%					
07/17/84	5312	(undefined)											
07/17/84	5312	1.230E-06	0.0%	15.45	407	0	X						
10/01/84	5388	7.820E-07	0.0%	15.53	0	30	*	0%	0	7.820E-07			
224TM-C5 (Loop2/ar) (MinUnc = 5%)													
10/02/84	5389				0	31	L	9%	68	6.114E-04	5%	-1.55E-04	99%
10/23/84	5410	6.250E-04	0.0%	15.50	21	31		9%					
11/20/84	5438	5.860E-04	0.0%	12.60	49	31		9%					
03/22/85	5560	6.830E-04	0.0%	11.96	171	31		10%					
05/30/85	5629	5.370E-04	0.0%	11.87	240	31		10%					
07/26/85	5686	5.560E-04	0.0%	11.20	297	31		10%					
08/22/85	5713	5.660E-04	0.0%	17.11	324	31		10%					
12/18/85	5831	5.440E-04	0.0%	12.40	442	31		10%					
05/30/86	5994	5.910E-04	0.0%	12.27	605	31		10%					
N-C6 (Loop/are) (MinUnc = 5%)													
01/04/84	5117	1.270E-03	0.0%	12.21	0	32	A	6%	16	1.325E-03	6%		
04/12/84	5216	1.380E-03	0.0%	12.35	99	32		6%					
04/12/84	5216	7.880E-04	0.0%	11.20	99	0	X	4%					
04/29/86	5963				0	33	*		3	6.410E-04			
05/01/86	5965	6.410E-04	0.0%	9.55	2	33		0%					
05/28/86	5992	8.520E-04	0.0%	9.45	0	34	*	0%	2	8.520E-04			
CYCC6 (Loop/are) (MinUnc = 5%)													
01/04/84	5117	1.240E-03	0.0%	14.43	0	35	A	2%	11	1.260E-03	2%		
04/12/84	5216	1.280E-03	0.0%	14.56	99	35		2%					
04/12/84	5216	7.870E-04	0.0%	13.08	99	0	X	2%					
N-C7 (Loop/are) (MinUnc = 5%)													
01/04/84	5117	1.050E-03	0.0%	15.63	0	36	A	3%	16	1.030E-03	3%		
04/12/84	5216	1.010E-03	0.0%	15.79	99	36		3%					
04/12/84	5216	6.250E-04	0.0%	14.18	99	0	X	-2%					
04/29/86	5963				0	37	A	17%	5	6.365E-04	17%		
05/01/86	5965	5.620E-04	0.0%	12.81	2	37		17%					
05/28/86	5992	7.110E-04	0.0%	12.69	29	37		17%					
ME-CYCC6 (Loop/are) (MinUnc = 5%)													
01/04/84	5117	1.050E-03	0.0%	16.45	0	38	A	5%	16	1.085E-03	5%		
04/12/84	5216	1.120E-03	0.0%	16.61	99	38		5%					
04/12/84	5216	7.160E-04	0.0%	14.18	99	0	X	3%					
01/08/86	5852	6.360E-04	0.0%	13.49	0	39	*	0%	0	6.360E-04			
N-C8 (Loop/are) (MinUnc = 5%)													
01/04/84	5117	8.950E-04	0.0%	18.72	0	40	A	3%	15	8.780E-04	3%		
04/12/84	5216	8.610E-04	0.0%	18.90	99	40		3%					
04/12/84	5216	5.510E-04	0.0%	11.20	99	0	X	-2%					
01/08/86	5852	5.970E-04	0.0%	15.75	0	41	A	13%	3	5.485E-04	13%		
05/01/86	5965	5.000E-04	0.0%	15.75	113	41		13%					
05/28/86	5992	8.040E-04	0.0%	15.63	0	42	*	0%	8	8.040E-04			
ET-CYCC6 (Loop/are) (MinUnc = 5%)													
01/04/84	5117	9.880E-04	0.0%	19.90	0	43	A	2%	11	9.715E-04	2%		
04/12/84	5216	9.550E-04	0.0%	20.07	99	43		2%					
04/12/84	5216	6.190E-04	0.0%	17.92	99	0	X	-2%					
P-XYLENE (Loop/are) (MinUnc = 5%)													
01/04/84	5117	1.110E-03	0.0%	20.93	0	44	A	10%	16	1.039E-03	10%		
04/12/84	5216	9.680E-04	0.0%	21.10	99	44		10%					
04/12/84	5216	6.060E-04	0.0%	18.86	99	0	X	6%					
N-C9 (Loop/are) (MinUnc = 5%)													
01/04/84	5117	1.040E-03	0.0%	21.55	0	45	*	0%	5	1.040E-03			
04/28/86	5962				0	46	*		3	6.170E-04			
05/01/86	5965	6.170E-04	0.0%	18.44	3	46		0%					
05/28/86	5992	9.660E-04	0.0%	18.32	0	47	*	0%	2	9.660E-04			
I-C3-BEN (Loop/are) (MinUnc = 5%)													
01/04/84	5117	1.150E-03	0.0%	22.45	0	48	A	18%	11	1.017E-03	18%		
04/12/84	5216	8.840E-04	0.0%	22.63	99	48		18%					
04/12/84	5216	5.590E-04	0.0%	22.63	99	0	X	-15%					
06/24/85	5654				0	49	*		2	8.100E-04			
05/02/86	5966	8.100E-04	0.0%	19.20	312	49		0%					
05/05/86	5969				0	50	*		3	1.020E-03			
05/29/86	5993	1.020E-03	0.0%	19.07	24	50		0%					
135-TMB (Loop/are) (MinUnc = 5%)													
01/04/84	5117	1.870E-03	0.0%	23.60	0	51	A	40%	16	1.460E-03	40%		
04/12/84	5216	1.050E-03	0.0%	23.78	99	51		40%					
04/12/84	5216	6.450E-04	0.0%	21.29	99	0	X	-39%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev	
<b>Instrument 2850 (continued)</b>														
N-C10 (Loop/are) (MinUnc = 5%)														
01/04/84	5117	1.260E-03	0.0%	24.15	0	52	*	0%	6	1.260E-03				
05/02/86	5966	7.520E-04	0.0%	20.92	0	53	*	0%	0	7.520E-04				
05/28/86	5992	1.230E-03	0.0%	20.80	0	54	*	0%	7	1.230E-03				
N-C11 (Loop/are) (MinUnc = 5%)														
01/04/84	5117	1.720E-03	0.0%	26.55	0	55	*	0%	5	1.720E-03				
04/29/86	5963				0	56	*		3	1.040E-03				
05/02/86	5966	1.040E-03	0.0%	23.22	3	56		0%						
05/28/86	5992	2.120E-03	0.0%	23.10	0	57	*	0%	2	2.120E-03				
TETRALIN (Loop/are) (MinUnc = 5%)														
01/04/84	5117	3.560E-03	0.0%	28.58	-875	0	X							
01/17/84	5130	7.730E-04	0.0%	28.85	0	58	A	27%	-23%	15	9.515E-04	27%		
04/12/84	5216	1.130E-03	0.0%	28.78	86	58		27%	16%					
04/12/84	5216	6.920E-04	0.0%	25.81	86	0	X							
N-C12 (Loop/are) (MinUnc = 5%)														
01/04/84	5117	2.880E-03	0.0%	28.78	0	59	*	0%	5	2.880E-03				
04/28/86	5962				0	60	*		3	1.520E-03				
05/01/86	5965	1.520E-03	0.0%	25.35	3	60		0%						
05/28/86	5992	3.650E-03	0.0%	25.24	0	61	*	0%	2	3.650E-03				
N-C13 (Loop/are) (MinUnc = 5%)														
01/04/84	5117	6.140E-03	0.0%	30.87	0	62	*	0%	5	6.140E-03				
04/29/86	5963				0	63	*		3	2.420E-03				
05/01/86	5965	2.420E-03	0.0%	27.35	2	63		0%						
05/28/86	5992	4.100E-03	0.0%	27.24	0	64	*	0%	2	4.100E-03				
N-C14 (Loop/are) (MinUnc = 50%)														
01/04/84	5117	1.520E-02	0.0%	32.99	0	65	*	0%	1	1.520E-02				
04/12/84	5216	3.430E-03	0.0%	33.24	0	66	*	0%	1	3.430E-03				
04/12/84	5216	1.800E-03	0.0%	30.01	0	0	X							
04/29/86	5963				0	67	*		3	4.830E-03				
05/01/86	5965	4.830E-03	0.0%	29.23	2	67		0%						
05/28/86	5992	1.050E-02	0.0%	29.14	0	68	*	0%	7	1.050E-02				
1-HEXENE (Loop/are) (MinUnc = 5%)														
01/08/86	5852	7.490E-04	0.0%	9.30	0	74	*	0%	3	7.490E-04				
05/29/86	5993	8.100E-04	0.0%	9.18	0	75	*	0%	5	8.100E-04				
1-C9-OLE (Loop/are) (MinUnc = 5%)														
01/08/86	5852	5.300E-04	0.0%	18.23	0	76	*	0%	3	5.300E-04				
05/29/86	5993	7.500E-04	0.0%	18.11	0	77	*	0%	8	7.500E-04				
O-XYLENE (Loop/are) (MinUnc = 5%)														
01/08/86	5852	7.210E-04	0.0%	18.37	0	78	A	5%	-3%	6	7.455E-04	5%		
05/29/86	5993	7.700E-04	0.0%	18.26	141	78		5%	3%					
124-TMB (Loop/are) (MinUnc = 5%)														
04/30/86	5964				0	79	*		1	1.360E-03				
05/02/86	5966	1.360E-03	0.0%	20.94	2	79		0%						
05/30/86	5994	9.430E-04	0.0%	20.81	0	80	*	0%	7	9.430E-04				
BENZENE (Loop/are) (MinUnc = 5%)														
04/29/86	5963				0	81	*		3	7.070E-04				
05/02/86	5966	7.070E-04	0.0%	11.60	3	81		0%						
05/29/86	5993	8.810E-04	0.0%	11.48	0	82	*	0%	6	8.810E-04				
2-ME-C4 (Loop/are) (MinUnc = 5%)														
04/29/86	5963				0	83	*		3	8.240E-04				
05/02/86	5966	8.240E-04	0.0%	4.95	3	83		0%						
05/30/86	5994	9.690E-04	0.0%	4.87	0	84	*	0%	0	9.690E-04				
C2-BENZ (Loop/are) (MinUnc = 5%)														
04/29/86	5963				0	85	A	3%		6	7.595E-04	3%		
05/02/86	5966	7.770E-04	0.0%	17.53	3	85		3%	2%					
05/30/86	5994	7.420E-04	0.0%	17.40	31	85		3%	-2%					
<b>Instrument 2500</b>														
N-C6 (Trap/are) (MinUnc = 5%)														
02/20/91	7721				0	1	L	4%		19	1.056E-04	2%	7.08E-04	46%
03/15/91	7744	1.053E-04	0.0%	4.30	23	1		3%	-2%					
03/25/91	7754	1.066E-04	0.0%	4.30	33	1		3%	-1%					
04/08/91	7768	1.132E-04	0.0%	0.00	47	1		3%	4%					
05/06/91	7796	1.116E-04	0.0%	0.00	75	1		3%	0%					
06/26/91	7847	1.140E-04	0.0%	0.00	126	1		3%	-1%					
M-XYLENE (Trap/are) (MinUnc = 5%)														
01/31/91	7701				0	2	L	10%		24	7.334E-05	8%	2.51E-03	34%
03/15/91	7744	8.282E-05	0.0%	4.30	43	2		9%	2%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2500 (continued)</b>													
03/25/91	7754	8.431E-05	0.0%	4.30	53	2	9%	1%					
04/08/91	7768	8.728E-05	0.0%	0.00	67	2	9%	2%					
05/06/91	7796	8.304E-05	0.0%	0.00	95	2	8%	-9%					
06/26/91	7847	1.037E-04	0.0%	0.00	146	2	8%	3%					
CARBITOL (Trap/are) (MinUnc = 5%)													
01/25/91	7695	2.538E-04	0.0%	9.60	0	3 A	2%	2%	3	2.494E-04	2%		
02/04/91	7705	2.450E-04	0.0%	9.60	10	3	2%	-2%					
ETO-ETOH (Trap/are) (MinUnc = 5%)													
01/25/91	7695	2.640E-04	0.0%	3.80	0	4 A	5%	-4%	3	2.740E-04	5%		
02/04/91	7705	2.840E-04	0.0%	3.83	10	4	5%	4%					
(SIOME)4 (Trap/are) (MinUnc = 5%)													
03/18/91	7747	6.490E-05	0.0%	0.00	0	5 A	122%	-264%	3	2.364E-04	122%		
03/25/91	7754	5.699E-04	0.0%	0.00	7	5	122%	59%					
04/08/91	7768	7.428E-05	0.0%	0.00	21	5	122%	-218%					
(SIOME)5 (Trap/are) (MinUnc = 5%)													
03/18/91	7747	5.387E-05	0.0%	0.00	0	6 A	39%	-38%	2	7.460E-05	39%		
04/08/91	7768	9.533E-05	0.0%	0.00	21	6	39%	22%					
<b>Instrument 2600</b>													
N-C6 (Trap/are) (MinUnc = 5%)													
09/30/91	7943				0	1 L	2%		46	3.916E-07	1%	-3.77E-04	40%
10/01/91	7944	3.962E-07	0.0%	4.30	1	1	2%	1%					
10/02/91	7945	3.948E-07	0.0%	4.30	2	1	2%	1%					
11/01/91	7975	3.761E-07	0.0%	0.00	32	1	2%	-3%					
11/25/91	7999	3.390E-07	0.0%	0.00	56	0 X							
11/27/91	8001	3.221E-07	0.0%	0.00	58	0 X							
12/16/91	8020	4.621E-07	0.0%	2.71	77	0 X							
01/16/92	8051	3.762E-07	0.0%	4.47	108	1	2%	0%					
02/07/92	8073	3.746E-07	0.0%	3.62	130	1	2%	1%					
N-C6 (Trap/mv) (MinUnc = 5%)													
02/03/92	8069	1.465E-04	0.0%	3.65	0	2 A	1%	0%	3	1.471E-04	1%		
02/25/92	8091	1.477E-04	0.0%	3.68	22	2	1%	0%					
N-C6 (Loop/mv) (MinUnc = 5%)													
02/25/92	8091	5.346E-03	0.0%	4.56	0	3 *		0%	2	5.346E-03			
N-C6 (Loop/are) (MinUnc = 5%)													
02/28/92	8094	1.110E-05	0.0%	4.50	0	4 L	5%	1%	49	1.095E-05	2%	-6.20E-04	18%
03/02/92	8097	1.052E-05	0.0%	4.06	3	4	5%	-4%					
03/09/92	8104	1.082E-05	0.0%	4.07	10	4	5%	-1%					
03/10/92	8105	1.062E-05	0.0%	1.49	11	4	5%	-2%					
03/20/92	8115	1.119E-05	0.0%	4.67	21	4	5%	3%					
04/13/92	8139	1.136E-05	0.0%	4.68	45	4	5%	6%					
06/04/92	8191	1.012E-05	0.0%	4.68	97	4	5%	-2%					
07/10/92	8227	1.050E-05	0.0%	4.69	133	4	5%	4%					
07/30/92	8247	1.001E-05	0.0%	4.69	153	4	5%	1%					
08/11/92	8259	8.997E-06	0.0%	4.66	165	4	5%	-9%					
08/11/92	8259	8.905E-06	0.0%	4.66	165	4	5%	-10%					
08/13/92	8261	1.013E-05	0.0%	4.66	167	4	5%	3%					
09/04/92	8283	9.988E-06	0.0%	4.69	189	4	5%	3%					
11/02/92	8342	9.255E-06	0.0%	5.34	248	4	6%	0%					
02/10/93	8442	8.841E-06	0.0%	5.36	348	4	6%	3%					
03/25/93	8485				0	5 A	3%		1	8.643E-06	3%		
04/02/93	8493	8.722E-06	0.0%	5.92	8	5	3%	1%					
05/20/93	8541	8.641E-06	0.0%	5.91	56	5	3%	0%					
05/24/93	8545	8.836E-06	0.0%	5.92	60	5	3%	2%					
07/12/93	8594	8.275E-06	0.0%	5.89	109	5	3%	-4%					
07/22/93	8604	8.481E-06	0.0%	5.90	119	5	3%	-2%					
07/30/93	8612	8.904E-06	0.0%	5.90	127	5	3%	3%					
M-XYLENE (Trap/are) (MinUnc = 5%)													
09/30/91	7943				0	6 L	6%		46	2.615E-07	3%	2.17E-04	189%
10/01/91	7944	2.702E-07	0.0%	8.90	1	6	6%	3%					
10/02/91	7945	2.444E-07	0.0%	8.96	2	6	6%	-7%					
11/01/91	7975	2.747E-07	0.0%	0.00	32	6	6%	4%					
11/25/91	7999	2.168E-07	0.0%	0.00	56	0 X							
11/27/91	8001	2.335E-07	0.0%	0.00	58	0 X							
12/16/91	8020	3.060E-07	0.0%	5.59	77	0 X							
01/16/92	8051	2.664E-07	0.0%	7.46	108	6	6%	0%					
02/07/92	8073	2.673E-07	0.0%	6.45	130	6	6%	-1%					
M-XYLENE (Trap/mv) (MinUnc = 5%)													
02/03/92	8069	7.623E-05	0.1%	5.60	0	7 A	1%	0%	3	7.593E-05	1%		
02/25/92	8091	7.563E-05	0.0%	5.75	22	7	1%	0%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2600 (continued)</b>												
M-XYLENE (Loop/mv) (MinUnc = 5%)												
02/25/92	8091	1.359E-03	0.0%	6.59	0	8 *	0%	2	1.359E-03			
M-XYLENE (Loop/are) (MinUnc = 5%)												
02/28/92	8094	5.385E-06	0.0%	7.06	0	9 L	10% -8%	48	5.821E-06	4%	-4.50E-04	67%
03/02/92	8097	5.162E-06	0.0%	6.96	3	9	10% -13%					
03/09/92	8104	5.719E-06	0.0%	6.97	10	9	10% -1%					
03/10/92	8105	5.757E-06	0.0%	4.74	11	9	10% -1%					
03/20/92	8115	6.253E-06	0.0%	7.38	21	9	10% 8%					
04/13/92	8139	6.571E-06	0.0%	7.40	45	9	10% 13%					
06/04/92	8191	5.656E-06	0.0%	7.39	97	9	10% 2%					
07/10/92	8227	6.070E-06	0.0%	7.40	133	9	11% 10%					
07/30/92	8247	5.662E-06	0.0%	7.40	153	9	11% 4%					
08/11/92	8259	4.740E-06	0.0%	7.37	165	9	11% -14%					
08/11/92	8259	4.502E-06	0.0%	7.37	165	9	11% -20%					
08/13/92	8261	5.536E-06	0.0%	7.37	167	9	11% 3%					
09/04/92	8283	5.620E-06	0.0%	7.40	189	9	11% 5%					
10/29/92	8338	5.188E-06	0.0%	7.97	244	9	11% 0%					
10/29/92	8338	5.188E-06	0.0%	7.97	0	10 A	3% 2%	30	5.105E-06	3%		
01/29/93	8430	5.203E-06	0.0%	7.39	92	10	3% 2%					
02/09/93	8441	4.985E-06	0.0%	7.96	103	10	3% -2%					
02/10/93	8442	4.744E-06	0.0%	7.97	104	10	3% -8%					
03/04/93	8464	4.884E-06	0.0%	7.95	126	10	3% -5%					
03/05/93	8465	4.976E-06	0.0%	7.95	127	10	3% -3%					
03/08/93	8468	5.392E-06	0.0%	7.90	130	10	3% 5%					
03/11/93	8471	5.048E-06	0.0%	7.95	133	10	3% -1%					
03/16/93	8476	5.220E-06	0.0%	7.96	138	10	3% 2%					
03/17/93	8477	5.273E-06	0.0%	7.96	139	10	3% 3%					
03/18/93	8478	5.147E-06	0.0%	7.96	140	10	3% 1%					
03/19/93	8479	5.290E-06	0.0%	7.97	141	10	3% 3%					
03/22/93	8482	5.021E-06	0.0%	7.96	144	10	3% -2%					
03/24/93	8484	5.105E-06	0.0%	7.96	146	10	3% 0%					
03/25/93	8485	4.956E-06	0.0%	9.65	0	11 A	5% -2%	66	5.040E-06	5%		
03/26/93	8486	4.962E-06	0.0%	9.65	1	11	5% -2%					
03/29/93	8489	4.914E-06	0.0%	9.65	4	11	5% -3%					
03/30/93	8490	4.890E-06	0.0%	9.65	5	11	5% -3%					
03/31/93	8491	4.993E-06	0.0%	9.65	6	11	5% -1%					
04/01/93	8492	4.805E-06	0.0%	9.65	7	11	5% -5%					
04/02/93	8493	4.515E-06	0.0%	9.67	8	11	5% -12%					
04/02/93	8493	5.088E-06	0.0%	9.65	8	11	5% 1%					
05/20/93	8541	5.136E-06	0.0%	9.67	56	11	5% 2%					
06/03/93	8555	5.216E-06	0.0%	9.67	70	11	5% 3%					
07/12/93	8594	5.504E-06	0.0%	9.63	109	11	5% 8%					
07/12/93	8594	5.515E-06	0.0%	9.65	109	11	5% 9%					
07/22/93	8604	5.032E-06	0.0%	9.65	119	11	5% 0%					
123-TMB (Trap/are) (MinUnc = 5%)												
10/02/91	7945	2.008E-07	0.0%	11.52	0	12 *	0%	2	2.008E-07			
MEOH (Trap/are) (MinUnc = 5%)												
10/01/91	7944				0	15 *		3	3.674E-06			
10/02/91	7945	3.674E-06	0.0%	1.65	1	15	0%					
224TM-C5 (Trap/are) (MinUnc = 5%)												
10/07/91	7950	2.910E-07	0.0%	5.70	0	16 *	0%	2	2.910E-07			
T-2-BUTE (Trap/are) (MinUnc = 5%)												
11/01/91	7975	6.090E-07	0.0%	1.75	0	17 *	0%	2	6.090E-07			
T-2-BUTE (Loop/are) (MinUnc = 5%)												
04/23/92	8149	1.366E-05	0.0%	3.83	0	18 A	6% 2%	29	1.337E-05	6%		
10/29/92	8338	1.229E-05	0.0%	3.27	189	18	6% -9%					
01/26/93	8427	1.505E-05	0.0%	3.28	278	18	6% 11%					
02/09/93	8441	1.275E-05	0.0%	3.27	292	18	6% -5%					
02/26/93	8458	1.412E-05	0.0%	3.27	309	18	6% 5%					
03/04/93	8464	1.296E-05	0.0%	3.28	315	18	6% -3%					
03/05/93	8465	1.240E-05	0.0%	3.27	316	18	6% -8%					
03/11/93	8471	1.364E-05	0.0%	3.29	322	18	6% 2%					
03/16/93	8476	1.377E-05	0.0%	3.28	327	18	6% 3%					
03/17/93	8477	1.373E-05	0.0%	3.29	328	18	6% 3%					
03/18/93	8478	1.324E-05	0.0%	3.27	329	18	6% -1%					
03/22/93	8482	1.319E-05	0.0%	3.28	333	18	6% -1%					
03/24/93	8484	1.300E-05	0.0%	3.28	335	18	6% -3%					
03/25/93	8485	1.294E-05	0.0%	4.02	0	19 A	5% -4%	64	1.352E-05	5%		
03/26/93	8486	1.334E-05	0.0%	4.02	1	19	5% -1%					
03/29/93	8489	1.317E-05	0.0%	4.02	4	19	5% -3%					
03/30/93	8490	1.312E-05	0.0%	4.02	5	19	5% -3%					
03/31/93	8491	1.313E-05	0.0%	4.02	6	19	5% -3%					
04/01/93	8492	1.302E-05	0.0%	4.02	7	19	5% -4%					
04/02/93	8493	1.326E-05	0.0%	4.01	8	19	5% -2%					
05/20/93	8541	1.297E-05	0.0%	4.02	56	19	5% -4%					
07/22/93	8604	1.454E-05	0.0%	4.00	119	19	5% 7%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2600 (continued)</b>													
07/30/93	8612	1.454E-05	0.0%	4.00	127	19	5%	7%					
08/02/93	8615	1.468E-05	0.0%	3.99	130	19	5%	8%					
N-C4 (Trap/are) (MinUnc = 5%)													
11/21/91	7995	4.943E-07	0.0%	2.43	0	20	*	0%	1	4.943E-07			
N-C4 (Loop/are) (MinUnc = 5%)													
06/16/92	8203	1.266E-05	0.0%	1.56	0	21	A	6%	31	1.334E-05	6%		
10/29/92	8338	1.207E-05	0.0%	2.99	135	21		6%					
01/07/93	8408	1.477E-05	0.0%	2.99	205	21		6%					
01/26/93	8427	1.470E-05	0.0%	3.01	224	21		6%					
02/09/93	8441	1.317E-05	0.0%	3.02	238	21		6%					
02/26/93	8458	1.420E-05	0.0%	3.01	255	21		6%					
03/04/93	8464	1.300E-05	0.0%	3.01	261	21		6%					
03/05/93	8465	1.296E-05	0.0%	3.01	262	21		6%					
03/11/93	8471	1.341E-05	0.0%	3.02	268	21		6%					
03/16/93	8476	1.345E-05	0.0%	3.02	273	21		6%					
03/17/93	8477	1.352E-05	0.0%	3.02	274	21		6%					
03/18/93	8478	1.333E-05	0.0%	3.01	275	21		6%					
03/22/93	8482	1.282E-05	0.0%	3.01	279	21		6%					
03/24/93	8484	1.275E-05	0.0%	3.01	281	21		6%					
03/25/93	8485	1.253E-05	0.0%	3.83	0	22	A	3%	100	1.285E-05	3%		
03/26/93	8486	1.282E-05	0.0%	3.83	1	22		3%					
03/29/93	8489	1.268E-05	0.0%	3.84	4	22		3%					
03/30/93	8490	1.266E-05	0.0%	3.83	5	22		3%					
03/31/93	8491	1.262E-05	0.0%	3.83	6	22		3%					
04/01/93	8492	1.250E-05	0.0%	3.83	7	22		3%					
04/02/93	8493	1.284E-05	0.0%	3.83	8	22		3%					
05/20/93	8541	1.309E-05	0.0%	3.84	56	22		3%					
07/12/93	8594	1.392E-05	0.0%	3.83	109	22		3%					
C2-BENZ (Trap/are) (MinUnc = 5%)													
11/10/91	7984				0	23	*		3	2.256E-07			
11/14/91	7988	2.256E-07	0.0%	5.58	4	23		0%					
ACETALD (Trap/are) (MinUnc = 5%)													
11/14/91	7988	1.980E-06	0.0%	0.88	0	24	A	12%	3	2.163E-06	12%		
02/13/92	8079	2.345E-06	0.0%	0.92	91	24		12%					
ACETALD (Loop/are) (MinUnc = 5%)													
05/28/92	8184	5.022E-05	0.0%	1.58	0	25	*	0%	1	5.022E-05			
03/25/93	8485				0	26	A	7%	6	7.089E-05	7%		
04/14/93	8505	4.335E-05	0.0%	3.90	20	0	X						
04/23/93	8514	6.986E-05	0.0%	3.97	29	26		7%					
06/03/93	8555	6.716E-05	0.0%	3.81	70	26		7%					
06/03/93	8555	7.144E-05	0.0%	3.81	70	26		7%					
06/03/93	8555	7.917E-05	0.0%	3.81	70	26		7%					
06/22/93	8574	6.680E-05	0.0%	3.81	89	26		7%					
N-C8 (Loop/are) (MinUnc = 5%)													
10/29/92	8338	6.278E-06	0.0%	7.31	0	28	L	4%	29	6.283E-06	3%	-3.14E-04	73%
01/29/93	8430	6.313E-06	0.0%	6.72	92	28		4%					
02/09/93	8441	5.991E-06	0.0%	7.30	103	28		4%					
02/10/93	8442	5.925E-06	0.0%	7.31	104	28		4%					
03/04/93	8464	5.808E-06	0.0%	7.29	126	28		4%					
03/05/93	8465	5.874E-06	0.0%	7.29	127	28		4%					
03/08/93	8468	6.288E-06	0.0%	7.31	130	28		4%					
03/11/93	8471	5.997E-06	0.0%	7.30	133	28		4%					
03/16/93	8476	6.087E-06	0.0%	7.30	138	28		4%					
03/17/93	8477	6.129E-06	0.0%	7.30	139	28		4%					
03/18/93	8478	6.036E-06	0.0%	7.30	140	28		4%					
03/19/93	8479	6.378E-06	0.0%	7.30	141	28		4%					
03/22/93	8482	5.808E-06	0.0%	7.29	144	28		4%					
03/24/93	8484	5.765E-06	0.0%	7.30	146	28		4%					
03/25/93	8485	5.691E-06	0.0%	8.66	0	29	A	5%	128	5.907E-06	5%		
03/26/93	8486	5.728E-06	0.0%	8.66	1	29		5%					
03/29/93	8489	5.678E-06	0.0%	8.66	4	29		5%					
03/30/93	8490	5.725E-06	0.0%	8.66	5	29		5%					
03/31/93	8491	5.550E-06	0.0%	8.66	6	29		5%					
04/01/93	8492	5.625E-06	0.0%	8.66	7	29		5%					
04/02/93	8493	5.701E-06	0.0%	8.67	8	29		5%					
04/02/93	8493	5.972E-06	0.0%	8.66	8	29		5%					
05/17/93	8538	6.033E-06	0.0%	8.67	53	29		5%					
05/20/93	8541	5.986E-06	0.0%	8.67	56	29		5%					
05/26/93	8547	6.198E-06	0.0%	8.68	62	29		5%					
06/03/93	8555	6.502E-06	0.0%	8.68	70	29		5%					
07/12/93	8594	5.854E-06	0.0%	8.64	109	29		5%					
07/12/93	8594	6.337E-06	0.0%	8.66	109	29		5%					
07/22/93	8604	6.018E-06	0.0%	8.66	119	29		5%					
P-XYLENE (Loop/are) (MinUnc = 5%)													
03/03/92	8098	5.479E-06	0.0%	6.97	0	30	*	0%	2	5.479E-06			

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev		
<b>Instrument 2600 (continued)</b>														
METHACRO (Loop/are) (MinUnc = 5%)														
06/05/92	8192	1.438E-05	0.0%	4.39	0	31	*		0%	1	1.438E-05			
03/25/93	8485				0	32	A	17%		11	2.197E-05	17%		
05/24/93	8545	2.402E-05	0.0%	5.62	60	32		17%	9%					
05/24/93	8545	2.418E-05	0.0%	5.62	60	32		17%	9%					
08/02/93	8615	1.772E-05	0.0%	5.58	130	32		17%	-24%					
MVK (Loop/are) (MinUnc = 5%)														
05/10/93	8531				0	33	A	15%		7	2.606E-05	15%		
05/26/93	8547	2.343E-05	0.0%	5.83	16	33		15%	-11%					
05/26/93	8547	2.493E-05	0.0%	5.83	16	33		15%	-5%					
06/03/93	8555	2.259E-05	0.0%	5.82	24	33		15%	-15%					
06/03/93	8555	2.317E-05	0.0%	5.81	24	33		15%	-12%					
06/03/93	8555	3.093E-05	0.0%	5.81	24	33		15%	16%					
06/03/93	8555	3.131E-05	0.0%	5.81	24	33		15%	17%					
ACETONE (Loop/are) (MinUnc = 5%)														
08/27/92	8275	2.838E-05	0.0%	4.37	0	38	A	10%	-12%	8	3.189E-05	10%		
08/27/92	8275	3.196E-05	0.0%	4.37	0	38		10%	0%					
08/27/92	8275	3.619E-05	0.0%	4.37	0	38		10%	12%					
01/04/93	8405	3.102E-05	0.0%	4.38	130	38		10%	-3%					
03/25/93	8485				0	39	A	7%		12	2.886E-05	7%		
04/14/93	8505	2.937E-05	0.0%	4.88	20	39		7%	2%					
06/03/93	8555	3.060E-05	0.0%	4.88	70	39		7%	6%					
06/22/93	8574	2.661E-05	0.0%	4.87	89	39		7%	-8%					
CYCC6 (Loop/are) (MinUnc = 5%)														
09/24/92	8303	9.790E-06	0.0%	5.33	0	40	L	7%	6%	93	9.180E-06	4%	-6.00E-04	55%
09/30/92	8309	8.309E-06	0.0%	5.33	6	40		7%	-10%					
10/29/92	8338	9.113E-06	0.0%	5.96	35	40		7%	1%					
01/04/93	8405	8.617E-06	0.0%	4.38	102	40		7%	0%					
01/29/93	8430	8.929E-06	0.0%	5.34	127	40		7%	5%					
02/10/93	8442	8.299E-06	0.0%	5.36	139	40		7%	-1%					
03/19/93	8479	7.983E-06	0.0%	5.96	176	40		7%	-3%					
03/25/93	8485				0	41	A	4%		14	8.177E-06	4%		
04/02/93	8493	8.188E-06	0.0%	6.69	8	41		4%	0%					
05/20/93	8541	8.040E-06	0.0%	6.69	56	41		4%	-2%					
05/24/93	8545	8.119E-06	0.0%	6.69	60	41		4%	-1%					
06/03/93	8555	8.639E-06	0.0%	6.69	70	41		4%	5%					
07/12/93	8594	8.097E-06	0.0%	6.68	109	41		4%	-1%					
07/22/93	8604	7.707E-06	0.0%	6.69	119	41		4%	-6%					
07/22/93	8604	7.976E-06	0.0%	6.67	119	41		4%	-3%					
07/30/93	8612	8.261E-06	0.0%	6.67	127	41		4%	1%					
08/05/93	8618	8.565E-06	0.0%	6.66	133	41		4%	5%					
TOLUENE (Loop/area) (MinUnc = 5%)														
08/11/92	8259	6.066E-06	0.0%	6.38	0	42	A	3%	-2%	29	6.216E-06	3%		
08/11/92	8259	5.876E-06	0.0%	6.38	0	42		3%	-6%					
10/29/92	8338	6.447E-06	0.0%	6.99	79	42		3%	4%					
01/29/93	8430	6.395E-06	0.0%	6.41	171	42		3%	3%					
02/09/93	8441	6.162E-06	0.0%	6.99	182	42		3%	-1%					
02/10/93	8442	6.246E-06	0.0%	6.99	183	42		3%	0%					
03/04/93	8464	6.024E-06	0.0%	6.98	205	42		3%	-3%					
03/05/93	8465	6.061E-06	0.0%	6.98	206	42		3%	-3%					
03/08/93	8468	6.332E-06	0.0%	6.99	209	42		3%	2%					
03/11/93	8471	6.181E-06	0.0%	6.98	212	42		3%	-1%					
03/16/93	8476	6.329E-06	0.0%	6.99	217	42		3%	2%					
03/17/93	8477	6.341E-06	0.0%	6.99	218	42		3%	2%					
03/18/93	8478	6.257E-06	0.0%	6.99	219	42		3%	1%					
03/19/93	8479	6.659E-06	0.0%	6.99	220	42		3%	7%					
03/22/93	8482	6.040E-06	0.0%	6.98	223	42		3%	-3%					
03/24/93	8484	6.039E-06	0.0%	6.99	225	42		3%	-3%					
03/25/93	8485	5.904E-06	0.0%	8.16	0	43	A	5%	-4%	68	6.169E-06	5%		
03/26/93	8486	5.952E-06	0.0%	8.16	1	43		5%	-4%					
03/29/93	8489	5.928E-06	0.0%	8.16	4	43		5%	-4%					
03/30/93	8490	5.905E-06	0.0%	8.16	5	43		5%	-4%					
03/31/93	8491	5.958E-06	0.0%	8.16	6	43		5%	-4%					
04/01/93	8492	5.858E-06	0.0%	8.16	7	43		5%	-5%					
04/02/93	8493	5.967E-06	0.0%	8.18	8	43		5%	-3%					
04/02/93	8493	6.389E-06	0.0%	8.16	8	43		5%	3%					
05/20/93	8541	6.247E-06	0.0%	8.12	56	43		5%	1%					
05/24/93	8545	6.315E-06	0.0%	8.18	60	43		5%	2%					
06/03/93	8555	6.585E-06	0.0%	8.18	70	43		5%	6%					
07/12/93	8594	6.064E-06	0.0%	8.14	109	43		5%	-2%					
07/12/93	8594	6.619E-06	0.0%	8.16	109	43		5%	7%					
07/22/93	8604	6.228E-06	0.0%	8.16	119	43		5%	1%					
08/05/93	8618	6.621E-06	0.0%	8.13	133	43		5%	7%					
ISOPRENE (Loop/are) (MinUnc = 5%)														
01/26/93	8427	1.473E-05	0.0%	3.28	0	44	*		0%	3	1.473E-05			
03/25/93	8485				0	45	A	5%		7	1.172E-05	5%		
05/17/93	8538	1.082E-05	0.0%	4.98	53	45		5%	-8%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev		
<b>Instrument 2600 (continued)</b>														
06/03/93	8555	1.216E-05	0.0%	4.97	70	45	5%	4%						
06/03/93	8555	1.207E-05	0.0%	4.97	70	45	5%	3%						
06/03/93	8555	1.182E-05	0.0%	4.97	70	45	5%	1%						
ME-CYCC6 (Loop/are) (MinUnc = 5%)														
02/25/93	8457				0	46	*		1	7.242E-06				
02/26/93	8458	7.242E-06	0.0%	5.96	1	46		0%						
A-PINENE (Loop/are) (MinUnc = 5%)														
08/13/92	8261	4.767E-06	0.0%	10.00	0	47	*	0%	0	4.767E-06				
03/25/93	8485				0	48	A	10%	4	4.619E-06	10%			
04/23/93	8514	4.388E-06	0.0%	10.55	29	48		10%						
05/11/93	8532	5.140E-06	0.0%	10.55	47	48		10%						
05/17/93	8538	4.328E-06	0.0%	10.56	53	48		10%						
B-PINENE (Loop/are) (MinUnc = 5%)														
08/13/92	8261	6.069E-06	0.0%	8.35	0	49	*	0%	0	6.069E-06				
03/25/93	8485				0	50	A	9%	2	4.980E-06	9%			
04/23/93	8514	4.818E-06	0.0%	11.16	29	50		9%						
05/11/93	8532	5.508E-06	0.0%	11.16	47	50		9%						
05/17/93	8538	4.613E-06	0.0%	11.17	53	50		9%						
BENZENE (Loop/are) (MinUnc = 5%)														
04/27/93	8518				0	51	A	7%	1	7.583E-06	7%			
04/28/93	8519	7.192E-06	0.0%	6.64	1	51		7%						
04/29/93	8520	7.973E-06	0.0%	6.66	2	51		7%						
ISOBUTEN (Loop/are) (MinUnc = 5%)														
04/23/92	8149	1.445E-05	0.0%	2.90	0	53	*	0%	0	1.445E-05				
03/25/93	8485				0	54	*		5	1.412E-05				
05/21/93	8542	1.412E-05	0.0%	3.74	57	54		0%						
BIACETYL (Loop/are) (MinUnc = 5%)														
08/02/93	8615	2.749E-05	0.0%	5.85	0	55	*	0%	0	2.749E-05				
<b>Instrument 2603</b>														
N-C6 (Loop/are) (MinUnc = 5%)														
08/18/93	8631	9.231E-06	0.0%	7.13	0	1	A	2%	1	9.160E-06	2%			
08/19/93	8632	8.992E-06	0.0%	7.15	1	1		2%						
09/07/93	8651	9.096E-06	0.0%	7.14	20	1		2%						
09/17/93	8661	8.818E-06	0.0%	7.12	30	1		2%						
10/05/93	8679	9.558E-06	0.0%	7.12	48	1		2%						
10/19/93	8693	9.166E-06	0.0%	7.14	62	1		2%						
10/25/93	8699	9.216E-06	0.0%	7.14	68	1		2%						
12/02/93	8737	9.202E-06	0.0%	7.15	106	1		2%						
M-XYLENE (Loop/are) (MinUnc = 5%)														
08/13/93	8626	5.362E-06	0.0%	11.21	0	2	L	9%	5%	19	5.093E-06	4%	-1.02E-03	66%
09/07/93	8651	5.022E-06	0.0%	11.25	25	2		9%						
09/07/93	8651	4.400E-06	0.0%	11.24	25	2		9%						
09/09/93	8653	4.413E-06	0.0%	11.25	27	2		9%						
09/17/93	8661	5.241E-06	0.0%	11.23	35	2		9%						
09/17/93	8661	4.484E-06	0.0%	11.24	35	2		9%						
10/05/93	8679	5.371E-06	0.0%	11.23	53	2		9%						
10/05/93	8679	5.117E-06	0.0%	11.23	53	2		9%						
10/19/93	8693	5.064E-06	0.0%	11.24	67	2		9%						
10/19/93	8693	4.558E-06	0.0%	11.24	67	2		9%						
10/25/93	8699	4.984E-06	0.0%	11.25	73	2		9%						
11/05/93	8710	4.632E-06	0.0%	11.26	84	2		9%						
11/15/93	8720	4.685E-06	0.0%	11.26	94	2		10%						
12/02/93	8737	4.078E-06	0.0%	11.27	111	2		10%						
135-TMB (Loop/are) (MinUnc = 5%)														
10/05/93	8679	3.448E-06	0.0%	12.64	0	3	L	10%	8%	1	3.171E-06	5%	-2.41E-03	59%
10/19/93	8693	3.120E-06	0.0%	12.65	14	3		10%						
10/19/93	8693	2.630E-06	0.0%	12.65	14	3		10%						
10/25/93	8699	3.039E-06	0.0%	12.66	20	3		10%						
12/03/93	8738	2.752E-06	0.0%	12.09	59	3		11%						
12/06/93	8741	2.744E-06	0.0%	12.67	62	3		11%						
T-2-BUTE (Loop/are) (MinUnc = 5%)														
09/28/93	8672				0	4	A	4%		13	1.526E-05	4%		
10/05/93	8679	1.603E-05	0.0%	4.83	7	4		4%						
10/25/93	8699	1.467E-05	0.0%	4.84	27	4		4%						
11/15/93	8720	1.515E-05	0.0%	4.85	48	4		4%						
12/03/93	8738	1.521E-05	0.0%	4.87	66	4		4%						
N-C4 (Loop/are) (MinUnc = 5%)														
08/13/93	8626	1.311E-05	0.0%	4.66	0	5	A	6%	-7%	43	1.400E-05	6%		
09/07/93	8651	1.346E-05	0.0%	4.66	25	5		6%						
10/19/93	8693	1.494E-05	0.0%	4.68	67	5		6%						



Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2603 (continued)</b>												
12/02/93	8737	1.450E-05	0.0%	4.53	111	5	6%	3%				
N-C8 (Loop/are) (MinUnc = 5%)												
08/13/93	8626	6.429E-06	0.0%	10.15	0	7	A	3%	2%	44	6.291E-06	3%
09/07/93	8651	6.142E-06	0.0%	10.19	25	7		3%	-2%			
09/17/93	8661	6.449E-06	0.0%	10.17	35	7		3%	2%			
10/05/93	8679	6.660E-06	0.0%	10.16	53	7		3%	6%			
10/19/93	8693	5.982E-06	0.0%	10.18	67	7		3%	-5%			
10/19/93	8693	6.415E-06	0.0%	10.18	67	7		3%	2%			
10/25/93	8699	6.195E-06	0.0%	10.19	73	7		3%	-2%			
11/15/93	8720	6.315E-06	0.0%	10.19	94	7		3%	0%			
11/18/93	8723	6.084E-06	0.0%	10.18	97	7		3%	-3%			
12/02/93	8737	6.241E-06	0.0%	10.20	111	7		3%	-1%			
PROPENE (Loop/are) (MinUnc = 5%)												
08/13/93	8626	1.999E-05	0.0%	2.96	0	8	A	4%	-2%	5	2.036E-05	4%
08/18/93	8631	1.932E-05	0.0%	2.97	5	8		4%	-5%			
09/07/93	8651	1.968E-05	0.0%	2.98	25	8		4%	-3%			
10/19/93	8693	2.171E-05	0.0%	3.00	67	8		4%	6%			
11/05/93	8710	2.052E-05	0.0%	3.00	84	8		4%	1%			
12/03/93	8738	2.096E-05	0.0%	3.04	112	8		4%	3%			
METHACRO (Loop/are) (MinUnc = 5%)												
09/07/93	8651	1.887E-05	0.0%	6.60	0	9	A	4%	-4%	3	1.967E-05	4%
09/17/93	8661	2.054E-05	0.0%	6.72	10	9		4%	4%			
12/06/93	8741	1.961E-05	0.0%	6.74	90	9		4%	0%			
MVK (Loop/are) (MinUnc = 5%)												
11/16/93	8721	2.960E-05	0.0%	6.98	0	10	A	19%		2	2.611E-05	19%
11/18/93	8723	2.960E-05	0.0%	6.98	2	10		19%	12%			
12/03/93	8738	2.263E-05	0.0%	7.00	17	10		19%	-15%			
ACETONE (Loop/are) (MinUnc = 5%)												
08/19/93	8632	2.965E-05	0.0%	5.78	0	11	A	5%	5%	5	2.822E-05	5%
09/07/93	8651	2.702E-05	0.0%	5.78	19	11		5%	-4%			
09/17/93	8661	2.982E-05	0.0%	5.75	29	11		5%	5%			
11/15/93	8720	2.727E-05	0.0%	5.77	88	11		5%	-3%			
12/03/93	8738	2.736E-05	0.0%	5.80	106	11		5%	-3%			
TOLUENE (Loo/area) (MinUnc = 5%)												
08/13/93	8626	6.634E-06	0.0%	9.66	0	13	A	3%	-1%	16	6.698E-06	3%
09/07/93	8651	6.893E-06	0.0%	9.69	25	13		3%	3%			
09/07/93	8651	6.695E-06	0.0%	9.68	25	13		3%	0%			
09/09/93	8653	6.295E-06	0.0%	9.68	27	13		3%	-6%			
09/17/93	8661	6.579E-06	0.0%	9.68	35	13		3%	-2%			
10/05/93	8679	6.849E-06	0.0%	9.67	53	13		3%	2%			
10/19/93	8693	6.924E-06	0.0%	9.69	67	13		3%	3%			
10/25/93	8699	7.040E-06	0.0%	9.70	73	13		3%	5%			
10/25/93	8699	6.607E-06	0.0%	9.70	73	13		3%	-1%			
11/15/93	8720	6.467E-06	0.0%	9.70	94	13		3%	-4%			
ISOPRENE (Loop/are) (MinUnc = 5%)												
09/07/93	8651	9.232E-06	0.0%	5.93	0	14	A	11%	-24%	6	1.144E-05	11%
09/09/93	8653	1.206E-05	0.0%	5.93	2	14		11%	5%			
09/17/93	8661	1.137E-05	0.0%	5.93	10	14		11%	-1%			
10/19/93	8693	1.232E-05	0.0%	5.94	42	14		11%	7%			
12/02/93	8737	1.221E-05	0.0%	5.91	86	14		11%	6%			
A-PINENE (Loop/are) (MinUnc = 5%)												
09/17/93	8661	4.334E-06	0.0%	12.20	0	15	A	9%	-4%	3	4.494E-06	9%
10/05/93	8679	5.092E-06	0.0%	12.19	18	15		9%	12%			
10/25/93	8699	4.422E-06	0.0%	12.22	38	15		9%	-2%			
12/02/93	8737	4.127E-06	0.0%	12.23	76	15		9%	-9%			
B-PINENE (Loop/are) (MinUnc = 5%)												
09/17/93	8661	4.349E-06	0.0%	12.80	0	16	A	10%	3%	3	4.228E-06	10%
10/05/93	8679	4.902E-06	0.0%	12.79	18	16		10%	14%			
11/15/93	8720	3.742E-06	0.0%	12.83	59	16		10%	-13%			
11/18/93	8723	4.156E-06	0.0%	12.80	62	16		10%	-2%			
12/02/93	8737	3.991E-06	0.0%	12.83	76	16		10%	-6%			
BIACETYL (Loop/are) (MinUnc = 5%)												
11/24/93	8729	8.869E-05	0.0%	7.03	0	17	A	37%	21%	1	7.037E-05	37%
11/30/93	8735	5.204E-05	0.0%	7.02	6	17		37%	-35%			
<b>Instrument 2601</b>												
N-C6 (Tenax/ar) (MinUnc = 5%)												
09/30/91	7943				0	1	A	3%		9	4.032E-07	3%
06/24/92	8211	4.013E-07	0.0%	7.19	268	1		3%	0%			
07/30/92	8247	3.932E-07	0.0%	7.23	304	1		3%	-3%			
08/12/92	8260	4.151E-07	0.0%	7.22	317	1		3%	3%			

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2601 (continued)</b>													
M-XYLENE (Tenax/ar) (MinUnc = 5%)													
09/30/91	7943				0	2	A	16%		9	3.277E-07	16%	
06/24/92	8211	3.896E-07	0.0%	10.51	268	2		16%	16%				
06/30/92	8217	3.446E-07	0.0%	10.56	274	2		16%	5%				
08/12/92	8260	3.907E-07	0.0%	10.56	317	2		16%	16%				
11/09/92	8349	3.057E-07	0.0%	9.88	406	2		16%	-7%				
11/10/92	8350	3.732E-07	0.0%	9.91	407	2		16%	12%				
11/24/92	8364	2.782E-07	0.0%	11.42	421	2		16%	-18%				
11/24/92	8364	2.778E-07	0.0%	11.42	421	2		16%	-18%				
12/10/92	8380	2.617E-07	0.0%	11.43	437	2		16%	-25%				
A-PINENE (Tenax/ar) (MinUnc = 5%)													
08/12/92	8260	2.435E-07	0.0%	11.35	0	3	A	5%	2%	6	2.393E-07	5%	
08/17/92	8265	2.502E-07	0.0%	10.76	5	3		5%	4%				
08/28/92	8276	2.550E-07	0.0%	10.80	16	3		5%	6%				
11/09/92	8349	2.239E-07	0.0%	10.66	89	3		5%	-7%				
11/10/92	8350	2.212E-07	0.0%	10.69	90	3		5%	-8%				
11/24/92	8364	2.351E-07	0.0%	12.25	104	3		5%	-2%				
11/24/92	8364	2.465E-07	0.0%	12.25	104	3		5%	3%				
B-PINENE (Tenax/ar) (MinUnc = 5%)													
08/12/92	8260	2.491E-07	0.0%	11.85	0	4	L	3%	-3%	5	2.575E-07	2%	-1.12E-03 23%
08/19/92	8267	2.638E-07	0.0%	11.26	7	4		4%	3%				
08/28/92	8276	2.541E-07	0.0%	11.29	16	4		4%	0%				
11/18/92	8358	2.222E-07	0.0%	11.19	98	4		4%	-3%				
11/24/92	8364	2.269E-07	0.0%	12.78	104	4		4%	0%				
11/24/92	8364	2.338E-07	0.0%	12.78	104	4		4%	3%				
SABINENE (Tenax/ar) (MinUnc = 5%)													
08/17/91	7899				0	5	A	9%		4	2.261E-07	9%	
08/17/92	8265	2.559E-07	0.0%	11.20	366	5		9%	12%				
11/09/92	8349	2.115E-07	0.0%	11.10	450	5		9%	-7%				
11/10/92	8350	2.194E-07	0.0%	11.13	451	5		9%	-3%				
12/10/92	8380	2.174E-07	0.0%	12.72	481	5		9%	-4%				
3-CARENE (Tenax/ar) (MinUnc = 5%)													
08/17/92	8265	3.026E-07	0.0%	11.61	0	6	L	4%	0%	4	3.025E-07	2%	-1.96E-03 17%
08/19/92	8267	3.146E-07	0.0%	11.62	2	6		5%	4%				
08/28/92	8276	2.859E-07	0.0%	11.64	11	6		5%	-4%				
11/09/92	8349	2.436E-07	0.0%	11.53	84	6		5%	-4%				
11/10/92	8350	2.455E-07	0.0%	11.54	85	6		5%	-3%				
12/10/92	8380	2.462E-07	0.0%	13.15	115	6		6%	5%				
D-LIMONE (Tenax/ar) (MinUnc = 5%)													
08/19/92	8267	3.058E-07	0.0%	11.82	0	7	L	7%	5%	4	2.896E-07	4%	-2.15E-03 25%
08/28/92	8276	2.668E-07	0.0%	11.84	9	7		7%	-6%				
11/18/92	8358	2.225E-07	0.0%	11.74	91	7		8%	-5%				
11/24/92	8364	2.327E-07	0.0%	13.33	97	7		9%	2%				
11/24/92	8364	2.368E-07	0.0%	13.33	97	7		9%	3%				
NOPINONE (Tenax/ar) (MinUnc = 5%)													
08/28/92	8276	3.265E-07	0.0%	12.97	0	9	*		0%	0	3.265E-07		
09/10/92	8289	7.318E-07	0.0%	12.97	0	10	A	10%	2%	14	7.178E-07	10%	
09/14/92	8293	6.390E-07	0.0%	12.99	4	10		10%	-12%				
10/16/92	8325	7.827E-07	0.0%	12.96	36	10		10%	8%				
11/04/92	8344				0	11	A	12%		3	3.240E-07	12%	
11/09/92	8349	2.940E-07	0.0%	12.83	5	11		12%	-10%				
11/10/92	8350	2.987E-07	0.0%	12.86	6	11		12%	-8%				
11/24/92	8364	3.755E-07	0.0%	14.55	20	11		12%	14%				
11/24/92	8364	5.780E-07	0.0%	14.55	20	0	X						
12/10/92	8380	3.277E-07	0.0%	14.56	36	11		12%	1%				
SI2OME0H (Tenax/ar) (MinUnc = 5%)													
06/16/92	8203	4.886E-07	0.0%	8.78	0	12	A	52%	32%	6	3.342E-07	52%	
06/24/92	8211	3.695E-07	0.0%	9.67	8	12		52%	10%				
07/07/92	8224	1.446E-07	0.0%	9.64	21	12		52%	-131%				
SI2OME6 (Tenax/ar) (MinUnc = 5%)													
06/16/92	8203	3.444E-07	0.0%	7.33	0	13	A	4%	3%	2	3.356E-07	4%	
06/24/92	8211	3.269E-07	0.0%	8.28	8	13		4%	-3%				
(SIOME)4 (Tenax/ar) (MinUnc = 5%)													
06/16/92	8203	2.517E-07	0.0%	11.10	0	14	A	6%	4%	3	2.416E-07	6%	
06/24/92	8211	2.315E-07	0.0%	11.97	8	14		6%	-4%				
<b>Instrument 2800</b>													
CYCC6 (Trap/are) (MinUnc = 5%)													
10/29/92	8338	3.503E-06	0.0%	6.93	0	1	*		0%	2	3.503E-06		
M-XYLENE (Trap/are) (MinUnc = 5%)													
10/29/92	8338	2.805E-07	0.0%	9.04	0	2	*		0%	2	2.805E-07		

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn.	Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2800 (continued)</b>													
N-C4 (Trap/are) (MinUnc = 5%)													
10/29/92	8338	4.540E-07	0.0%	2.70	0	3	*	0%	2	4.540E-07			
N-C8 (Trap/are) (MinUnc = 5%)													
10/29/92	8338	2.802E-07	0.0%	8.40	0	5	*	0%	2	2.802E-07			
TOLUENE (Trap/are) (MinUnc = 5%)													
10/29/92	8338	3.003E-07	0.0%	8.05	0	6	*	0%	2	3.003E-07			
T-2-BUTE (Trap/are) (MinUnc = 5%)													
10/29/92	8338	4.594E-07	0.0%	3.13	0	7	*	0%	2	4.594E-07			
<b>Instrument 2801</b>													
CYCC6 (Trap/are) (MinUnc = 5%)													
01/25/93	8426				0	5	A	10%	12	3.341E-07	10%		
01/29/93	8430	3.579E-07	0.0%	9.36	4	5		10%					
02/10/93	8442	3.102E-07	0.0%	9.37	16	5		10%					
ISOPRENE (Trap/are) (MinUnc = 5%)													
01/26/93	8427	5.334E-07	0.0%	7.38	0	7	*	0%	2	5.334E-07			
ME-CYCC6 (Trap/are) (MinUnc = 5%)													
02/25/93	8457				0	8	*		1	2.483E-07			
02/26/93	8458	2.483E-07	0.0%	10.03	1	8		0%					
M-XYLENE (Trap/are) (MinUnc = 5%)													
11/18/92	8358	3.870E-07	0.0%	11.55	-99	0	X						
11/19/92	8359	2.477E-07	0.0%	11.56	0	9	A	9%	8	2.416E-07	9%		
01/29/93	8430	2.701E-07	0.0%	10.53	71	9		9%					
02/09/93	8441	2.313E-07	0.0%	11.52	82	9		9%					
02/10/93	8442	2.174E-07	0.0%	11.53	83	9		9%					
M-XYLENE (Loop/are) (MinUnc = 5%)													
04/03/93	8494	1.783E-06	0.0%	12.67	0	10	A	7%	4	1.876E-06	7%		
04/03/93	8494	1.969E-06	0.0%	11.96	0	10		7%					
N-C4 (Trap/are) (MinUnc = 5%)													
11/18/92	8358	5.132E-07	0.0%	5.45	0	11	A	7%	8	5.009E-07	7%		
01/26/93	8427	5.416E-07	0.0%	5.43	69	11		7%					
02/09/93	8441	4.586E-07	0.0%	5.42	83	11		7%					
02/26/93	8458	4.903E-07	0.0%	5.40	100	11		7%					
N-C4 (Loop/are) (MinUnc = 5%)													
04/02/93	8493	4.365E-06	0.0%	4.36	0	12	*	0%	4	4.365E-06			
N-C8 (Trap/are) (MinUnc = 5%)													
11/18/92	8358	3.712E-07	0.0%	10.84	-135	0	X						
11/19/92	8359	2.504E-07	0.0%	10.84	0	15	A	10%	8	2.536E-07	10%		
01/29/93	8430	2.798E-07	0.0%	10.81	71	15		10%					
02/09/93	8441	2.307E-07	0.0%	10.81	82	15		10%					
N-C8 (Loop/are) (MinUnc = 5%)													
04/03/93	8494	2.116E-06	0.0%	12.10	0	16	A	2%	4	2.145E-06	2%		
04/03/93	8494	2.175E-06	0.0%	11.96	0	16		2%					
PROPENE (Trap/are) (MinUnc = 5%)													
11/18/92	8358	6.645E-07	0.0%	2.66	0	18	A	18%	16	7.282E-07	18%		
01/26/93	8427	7.728E-07	0.0%	2.66	69	18		18%					
02/09/93	8441	6.144E-07	0.0%	2.65	83	18		18%					
02/26/93	8458	6.511E-07	0.0%	2.60	100	18		18%					
03/19/93	8479	9.381E-07	0.0%	2.63	121	18		18%					
TOLUENE (Trap/are) (MinUnc = 5%)													
11/18/92	8358	4.093E-07	0.0%	10.53	0	0	X						
11/19/92	8359	2.708E-07	0.0%	10.54	0	19	A	8%	8	2.682E-07	8%		
01/29/93	8430	2.888E-07	0.0%	10.50	71	19		8%					
02/09/93	8441	2.449E-07	0.0%	10.50	82	19		8%					
TOLUENE (Loop/are) (MinUnc = 5%)													
04/03/93	8494	2.214E-06	0.0%	11.86	0	20	A	4%	4	2.277E-06	4%		
04/03/93	8494	2.339E-06	0.0%	11.74	0	20		4%					
T-2-BUTE (Trap/are) (MinUnc = 5%)													
11/18/92	8358	4.870E-07	0.0%	5.75	0	21	A	8%	9	4.868E-07	8%		
01/26/93	8427	5.379E-07	0.0%	5.73	69	21		8%					
02/09/93	8441	4.415E-07	0.0%	5.72	83	21		8%					
02/26/93	8458	4.806E-07	0.0%	5.70	100	21		8%					
T-2-BUTE (Loop/are) (MinUnc = 5%)													
04/02/93	8493	4.426E-06	0.0%	6.94	0	22	*	0%	2	4.426E-06			

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff	Runs	Avg/Intc	Sdev	Slope	Sdev		
<b>Instrument 2801 (continued)</b>														
<b>Instrument 2802</b>														
ACETALD (Loop/are) (MinUnc = 5%)														
05/24/93	8545				0	1	A	6%		25	2.039E-05	6%		
06/03/93	8555	2.060E-05	0.0%	10.60	10	1		6%	1%					
07/22/93	8604	2.077E-05	0.0%	10.72	59	1		6%	2%					
08/18/93	8631	2.134E-05	0.0%	10.74	86	1		6%	4%					
09/07/93	8651	2.113E-05	0.0%	10.76	106	1		6%	3%					
11/05/93	8710	1.902E-05	0.0%	9.89	165	1		6%	-7%					
11/11/93	8716	2.186E-05	0.0%	10.31	171	1		6%	7%					
11/15/93	8720	2.035E-05	0.0%	9.39	175	1		6%	0%					
12/06/93	8741	1.809E-05	0.0%	10.34	196	1		6%	-13%					
ACETONE (Loop/are) (MinUnc = 5%)														
05/24/93	8545				0	2	A	7%		15	9.809E-06	7%		
06/03/93	8555	1.041E-05	0.0%	11.18	10	2		7%	6%					
07/22/93	8604	1.009E-05	0.0%	12.60	59	2		7%	3%					
09/07/93	8651	9.811E-06	0.0%	12.59	106	2		7%	0%					
09/17/93	8661	1.037E-05	0.0%	12.61	116	2		7%	5%					
11/15/93	8720	9.475E-06	0.0%	11.27	175	2		7%	-4%					
12/03/93	8738	8.697E-06	0.0%	12.80	193	2		7%	-13%					
BIACETYL (Loop/are) (MinUnc = 5%)														
11/05/93	8710	1.017E-05	0.0%	14.59	0	3	A	6%	6%	1	9.588E-06	6%		
11/11/93	8716	8.863E-06	0.0%	14.60	6	3		6%	-8%					
11/11/93	8716	9.448E-06	0.0%	14.59	6	3		6%	-1%					
11/15/93	8720	1.047E-05	0.0%	14.60	10	3		6%	8%					
11/24/93	8729	9.095E-06	0.0%	14.61	19	3		6%	-5%					
11/30/93	8735	9.479E-06	0.0%	14.61	25	3		6%	-1%					
ETHANE (Loop/are) (MinUnc = 5%)														
09/29/93	8673				0	4	*			4	1.050E-05			
10/05/93	8679	1.050E-05	0.0%	7.70	6	4			0%					
ETHENE (Loop/are) (MinUnc = 5%)														
05/17/93	8538	9.711E-06	0.0%	7.36	0	5	*		0%	0	9.711E-06			
05/17/93	8538				0	6	A	4%		51	9.756E-06	4%		
05/20/93	8541	9.357E-06	0.0%	7.39	3	6		4%	-4%					
05/21/93	8542	9.567E-06	0.0%	7.37	4	6		4%	-2%					
07/12/93	8594	9.969E-06	0.0%	7.34	56	6		4%	2%					
08/13/93	8626	9.868E-06	0.0%	7.35	88	6		4%	1%					
09/07/93	8651	9.942E-06	0.0%	7.36	113	6		4%	2%					
10/05/93	8679	1.062E-05	0.0%	7.36	141	6		4%	8%					
10/19/93	8693	9.360E-06	0.0%	6.01	155	6		4%	-4%					
11/05/93	8710	9.366E-06	0.0%	5.99	172	6		4%	-4%					
ISOBUTEN (Loop/are) (MinUnc = 5%)														
05/21/93	8542	5.307E-06	0.0%	11.26	0	7	*		0%	5	5.307E-06			
ISOPRENE (Loop/are) (MinUnc = 5%)														
06/03/93	8555	4.872E-06	0.0%	11.64	0	8	L	2%	-1%	6	4.903E-06	2%	-1.08E-03	12%
09/07/93	8651	4.384E-06	0.0%	12.99	96	8		3%	0%					
09/17/93	8661	4.463E-06	0.0%	13.63	106	8		3%	3%					
10/19/93	8693	4.101E-06	0.0%	11.62	138	8		3%	-2%					
12/02/93	8737	3.921E-06	0.0%	11.64	182	8		3%	0%					
METHACRO (Loop/are) (MinUnc = 5%)														
09/07/93	8651	6.646E-06	0.0%	13.59	0	9	L	3%	-2%	1	6.749E-06	2%	-1.20E-03	27%
09/17/93	8661	6.783E-06	0.0%	14.30	10	9		3%	2%					
12/06/93	8741	6.006E-06	0.0%	14.07	90	9		3%	0%					
MVK (Loop/are) (MinUnc = 5%)														
06/03/93	8555	1.012E-05	0.0%	12.60	0	10	L	3%	0%	2	1.013E-05	2%	-1.59E-03	9%
11/18/93	8723	7.567E-06	0.0%	14.45	168	10		4%	2%					
12/03/93	8738	7.042E-06	0.0%	14.47	183	10		4%	-2%					
N-C4 (Loop/are) (MinUnc = 5%)														
07/19/93	8601				0	11	A	6%		57	4.839E-06	6%		
08/13/93	8626	5.121E-06	0.0%	11.35	25	11		6%	6%					
08/18/93	8631	5.181E-06	0.0%	11.38	30	11		6%	7%					
09/07/93	8651	4.622E-06	0.0%	11.39	50	11		6%	-5%					
10/19/93	8693	4.775E-06	0.0%	10.00	92	11		6%	-1%					
12/02/93	8737	4.494E-06	0.0%	10.00	136	11		6%	-8%					
PROPENE (Loop/are) (MinUnc = 5%)														
05/17/93	8538	6.158E-06	0.0%	9.45	0	12	*		0%	0	6.158E-06			
05/17/93	8538				0	13	A	2%		63	6.351E-06	2%		
05/20/93	8541	6.307E-06	0.0%	9.45	3	13		2%	-1%					
05/21/93	8542	6.195E-06	0.0%	9.45	4	13		2%	-3%					
07/12/93	8594	6.436E-06	0.0%	9.40	56	13		2%	1%					
08/13/93	8626	6.296E-06	0.0%	9.42	88	13		2%	-1%					
08/18/93	8631	6.527E-06	0.0%	9.43	93	13		2%	3%					

Table B-3 (continued)

Date	DayNo	Factor	Sdev	R.T.	Days	Asn. Cd	F(fit) Unc. Diff		Runs	Avg/Intc	Sdev	Slope	Sdev
<b>Instrument 2802 (continued)</b>													
09/07/93	8651	6.483E-06	0.0%	9.44	113	13	2%	2%					
10/19/93	8693	6.427E-06	0.0%	8.00	155	13	2%	1%					
11/05/93	8710	6.302E-06	0.0%	7.98	172	13	2%	-1%					
12/03/93	8738	6.185E-06	0.0%	8.48	200	13	2%	-3%					
<b>Instrument 2710</b>													
CCL4 (Loop/are) (MinUnc = 10%)													
03/19/93	8479	1.699E-06	0.0%	5.89	0	1 *		0%	4	1.699E-06			
<b>Instrument 2700</b>													
CCL4 (Loop/are) (MinUnc = 5%)													
03/17/92	8112				0	1 A	37%		46	5.439E-08	37%		
03/20/92	8115	6.948E-08	0.0%	12.24	3	1	37%	22%					
04/29/92	8155	9.282E-08	0.0%	11.75	43	1	37%	41%					
06/05/92	8192	4.862E-08	0.0%	11.75	80	1	37%	-12%					
06/24/92	8211	4.624E-08	0.0%	6.40	99	1	37%	-18%					
08/03/92	8251	4.600E-08	0.0%	6.42	139	1	37%	-18%					
08/06/92	8254	4.514E-08	0.0%	6.38	142	1	37%	-21%					
08/28/92	8276	3.246E-08	0.0%	9.30	164	1	37%	-68%					
09/16/92	8295	6.754E-08	0.0%	5.71	0	2 A	13%	-23%	15	8.317E-08	13%		
10/03/92	8312	8.380E-08	0.0%	5.80	17	2	13%	1%					
10/06/92	8315	9.751E-08	0.0%	5.45	20	2	13%	15%					
10/16/92	8325	9.307E-08	0.0%	5.85	30	2	13%	11%					
10/22/92	8331	8.124E-08	0.0%	5.85	36	2	13%	-2%					
10/22/92	8331	7.588E-08	0.0%	5.85	36	2	13%	-10%					
12/04/92	8374				0	3 A	17%		46	1.738E-08	17%		
12/07/92	8377	1.417E-08	0.0%	8.73	3	3	17%	-23%					
12/15/92	8385	1.577E-08	0.0%	8.74	11	3	17%	-10%					
02/02/93	8434	1.893E-08	0.0%	10.47	60	3	17%	8%					
02/12/93	8444	2.065E-08	0.0%	10.45	70	3	17%	16%					
CCL4 (Loop/ar#) (MinUnc = 5%)													
03/19/93	8479	8.654E-07	0.0%	9.34	0	4 *		0%	4	8.654E-07			
CL2IBUTE (Loop/are) (MinUnc = 5%)													
02/20/92	8086				0	5 L	18%		56	4.998E-07	9%	-3.12E-03	26%
02/21/92	8087	8.207E-07	0.0%	0.00	1	0 X							
03/02/92	8097	5.064E-07	0.0%	9.98	11	5	19%	5%					
03/09/92	8104	8.495E-07	0.0%	9.78	18	0 X							
03/10/92	8105	3.537E-07	0.0%	9.50	19	5	20%	-33%					
03/20/92	8115	4.735E-07	0.0%	18.75	29	5	20%	4%					
04/29/92	8155	4.895E-07	0.0%	18.04	69	5	23%	20%					
06/05/92	8192	3.263E-07	0.0%	18.05	106	5	27%	-3%					
06/24/92	8211	2.929E-07	0.0%	7.90	125	5	30%	-4%					
08/03/92	8251	3.430E-07	0.0%	7.98	165	5	38%	29%					
08/06/92	8254	2.289E-07	0.0%	7.91	168	5	39%	-4%					
08/28/92	8276	1.090E-07	0.0%	11.60	190	5	45%	-87%					
09/16/92	8295	2.957E-07	0.0%	8.15	0	6 A	25%	-29%	14	3.816E-07	25%		
10/06/92	8315	4.155E-07	0.0%	9.48	20	6	25%	8%					
10/16/92	8325	5.110E-07	0.0%	9.81	30	6	25%	25%					
10/22/92	8331	4.070E-07	0.0%	9.80	36	6	25%	6%					
10/22/92	8331	2.787E-07	0.0%	9.80	36	6	25%	-37%					
12/04/92	8374				0	7 A	15%		37	1.275E-07	15%		
12/07/92	8377	1.418E-07	0.0%	12.78	3	7	15%	10%					
12/15/92	8385	1.433E-07	0.0%	12.78	11	7	15%	11%					
02/02/93	8434	1.036E-07	0.0%	19.30	60	7	15%	-23%					
02/12/93	8444	1.215E-07	0.0%	19.28	70	7	15%	-5%					
CL2IBUTE (Loop/mv) (MinUnc = 5%)													
02/26/92	8092				0	8 *			1	5.976E-04			
02/27/92	8093	5.976E-04	0.0%	6.70	1	8		0%					
BIACETYL (Loop/are) (MinUnc = 5%)													
07/30/93	8612				0	9 *			2	6.650E-08			
08/02/93	8615	6.650E-08	0.0%	7.36	3	9		0%					

## APPENDIX C

### INSTALLATION OF FILES AND MODELING PROGRAMS

Associated with this document is a set of computer data files containing the SAPRC environmental chamber data, associated spreadsheets and backing data, and data and software which can be used to conduct initial model simulations of the runs. This Appendix describes how to obtain and install these files and gives a brief summary of the modeling files and programs. The latter is not intended to be comprehensive, but should give the user sufficient information to have an overview of the modeling process using this software and to understand the types of files and data which are required.

The source files for the example model simulation programs are available in a separate distribution, which also contains a large set of SAPRC modeling and VOC reactivity calculation software and files. Although this separate distribution is available to all who request it, a discussion of the installation and use of these files is beyond the scope of this document. FILES.DOC, which is included in this distribution, discusses the background, installation, and use of these programs.

#### How to Obtain the Files

By Internet. The files are available on the Internet by anonymous FTP at carterpc.ucr.edu in directory "chdata", or at cert.ucr.edu in the "pub/carter/chdata" directory. In either case, the user should: (1) run an FTP program on a computer connected to the Internet; (2) connect to (or "open") carterpc.ucr.edu or cert.ucr.edu; (3) give the username "anonymous" when prompted to do so; (3) give their e-mail address when prompted for a password; (4) change to the directory "chdata" or "pub/carter/chdata" (e.g., by using the command "cd pub/carter/chdata"); (5) be sure the file transfer type is set at "binary" (e.g., type in "binary"); (6) download all the files in the directory (e.g., by using "mget \*.\*"); and (6) log out or disconnect. The files should be transferred to an empty subdirectory for installation. The total size of the distributed files as downloaded from the FTP site is ~11 MB.

The "carterpc" location should be tried first because it is the location where files will be updated first. However, the FTP server program presently implemented on carterpc is unreliable and may hang up when transfers are attempted. The "cert" computer is less likely to be unavailable and have FTP server problems.

The authors would appreciate it if users of these data would send e-mail to carter@cert.ucr.edu to inform us that they have downloaded those files. In addition to informing us of users of these data, it will allow us to inform users of updates or corrections. This e-mail address can also be used to report any problems with the acquisition, installation or use of these data.

The separate distribution containing the full set of SAPRC model simulation and reactivity calculation software can also be obtained from these Internet locations. At carterpc.ucr.edu these are in the directory "model", while at cert.ucr.edu they are in the directory "pub\carter\model". All the files in the "model" directory should be downloaded. The file \_README2.TXT contains brief installation instructions, and FILES.DOC contains the documentation and instructions in more detail.

By Diskette. The files are available on diskette from the authors, but there will be a charge for this service. Those who have access to Internet are requested to use that method and not request diskettes.

The distributed data requires several diskettes. The files necessary to start the installation are on the first diskette.

Diskettes containing the full set of SAPRC model simulation and reactivity calculation software will be included if requested. The first diskette includes the files \_README.TXT and FILES.DOC. \_README.TXT contains brief installation instructions, and FILES.DOC contains the documentation and instructions in more detail.

## **Installation of Files**

The distributed files are intended to be installed on an IBM PC compatible computer in the directory structure indicated in Table 7 in Section 2.3 in Volume 1. Most of the distributed files are in compressed (ZIP) format which were created by PKZIP version 1.1. The useable files can be recovered using the PKUNZIP program which is included in the FTP directory or on the first of the diskettes. The install procedure, discussed below, will take care of this in most cases, and place the extracted files in the appropriate subdirectories as indicated in Table 7 in Section 2.3 of Volume 1. (That table is also given in FILES2.TAB in the distribution set). The file FILES2.LIS gives a listing of the files as they should be after installation.

INSTALL2.BAT will run PKUNZIP to uncompress the distributed files and will copy them to the recommended directory structure on a hard disk. The distributed files should be either on the diskettes as received, or downloaded into a single directory from the FTP. The hard disk must have at least 16 MB of free space for the installation program to run. (This is not counting the disk space required for the downloaded compressed files if they are obtained from the Internet.) Considerably more disk space will

be required to conduct model simulations of all the runs, though the example procedure, discussed below, does not have large disk requirements.

The install procedure is similar regardless of whether the distributed files are on diskettes or in a single disk directory as downloaded using FTP. The first step is to create a subdirectory which will be the root directory for the installed files. If the SAPRC modeling software and files are also installed, the same root directory should be used for this chamber data base. If both are to be installed simultaneously, the distribution set with the earliest date should be installed first, since this will assure that the files they have in common will be the latest available version. (If they have the same date it's probably best to install the chamber data first.)

After the root subdirectory for the installed files has been created, give the command

```
source\INSTALL2 source destination
```

where "source" is the diskette letter or disk and directory for the distributed files, and "destination" is the disk and subdirectory for the files to be installed. For example, suppose the installed files are to be placed in D:\SAPRCDAT. For diskette installation, if the drive which can read the diskettes is A, then the steps would then be:

- 1) Put disk #1 in a floppy drive A
- 2) Type A:INSTALL2 A D:\SAPRCDAT.
- 3) Change diskettes when prompted to do so.
- 4) Check for successful installation by comparing files in D:\SAPRCDAT and its subdirectories with those listed in FILES2.LIS.

For installation using downloaded files in a disk directory, if the files have been downloaded into the directory C:\NETWORK\DOWNLOAD), then the steps would be:

- 1) Be sure that C:\NETWORK\DOWNLOAD contains all the files found in the FTP directory.
- 2) Type the following:  
C:\NETWORK\DOWNLOAD\INSTALL2 C:\NETWORK\DOWNLOAD D:\SAPRCDAT
- 3) Check for successful installation by comparing files in D:\SAPRCDAT and its subdirectories with those listed in FILES2.LIS.
- 4) The downloaded files in C:\NETWORK\DOWNLOAD can be deleted to free disk space if the installation was successful.



Do not use a ":" after the source drive letter, nor a "\" after the source or destination directory name. INSTALL2.BAT will then copy the files to the destination, placing most of them in various subdirectories to the named destination as indicated in Table 7 and FILES2.TAB. For example, if the directory D:\SAPRCDAT was specified on the INSTALL2 command line, the environmental chamber data will be in the D:\SAPRCDAT\CHAFILES directory, and the spreadsheets will be in the D:\SAPRCDAT\SHEETS directory.

The install procedure extracts many of the files from the ZIP files on the distributed set. However, the chamber data (.CHA) files themselves are not extracted; instead a series of zip files containing them are copied to the CHAFILES subdirectory, as indicated in Table 7 in Volume 1. In addition, the calibration data files and the spreadsheets in the CSV format are not extracted; instead, zip files containing them are copied to the ZIPFILES subdirectory. The program PKUNZIP is copied to the PGMS subdirectory, and can be used to extract these files if desired. If they are extracted, the ZIP file(s) can be deleted from the hard disk to save space.

The distribution has a number of other executable programs which are copied to the PGMS subdirectory. The programs require a 386 or better computer with a 387-type math co-processor (or a 486 DX) to run. The programs are discussed either in Section 2.2 of the main report or in the sections below.

The file EXAMPLE2.BAT included with the distribution can be used to do a few example calculations to see if the programs will run. Note that the executable files it needs are in the subdirectory PGMS. EXAMPLE2.BAT appends this temporarily to your path so these programs can be used, and then restores the path (using the environment variable SAPRCTMP). If you get an "out of environment space" message, you need to add something like "SHELL=C:\DOS\COMMAND.COM /P /E:1024" to your CONFIG.SYS, and reboot. This will give 1024 bytes of environment space, which should be enough. If not, the number after the "/E:" can be increased.

All the mechanism preparation input files and software needed to prepare the mechanisms used in the examples are included in this distribution. However, the mechanism preparation batch files are set up to require Lahey F77L, and the preparation procedure will not be successful if F77L and the files it needs are not on the path. This is discussed further in the following section. (See also FILES.DOC in the separate distribution of modeling software and files.)

## **Description of Modeling Programs and Files**

The distributed disks contain the minimum set of SAPRC modeling programs and files necessary to conduct model simulations of the chamber runs using the SAPRC90 and the Carbon Bond IV mechanisms. There are a number of programs and batch files involved, but essentially the steps involved are as follows: (1) preparation of the mechanism; (2) preparation of the chamber input files for the

specified mechanism and chamber characterization set; (3) conducting the simulation itself, and (4) examining or extracting the results. The programs, files and procedures required for each of these steps are discussed below.

### **Mechanism Preparation**

Model simulations using a particular mechanism requires an executable (.EXE) file specific to that mechanism, and a data (.MOD) file containing the mechanism-specific parameters. These are produced by the PRP program and the programs and batch files it calls. All the output files produced by PRP and the programs it calls are already included in the distribution for SAPRC90 and UAM 6.21 version of the CB4 mechanisms, so it is not necessary to do the mechanism preparation to use these mechanisms as distributed. In particular, the example calculations, discussed below, use only these two mechanisms and thus do not require mechanism preparation. However, a mechanism preparation would have to be carried out if a new mechanism is used, or if changes are made to the distributed ones. This step is briefly discussed in this section.

The input required for mechanism preparation is a .PRP file, which gives (or references files giving) the species, reactions, kinetic and stoichiometric parameters, absorption cross sections and quantum yields, etc., for the particular mechanism. The outputs produced are the .EXE and .MOD files for the mechanism. Also output is a .PRO file, which lists the mechanism and (if applicable) any error or warning messages appropriate to the preparation. The .PRO file is not needed to conduct a simulation with the mechanism.

The command to cause the mechanism preparation is "PRP filename", where "filename" is the name of the .PRP file. For example, to prepare the .EXE and .MOD files required to simulate chamber runs using the UAM 6.21 version of the Carbon Bond mechanism, change to the MODEL\CB4 subdirectory, and issue the command "PRP CB4\_621". This takes input from CB4\_621.PRP (and files referenced by it), and produces CB4\_621.EXE, CB4\_621.MOD, and CB4\_621.PRO.

A discussion of the format of the mechanism input (.PRP) files is beyond the scope of this document, though a discussion of a somewhat earlier version of the program has been given previously (Carter, 1988). An examination of the input files for the two mechanisms (in MODEL\CB4 or MODEL\SAPRC90) will give an indication of the format which should be sufficient for implementing any reasonable mechanism. Note that an input record starting with a "!" is a comment (as is the case for almost all input files used by SAPRC software), and a record starting with a "@" causes data from the file named after the "@" to be input. Including secondary input files using "@" records is used extensively in the .PRP files in this distribution. In the case of the SAPRC90 mechanism, the secondary input files are the various .RXN files which contain various modules of the mechanism. See the

FILES.DOC file in the SAPRC90 directory for a listing of them. In the case of the Carbon Bond mechanism, the secondary input files have the extension .RXC.

Photolysis absorption cross sections and quantum yields used by the mechanisms are given in the various .PHF files in the directory for the mechanisms. There is one such file for each photolysis reaction with unique absorption cross sections and quantum yields. These are referenced by the expression "PF=filename" input in place of the kinetic parameters for the reaction (Carter, 1988).

The PRP.EXE program does not actually prepare the mechanism; what it does is call the programs and batch files which do the various steps. The first step is to call the PREP.EXE program which reads the .PRP file (and files referenced in it) and produces the .PRO and .MOD files and also a .FOR file containing the mechanism-specific code in the form of a FORTRAN subroutine. The PRP program then calls "INTCL.BAT" to compile the subroutine and link it to produce the mechanism-specific .EXE file.

System Requirements for Mechanism Preparation. The system must be configured properly for mechanism preparation to be carried out successfully. Lahey F77L (preferably version 4 — later versions do not always work reliably) and files required by it must be on the path for INTCL.BAT to run. Mechanism preparation also requires the files INT.LIB and SUBS.LIB to get the mechanism-independent subroutines which make up the bulk of the model simulation program. The SOURCE environment variable *must* be set to point to the location of these libraries, which the INSTALL2.BAT procedure places in the subdirectories SOURCE\INT and SOURCE to the installed root directory. Otherwise, there will be an error message indicating that these library files could not be found. For example, if the distributed files are installed in the directory D:\SAPRCDAT, the DOS command

```
SET SOURCE=D:\SAPRCDAT\SOURCE
```

must be executed first, or placed in AUTOEXEC.BAT. If an "out of environment space" message results, put the record

```
SHELL=C:\DOS\COMMAND.COM C:\DOS\ /P /E:1024
```

(or something similar) in the CONFIG.SYS file, and reboot. If this is not sufficient, increase the number following the "/E:".

### **Preparation of Chamber Input Files**

To conduct a model simulation of a run, it is necessary to have an input file giving the conditions of the run. Preparation of these input files has two major steps, (1) preparation of the mechanism-independent input (.INP) file for the run, and (2) running a simulation input pre-processing program to

convert the .INP file to the model simulation input (.INT) file specific to the mechanism. The latter is then read by the mechanism's executable file to conduct the model simulation. The mechanism-independent input files are discussed below, and the processing of these files for model simulations are discussed in the next section,

The mechanism dependent input (.INP) files are included in the distribution for all the runs for which the necessary information is in the run's data (.CHA) file. These were produced by using the CHADCONV program to convert the .CHA file to a binary (.CHD) format, and then by using the RCHADINP program to read the .CHD file and extract all the information needed to output the .INP file. (The MODELING.PRM file is read by both of these programs to get the locations for the .CHA, .CHD, and .INP input or output files. See comments in that file for details.) For example, to produce the mechanism-independent input file for run EC340, use the commands:

```
CHADCONV CHACHD EC340
RCHADINP EC340
```

(Note that EC340.CHA will need to be extracted from ECCHA1.ZIP, if that had not been done previously. Table 7 in Volume 1 indicates which ZIP files contain the .CHA files for the various individual runs.) These steps were already done to produce the .INP files on the distribution, so need not be done again unless data in the run are changed.

An example of an .INP file for a run is given in Table C-1, with the first column listing the data in the file, and the second explaining it. This particular example consisted of a two-day run where the lights were turned off overnight, and NO was injected on Day 2. Most runs have no conditions changed after the start, so their .INP files have no .SETDEF command and no input following the first .INT command.

Note that the @CHAR record in the .INP file causes the simulation input pre-processing program to take input from the corresponding .CHR file. (MODELING.PRM or the mechanism's .PRM file tells the program where to find these files.) The input in these files contain parameters which are the same for all runs carried out in the same chamber and under the same set of conditions. The distribution contains two .CHR files for the EC runs, one for dry runs at ~300°K, and the other for ~50% RH runs at ~300°K, and it contains one .CHR file for each of the reaction bags used in the ITC. An example of a distributed characterization input file, which is recommended for initial modeling of ITC runs using reaction bag #3, is shown in Table C-2. However, as discussed in Section 6.4 in Volume 1, the modeler should carry out his/her own assessment of the chamber-dependent parameters and should modify the .CHR files accordingly. (Note that changing the structure of the chamber model may require re-

Table C-1. Example of a mechanism-independent input (.INP) file.

Data in File [a]	Explanation
ITC626 SURROGATE	Run title. Included in calculation title record
MODEL=	Options input follow until the "." record
SAVE	Placeholder for mechanism specification (undetermined)
NOOUT	Option to save calculation results
.	Option not to produce a calculation output (.OUT) file unless an error occurs. This is required by INTRUN, since the existence of an .OUT file tells it an error occurred.
.	End of run option input
.LBL1 ITC626	Run ID that is included in on the first 8 characters of the calculation title record.
.DPRN 15.	Output results every 15 minutes
@MODDOC.IN	Placeholder to tell the simulation input pre-processing program where to put model documentation record.
@CHAR\ITC-05.CHR	Tells the simulation input pre-processing program where to get file with chamber-dependent parameters. The number ("05" in this case) is the CHARSET parameter in the chamber data (.CHA) file, which indicates which set of chamber dependent parameters are to be used. The modeler may wish to modify this.
.VARYCO	Tells the program that time-varying coefficient input is to follow.
L#TEMPR	Time varying temperatures. The "L#" prefix means that values for intermediate times are to be determined by linear interpolation. The first column is the time, the second is the temperature at that time. Temperatures for intermediate times determined by linear interpolation. Read from the Tmodel data in the chamber data file.
3. 295.40	
29. 298.00	
(some data removed)	
1800. 301.50	
#END	Tells the program that this is the end of time-varying coefficient input
H2O 1.850E+04	Water concentration in ppm
P(1) 0.3524	NO <sub>2</sub> Photolysis rate. Note: This assumes that the NO <sub>2</sub> photolysis reaction in the mechanism has the label "1".
.LUMP	Tells the simulation input pre-processing program that the following input contains species which may have to be re-named or "lumped" depending on the mechanism. The program reads the following and converts it to model species in the specific mechanism and (if it is a variable parameter mechanism such as SAPRC90) the appropriate parameter values.
NOLUMP	Tells the program not to lump VOC species together. (Applicable for lumped parameter mechanisms such as SAPRC90 only.) Can be deleted if too many species for mechanism to handle.
TOLUENE 8.090E-02	Species initially present in experiment and their concentration in ppm.
(some input removed)	
NO2-UNC 7.026E-02	
.	End of input that needs to be processed or lumped for mechanism.
.SETDEF	Sets the defaults for the parameters at the values currently input. Applicable for multi-part simulations only; not used in runs where no conditions were changed after the lights were turned on.
.TEND 720.	Ending time of the simulation in minutes.
.INT	Execute the simulation up to time .TEND. (This is the last record if no reactants were injected or other conditions changed during the run.)
.CONT	This indicates that the simulation continues with a change of conditions.
HV 0.0	The lights were turned off. "HV" is a parameter which all photolysis rates are multiplied by.
.TEND 1440.	The ending time of the simulation with the lights off.
.INTAPND	Continue the simulation, appending the results to those for the previous one.
.CONT	Further input to continue the simulation follows.
HV 1.0	The lights are turned on
.TEND 1502.	Ending time with the lights on or time until the next change.
.INTAPND	Continue the simulation
.CONT	Further input to continue the simulation follows
.LUMP	More mechanism-dependent input
+NO 0.859	NO is added. Add 0.869 ppm to the current concentration.
.	End of mechanism specific input
.TEND 1800.	Ending time of this step
.INTAPND	Continue the simulation up to the specified ending time.

[a] No blank records are in the file. The blank records shown are for formatting of this table only.

Table C-2. Example of a characterization input (.CHR) file. This example shows the file for ITC runs using reaction bag number 3.

Data in File [a]	Explanation
.LBL5 Chr=3a	Adds an identification of this characterization set to the 5'th set of 8 bytes of the calculation's title record.
K(O3W) 1.5E-4	Chamber wall model parameters tentatively assigned to the ITC runs using this reaction bag. See Section 6.4 and Tables 24 and 25 in Volume 1. These can be changed if the modeler considers it appropriate.
K(N25I) 2.5E-3	
K(N25S) 0.0	
K(NO2W) 1.6E-4	
YHONO 0.2	
K(XSHC) 250.	
RS-I 4.0E-4	
RS-S 0.0	(This is referred to as "E-NO2" in Tables 24 and 25 in Volume 1)
E-NO2/K1 1.5E-4	
HONO-F 0.0	
.SD-ITCUSE	Recommended spectral distribution for modeling all ITC runs. This should not be changed except for sensitivity studies, unless the modeler has a better spectral distribution file for the ITC.
CO 2.5	Default CO concentration if no data available. (If CO data are available, it would be input after this and supersede it. This is the approximate average for the few runs where CO was measured.

[a] The actual file contains comments (data starting with a "!") which are not shown. There are no blank records in the file; blanks shown are for formatting of this table only.

preparing the mechanism. The files WALLS.RXN or WALLS.RXC contain the mechanism preparation input data for the chamber model used in the distributed .CHR files.

The .INP files for the EC runs have additional input giving the spectral distribution measured for the particular run. These consist of an #SDADJ record, followed by the wavelengths and the relative intensity, one per record, and terminated by a #END record. The simulation input pre-processing program uses this to adjust the spectral distribution read in the characterization file to produce the appropriate spectral distribution for the run. The software requires that the #SDADJ input precede the spectral distribution definition (".SD-sdrname") record in the prepared input file, so the #SDADJ records occur immediately prior to the "@CHAR" record.

### Conducting Model Simulations

There are several ways to conduct model simulations of a chamber run, but the recommended procedure is to use the INTRUN program. This program operates in three steps. First, it calls the appropriate program to pre-process the run's mechanism-independent input (.INP) file to produce the mechanism-dependent input (.INT) file required by the simulation program for the mechanism. Then it calls the appropriate simulation program to do the calculation. Finally, it determines if the simulation was successful, and if so, it logs the calculation number in a calculation number summary (.EXT) file for the mechanism; this can be used to determine the calculation number when analyzing the results. These steps are discussed in more detail below.

input for the mechanism. The distributed .PRM files show the format of the data in these files, and contain comments giving the purpose of each of the input records.

To use INTRUN to do model simulations, it is first necessary to create a parameter (.PRM) file for that mechanism. The name of the .PRM file identifies the mechanism to INTRUN and to the various programs which process the modeling results, as discussed in the following section. For example, the distribution includes the files SAPRC90.PRM and CB4.PRM to give the parameters INTRUN uses for the SAPRC90 and the Carbon Bond simulations, respectively. These files contain the following information which is needed by INTRUN: (1) the name of the model simulation program to use and the directory where its .EXE and .MOD files can be found; (2) the name of the program to use to pre-process the .INP file for the mechanism; and (3) the lumping control files to use when processing the .INP file. To run INTRUN to simulate an experiment, use the command "INTRUN runid model", where "runid" is the run file name, and "model" is the name of the .PRM file for the mechanism. INTRUN can also have third and fourth parameters on the command line to specify options for the program. For example, if the command "INTRUN runid model CHECK" is used, INTRUN will check the .EXT file for the mechanism to see if a simulation with this run was done before, and will do the simulation only if it was not. If the command "INTRUN runid model „INTFILE" is used, the program produces the .INT file but does not do the simulation. (The batch file INTFILE.BAT serves the same function — "INTFILE runid model" is the same as "INTRUN runid model „INTFILE"). The latter option is useful if the user desires to see the .INT file or modify it before running the simulation, since otherwise INTRUN deletes it if the simulation occurs successfully. The command "INTRUN" without any options produces an output giving the list of options.

The three steps of the simulation using the INTRUN program are discussed in more detail below.

Input File Pre-Processing. The first step in the model simulation is running the simulation pre-processing program for the mechanism. The program used depends on the type of VOC lumping used in the mechanism. CB4 and other mechanisms which use lumped model species whose parameters are the same regardless of the VOCs they represent use LUMPGEN.EXE program, while mechanisms such as SAPRC90 which use model species with adjusted parameters use LUMPINT.EXE. The appropriate program for the mechanism are specified by the "LMPPGM=" input record in the parameter file or MODELING.PRM. In either case, the program performs the following functions:

(1) The species are lumped or renamed as appropriate for the specific mechanism. The .INP files refer to experimentally measured species (listed in Table 5), but model simulation programs require that species be referenced as model species recognized by the mechanism. (For example, when processing for the Carbon Bond mechanism, "135-TMB" must be converted to TOL and 2 PAR, and "NO2-UNC" must be converted to NO2.) The LUMPGEN program reads the mechanisms's condensed lumping control (.LCC) file to determine the assignments of detailed model species to lumped model species. This file

is specified by the "LCC=" input record in the parameter file. The format of these files is reasonably clear when examining the MODEL\CB4\CB4.LCC file in the distribution. The LUMPINT program reads the mechanisms' lumping control (.LPC) file specified by the "LPC=" record in the parameter file to determine which model species are used and (where applicable) their mechanistic parameters. In both cases, they can take input from .LPM files giving additional assignments or (in the case of the .LPC files read by LUMPINT) the mechanistic parameters. The formats of these files are discussed elsewhere (Carter, 1988, Lurmann et al., 1991). All input between the '.LUMP' and the '.' records in the .INP file are processed by these programs and converted to model species.

The input files as prepared by the RCHADINP program have the "NOLUMP" option specified with the lumping input. This forces LUMPINT to create a separate model species for each individual alkane, aromatic, and alkene in the input file. If the "NOLUMP" option record were omitted, the individual organic species might be lumped together, depending on their OH radical rate constants as specified in the .LPC file (Carter, 1988, Lurmann et al, 1990). This option is used because (1) it forces the mechanism to simulate the individual VOC species, to allow their profiles to be compared with the experimental measurements, and (2) it allows for the model to appropriately represent these species if they are input after the run starts. However, for the simulation to be successful, the prepared mechanism must have a sufficient number of generalized alkane and aromatic or alkene species to represent all the species in the run. (Note that the SAPRC90 mechanism allows for lumping of alkane and aromatic species into the same model species in box model or chamber simulations, if they react with sufficiently close OH radical rate constants.) The version of the SAPRC90 mechanism used for simulation of mixtures (LMPA84) allows for 8 different alkanes and aromatics and 4 different alkenes. If the run has mixtures more complex than that, the "NOLUMP" option record must be removed. The "NOLUMP" option has no effect on lumping by the LUMPGEN program.

(2) The program determines which model simulation program is to be used for the calculation. For the LUMPGEN program, this is specified by the "DFLMOD=" parameter in the model's .PRM file. The LUMPINT program will also use the mechanism program specified by the "DFLMOD=" parameter if this is desired. However, LUMPINT can also allow for the possibility of different mechanism .EXE (and .MOD) files being used depending on the number of alkane/aromatic and alkene species which are processed. If a "MPR=" record is in the parameter file, it uses the string specified as the prefix to the mechanism name and appends first the number of alkane/aromatics, and second the number of alkenes processed. For example, if the parameter file has the record "MPR=LMPA" and a run has one alkene, LUMPINT produces the name "LMPA01" as the optimum mechanism for the simulation. If the .EXE file for this mechanism exists, the simulation is conducted using this mechanism. If it does not exist, LUMPINT uses the mechanism specified in the "DFLMOD=" input to conduct the simulation. If there is no "MPR=" record, LUMPINT functions the same as LUMPGEN.



The distributed SAPRC90 files have four separate mechanism simulation programs. LMPA is used for runs with no alkane/aromatics or alkenes; LMPA1 is for runs with one alkane or aromatic; LMPA01 for runs with one alkene, and LMPA84 for runs with mixtures. They differ only in the number of generalized alkane/aromatic or alkene species. Separate mechanisms are used for the single VOC runs primarily to speed calculation and reduce the size of the output files.

The following functions are the same regardless of whether LUMPINT or LUMPGEN are used.

(3) The "@MODDOC.IN" record is replaced by a record which will cause an identification of the mechanism being used to be output in the calculation's title record. The identification string, which can be no more than 8 characters, is specified by the "MDC=" parameter in the .PRM file.

(4) The "@CHAR" record is replaced by the data in the characterization (.CHR) file it references. The location of these files is indicated by the "@CHAR" record in the parameter file or MODELING.PRM. If the characterization files to use depend on the mechanism, they can be placed in different directories for each mechanism, and the appropriate directory can be referenced by a "@CHAR" input record in the mechanism's parameter (.PRM) file. If the characterization files are the same regardless of the mechanism (which is obviously preferable if mechanisms are to be compared on a consistent basis), the "@CHAR" record should be placed in MODELING.PRM and kept out of the mechanism's parameter files. (Note that input in the mechanism's parameter file overrides conflicting input in MODELING.PRM.) This is the case for the files in the present distribution. INTRUN, LUMPINT, and LUMPGEN operate as if the data in MODELING.PRM is at the start of the parameter file. Input in MODELING.PRM which is not overridden by input in the parameter file is treated as if it were in the parameter file.

(4) If the .INP file for the run has "#SDADJ" input, as is the case with all EC runs in the distribution, the program uses these spectral input data, together with the spectrum named by the ".SD-" record in the .CHR file, to synthesize a spectrum for the run. This is output in the temporary file TMP.SDR which is output in the directory named by the "SDR=" record in MODELING.PRM. The ".SD-TMP" record output in the .INT file references that temporary spectral distribution. (The .INP files for XTC runs also have "#SDADJ" input, which in this case consist of LiCor relative spectra in appropriate units. However, the XTC-01.CHR file contains the record ".SD- Use Run", which tells LUMPINT or LUMPGEN to use the spectral data in the #SDADJ input without further processing. This spectral distribution is output in the .INT file following a ".SD-" record.)

(5) If the chamber run has time-varying spectral distributions and light intensities, as might be the case for outdoor chamber runs, the program calculates the photolysis rates as a function of time, and outputs them in the .INT file as time-varying coefficients. It reads the mechanism's .MOD file to get the

absorption cross sections and quantum yields and the photolysis file names used for this purpose. This is not applicable for the indoor chamber runs in the present distribution, but is used when modeling UNC chamber runs or the more recent SAPRC OTC runs where time-varying solar actinic flux estimates are available.

The .INT files have a similar format as the .INP files, except they contain a "MODEL=" record giving the name of a mechanism .EXE file, they contain no ".LUMP" or "#SDADJ" records or records starting with "@", and they contain concentrations only of model species. INT files produced by LUMPINT may have mechanistic parameter codes and their values, and they may also have ".NAME oldname newname" records, where "oldname" is the name of a generalized model species, and "newname" is the name of the detailed model species being used to represent it. This causes the name of the species being represented to be saved with the calculation.

Model Simulation Step. If LUMPINT or LUMPGEN executes successfully, it outputs the name of the appropriate mechanism-specific simulation program in the temporary file STATUS.TMP, and INTRUN then calls that program to do the simulation. The results of the calculation are stored in binary format in calculation data (.CDT) files which are located in the directory named by the "CAL=" records in MODELING.PRM. These files have names CALCnnnn.CDT, where "nnnn" is the 4-digit calculation number. The number for the last calculation saved is in a file called CALC.PRM in the same directory as the .CDT files, and this number is incremented each time a calculation is saved. If no CALC.PRM exists, one is created and the first calculation is given the number "0001". The simulation program also appends a record giving the calculation number and the calculation title record to a file called "CALC.LOG". (If such a file does not exist, it creates one.) If the calculation is successful, these are the only files which are output. Other programs, discussed below, can read the .CDT files to obtain the results of the calculation in a useable format. If the simulation failed, an .OUT file for the run remains which has any error messages caused by the failure.

Simulations can be carried out directly with .INT files using the INT.EXE program. Assuming an .INT file has been created (such as by using the INTFILE.BAT procedure), the command "INT filename model" will do a model simulation using filename.INT and the parameters in the model.PRM file as input. (The parameter file name need not be given if the location of the model's .EXE and .MOD file are given in MODELING.PRM.) The INT calls the mechanism program specified in the "MODEL=" record to conduct the simulation.

Using INTFILE combined with INT is useful if the modeler wishes to explore the effects of making changes to individual parameters in the input file. It is also useful if the modeler wishes to conduct model simulations of individual runs using different options. For example, if the modeler wishes to save the .OUT file produced by successful simulations, which give a listing of the mechanism, the input

parameter, and the results, the "NOOUT" option in the input file can be removed. In addition, to save integrated reaction rates, the "SAVE" record can be changed to "SAVE INTRATE".

Post Simulation Processing. If the simulation is successful, INTRUN deletes the temporary files (including the .INT file) which were created, and appends the run's name and the calculation number to the end of a file named "model.EXT", where "model" is the name of the model's parameter file. The model's .EXT file is used by some of the output processing programs to find which calculation number gives the results of the latest simulation of a particular run using a particular model parameter file. Note that, unlike INTRUN, INT does not log the calculation number in an .EXT file.

### **Examining the Results of Model Simulations**

There are several distributed programs which can be used to examine the results of the model simulations and see how well they simulated the experiments. These are discussed below.

Importing to Spreadsheets. Many modelers find spreadsheets the most convenient way to process calculation results and plot the output. The program CDT2CSV can be used to convert the .CDT file to a comma-separated-value (.CSV) file giving the results in a format which is readily imported into spreadsheet programs. The .CSV files are placed in the directory indicated by the "CDTCSV=" record in MODELING.PRM. (To place these files in the default directory, simply delete this record.) Note that the .CDT file is retained; it is required by other programs discussed below. To create a .CSV file for the last calculation, use the command "CDT2CSV 0". If .CSV files are always desired, the user may wish to include this option in a batch file. For example, a batch file consisting of "INTRUN %1 %2 %3 %4" followed by "CDT2CSV 0" will perform the same functions as INTRUN and also automatically produce a .CSV file. Use "CDT2CSV -1" for the second-to-last calculation, or "CDT2CSV nnnn" for calculation number "nnnn", respectively. In either case, the output file is given the name CALCnnnn.CSV, where "nnnn" is the calculation number used in the .CDT file.

Plotting. The program CHADSPL.EXE combined with SPL.EXE can be used to produce plots of experimental data and model simulations. To do this, give the command "CHADSPL runid model1 model2 ...", followed by the command "SPL runid". Here, "runid" is the run file name and "model1", etc are names of mechanism parameter files. The model file names need not be given, in which case the plots will contain the experimental data only. CHADSPL reads a file called PLTNAMES.LIS (or the file referenced by the "PLTNAMES=" record in MODELING.PRM) to determine the names of the species which might be plotted. It then looks in the run's chamber data binary (.CHD) file to see which species are in the run and then creates a runid.SPL file giving inputs to the SPL program to plot those species. When SPL is run, it reads the .SPL file to get the plot commands, reads the experimental (.CHD) and calculation (.CDT) binary files, and gives the user a menu of which channels to display on the screen. SPL determines the .CDT file number by reading the .EXT file for the model and looking for the run file

name and uses the last calculation number it finds with that name. If the run file name is not found in the .EXT file, the program does not plot the calculation results.

The chamber data binary (.CHD) files are not included in the distribution. To produce them from the distributed chamber data ASCII (.CHA) files, use the command "CHADCONV CHACHD runid", where "runid" is the run's file name. The batch file CHA2CHD.BAT can also be used; "CHA2CHD runid" will produce the .CHD file for a single run, while "CHA2CHD ALL" will do it for all runs in the distribution.

The file PLTSRUN.BAT can be used to automatically run both CHADSPL and SPL. To use it, give the command PLTSRUN runid model1 model2 ...", where the parameters are the same as for CHADSPL. The procedure first runs CHADSPL, then SPL, and then deletes the runid.SPL input file.

SPL requires a VGA monitor to operate properly. If the user has a EGA monitor, the SPL88 program, discussed below, should be used instead.

The program SPL88.EXE can be used instead of SPL if hard copies of the plots are desired. To use it, give the command "SPL88 splfile option", where "splfile" is the name of the .SPL file (as with SPL.EXE), and "option" is the output option. A list of possible options are indicated by running SPL88 without any parameters, but not all those possibilities are implemented. Those that are implemented include "EGA" to produce output for EGA monitors, "HPLA" to output to a HP-compatible laser printer and "HPGL", to produce HPGL files. The latter can be imported into word processing programs such as WordPerfect, which in fact was the means we used to prepare most of the data plots in this report. The HPGL files created are given the name splfile.Sn, where "splfile" is the name of the input file, and "n" is the selection number used to produce the plots. If no output option is specified, the plot goes to the screen, which is assumed to be in "VGA" format.

Results Summary Tabulations. The program SUMCALC.EXE can be used to produce tabular summaries of the calculation results (in comma separated value format) which can be compared with similar tabulations of the experimental results in the run spreadsheets. To use it, give the command "SUMCALC inputfile outputfile model species1 species2 ...", where "inputfile" and "outputfile" are the full names of the input and output files, "model" is the name of a model's .PRM file, and species1, etc., are the calculated species to summarize. The input file contains a list of the run file names, one per record. For example, the distributed files ECUSE.LIS or ITCUSE.LIS can be used if one wants summaries for all the EC or ITC runs in the distribution. The output file contains the results in CSV format and would usually be given a .CSV extension, though this is not required. The first column in the output file contains the run file names, and the subsequent columns give the results for the species. If the "species" option is the name of a model species, the output file contains the maximum concentration of

that species in the corresponding column. Note that the name used by the model, which may depend on the mechanism and in some cases will be different from the experimental data name, must be specified. If the species name has the suffix "/1", the maximum for the first 24 hours is output; the suffix "/2" can be used for the first 48 hours, etc. Alternatively, the code "RCT" could be given instead of a species name. This causes seven columns of data to be included in the output file. The first is the day 1 (24 hour) maximum ozone, and the second through 7th are the average rates of change of  $[O_3]$ - $[NO]$  for the first one, two, through 6 hours of the run, respectively, in ppb/minute units.

### **Source Files**

Only the source files for the CALRUN and GCALRUN programs are included in this distribution. These are placed in the SOURCE subdirectory, and the batch file CALBLD will compile and link these if Lahey F77L and the files it requires are on the path. The source files for the other programs are not included in this distribution, but can be found on the Internet for anonymous FTP at carterpc.ucr.edu in the directory "\model", or at cert.ucr.edu in the directory "\pub\carter\model". PC-compatible diskettes containing these files can also be obtained from the EPA project officer (address above) or from William P. L. Carter upon request. To be compatible with this set of programs, the SAPRC modeling software distribution must be dated December, 1994, or later. Earlier distributions may not contain the source for CHADCONV or RCHADINP, and new features were added to the model simulation programs which are required to simulate the experiments in this distribution.

### **References**

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