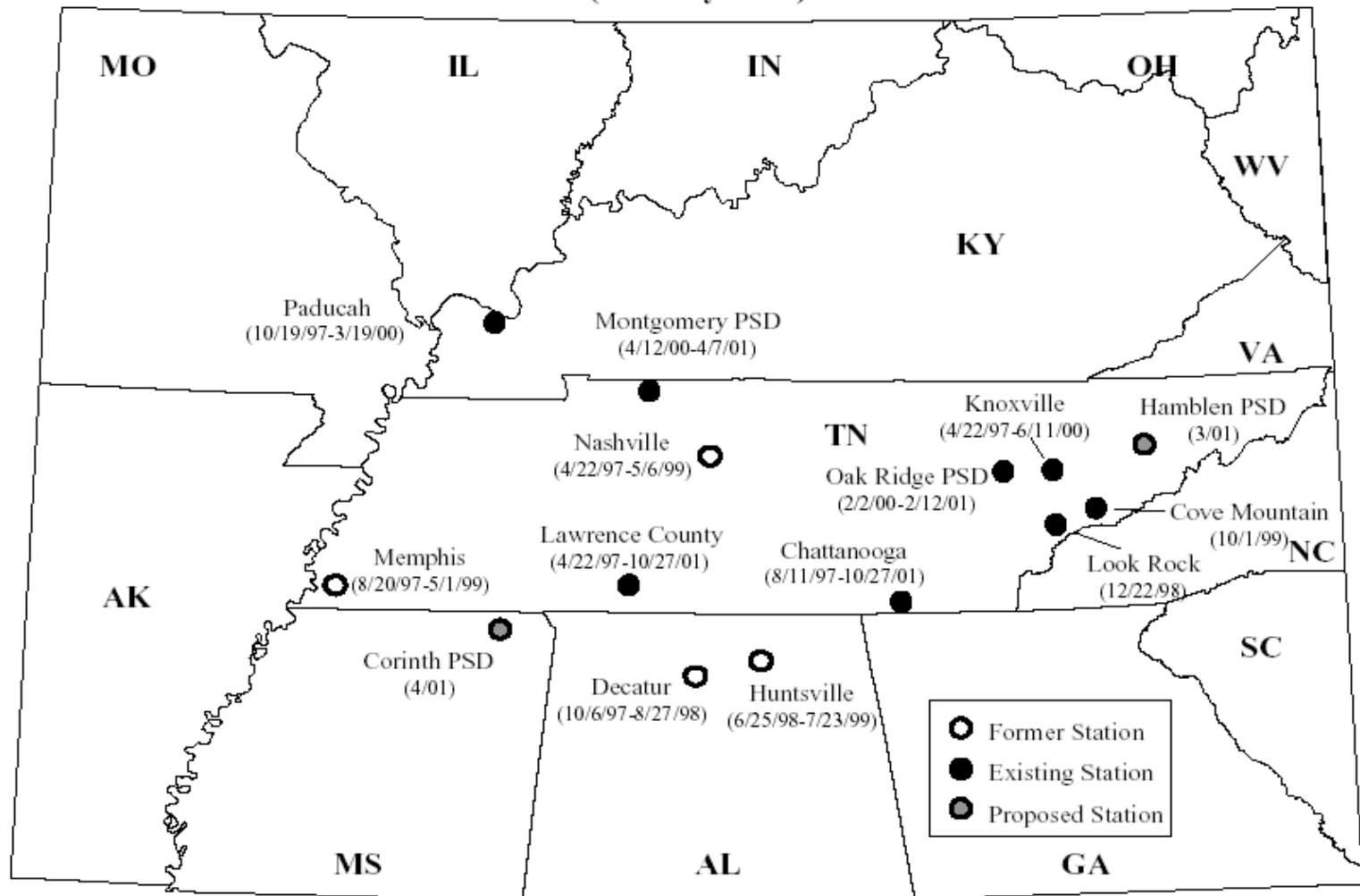


Tennessee Valley PM_{2.5} Partnership Monitoring Network

(January 2002)



TVA PM2.5 Monitoring Sites

Monitor	Latitude	Longitude	Latitude	Longitude
	ddmmss	ddmmss	dd.decimal	dd.decimal
Chattanooga PM2.5	350015	851735	35.004	85.293
Corinth/Alcorn County PSD	345433	883606	34.909	88.602
Cove Mountain SOS	354148	833635	35.697	83.610
Decatur PM2.5	343621	865855	34.606	86.982
Hamblen County PSD	361829	830843	36.308	83.145
Huntsville PM2.5	344127	863459	34.691	86.583
Knoxville PM2.5	355354	835726	35.898	83.957
Lawrence County PM2.5	350658	872812	35.116	87.470
Look Rock PM2.5	353803	835622	35.634	83.939
Memphis PM2.5	351622	895741	35.273	89.961
Montgomery Cty. PM2.5	363730	871009	36.625	87.169
Nashville PM2.5	361036	864737	36.177	86.794
Oak Ridge PM2.5	355306	842231	35.885	84.375
Paducah PM2.5	370227	883228	37.041	88.541

Table 1. Summary/Status of Valley Partners PM_{2.5} Monitoring Network

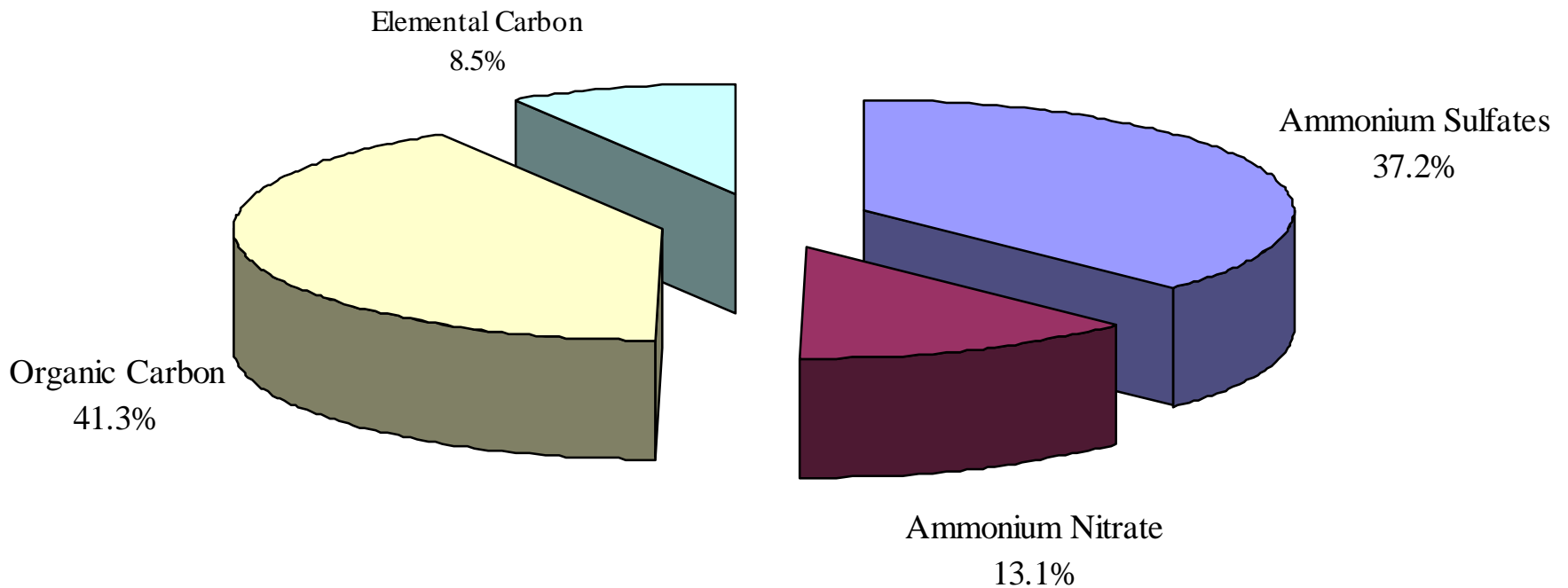
Station	On-Date	Off-Date	Cooperators	Samples^a	Avg.^b	Max.^b
Lawrence Cty TN	4/22/97	Operational	TDAPC/TVA	303	13.8	38.7
Nashville TN	4/22/97	4/24/99	Nash./David. Cty.	170	18.8	57.4
Knox County TN	4/22/97	6/11/00	Knox Cty./TVA	198	17.6	39.2
Chattanooga TN	9/11/97	Operational	CHCAPCB	261	19.9	69.6
Memphis TN	9/20/97	4/19/99	MSCHD	125	16.9	55.3
Decatur AL	10/7/97	9/5/98	ADEM	67	21.0	45.4
Paducah KY	10/19/97	4/18/00	KDEP	164	16.9	49.0
Huntsville AL	6/25/98	7/23/99	Huntsville DNR	70	17.6	40.5
Look Rock TN	12/22/98	Operational	TVA/NPS	88	12.2	45.9
Cove Mountain TN	10/16/99	Intermittent	TVA/NPS	19	9.4	17.2
Oak Ridge TN	2/12/00	2/12/01	TVA	49	15.7	48.9
Montgomery Cty TN	4/12/00	4/7/01	TDAPC/TVA	52	16.6	54.6
Hamblen Cty TN	3/26/01	Operational	TVA	16	13.8	27.1
Alcorn Cty MS	4/13/01	Operational	TVA	9	10.8	20.8
Network Total				1591	17.0	69.6

^a Through April 7, 2001. Not counting field blanks.

^b Concentrations are in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

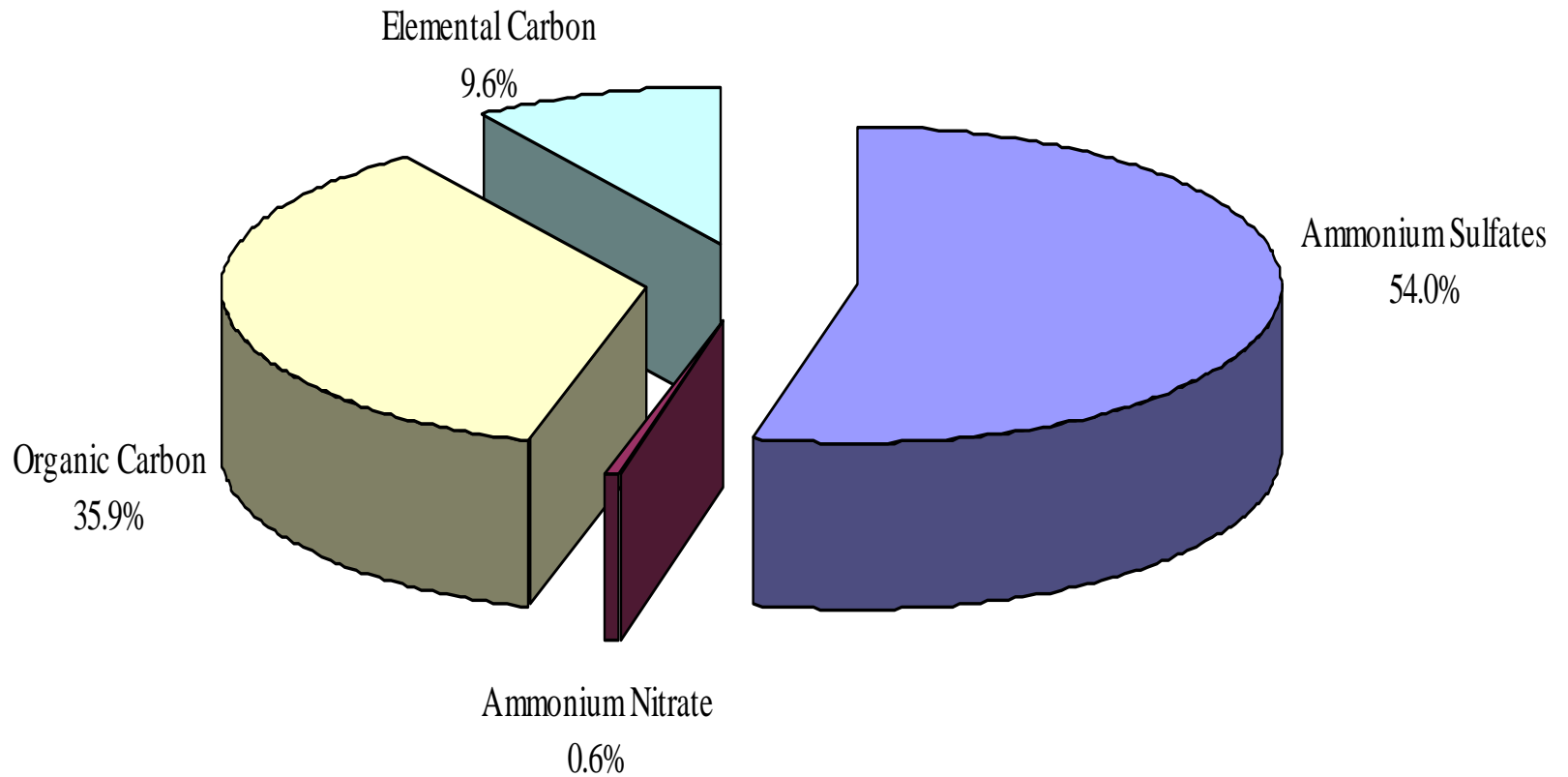
Chemical Composition at Look Rock Winter Season

Ave PM2.5 Mass = 6.4 ug/m³

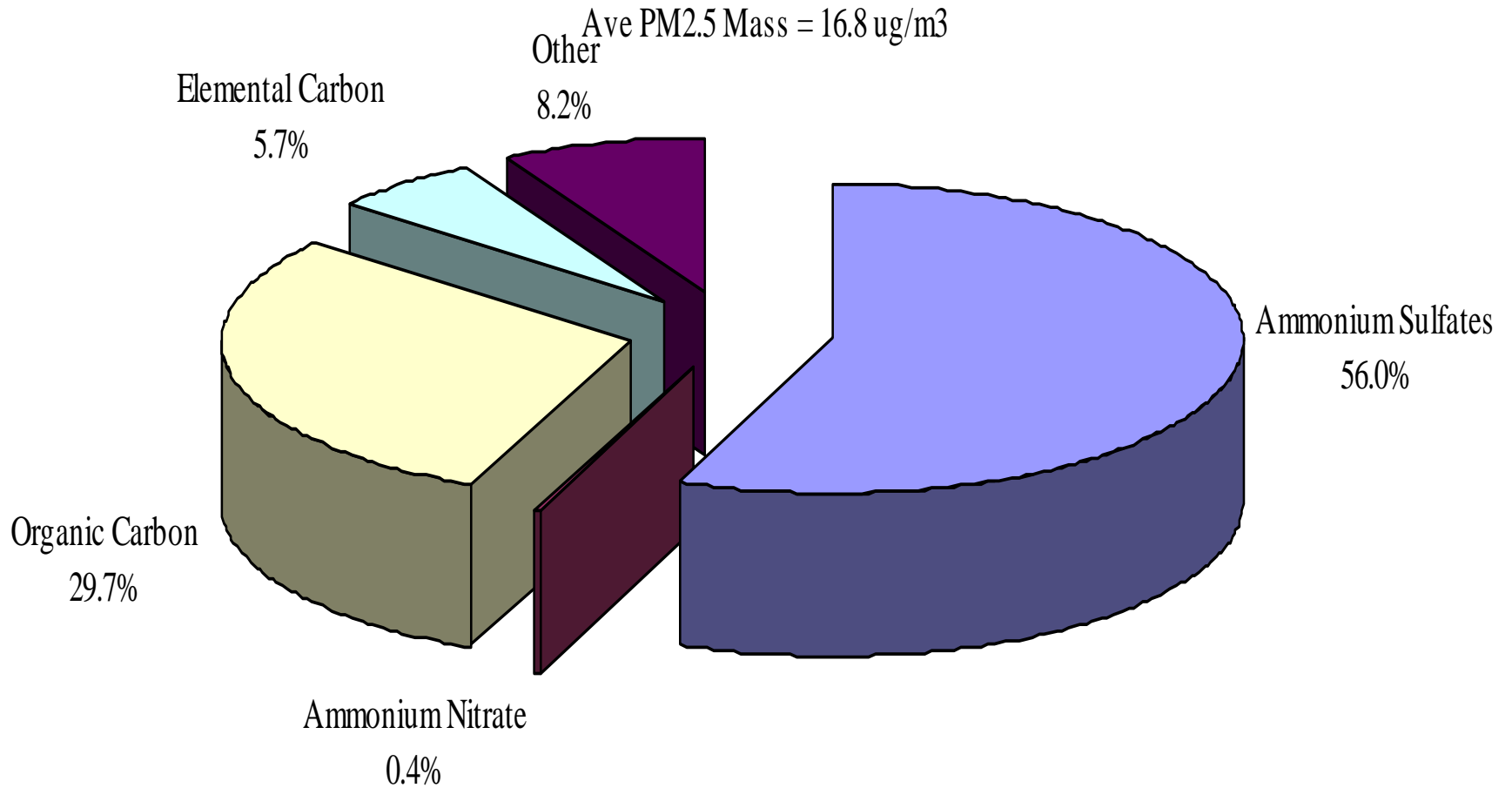


Chemical Composition at Look Rock Spring Season

Ave PM_{2.5} Mass = 14.8 ug/m³



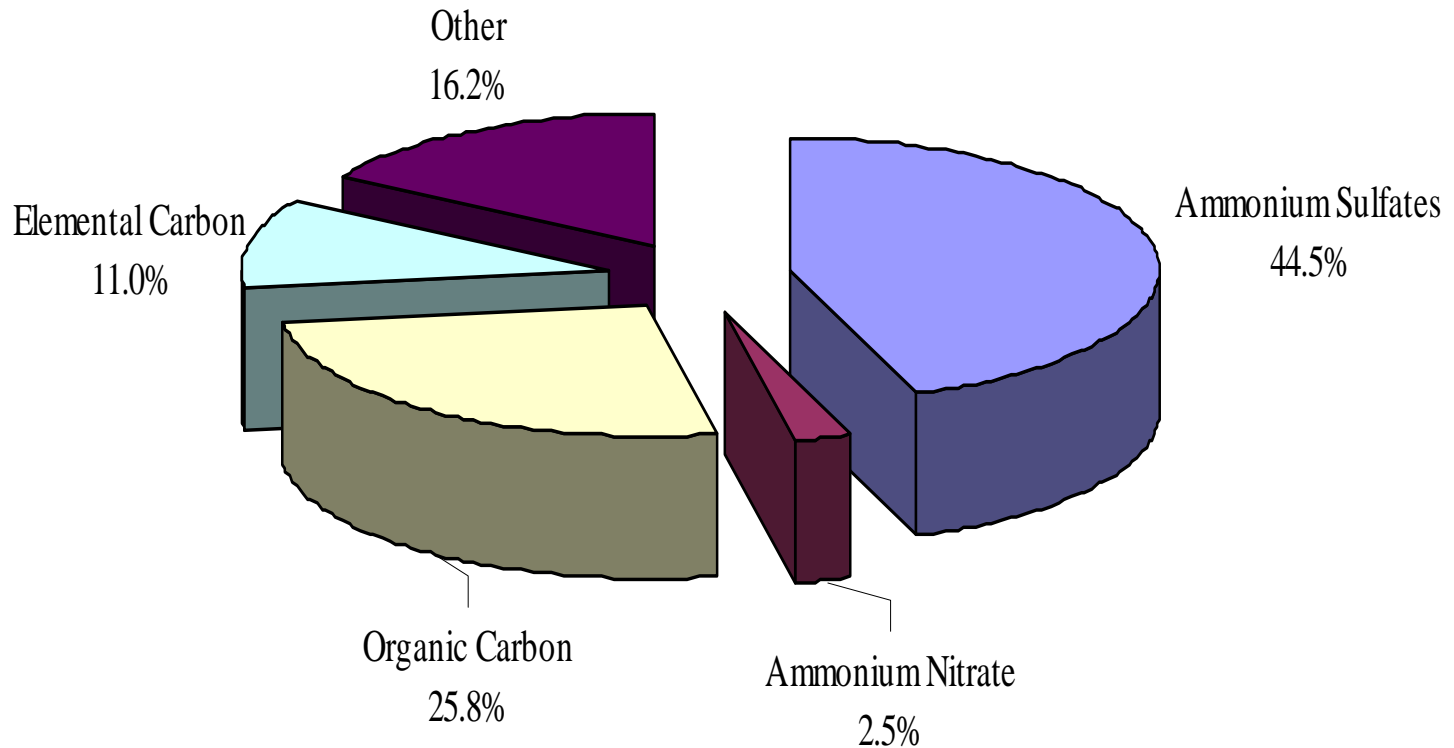
Chemical Composition at Look Rock Summer Season



Chemical Composition at Look Rock

Fall Season

Ave PM2.5 Mass = 9.0 ug/m³



Look Rock FRM Chemical Composition Data

Data in italics estimated from PC-BOSS data; fraction of modern carbon from PM10 HiVol samples.

Date	PM_{2.5} Mass, µg/m³	Sulfate, µg/m³	TOR OC*1.4, ug/m3	Fraction of Modern Carbon
4/26/00	6.86	<i>3.2</i>	<i>2.1</i>	0.597
4/28/00	13.22	<i>5.7</i>	<i>4.0</i>	0.592
4/30/00	15.27	<i>7.1</i>	<i>3.3</i>	0.269 (Blank)
5/02/00	19.46	<i>7.62</i>	<i>6.50</i>	0.822
5/04/00	14.35	<i>6.38</i>	<i>4.58</i>	0.774
5/06/00	18.12	<i>7.19</i>	<i>5.53</i>	0.798
5/08/00	16.90	<i>6.39</i>	<i>5.37</i>	0.912
5/10/00	9.08	<i>3.39</i>	<i>2.62</i>	0.914

Look Rock FRM Chemical Composition Data

Date	PM _{2.5} Mass, μg/m ³	Sulfate, μg/m ³	TOR OC*1.4, ug/m3	Fraction of Modern Carbon
8/20/00	21.78	10.6	4.14	No data
8/22/00	21.17	9.1	6.08	No data
8/24/00	19.63	6.4	5.82	No data
8/26/00	17.34	8.0	4.92	0.389
8/28/00	14.30	6.9	5.06	0.435
8/30/00	13.55	4.7	4.20	0.464
9/01/00	15.72	7.3	4.41	0.378
9/03/00	12.46	6.6	4.02	0.406
9/05/00	19.22	11.0	1.52	0.434
9/07/00	4.75	1.9	2.59	0.274
9/07/00	NA	NA	NA	0.483 (Blank)