AQS 504 REPORT

Automated Data Review Tool

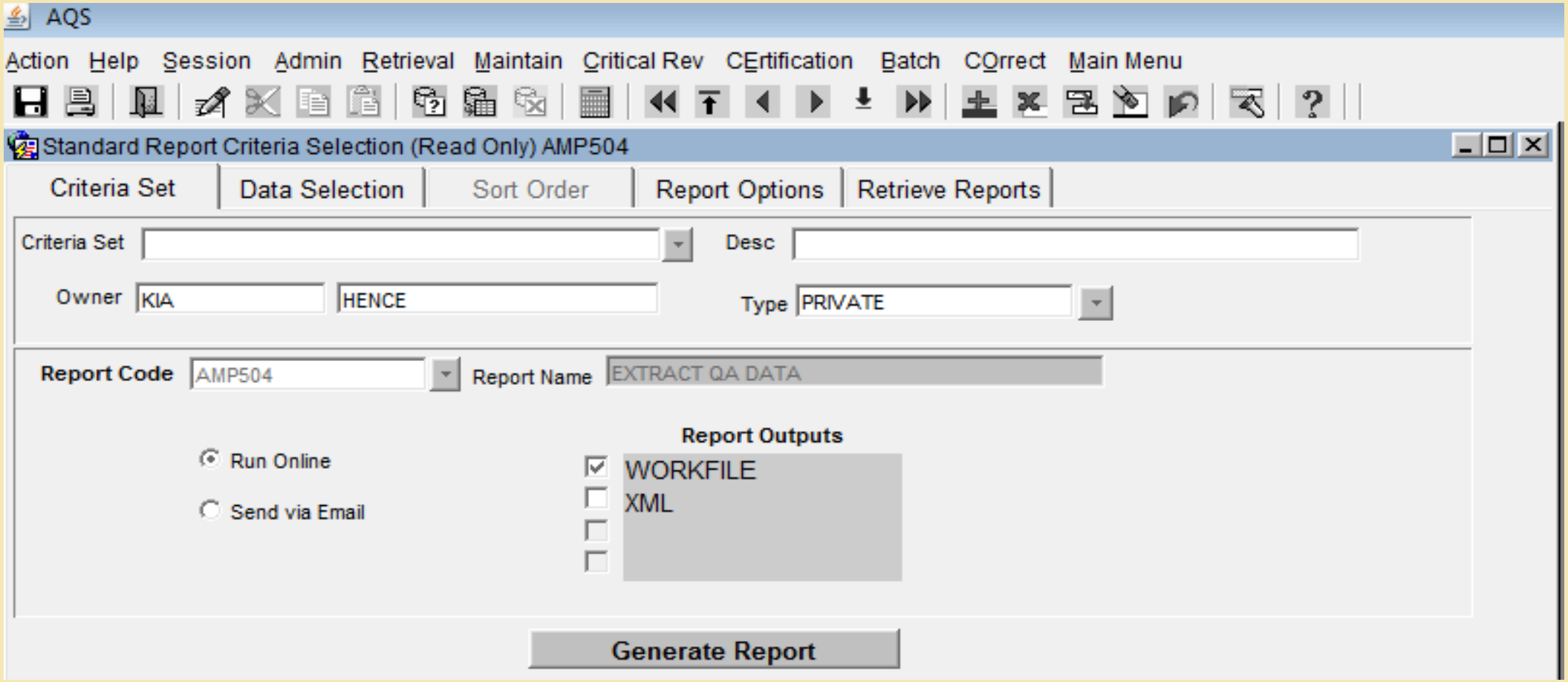
EPA Region 3
Air Protection Division
Office of Air Monitoring & Analysis
Kia Hence

504 REPORT IN A NUTSHELL

- Replaced the AMP502- Extract P&A Report.
- Retrieves QA transactions submitted to AQS:
  - 1-Point Quality Control
  - Annual Performance Evaluation (S/L Quarterly Audits)
  - Flow Rate Verification
  - Semi-Annual Flow Rate Audit
  - PM coarse Flow Rate Verification
  - PM coarse Semi-Annual Flow Rate Audit
  - Speciation Flow Rate Verification
  - Speciation Semi-Annual Flow Rate Audit
  - Performance Evaluation Program
  - National Performance Audit Program
  - Pb Analysis Audit
  - Collocated Assessments

GENERATING THE 504 REPORT

504 report format options .pdf, .txt. or .xml.



504 REPORT – TEXT FILE

AMP504_1393922.txt - Notepad

File Edit Format View Help

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#Transaction Type|Action Indicator|Assessment Type|Performing Agency|State Code / Tribal Indicator|County Code / Tribal
Code|Site Number|Parameter Code|POC|Assessment Date|Assessment Number|Monitor Method Code|Reported Unit|Monitor
Concentration|Assessment Concentration
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140108|1|054|007|10.08|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140116|1|054|007|10.01|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140128|1|054|007|9.532|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140206|1|054|007|9.57|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140212|1|054|007|9.69|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140220|1|054|007|9.77|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140305|1|054|007|9.31|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140311|1|054|007|9.35|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140321|1|054|007|9.44|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140327|1|054|007|9.55|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140408|1|054|007|9.48|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140422|1|054|007|9.52|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140501|1|054|007|9.507|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140507|1|054|007|9.589|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140512|1|054|007|9.487|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140520|1|054|007|9.471|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140602|1|054|007|9.3|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140611|1|054|007|9.378|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140616|1|054|007|9.352|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140626|1|054|007|9.334|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140701|1|054|007|9.318|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140707|1|054|007|9.265|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140716|1|054|007|9.232|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140723|1|054|007|9.204|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140731|1|054|007|9.131|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140811|1|054|007|9.252|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140821|1|054|007|9.176|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140829|1|054|007|9.222|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140905|1|054|007|9.203|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140908|1|054|007|9.213|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140916|1|054|007|9.271|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140922|1|054|007|9.394|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20140930|1|054|007|9.485|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141007|1|054|007|9.46|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141014|1|054|007|9.48|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141021|1|054|007|9.588|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141027|1|054|007|9.57|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141106|1|054|007|9.57|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141114|1|054|007|9.84|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141119|1|054|007|9.97|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141125|1|054|007|9.93|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141202|1|054|007|9.732|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141211|1|054|007|9.455|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141216|1|054|007|9.463|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141222|1|054|007|9.58|9.19
QA|I|1-Point QC|0350|11|001|0023|42101|1|20141229|1|054|007|9.61|9.19
QA|I|1-Point QC|0350|11|001|0041|42101|1|20140108|1|054|007|10.01|9.21
QA|I|1-Point QC|0350|11|001|0041|42101|1|20140114|1|054|007|9.89|9.21
QA|I|1-Point QC|0350|11|001|0041|42101|1|20140123|1|054|007|10.17|9.21
QA|I|1-Point QC|0350|11|001|0041|42101|1|20140203|1|054|007|9.41|9.21
QA|I|1-Point QC|0350|11|001|0041|42101|1|20140210|1|054|007|9.51|9.21
QA|I|1-Point QC|0350|11|001|0041|42101|1|20140220|1|054|007|9.52|9.21
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The text file is the best option for formating and evaluating QC data in the report.

DATA REVIEW – EXCEL REPORT

- EPA Region 3's Office of Air Monitoring & Analysis copied, formated, sorted and analyzed data in excel manually.
- The process took weeks to complete.

CREATION

of the AQS 504 Automated Excel Report

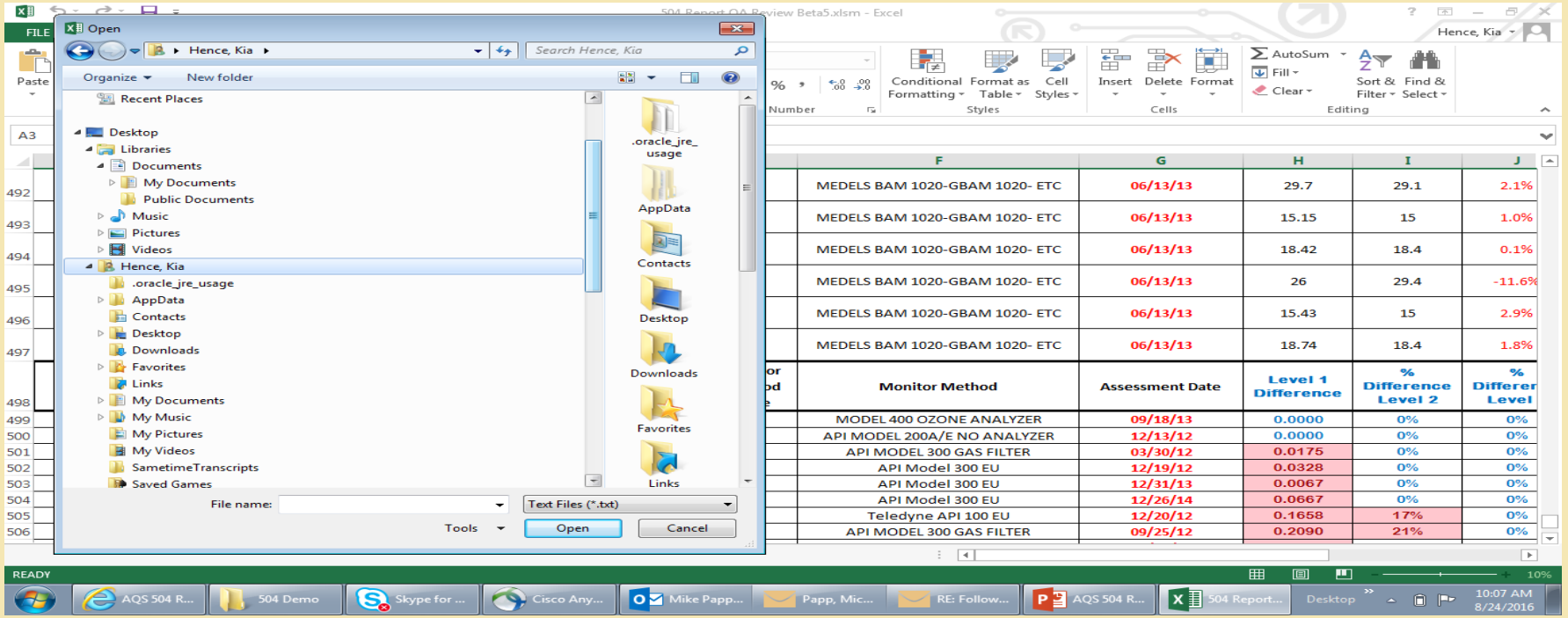
THE MARVEL OF MACROS

- The Report does the following:
  - Converts 504 text file to an excel file and automatically saves it as a separate file.
  - Organizes data, adds worksheets and additional information to the file.
  - Sorts through data and identifies exceedances based on the criteria from Validation Templates
- **Creates a Final Report!**

IT'S EASY TO USE!

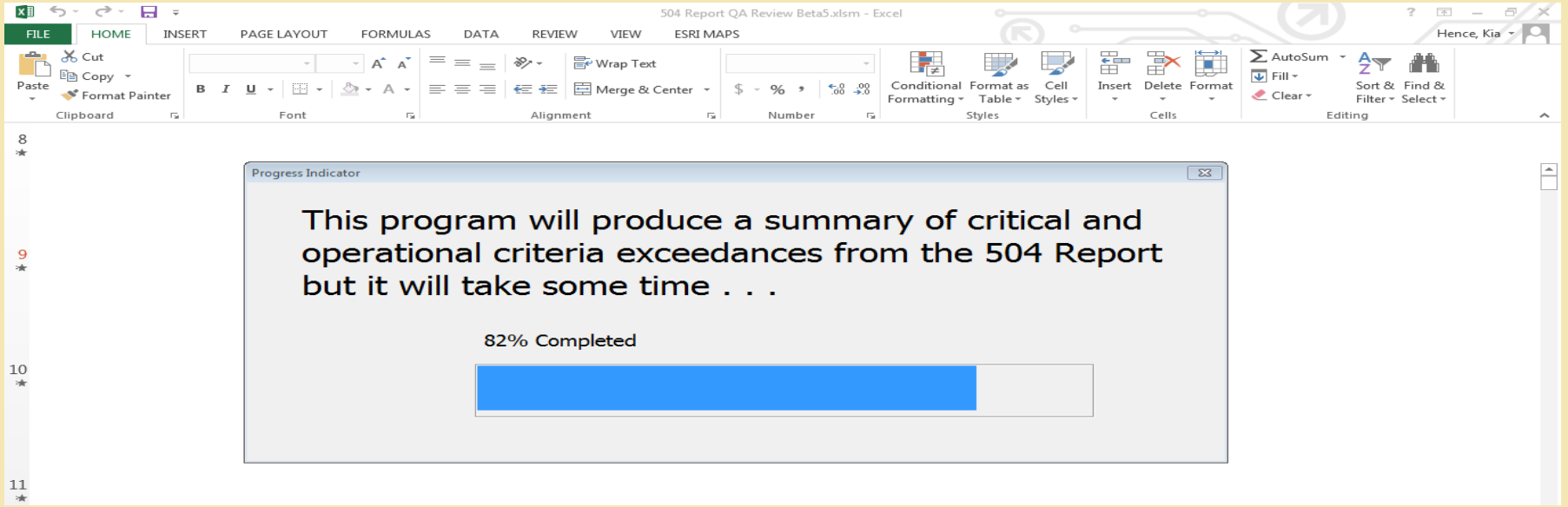
All you need to do is:

1. Download and save an AMP504 text file from AQS Or save the text file generated from the QA transaction generator.
2. Open the 504 Excel tool. (Note: You may need to select "Enable Content" for the program to run.) A window will pop up prompting you to select a 504 text file.



IT'S EASY TO USE!

3. Grab a cup of coffee while the report runs.



4. Finally, once the report is finished loading. A window will appear asking if you want to process another file. Select "Yes" if you want to run another 504 text file. If not, select "No".

FINAL REPORT SAMPLE

Summary of Data Exceeding Acceptance Criteria

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/08/15	8.9	8	11.3%	10.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/22/15	9	8	12.5%	10.0%	NONE	0.0%	21
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	01/08/15	0.043	0.04	7.5%	7.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	06/04/15	0.037	0.04	-7.5%	7.0%	05/28/15	-6.9%	7
1-Point QC	County A	1X-XXX-2004-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	03/06/15	9	8	12.5%	10.0%	02/16/15	11.0%	18

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
Flow Rate Verification	County B	1X-XXX-0002-1	88101	145	R & P Model 2025 Sequential Air Sampler with BGI VSCC	03/19/15	16.7	15.98	4.4%	4.0%	02/25/15	3.9%	22
Flow Rate Verification	County B	1X-XXX-0002-3	88101	184	Thermo Scientific Model 5030 SHARP VSCC FEM	03/19/15	16.7	0	4.5%	4.0%	03/04/15	3.0%	15

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Level 1 Difference	Level 2 Difference	% Difference Level 3	% Difference Level 4	% Difference Level 5	% Difference Level 6	% Difference Level 7	% Difference Level 8	% Difference Level 9	% Difference Level 10	Criteria Level 1-2	Criteria Level 3 - 10
Annual PE	County C	4X-XXX-0002-1	42401	60	THERMO ELECTRON 43A, 43B, 43C	04/14/15	0.0000	0.0000	0%	0%	23%	0%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-0008-2	42101	593	API Model 300 EU	03/03/15	0.0000	0.0040	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	02/10/15	0.0000	0.0000	0%	0%	0%	16%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	05/06/15	0.0000	0.0000	0%	0%	0%	36%	21%	15%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	03/11/15	0.0000	0.0050	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	05/18/15	0.0000	0.0120	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%

FINAL REPORT SAMPLE – SITE RELATED INFO

Summary of Data Exceeding Acceptance Criteria

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/08/15	8.9	8	11.3%	10.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/22/15	9	8	12.5%	10.0%	NONE	0.0%	21
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	01/08/15	0.043	0.04	7.5%	7.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	06/04/15	0.037	0.04	-7.5%	7.0%	05/28/15	-6.9%	7
1-Point QC	County A	1X-XXX-2004-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	03/06/15	9	8	12.5%	10.0%	02/16/15	11.0%	18
Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
Flow Rate Verification	County B	1X-XXX-0002-1	88101	145	R & P Model 2025 Sequential Air Sampler with BGI VSCC	03/19/15	16.7	15.98	4.4%	4.0%	02/25/15	3.9%	22
Flow Rate Verification	County B	1X-XXX-0002-3	88101	184	Thermo Scientific Model 5030 SHARP VSCC FEM	03/19/15	16.7	0	4.5%	4.0%	03/04/15	3.0%	15

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Level 1 Difference	Level 2 Difference	% Difference Level 3	% Difference Level 4	% Difference Level 5	% Difference Level 6	% Difference Level 7	% Difference Level 8	% Difference Level 9	% Difference Level 10	Criteria Level 1-2	Criteria Level 3 - 10
Annual PE	County C	4X-XXX-0002-1	42401	60	THERMO ELECTRON 43A, 43B, 43C	04/14/15	0.0000	0.0000	0%	0%	23%	0%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-0008-2	42101	593	API Model 300 EU	03/03/15	0.0000	0.0040	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	02/10/15	0.0000	0.0000	0%	0%	0%	16%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	05/06/15	0.0000	0.0000	0%	0%	0%	36%	21%	15%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	03/11/15	0.0000	0.0050	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	05/18/15	0.0000	0.0120	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%

The tool creates a column for the county name and AQS ID.

FINAL REPORT SAMPLE – INSTRUMENT METHOD

Summary of Data Exceeding Acceptance Criteria

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/08/15	8.9	8	11.3%	10.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/22/15	9	8	12.5%	10.0%	NONE	0.0%	21
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	01/08/15	0.043	0.04	7.5%	7.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	06/04/15	0.037	0.04	-7.5%	7.0%	05/28/15	-6.9%	7
1-Point QC	County A	1X-XXX-2004-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	03/06/15	9	8	12.5%	10.0%	02/16/15	11.0%	18

The tool adds a column for the monitor method description.

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
Flow Rate Verification	County B	1X-XXX-0002-1	88101	145	R & P Model 2025 Sequential Air Sampler with BGI VSCC	03/19/15	16.7	15.98	4.4%	4.0%	02/25/15	3.9%	22
Flow Rate Verification	County B	1X-XXX-0002-3	88101	184	Thermo Scientific Model 5030 SHARP VSCC FEM	03/19/15	16.7	0	4.5%	4.0%	03/04/15	3.0%	15

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Level 1 Difference	Level 2 Difference	% Difference Level 3	% Difference Level 4	% Difference Level 5	% Difference Level 6	% Difference Level 7	% Difference Level 8	% Difference Level 9	% Difference Level 10	Criteria Level 1-2	Criteria Level 3 - 10
Annual PE	County C	4X-XXX-0002-1	42401	60	THERMO ELECTRON 43A, 43B, 43C	04/14/15	0.0000	0.0000	0%	0%	23%	0%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-0008-2	42101	593	API Model 300 EU	03/03/15	0.0000	0.0040	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	02/10/15	0.0000	0.0000	0%	0%	0%	16%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	05/06/15	0.0000	0.0000	0%	0%	0%	36%	21%	15%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	03/11/15	0.0000	0.0050	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	05/18/15	0.0000	0.0120	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%

FINAL REPORT SAMPLE – QA/QC RESULTS

Summary of Data Exceeding Acceptance Criteria

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/08/15	8.9	8	11.3%	10.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/22/15	9	8	12.5%	10.0%	NONE	0.0%	21
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	01/08/15	0.043	0.04	7.5%	7.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	06/04/15	0.037	0.04	-7.5%	7.0%	05/28/15	-6.9%	7
1-Point QC	County A	1X-XXX-2004-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	03/06/15	9	8	12.5%	10.0%	02/16/15	11.0%	18
Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
Flow Rate Verification	County B	1X-XXX-0002-1	88101	145	R & P Model 2025 Sequential Air Sampler with BGI VSCC	03/19/15	16.7	15.98	4.4%	4.0%	02/25/15	3.9%	22
Flow Rate Verification	County B	1X-XXX-0002-3	88101	184	Thermo Scientific Model 5030 SHARP VSCC FEM	03/19/15	16.7	0	4.5%	4.0%	03/04/15	3.0%	15

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Level 1 Difference	Level 2 Difference	% Difference Level 3	% Difference Level 4	% Difference Level 5	% Difference Level 6	% Difference Level 7	% Difference Level 8	% Difference Level 9	% Difference Level 10	Criteria Level 1-2	Criteria Level 3 - 10
Annual PE	County C	4X-XXX-0002-1	42401	60	THERMO ELECTRON 43A, 43B, 43C	04/14/15	0.0000	0.0000	0%	0%	23%	0%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-0008-2	42101	593	API Model 300 EU	03/03/15	0.0000	0.0040	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	02/10/15	0.0000	0.0000	0%	0%	0%	16%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	05/06/15	0.0000	0.0000	0%	0%	0%	36%	21%	15%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	03/11/15	0.0000	0.0050	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	05/18/15	0.0000	0.0120	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%

QA/QC checks that exceeded acceptance criteria are summarized in these cells

FINAL REPORT SAMPLE – "AFFECTED" DAYS

Summary of Data Exceeding Acceptance Criteria

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/08/15	8.9	8	11.3%	10.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	01/22/15	9	8	12.5%	10.0%	NONE	0.0%	21
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	01/08/15	0.043	0.04	7.5%	7.0%	NONE	0.0%	7
1-Point QC	County A	1X-XXX-1013-1	44201	47	THERMO ELECTRON 49	06/04/15	0.037	0.04	-7.5%	7.0%	05/28/15	-6.9%	7
1-Point QC	County A	1X-XXX-2004-1	42401	560	Thermo Electron 43c-TLE/43i-TLE	03/06/15	9	8	12.5%	10.0%	02/16/15	11.0%	18
Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Monitor Concentration	Assessment Concentration	% Difference	Part 58 Appendix A Criteria	Last Valid Assessment Date	Last Valid % Difference	Number of Days Affected
Flow Rate Verification	County B	1X-XXX-0002-1	88101	145	R & P Model 2025 Sequential Air Sampler with BGI VSCC	03/19/15	16.7	15.98	4.4%	4.0%	02/25/15	3.9%	22
Flow Rate Verification	County B	1X-XXX-0002-3	88101	184	Thermo Scientific Model 5030 SHARP VSCC FEM	03/19/15	16.7	0	4.5%	4.0%	03/04/15	3.0%	15

The tool searches for the last QA/QC check date (within calendar year) and result that was within acceptance criteria. Then calculates the number of days in between.

Assessment Type	County/ City Name	AQS ID	Parameter Code	Monitor Method Code	Monitor Method	Assessment Date	Level 1 Difference	Level 2 Difference	% Difference Level 3	% Difference Level 4	% Difference Level 5	% Difference Level 6	% Difference Level 7	% Difference Level 8	% Difference Level 9	% Difference Level 10	Criteria Level 1-2	Criteria Level 3 - 10
Annual PE	County C	4X-XXX-0002-1	42401	60	THERMO ELECTRON 43A, 43B, 43C	04/14/15	0.0000	0.0000	0%	0%	23%	0%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-0008-2	42101	593	API Model 300 EU	03/03/15	0.0000	0.0040	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	02/10/15	0.0000	0.0000	0%	0%	0%	16%	0%	0%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1008-1	42602	99	API MODEL 200A/E NO ANALYZER	05/06/15	0.0000	0.0000	0%	0%	0%	36%	21%	15%	0%	0%	1.5000	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	03/11/15	0.0000	0.0050	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%
Annual PE	County C	4X-XXX-1376-1	42101	593	API Model 300 EU	05/18/15	0.0000	0.0120	0%	0%	0%	0%	0%	0%	0%	0%	0.0015	15%

DATA VERFICATION & DATA VALIDATION

- Monitoring agencies can run the tool before uploading QC data to AQS as a final data verification and data validation check.
- EPA Regional TSA auditors can use the tool as part of their data review process.