FELF **Fellows - Foothills**

CAUTION: PRELIMINARY DATA

Time Period: December 8, 1999 to February 3, 2001

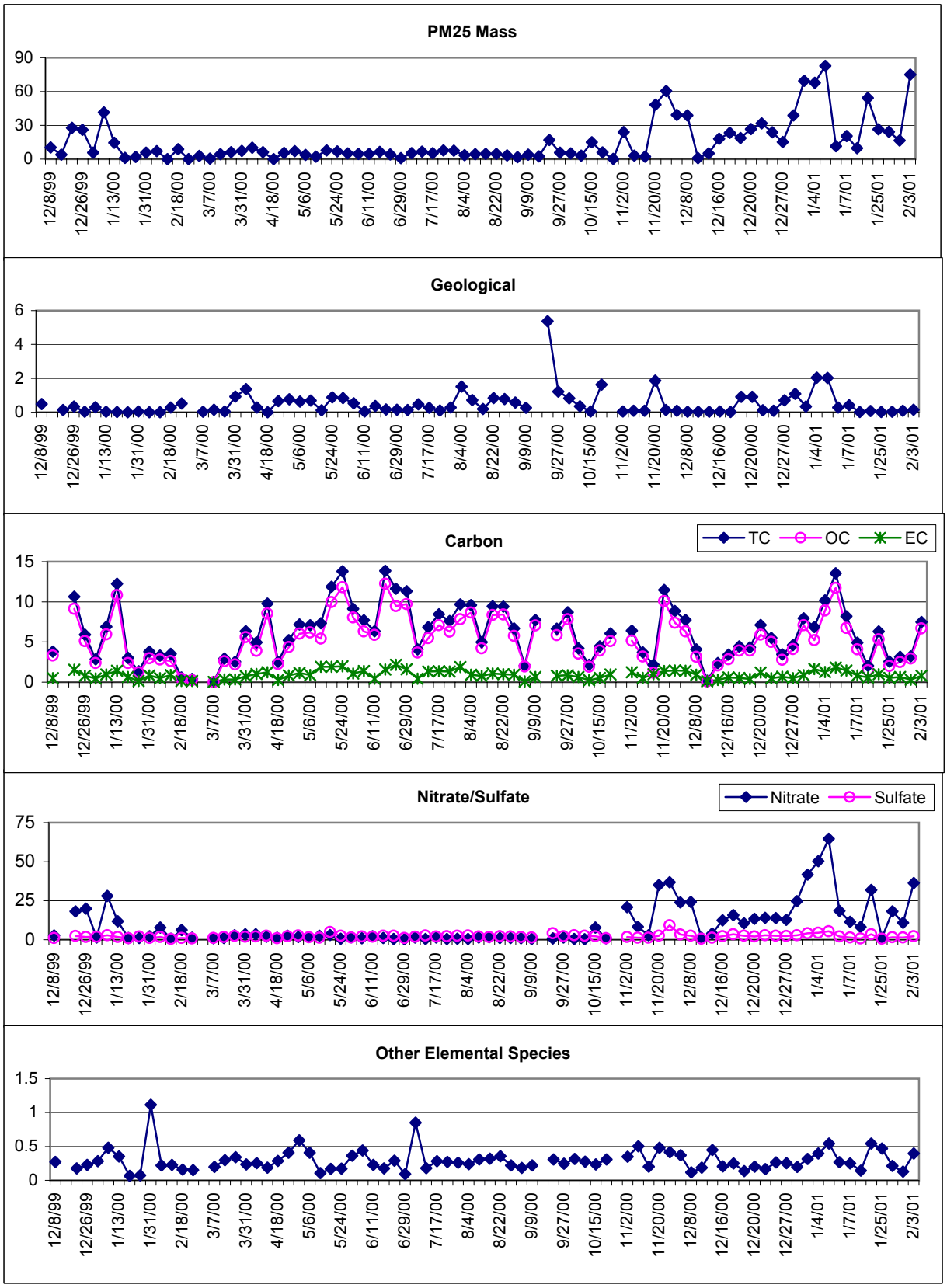
Concentrations of chemical components were estimated by multiplying the measured concentration of a species by a factor representing an estimate of the unmeasured oxygen and hydrogen. For the purpose of this summary the following multipliers were used:

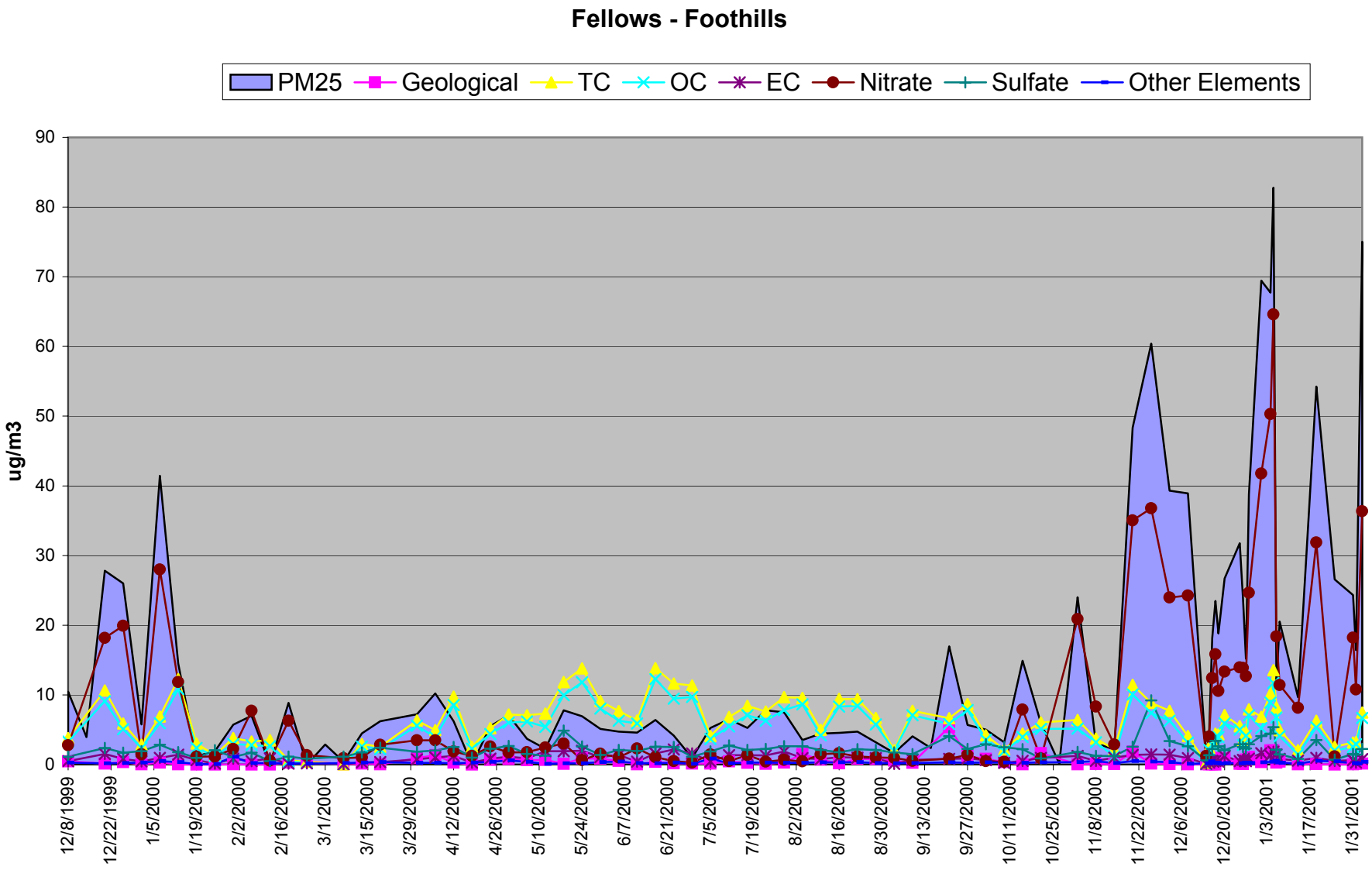
Species	Multiplier
Non-volatilized nitrate	1.29
Sulfate	1.38
Organic carbon	1.4
Aluminum	1.89
Silicon	2.14
Calcium	1.4
Iron	1.43

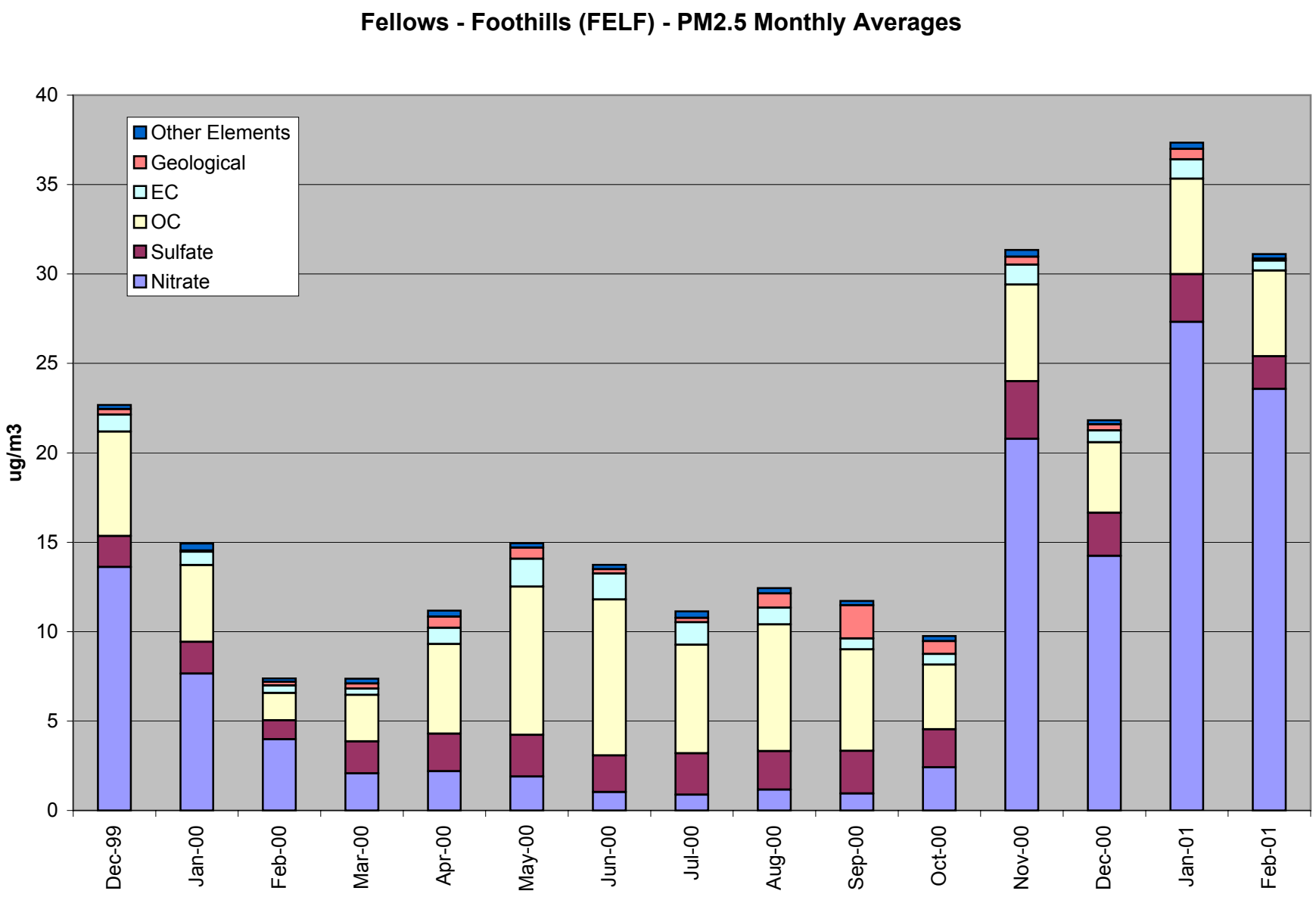
For each chemical composition sample, chemical components were calculated as follows:

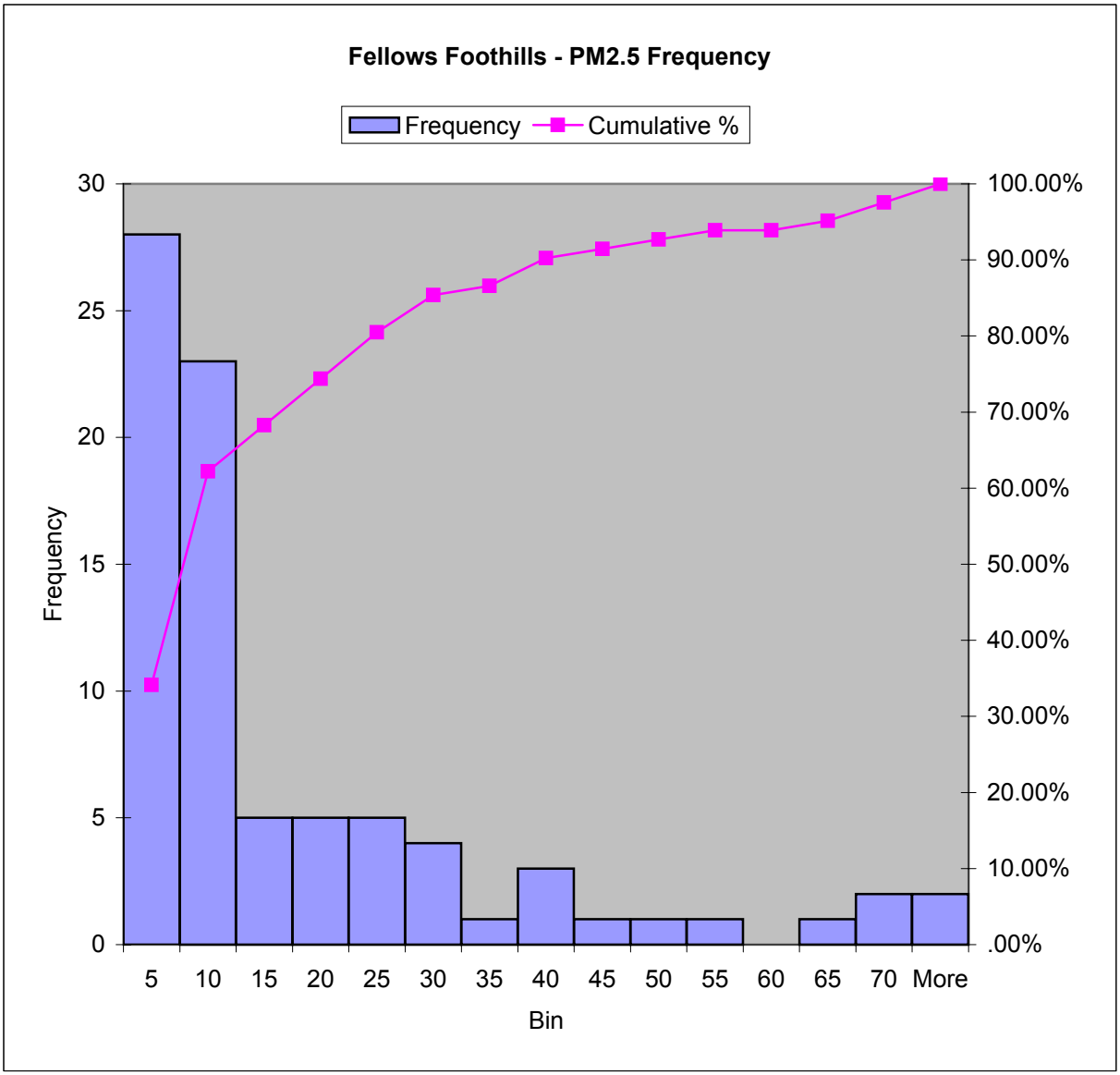
- Nitrate/Sulfate = 1.29[$NO3^-$] + 1.38[SO42-]
- Total Carbon = 1.4[OC] + [EC]
- Geological species = 1.89[Al] + 2.14[Si] + 1.4[CA] + 1.43[Fe]

Fellows - Foothills
(units - $\mu g/m^3$)



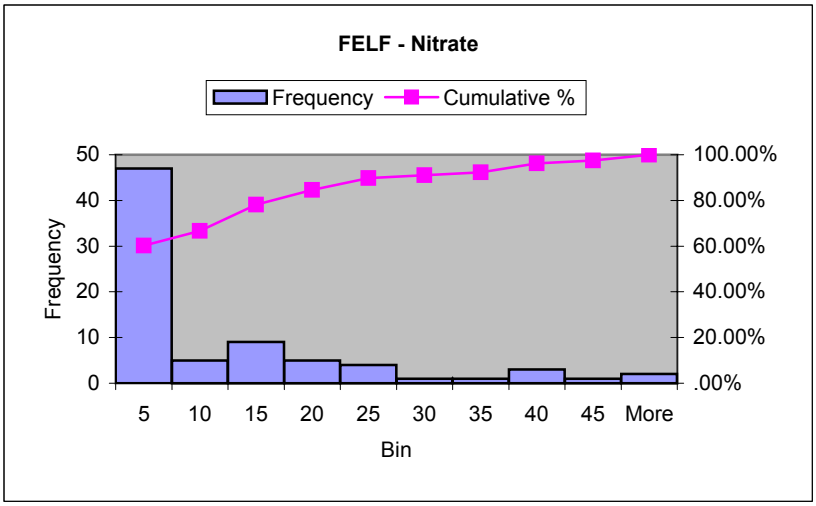

Fellows - Foothills
PM25
Geological
TC
OC
EC
Nitrate
Sulfate
Other Elements
ug/m3
90
80
70
60
50
40
30
20
10
0
12/8/1999
12/22/1999
1/5/2000
1/19/2000
2/2/2000
2/16/2000
3/1/2000
3/15/2000
3/29/2000
4/12/2000
4/26/2000
5/10/2000
5/24/2000
6/7/2000
6/21/2000
7/5/2000
7/19/2000
8/2/2000
8/16/2000
8/30/2000
9/13/2000
9/27/2000
10/11/2000
10/25/2000
11/8/2000
11/22/2000
12/6/2000
12/20/2000
1/3/2001
1/17/2001
1/31/2001


Fellows - Foothills (FELF) - PM2.5 Monthly Averages
Other Elements
Geological
EC
OC
Sulfate
Nitrate
ug/m3
0
5
10
15
20
25
30
35
40
Dec-99
Jan-00
Feb-00
Mar-00
Apr-00
May-00
Jun-00
Jul-00
Aug-00
Sep-00
Oct-00
Nov-00
Dec-00
Jan-01
Feb-01

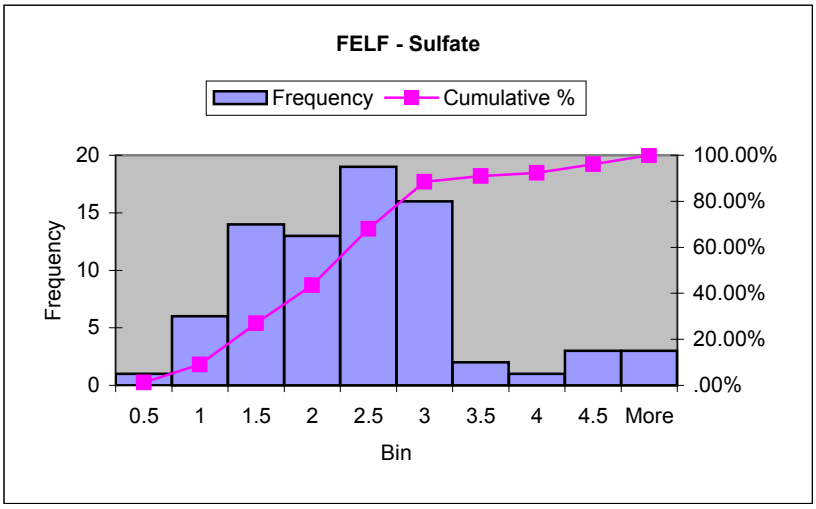


Bin	*Frequency*	*Cumulative %*
5	28	34.15%
10	23	62.20%
15	5	68.29%
20	5	74.39%
25	5	80.49%
30	4	85.37%
35	1	86.59%
40	3	90.24%
45	1	91.46%
50	1	92.68%
55	1	93.90%
60	0	93.90%
65	1	95.12%
70	2	97.56%
More	2	100.00%

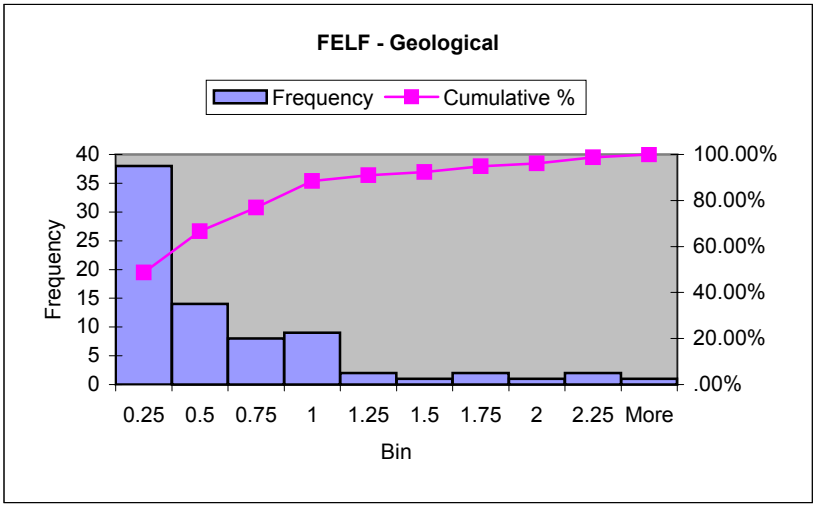
Bin	Frequency	Cumulative %
5	47	60.26%
10	5	66.67%
15	9	78.21%
20	5	84.62%
25	4	89.74%
30	1	91.03%
35	1	92.31%
40	3	96.15%
45	1	97.44%
More	2	100.00%



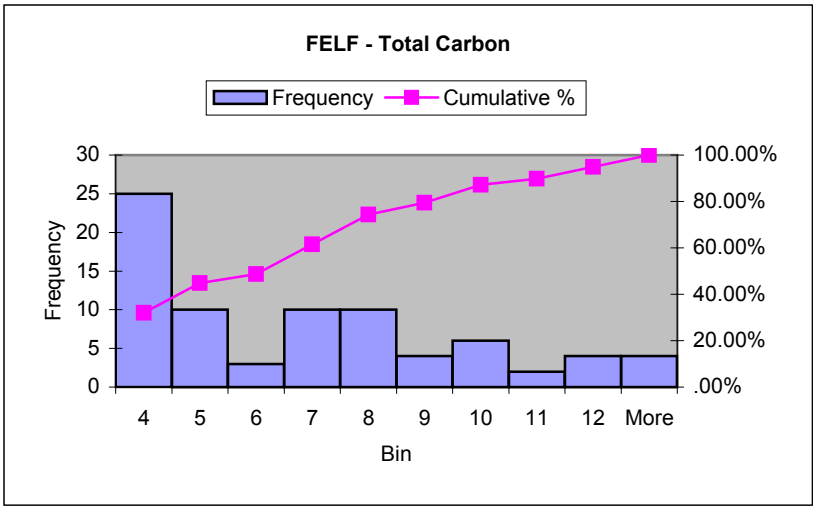
Bin	Frequency	Cumulative %
0.5	1	1.28%
1	6	8.97%
1.5	14	26.92%
2	13	43.59%
2.5	19	67.95%
3	16	88.46%
3.5	2	91.03%
4	1	92.31%
4.5	3	96.15%
More	3	100.00%



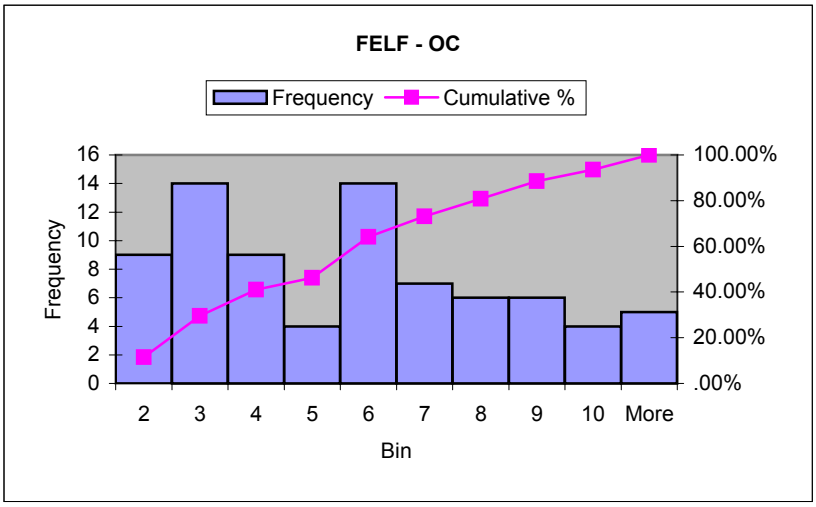
Bin	Frequency	Cumulative %
0.25	38	48.72%
0.5	14	66.67%
0.75	8	76.92%
1	9	88.46%
1.25	2	91.03%
1.5	1	92.31%
1.75	2	94.87%
2	1	96.15%
2.25	2	98.72%
More	1	100.00%



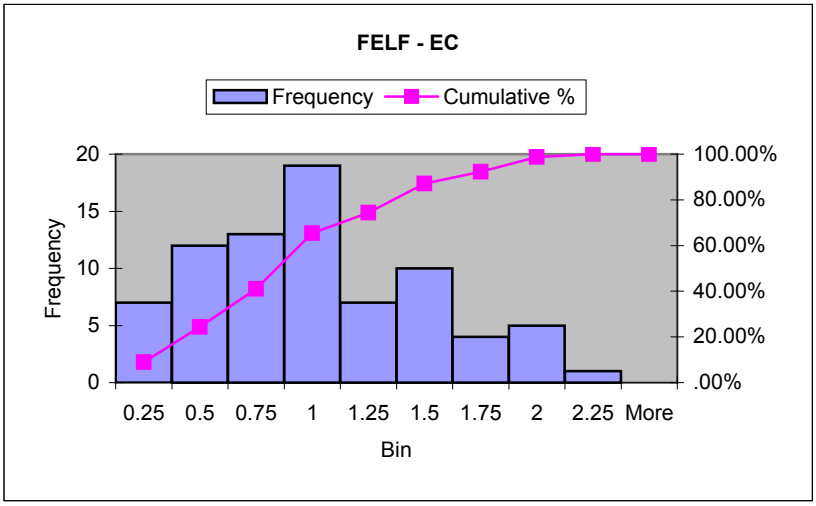
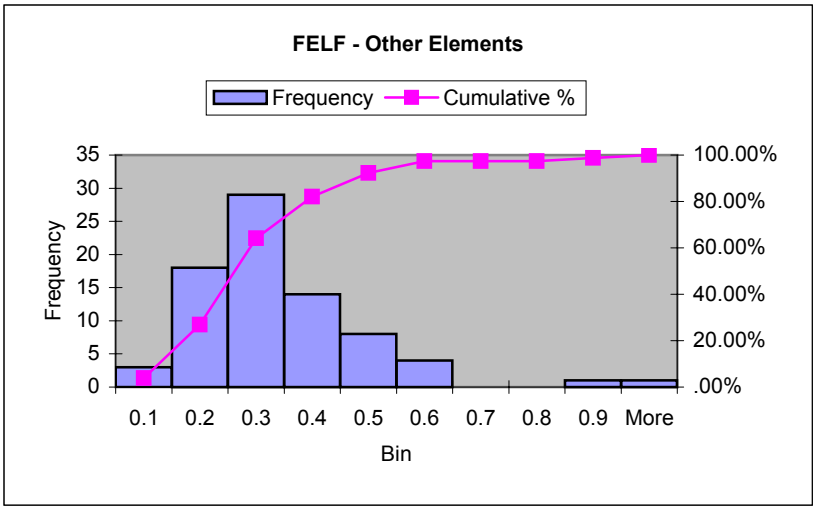
Bin	Frequency	Cumulative %
4	25	32.05%
5	10	44.87%
6	3	48.72%
7	10	61.54%
8	10	74.36%
9	4	79.49%
10	6	87.18%
11	2	89.74%
12	4	94.87%
More	4	100.00%



Bin	Frequency	Cumulative %
2	9	11.54%
3	14	29.49%
4	9	41.03%
5	4	46.15%
6	14	64.10%
7	7	73.08%
8	6	80.77%
9	6	88.46%
10	4	93.59%
More	5	100.00%



Bin	Frequency	Cumulative %
0.25	7	8.97%
0.5	12	24.36%
0.75	13	41.03%
1	19	65.38%
1.25	7	74.36%
1.5	10	87.18%
1.75	4	92.31%
2	5	98.72%
2.25	1	100.00%
More	0	100.00%



Bin	Frequency	Cumulative %
0.1	3	3.85%
0.2	18	26.92%
0.3	29	64.10%
0.4	14	82.05%
0.5	8	92.31%
0.6	4	97.44%
0.7	0	97.44%
0.8	0	97.44%
0.9	1	98.72%
More	1	100.00%