



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

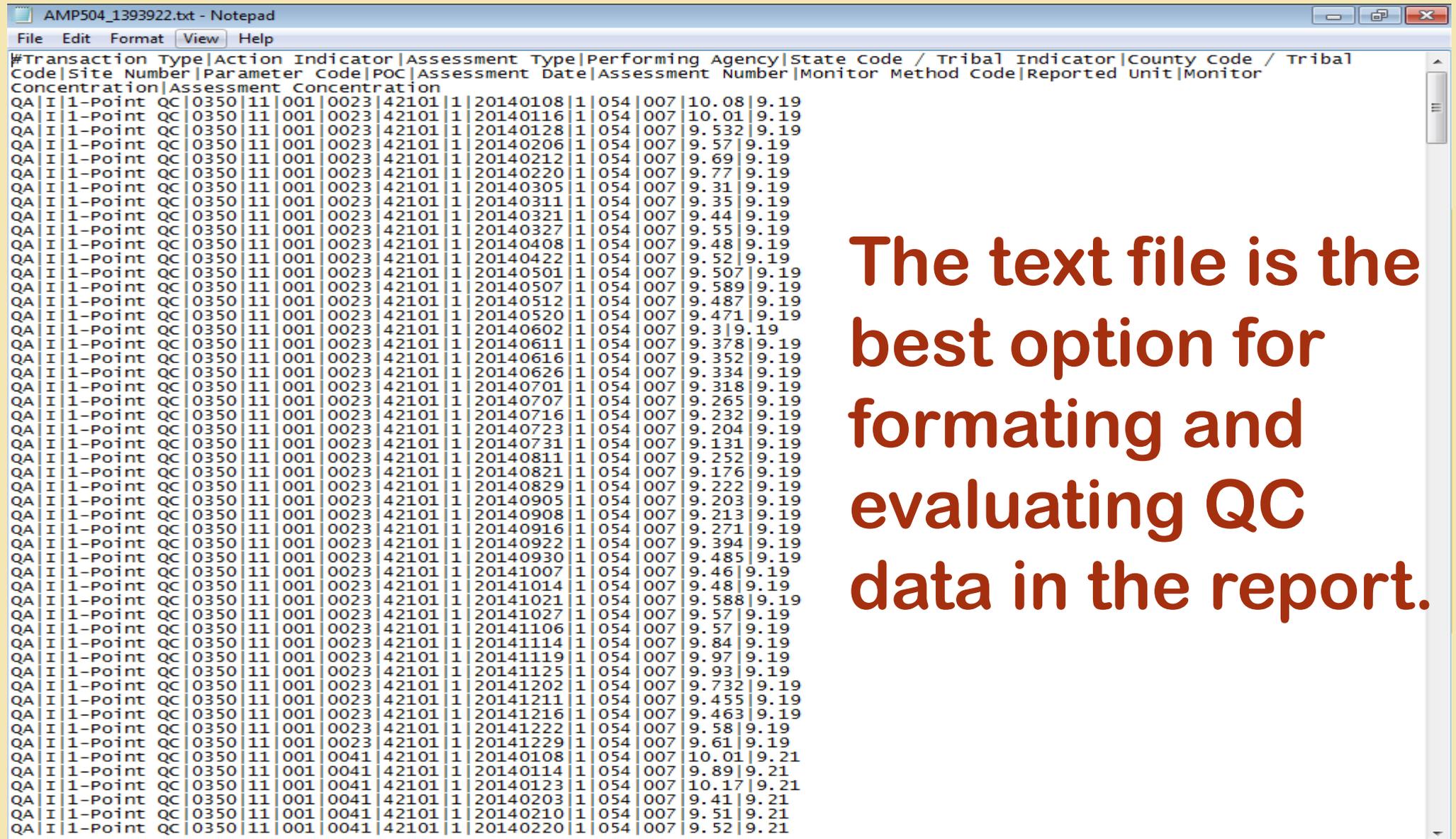
504 report format options .pdf, .txt. or .xml.

The screenshot shows the AQS (Automated Quality System) software interface. The title bar reads "AQS". The menu bar includes: Action, Help, Session, Admin, Retrieval, Maintain, Critical Rev, Certification, Batch, Correct, Main Menu. The toolbar contains various icons for file operations and navigation. The main window title is "Standard Report Criteria Selection (Read Only) AMP504". The interface is divided into several sections:

- Criteria Set:** A dropdown menu is currently empty.
- Desc:** An empty text input field.
- Owner:** Two text input fields containing "KIA" and "HENCE".
- Type:** A dropdown menu set to "PRIVATE".
- Report Code:** A dropdown menu set to "AMP504".
- Report Name:** A text input field containing "EXTRACT QA DATA".
- Report Outputs:** A section with two radio buttons and three checkboxes:
 - Run Online
 - Send via Email
 - WORKFILE
 - XML
 - [Unlabeled]

At the bottom center, there is a large button labeled "Generate Report".

504 REPORT – TEXT FILE



AMP504_1393922.txt - Notepad

File Edit Format View Help

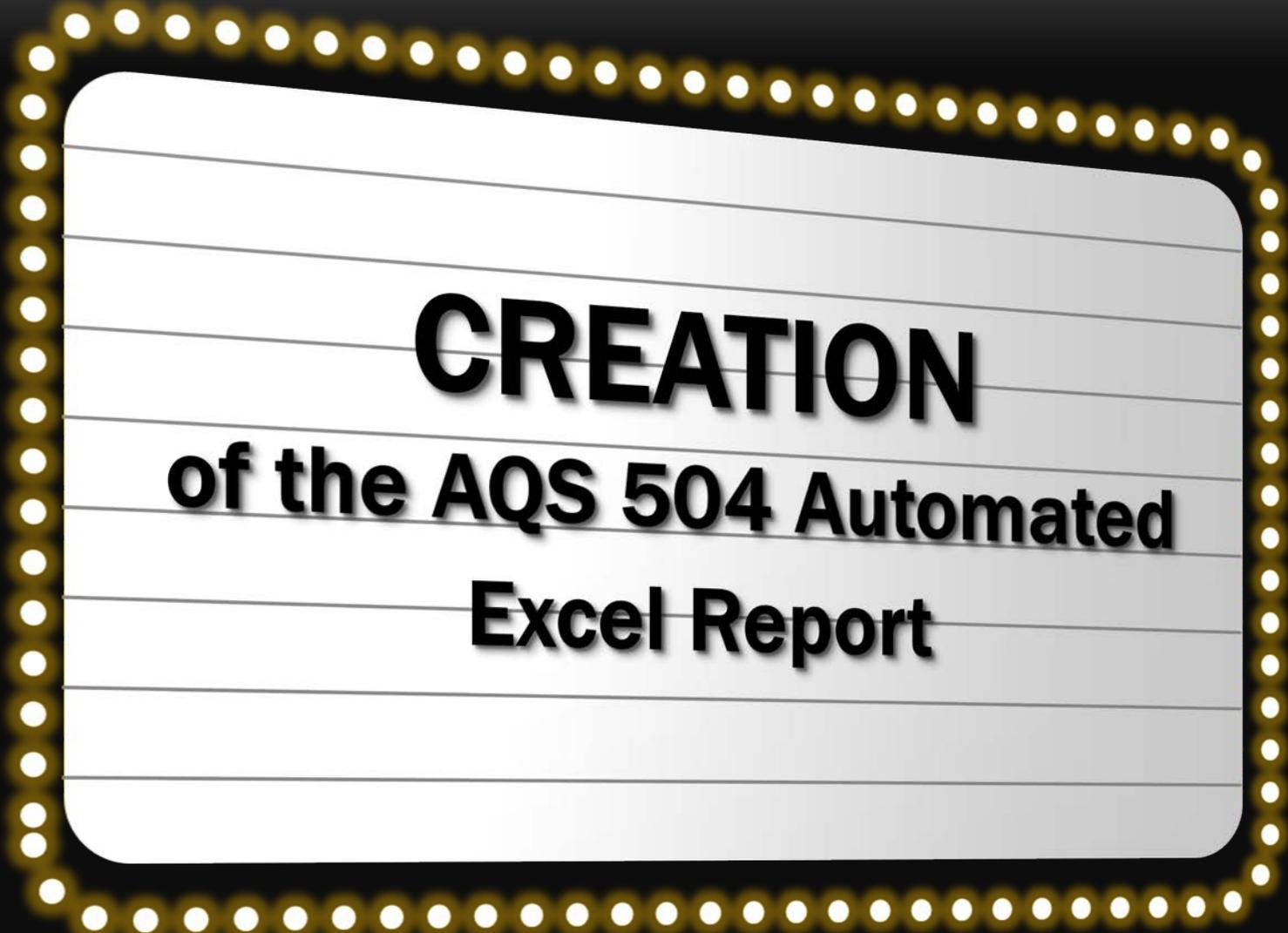
#	Transaction	Type	Action	Indicator	Assessment	Type	Performing	Agency	State	Code / Tribal	Indicator	County	Code / Tribal		
Code	Site Number	Parameter	Code	POC	Assessment	Date	Assessment	Number	Monitor	Method	Code	Reported	Unit	Monitor	
Concentration	Assessment	Concentration													
QA	I	1-Point	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

The text file is the best option for formatting and evaluating QC data in the report.

DATA REVIEW – EXCEL REPORT

- EPA Region 3's Office of Air Monitoring & Analysis copied, formatted, 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:

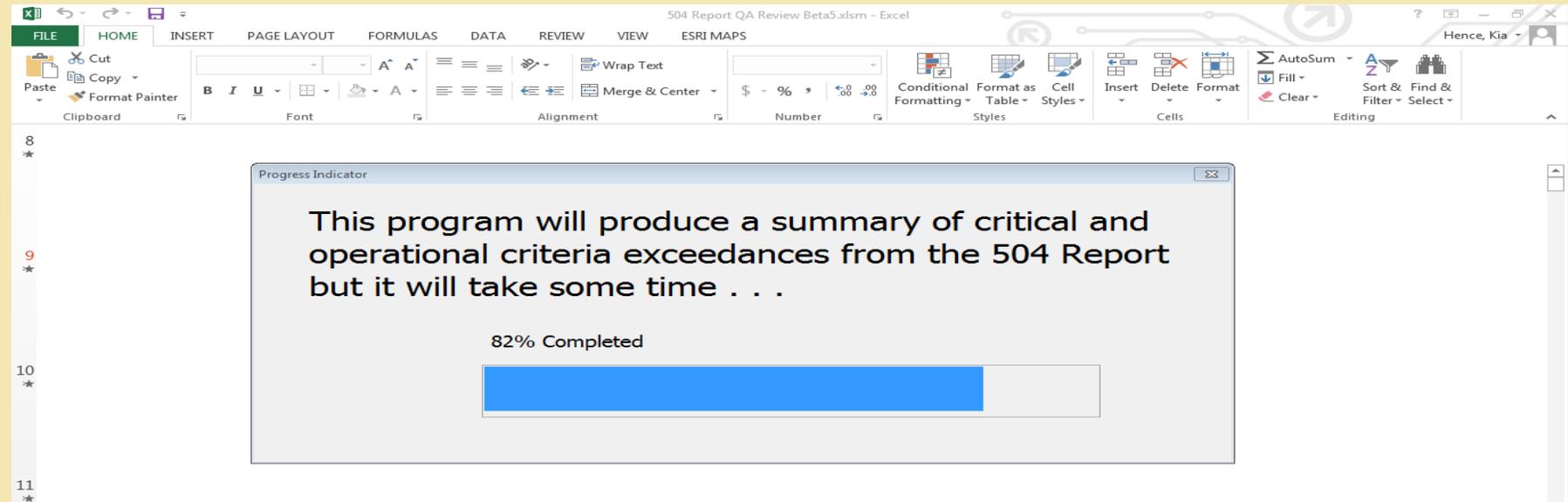
1. Download and save an AMP504 text file from AQS Or save the text file generated from the QA transaction generator.
2. Open the 504 Excel tool. (Note: You may need to select “Enable Content” for the program to run.) A window will pop up prompting you to select a 504 text file.

The screenshot displays an Excel spreadsheet with a table of monitoring data. The table has columns for 'Monitor Method', 'Assessment Date', 'Level 1 Difference', '% Difference Level 2', and '% Differer Level'. The data rows include various monitoring methods such as 'MEDELS BAM 1020-GBAM 1020- ETC', 'MODEL 400 OZONE ANALYZER', and 'API MODEL 200A/E NO ANALYZER'. An 'Open' file dialog box is overlaid on the spreadsheet, showing the file explorer interface with the 'Hence, Kia' folder selected. The dialog box is set to search for 'Text Files (*.txt)'. The taskbar at the bottom shows several open applications, including 'AQS 504 R...', '504 Demo', 'Skype for ...', 'Cisco Any...', 'Mike Papp...', 'Papp, Mic...', 'RE: Follow...', 'AQS 504 R...', and '504 Report...'. The system clock in the bottom right corner indicates the time is 10:07 AM on 8/24/2016.

	F	G	H	I	J
	MEDELS BAM 1020-GBAM 1020- ETC	06/13/13	29.7	29.1	2.1%
	MEDELS BAM 1020-GBAM 1020- ETC	06/13/13	15.15	15	1.0%
	MEDELS BAM 1020-GBAM 1020- ETC	06/13/13	18.42	18.4	0.1%
	MEDELS BAM 1020-GBAM 1020- ETC	06/13/13	26	29.4	-11.6%
	MEDELS BAM 1020-GBAM 1020- ETC	06/13/13	15.43	15	2.9%
	MEDELS BAM 1020-GBAM 1020- ETC	06/13/13	18.74	18.4	1.8%
	Monitor Method	Assessment Date	Level 1 Difference	% Difference Level 2	% Differer Level
	MODEL 400 OZONE ANALYZER	09/18/13	0.0000	0%	0%
	API MODEL 200A/E NO ANALYZER	12/13/12	0.0000	0%	0%
	API MODEL 300 GAS FILTER	03/30/12	0.0175	0%	0%
	API Model 300 EU	12/19/12	0.0328	0%	0%
	API Model 300 EU	12/31/13	0.0067	0%	0%
	API Model 300 EU	12/26/14	0.0667	0%	0%
	Teledyne API 100 EU	12/20/12	0.1658	17%	0%
	API MODEL 300 GAS FILTER	09/25/12	0.2090	21%	0%

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

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

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 – 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
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 adds a column for the monitor method description.

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

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

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 – “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 VERIFICATION & 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.**