

Raw Data Work File Formats

The Raw Data Work File report essentially contains the same content in flat file format as the Raw Data Report (AMP350) and the Raw Data Report for NAAQS Durations W, X, Y and Z (AMP350NW). Its purpose is to facilitate the export of information from AQS to some other application or analysis tool.

The output is always a "flat" ASCII file with each record being a single line with a "pipe" character as a delimiter between fields. The following data is a sample of a single Site/Monitor record line.

```
1|23|MAINE|009|HANCOCK|9992|45201|BENZENE|1|02830|BAR HARBOR|TOP OF CADILLAC  
MOUNTAIN|109|DOWN EAST|0000|NOT IN AN MSA|||01|POPULATION EXPOSURE|||1120|BOSTON,  
MA|MOBILE|RURAL|44.351667|-68.227222|19|4911000|561583|018|INTERPOLATION-MAP|NAD27|182.18|24000|466|000|UNK
```

Workfile Layout

The work file includes four (4) types of data record. Although each type has a different layout, they have the same first field, which is the *Transaction Type* field. The *Transaction Type* values are:

Value Description

- 1 [Site and Monitor Record](#)
- 2 [Raw Data Record](#)
- 3 [NAAQS Average Record](#)
- 4 [Composite Data Record](#)

(Use the above links to see the format specifications for each type.)

Each of the four types of data are sorted separately. This means that all of the Site/Monitor descriptions appear, sorted, at the top of the file, followed by sorted Raw Data Records, then the NAAQS Average Records, and finally the Composite Data Records.

Within each type, the data is sorted by state, county (or equivalent unit), site, pollutant type, POC and date, where appropriate.

Site and Monitor Record Work File Format

Field Number	Field Name	Alpha/ Numeric	Max Size/Scale
1	Transaction Type	A	1
2	State Code	A	2
3	State Name	A	50
4	County Code	A	3
5	County Name	A	50
6	Site ID	A	4
7	Parameter Code	A	5
8	Parameter Description	A	120
9	POC	N	2
10	City Code	A	5
11	City Name	A	50
12	Street Address	A	2000
13	AQCR Code	A	3
14	AQCR Name	A	50
15	MSA Code	A	4
16	MSA Name	A	50
17	CMSA Code	A	2
18	CMSA Name	A	50
19	EPA Region Code	A	2
20	Monitoring Objective 1	A	50
21	Monitoring Objective 2	A	50
22	Monitoring Objective 3	A	50
23	Urbanized Area Code	A	4
24	Urbanized Area Name	A	50
25	Land Use	A	20
26	Location Setting	A	50
27	Latitude	N	2.6 (Signed)
28	Longitude	N	3.6 (Signed)
29	UTM Zone	N	2
30	UTM Northing	N	8.2
31	UTM Easting	N	8.2
32	Horizontal Collection Method Code	A	3
33	Horizontal Collection Method Description	A	120
34	Horizontal Datum	A	120
35	Horizontal Accuracy Value	N	8.2
36	Horizontal Source Scale	N	12
37	Height Above Mean Sea Level	N	8.2
38	Vertical Collection Method Code	A	3
39	Vertical Collection Method Description	A	60

40	Vertical Datum	A	60
41	Vertical Accuracy Value	N	8.2

Raw Data Record Work File Format

A single record, or line, in the file holds a day of data. The Value and Qualifier fields zero through twenty-three correspond to the hours of the day: midnight through 11:00PM. For durations that are longer than hourly, the data appears at the time collected. Empty lines are not provided for skipped or missing days.

Field Number	Field Name	Alpha/ Numeric	Max Size/Scale
1	Transaction Type	A	1
2	State Code	A	2
3	County Code	A	3
4	Site ID	A	4
5	Parameter Code	A	5
6	POC	N	2
7	Sample Duration Code	A	8
8	Sampling Methodology Code	A	8
9	Units Code	A	3
10	Minimum Detection Limit	N	5.5 (Signed)
11	Uncertainty Value	N	4.6
12	Reported Collection Frequency Code	A	8
13	Required Collection Frequency Code	A	8
14	Primary Monitor Type	A	20
15	Reporting Organization Code	A	8
16	Reporting Organization Name	A	120
17	Sample Date	A	8(YYYYMMDD)
18	Sample Value 0	N	5.5 (Signed)
19	Primary Qualifier 0	A	8
20	Sample Value 1	N	5.5 (Signed)
21	Primary Qualifier 1	A	8
22	Sample Value 2	N	5.5 (Signed)
23	Primary Qualifier 2	A	8
24	Sample Value 3	N	5.5 (Signed)
25	Primary Qualifier 3	A	8
26	Sample Value 4	N	5.5 (Signed)
27	Primary Qualifier 4	A	8
28	Sample Value 5	N	5.5 (Signed)
29	Primary Qualifier 5	A	8
30	Sample Value 6	N	5.5 (Signed)
31	Primary Qualifier 6	A	8
32	Sample Value 7	N	5.5 (Signed)
33	Primary Qualifier 7	A	8
34	Sample Value 8	N	5.5 (Signed)
35	Primary Qualifier 8	A	8
36	Sample Value 9	N	5.5 (Signed)
37	Primary Qualifier 9	A	8

38	Sample Value 10	N	5.5 (Signed)
39	Primary Qualifier 10	A	8
40	Sample Value 11	N	5.5 (Signed)
41	Primary Qualifier 11	A	8
42	Sample Value 12	N	5.5 (Signed)
43	Primary Qualifier 12	A	8
44	Sample Value 13	N	5.5 (Signed)
45	Primary Qualifier 13	A	8
46	Sample Value 14	N	5.5 (Signed)
47	Primary Qualifier 14	A	8
48	Sample Value 15	N	5.5 (Signed)
49	Primary Qualifier 15	A	8
50	Sample Value 16	N	5.5 (Signed)
51	Primary Qualifier 16	A	8
52	Sample Value 17	N	5.5 (Signed)
53	Primary Qualifier 17	A	8
54	Sample Value 18	N	5.5 (Signed)
55	Primary Qualifier 18	A	8
56	Sample Value 19	N	5.5 (Signed)
57	Primary Qualifier 19	A	8
58	Sample Value 20	N	5.5 (Signed)
59	Primary Qualifier 20	A	8
60	Sample Value 21	N	5.5 (Signed)
61	Primary Qualifier 21	A	8
62	Sample Value 22	N	5.5 (Signed)
63	Primary Qualifier 22	A	8
64	Sample Value 23	N	5.5 (Signed)
65	Primary Qualifier 23	A	8

NAAQS Average Record Work File Format

A single record, or line, in the file holds a day of data. The Value and Qualifier fields zero through twenty-three correspond to the hours of the day: midnight through 11:00PM. For durations that are longer than hourly, the data appears at the time collected. Empty lines are not provided for skipped or missing days.

Field Number	Field Name	Alpha/ Numeric	Max Size/Scale
1	Transaction Type	A	1
2	State Code	A	2
3	County Code	A	3
4	Site ID	A	4
5	Parameter Code	A	5
6	POC	N	2
7	Sample Duration Code	A	8
8	Units Code	A	3
9	Primary Monitor Type	A	20
10	Reporting Organization Code	A	8
11	Reporting Organization Name	A	120
12	Sample Date	A	8 (YYYYMMDD)
13	Sample Value 0	N	5.5 (Signed)
14	Exceptional Data Flag 0	N	1
15	Sample Value 1	N	5.5 (Signed)
16	Exceptional Data Flag 1	N	1
17	Sample Value 2	N	5.5 (Signed)
18	Exceptional Data Flag 2	N	1
19	Sample Value 3	N	5.5 (Signed)
20	Exceptional Data Flag 3	N	1
21	Sample Value 4	N	5.5 (Signed)
22	Exceptional Data Flag 4	N	1
23	Sample Value 5	N	5.5 (Signed)
24	Exceptional Data Flag 5	N	1
25	Sample Value 6	N	5.5 (Signed)
26	Exceptional Data Flag 6	N	1
27	Sample Value 7	N	5.5 (Signed)
28	Exceptional Data Flag 7	N	1
29	Sample Value 8	N	5.5 (Signed)
30	Exceptional Data Flag 8	N	1
31	Sample Value 9	N	5.5 (Signed)
32	Exceptional Data Flag 9	N	1
33	Sample Value 10	N	5.5 (Signed)
34	Exceptional Data Flag 10	N	1
35	Sample Value 11	N	5.5 (Signed)
36	Exceptional Data Flag 11	N	1

37	Sample Value 12	N	5.5 (Signed)
38	Exceptional Data Flag 12	N	1
39	Sample Value 13	N	5.5 (Signed)
40	Exceptional Data Flag 13	N	1
41	Sample Value 14	N	5.5 (Signed)
42	Exceptional Data Flag 14	N	1
43	Sample Value 15	N	5.5 (Signed)
44	Exceptional Data Flag 15	N	1
45	Sample Value 16	N	5.5 (Signed)
46	Exceptional Data Flag 16	N	1
47	Sample Value 17	N	5.5 (Signed)
48	Exceptional Data Flag 17	N	1
49	Sample Value 18	N	5.5 (Signed)
50	Exceptional Data Flag 18	N	1
51	Sample Value 19	N	5.5 (Signed)
52	Exceptional Data Flag 19	N	1
53	Sample Value 20	N	5.5 (Signed)
54	Exceptional Data Flag 20	N	1
55	Sample Value 21	N	5.5 (Signed)
56	Exceptional Data Flag 21	N	1
57	Sample Value 22	N	5.5 (Signed)
58	Exceptional Data Flag 22	N	1
59	Sample Value 23	N	5.5 (Signed)
60	Exceptional Data Flag 23	N	1

Composite Data Record Work File Format

A single record, or line, in the file holds a year of data. The Value Sample and Qualifier fields one through fifty-three correspond to the weeks, months or quarters of the year. Empty lines are not provided for skipped or missing data.

Field Number	Field Name	Alpha/ Numeric	Max Size/Scale
1	Transaction Type	A	A1
2	State Code	A	A2
3	County Code	A	A3
4	Site ID	A	A4
5	Parameter Code	A	A5
6	POC	N	N2
7	Sampling Methodology Code	A	A8
8	Units Code	A	A3
9	Minimum Detection Limit	N	N5.5 (Signed)
10	Uncertainty Value	N	N4.6
11	Composite Type	A	A20
12	Primary Monitor Type	A	A20
13	Reporting Organization Code	A	A8
14	Reporting Organization Name	A	A120
15	Year	N	N4
16	Sample Value 1	N	N5.5 (Signed)
17	Sample Count 1	N	N3
18	Primary Qualifier 1	A	A8
19	Sample Value 2	N	N5.5 (Signed)
20	Sample Count 2	N	N3
21	Primary Qualifier 2	A	A8
22	Sample Value 3	N	N5.5 (Signed)
23	Sample Count 3	N	N3
24	Primary Qualifier 3	A	A8
25	Sample Value 4	N	N5.5 (Signed)
26	Sample Count 4	N	N3
27	Primary Qualifier 4	A	A8
28	Sample Value 5	N	N5.5 (Signed)
29	Sample Count 5	N	N3
30	Primary Qualifier 5	A	A8
31	Sample Value 6	N	N5.5 (Signed)
32	Sample Count 6	N	N3
33	Primary Qualifier 6	A	A8
34	Sample Value 7	N	N5.5 (Signed)
35	Sample Count 7	N	N3
36	Primary Qualifier 7	A	A8

37	Sample Value 8	N	N5.5 (Signed)
38	Sample Count 8	N	N3
39	Primary Qualifier 8	A	A8
40	Sample Value 9	N	N5.5 (Signed)
41	Sample Count 9	N	N3
42	Primary Qualifier 9	A	A8
43	Sample Value 10	N	N5.5 (Signed)
44	Sample Count 10	N	N3
45	Primary Qualifier 10	A	A8
46	Sample Value 11	N	N5.5 (Signed)
47	Sample Count 11	N	N3
48	Primary Qualifier 11	A	A8
49	Sample Value 12	N	N5.5 (Signed)
50	Sample Count 12	N	N3
51	Primary Qualifier 12	A	A8
52	Sample Value 13	N	N5.5 (Signed)
53	Sample Count 13	N	N3
54	Primary Qualifier 13	A	A8
55	Sample Value 14	N	N5.5 (Signed)
56	Sample Count 14	N	N3
57	Primary Qualifier 14	A	A8
58	Sample Value 15	N	N5.5 (Signed)
59	Sample Count 15	N	N3
60	Primary Qualifier 15	A	A8
61	Sample Value 16	N	N5.5 (Signed)
62	Sample Count 16	N	N3
63	Primary Qualifier 16	A	A8
64	Sample Value 17	N	N5.5 (Signed)
65	Sample Count 17	N	N3
66	Primary Qualifier 17	A	A8
67	Sample Value 18	N	N5.5 (Signed)
68	Sample Count 18	N	N3
69	Primary Qualifier 18	A	A8
70	Sample Value 19	N	N5.5 (Signed)
71	Sample Count 19	N	N3
72	Primary Qualifier 19	A	A8
73	Sample Value 20	N	N5.5 (Signed)
74	Sample Count 20	N	N3
75	Primary Qualifier 20	A	A8
76	Sample Value 21	N	N5.5 (Signed)
77	Sample Count 21	N	N3
78	Primary Qualifier 21	A	A8
79	Sample Value 22	N	N5.5 (Signed)

80	Sample Count 22	N	N3
81	Primary Qualifier 22	A	A8
82	Sample Value 23	N	N5.5 (Signed)
83	Sample Count 23	N	N3
84	Primary Qualifier 23	A	A8
85	Sample Value 24	N	N5.5 (Signed)
86	Sample Count 24	N	N3
87	Primary Qualifier 24	A	A8
88	Sample Value 25	N	N5.5 (Signed)
89	Sample Count 25	N	N3
90	Primary Qualifier 25	A	A8
91	Sample Value 26	N	N5.5 (Signed)
92	Sample Count 26	N	N3
93	Primary Qualifier 26	A	A8
94	Sample Value 27	N	N5.5 (Signed)
95	Sample Count 27	N	N3
96	Primary Qualifier 27	A	A8
97	Sample Value 28	N	N5.5 (Signed)
98	Sample Count 28	N	N3
99	Primary Qualifier 28	A	A8
100	Sample Value 29	N	5.5 (Signed)
101	Sample Count 29	N	3
102	Primary Qualifier 29	A	8
103	Sample Value 30	N	5.5 (Signed)
104	Sample Count 30	N	3
105	Primary Qualifier 30	A	8
106	Sample Value 31	N	5.5 (Signed)
107	Sample Count 31	N	3
108	Primary Qualifier 31	A	8
109	Sample Value 32	N	5.5 (Signed)
110	Sample Count 32	N	3
111	Primary Qualifier 32	A	8
112	Sample Value 33	N	5.5 (Signed)
113	Sample Count 33	N	3
114	Primary Qualifier 33	A	8
115	Sample Value 34	N	5.5 (Signed)
116	Sample Count 34	N	3
117	Primary Qualifier 34	A	8
118	Sample Value 35	N	5.5 (Signed)
119	Sample Count 35	N	3
120	Primary Qualifier 35	A	8
121	Sample Value 36	N	5.5 (Signed)

122	Sample Count 36	N	3
123	Primary Qualifier 36	A	8
124	Sample Value 37	N	5.5 (Signed)
125	Sample Count 37	N	3
126	Primary Qualifier 37	A	8
127	Sample Value 38	N	5.5 (Signed)
128	Sample Count 38	N	3
129	Primary Qualifier 38	A	8
130	Sample Value 39	N	5.5 (Signed)
131	Sample Count 39	N	3
132	Primary Qualifier 39	A	8
133	Sample Value 40	N	5.5 (Signed)
134	Sample Count 40	N	3
135	Primary Qualifier 40	A	8
136	Sample Value 41	N	5.5 (Signed)
137	Sample Count 41	N	3
138	Primary Qualifier 41	A	8
139	Sample Value 42	N	5.5 (Signed)
140	Sample Count 42	N	3
141	Primary Qualifier 42	A	8
142	Sample Value 43	N	5.5 (Signed)
143	Sample Count 43	N	3
144	Primary Qualifier 43	A	8
145	Sample Value 44	N	5.5 (Signed)
146	Sample Count 44	N	3
147	Primary Qualifier 44	A	8
148	Sample Value 45	N	5.5 (Signed)
149	Sample Count 45	N	3
150	Primary Qualifier 45	A	8
151	Sample Value 46	N	5.5 (Signed)
152	Sample Count 46	N	3
153	Primary Qualifier 46	A	8
154	Sample Value 47	N	5.5 (Signed)
155	Sample Count 47	N	3
156	Primary Qualifier 47	A	8
157	Sample Value 48	N	5.5 (Signed)
158	Sample Count 48	N	3
159	Primary Qualifier 48	A	8
160	Sample Value 49	N	5.5 (Signed)
161	Sample Count 49	N	3
162	Primary Qualifier 49	A	8
163	Sample Value 50	N	5.5 (Signed)
164	Sample Count 50	N	3

165	Primary Qualifier 50	A	8
166	Sample Value 51	N	5.5 (Signed)
167	Sample Count 51	N	3
168	Primary Qualifier 51	A	8
169	Sample Value 52	N	5.5 (Signed)
170	Sample Count 52	N	3
171	Primary Qualifier 52	A	8
172	Sample Value 53	N	5.5 (Signed)
173	Sample Count 53	N	3
174	Primary Qualifier 53	A	8