

Orsat is a third-party service organization specializing in the automation and support services for PAMS AutoGC Systems. Offer services and support for PE and Agilent Systems. With over 20 years of experience in operating AutoGC systems for PAMS Ozone precursor analysis in Texas, Louisiana and Georgia, Orsat currently supports and operates over 30 continuous analyzers in Texas. We have experience in every aspect of operation and validation of AutoGC data.



Purpose of our Value-added Hardware Application is to provide the elements specific to a turn-key continuous monitoring solution using these Lab-scale GC systems. We can configure, supply hardware and automation for continuous operation including routine quality control samples. We provide software to generate sequences which control the introduction of routine QC samples as well as generation of calibration curves. Our solution will result in a field ready – field tested solution.

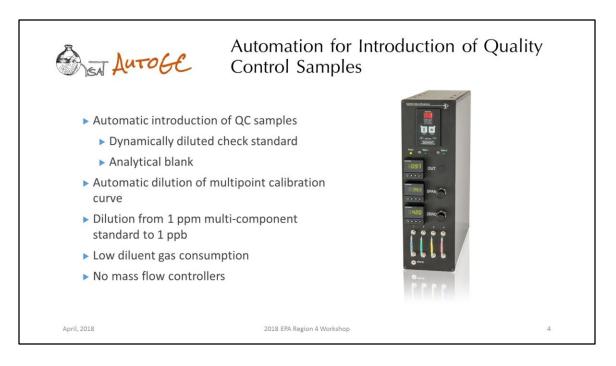


What you get:

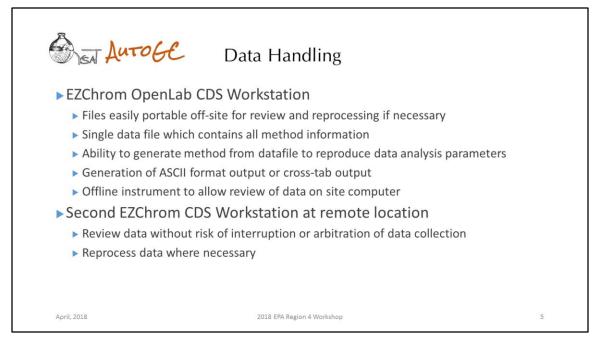
- 1. A dilution system to generate calibration curves from a 1 ppmC calibration gas
- 2. Software to generate sequences which will interface with our additional valving installed and configured to introduce routine QC samples
- 3. Configuration of all necessary analytical methods
- 4. Complete configuration of all plumbing and support gas systems What we can do:
- 1. Deployment
- 2. Field Qualification for 1 week to meet specification
- 3. Training for operators and validators

Also available:

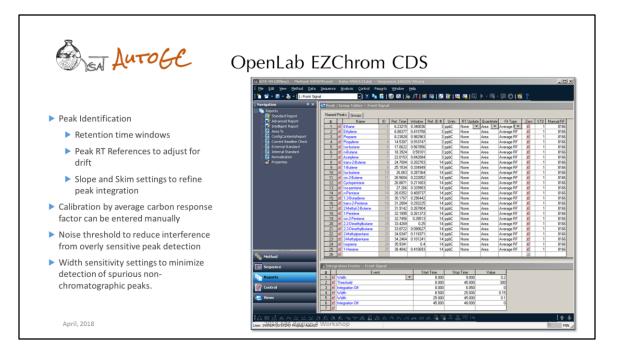
Support contracts



Each system will have automatic introduction of quality control samples and is designed for uninterrupted data collection. Each system is equipped with its own dynamic calibration system capable of automatically introducing daily calibration checks and analytical blanks as well as multipoint calibration points.



OpenLab EZChrom was chosen because it generates data files which are easily transported to another computer where they can be reviewed and reprocessed if necessary. It also can generate ASCII text output for ingestion into other systems. We recommend the purchase of a second copy of the data system to be used offline at a remote location to reduce the risk of interfering with on-going monitoring activities to facilitate the review and reprocessing of any data.



The EZChrom Data System

- 1. Identifies components using retention time windows and uses reference peaks to accommodate routine diurnal drift
- 2. Quantitates components using an average response factor based on Propane and Benzene
- 3. Allows for noise thresholds to reduce interference
- 4. Uses a width sensitivity setting to minimize detection of spurious nonchromatographic peaks.

	Z	A TA	ит	06	E	Ο							CDS	5					
	5174//	Group Tables From					I Ble D	· · · · ·	d Qata Front Sign	Sequence Anal	hysis Contro	Report	s <u>wi</u> ndow <u>Help</u> ∰2015551,£ns,57¥ 8 aal	d 10 20 Br 1	4 4 16	2) - 16	· 🗊 O I 🕏	?	
	100004.0		nt Signai	(Ferrar	-		_	_	_		_	_	-	Ref. ID # Units		te Quantita		Zero	STD Manual RF
Nar	med F	eaks Groups											- -	6 3 ppbC 8 3 ppbC	None None	Area	Average F ·	2	1 8166
	+ 1	Name	ID	Ret. Time	Window	Ref. ID # Units	BTI	pdate Quan	litate	Fit Type	Zero	STD	Manual RF	3 3 ppbC	None	Area	Average RF	×	1 8166
	1	Ethane	1		0.340036	3 ppbC	None	 Area 		verage F -	1	1	8166	7 3 ppbC 6 3 ppbC	None	Area	Average RF Average RF	-	1 8166 1 8166
				6.88377			None				1		8166	1 3 ppbC	None	Area	Average RF	8	1 8166
		Ethylene	6			3 ppbC		Area		verage RF		1		4 3 ppbC 3 14 ppbC	None	Area	Average RF Average RF	8	1 8166 1 8166
		Propane	3	8.23828	0.982963	3 ppbC	None	Area		verage RF	1	1	8166	3 14 ppbL 9 14 ppbL	None	Area	Average HF Average RF	20	1 8166
	4	Propylene	4	14.5307	0.910747	3 ppbC	None	Area	A	verage RF		1	8166	4 14 ppbC	None	Area	Average RF	2	1 8166
	5	Iso-butane	5	17.0622	0.567856	3 ppbC	None	Area	۵	verage RF		1	8166	2 14 ppbC	None	Area	Average RF	2	1 8166
	6	n-Butane	C	18.3924	0.58101	3 ppbC	None	Area		verage RF	1	1	8166	3 14 ppbC 3 14 ppbC	None	Area	Average RF Average RF	2	1 8166
	~		0											7 14 ppbC	None	Area	Average RF	×	1 8166
		Acetylene	1	22.0153		3 ppbC	None	Area		verage RF	1	1	8166	2 14 ppbC	None	Area	Average RF	2	1 8166
	8	trans-2-Butene	8	24.7004	0.202783	14 ppbC	None	Area	A	verage RF		1	8166	5 14 ppbC 4 14 ppbC	None	Area Area	Average RF Average RF	10	1 8166
	9	1-Butene	9	25.1534	0.334949	14 ppbC	None	Area	A	verage RF		1	8166	3 14 ppbC	None	Area	Average RF	2	1 8166
	-		-			14	1			In the second designed	a summer	1	man man	3 14 ppbC	None	Area	Average RF	8	1 8166
										20 1 22	2-Dimethylbuta 3-Dimethylbuta	ne	33.4269 0.25 33.8722 0.09062		None	Area Area	Average RF Average RF		1 8166 1 8166
											Methologiane		2 34.0347 0.11937	1 14 ppbC	None	Area	Average RF	M	1 8166
	- 11	🔒 Integration Eve	ents F	🔪 nt Signa									34,2454 0.101241 35,9341 0.4		None	Area	Average RF	1	1 8166 1 8166
	- 11	#	-	Event		Start	Time	Stop T	ime	Val	hua		35.9341 0.4 38.4842 0.410693		None	Area	Average RF Average RF	2	1 8166
	- 1	1 10 11 11		LYCIN		- Start	0.000		9.00									1	
		1 🛃 Width									0.3								
	- 11	2 K Threshold					0.000		45.000		30		1						
	- 11	3 🗹 Integration	Off				0.000	8	6.050	0	1			tart Time St	9.000	Value	0.2		
	- 1	4 💉 Width					8.500		25.000	0	0.1	5	1500	0.000	45.000		300		
	- 11	5 Vidth					25.000		45.000		0.1			0.000	6.050		0		
	- 11		0//											8.500 25.000	25.000 45.000		0.15		
	- 11	6 💉 Integration	1 Ult				45.000		48.000	0	3	0		45.000	48.000		0		
	- 11	7 💉																	
		1					1.0.00			N 10 10 10 10		D 0 0	enterne nervense	AL 201 102 107	and the state				14.4

Key elements of the chromatographic method includes the Peaks and Groups table and Integration events.

The Peaks and Groups table allows the entry of

- 1. The component name
- 2. Retention time window
- 3. And Response Factor

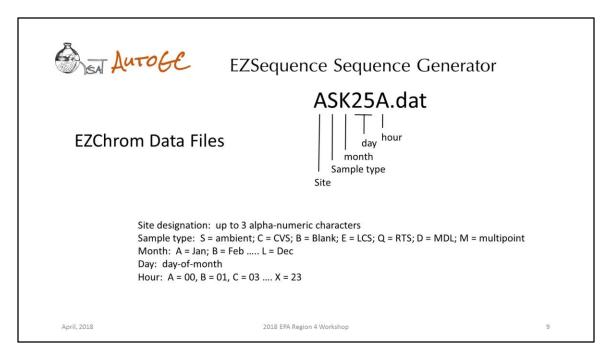
The Integration Event table allows the introduction of

1. Width and threshold events as well as integration on/off

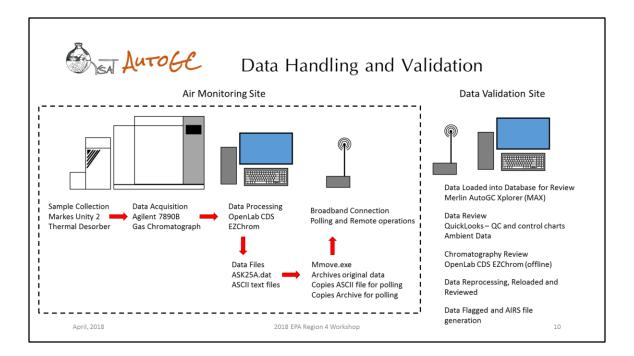
	SAT AUT	-ofe	EZ	Sequ	ience Se	equence G	enerato	or	
		Site-99 Method: S	SPAMS.met Data: 995K14T.d	at Sequence: 161	026-99.seq - [Sequence]				- 🗆 ×
		Ele Edit Yew Me	thod Data Sequence Analysis						- e ×
		🛅 🗟 - 👼 - 💩 -	1: Front Signal	- I 🗶 🍡 🖬 I	😰 🖾 🏤 Jii 🖬 🗟 🔡	📓 🗛 🕰 🙉 🕨 - 🕮 - 💯 🔘	😻 ?		
		Navigation	🕫 🗙 🛛 Run # Status	Run Type	Level Sample ID	Method	Filename Ac	tion Description	
	1	El TEL Sequence	470 Complete	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK14N.dat	11/14/2016 13:00	
	1		471 Complete	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K140.dat	11/14/2016 14:00	
		Properties	472 Complete	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K14P.dat	11/14/2016 15:00	
			473 Complete	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK14Q.dat	11/14/2016 16:00	
			474 Complete	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK14R.dat	11/14/2016 17:00	
			475 Complete	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K145.dat	11/14/2016 18:00	
			476 Acquing	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K14T.dat	11/14/2016 19:00	
			477	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK14U.dat	11/14/2016 20:00	-
			478	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K14V.dat	11/14/2016 21:00	_
			479	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K14W.dat	11/14/2016 22:00	_
			490	Unknown	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK14K.dat	11/14/2016 23:00	-
Merlin EZ Seguen	ce Setup			X known	0 Ambient Air 0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K15A.dat ANY 995K15B.dat ANY	11/15/2016 00:00	-
				known	0 Standard	D:\AutoGC\Method\SSPAMS.met D:\AutoGC\Method\SSPAMS.met	995K15C dat ANY 99CK15C dat ANY	11/15/2016 01:00	
	In the lot		Merlin EZ Sequence	known	0 Blank	D:\AutoGC\Method\SSPAMS.met	998K150.dat	11/15/2016 02:00	_
Sequence Type	Total Chrom	Apply	Copyright 2016	known	O Diank.	D:\dutoGC\Method\SSPAMS.met	SSOK ISD. dar	11/15/2016 03:00	-
	Agilent	-	Orsat, Pasadena, TX	known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK15F.dat	11/15/2016 05:00	
	[m. e	- Cancel	713-920-1696	known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK15G.dat	11/15/2016 06:00	-
QC Type	Static QC		713-320-1636	known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK15H.dat	11/15/2016 07:00	-
de type	Weekly (CS + IQ)			known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K15I.dat	11/15/2016 08:00	-
				known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK15J.dat	11/15/2016 09:00	_
Site ID	99			known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K15K.dat	11/15/2016 10:00	_
				known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K15L.dat	11/15/2016 11:00	_
	TotalChrom		EZChrom	known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K15M.dat	11/15/2016 12:00	_
	rotalchrom		EZGNION	known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K15N.dat	11/15/2016 13:00	_
Output Directory	D:\TC\99-other	Output Directory	D:\AutoGC\Seguence	known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K150.dat	11/15/2016 14:00	
por c not only	10.110.000 00.001	- upor encolory	Terre renove in edución	known	0 Ambient Air	D:\AutoGE\Method\SSPAMS.met	995K15P.dat	11/15/2016 15:00	
Method Path	D:\TC\99-meth	Method File	D:\AutoGC\Method\PA	known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK15Q.dat	11/15/2016 16:00	
and a second second	le. ne wormour			known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK15R.dat	11/15/2016 17:00	
		External Valving	v.	known	0 Ambient Air	D \AutoGC\Method\SSPAMS.met	995K155.dat	11/15/2016 18:00	_
				known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K15T.dat	11/15/2016 19:00	
				known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK15U.dat	11/15/2016 20:00	_
	22	Lines and Lines		known	0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	995K15V.dat	11/15/2016 21:00	-
			503	Unknown	0 Ambient Air 0 Ambient Air	D:\AutoGC\Method\SSPAMS.met	99SK15W.dat ANY	11/15/2016 22:00	
			504	Unknown	0 Ambient Air 0 Standard	D:\AutoGC\Method\SSPAMS.met D:\AutoGC\Method\SSPAMS.met	995K15K.dat ANY	11/15/2016 23:00	-
					0 Standard		99CK16A.dat ANY	11/16/2016 00:00	

The sampling is scheduled using a sequence which is generated using the

- 1. Merlin EZ Sequence program. This program generates a text file which when loaded into the EZChrom sequence includes
- 2. routine QC samples, provides filenames which identify samples and the necessary valving events to control the introduction of samples.



Filenames generated by EZSequence allow sorting of data and easy identification of site and sample type as well as month, day and hour of the day the sample was collected.



This shows a schematic representation of the system hardware and the process of sample collection and analysis. We supply and additional application which will automatically move data for polling and archive into zip files data to keep data organized and reduce losses.

 In addition, it shows the flow of data from the chromatographic system to a remote site where data can be uploaded to our cloud-based system MAX and evaluated using MAX Quicklooks and graphic capabilities. If necessary, chromatographic data can be reprocessed and reloaded into MAX to correct any integration or identification issues which might arise. The ability to flag data and generate AIRS files is currently under development.

Construction C	Configuration settings 1 KB	Setup File Structure for automatic archiving, polling and easy access
---	-----------------------------	--

We will structure the data collection and archiving for remote access, polling and to make data easily accessible to operators.

1. The current directory will be where the data is written by EZChrom for the current day.

Aurofe	Data Har		Validati	on	
- D:\ 	✓ G2 Search DataStor	(D:)	Current Data	1	
Organize Include in library Share with Burn New folder A Name Name	Date modified Type Size	III • 🔟 😧			
Favorites	D:\Current				×
Downloads Current	4 🔄 🕞 🐇 • EZCHROM 2016 • DataStor (D:) •	Durrent	👻 🚺 Search	Current	2
Current Second Places	Organize Include in library Share with	Darp New Folder		ii • 🖬 😡	
EZ	Desktop	Date modified -	Type Size	Date created Atl	
Libraries BZSequence 1.1	1 Downloads 00 995D11U.dat	4/11/2018 21:36		4/11/2018 21:36 A	-
Documents	4 🝊 OneDrive	4/11/2018 21:36		4/11/2018 21:36 A	
🌙 Music 🔒 Template	3 Recent Places	4/11/2018 20:36		4/11/2018 20:36 A	
Pictures J TX1MMSD	Elipsanies Solution	4/11/2018 20:36		4/11/2018 20:36 A	
Videos 💿 mmoveez.ini	3 🕑 Documents 💿 995D115.dat	4/11/2018 19:36	DAT File 960 KE	4/11/2018 19:36 A	
	Music 9950115.bc1	4/11/2018 19:36	TX1 File 3 KB	4/11/2018 19:36 A	
1 EZCHROM 2016	Pictures 995D11R.bx1	4/11/2018 18:36	TX1 File 3 KB	4/11/2018 18:36 A	
BataStor (D:)	@1995D11R.dat	4/11/2018 18:36	DAT File 960 KE	4/11/2018 18:36 A	
Decastor (Dt)	EZCHROM 2016	4/11/2018 17:36		4/11/2018 17:36 A	
9 items		4/11/2018 17:36		4/11/2018 17:36 A	
		4/11/2018 16:36		4/11/2018 16:36 A	
	e ge admin (((CONSCI) (P: @) 995D11P.dat e ge dataag (((CONSCI) (€ @) 995D110.dat	4/11/2018 16:36		4/11/2018 16:36 A 4/11/2018 15:36 A	
		4/11/2018 15:36 4/11/2018 15:36		4/11/2018 15:36 A	
		4/11/2018 15:36		4/11/2018 14:36 A	
	Wetwork W1995011N.dat	4/11/2018 14:36		4/11/2018 14:36 A	
		4/11/2018 13:36		4/11/2018 13:36 A	
	🖹 🌉 BOLL-HP 🗾 995D11M.bc1	4/11/2018 13:36	TX1 File 3 KB	4/11/2018 13:36 A	-
				·	

The current directory will contain the 1. raw data files and the ASCII text report files.

Aurofe	Data	Handlir		l Valio	datio	on	
- DA G) EZCHROM 2016 + DataStor (D:) +	- (7)	Search DataStor (D:)		Archive	ed Data	Э	
Organize Include in library Share with Burn New folder Name -	Date modified Type	Size					
Pavorites	4 D:\Archive	340					- D X
Downloads		016 • DataStor (D:) • Archive •		-	Search Arc	hive	
Current	1						
→ EZ	4 Organize 💌 🧊 Open 💌	Burn New folder	1	1	1.000		
Libraries Libraries Libraries Documents Crsat	Pavorkes	Name ~	Date modified	Туре	Size	Date created	î
Documents Documents Music Template	4 E Desktop 3 A Downloads	2017	11/21/2017 13:36	File folder		3/1/2017 16:26	_
Pictures	J Downloads	2018	4/11/2018 21:49	File folder		4/11/2018 21:49	
Videos mmoveez.ini	Recent Places	Audits Audits	12/9/2016 16:57	File folder		12/9/2016 16:57	
		😹 Blanks	4/11/2018 00:15	File folder		12/9/2016 16:57	
F EZCHROM 2016	Caraties Libraries	L curve	2/15/2018 00:15	File folder		6/7/2017 12:13	
🚣 os (c:)	Documents	LCS	4/11/2018 00:15	File folder File folder		12/9/2016 16:57	
DataStor (D:)	Pictures	MDL	4/10/2018 00:15 12/9/2016 16:57	File folder File folder		12/9/2016 16:57 12/9/2016 16:57	
9 items	Videos	RTS	12/9/2016 16:57 4/10/2018 00:15	File folder		12/9/2016 16:57	
I A A A A A A A A A A A A A A A A A A A		xfiles	4/10/2018 00:15	File folder		12/9/2016 16:57	
	EZCHROM 2016	e17112099.ap	4/10/2018 00:15	File Tolder	3.540.00	12/9/2016 16:57	
	C:)	e17112199.2p	11/22/2017 00:34	Compressed (zippe		11/21/2017 01:34	
	admin ()/CONSCI) (F:	e17112299.zp	11/23/2017 00:34	Compressed (zippe		11/22/2017 01:34	
	dataaq (\\CONSCI) (6	e17112399.zp	11/24/2017 00:34	Compressed (zppe		11/23/2017 01:34	
	🖵 d (\\demo17) (Z:)	e17112499.ap	11/25/2017 00:34	Compressed (zippe		11/24/2017 01:34	
	-	1			-,	1	2
	Ataburada 2					_	A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O

An Archive directory will contain the archived data.

1. Each day a zip file is written containing the data file and ASCII text report files and named for the site and date. Additional folders are in the archive folder which allow the automatic extraction of copies of the QC samples each day so they are always available to operators for review.

		Dri Archiveri a U7112199.cop					,
ar D∖∖		CO	(6 • DetaStor (D:) • Archive • e171	12199.30	• 💶 Search e	17112199.20	_
	• CD Search Data	Organize · Extract al files		-	100		• 🖬
O C L . ESCHONEDIO . DEBUG (D.) .	• Ma j Search Data:	😭 Favorites 🦷	Name -	Date modified	Type Compress		
Organize Include in library Share with Burn New folder		Devilop	TD_PAMS +0 min_20scon.mb	6/2/2017 13:38		1.18 2.1	
	1	A Contract	SSPAMS - 40-20.seq	10/14/2017 15:53 10/17/2017 06:52		143 14	
Favorites	Date modified Type	Size Recent Places	SSPAMS rone.net	6/14/2017 10:50		248 304 8	
Desktop	4 D:\Archive		SSPAMS.met	11/9(2017 18:11		1 KB 304 K	
Downloads	4 - EZCHROM 2016 + DataSt	Contraction and Contraction	ShortCycle.met	6/14/2017 14:23		2 1/2 304 1	
ConeDrive	1 🕒 😳 🗼 + EZCHROM 2016 + DataSt	sr (D:) • Avcrive •	RPO_171017.seq	10/17/2017 07:09		2 KB 32 K	
Recent Places	- Organize - 💢 Open - Burn New	Folder	RPO_171016-17.seq ImpedDMPV-17003.seq	10/17/2017 06:56		0 KB 64 K	
Jan EZ	4 organize • Jopen • burn New	rolder 📑 Videos	Pets0499-17003.stsx I71115-160.rst	11/20/2017 19:14 11/22/2017 00:34		9KB 119K 3KB 64X	
EZSequence 1.1	1 Arne - Name -	5 EZO/ROM 2016	(171115-99.seg	11/20/2017 15:07		0 KB 920 K	
Documents Jorsat	4 E Desktop 2017	些 05 (C:)	171022-99.seg	11/9(2017 12:24		P K28 920 K	
Music Implate	3 🎉 Downloads	DataStor (D.)	170920-99.seq	10/19/2017 14:24	SEQ File 3	1KB 944.8	.8
Pictures IX1MMSD	G Confining	edmin (\)CONSCI) (F:	I 7002Blender.met	10/4/2017 15:42		288 3048	8
	S Recent Places	😅 d ((\demo17) (2:)	999821X.bs1	11/22/2017 00:04		2.62 4.6	
📑 videos 🔬 mnoveez.ini	3 👪 Blanks		995K21X.dat	11/22/2017 00:34		5 KB 960 K	
EZCHROM 2016	🕞 Libraries 🍶 curve	🗣 Network	999821W.64	11/21/2017 23:34	DAT File 13	213 41	
🚢 OS (C:)	Documents	15 A89-2017	999821V.bil	11/21/2017 22:34		283 48	
and DataStor (D:)	Music LCS	1 EDL/+P	@]999K21V.dut	11/21/2017 22:34	DAT File 12	960 8	8
Carlo Alexandre a	Pictures ADL	1 ELAKE-2015	9999(21U.bx1	11/21/2017 21:34	TX1 File	2.430 3.4	
9 items	Wideos RTS	the the state of t	@]999k21U.dat	11/21/2017 21:34	DAT File 12	5 KB 960 K	8
		62 items					
	EZCHROM 2016	-					
	an 03(Ci)	2099.30	Conpressed (appendia	a.346 s.b 13/20/2014	/01:24		_
	Ra DataStor (D:)	2199.ap 11/22/2017 00:34	Compressed (zippe	3,394 KB 11/21/2017	01:34		
	😴 admin (\\CONSCI) (F: 🔒 e171)	2299.zip 11/23/2017 00:34	Compressed (zippe	3,479 KB 11/22/2017	01:34		
Daily ZIP files	😪 dataaq (\\CONSCI) (C	2399.zip 11/24/2017 00:34	Compressed (zippe	3,553 KB 11/23/2017	01:34		
Daily ZIF mes	😪 d (\\demo17) (Z:)	2499.zip 11/25/2017 00:34	Compressed (zippe	3.472 KB 11/24/2017	01-34		
		2199-ap 11/23/2017-00.31	Compressed (append	3,472.60 11(24)2017	<u> </u>		
	G 100 11 1				•		

- 1. The Daily ZIP files also contain the contents of the
- 2. EZChrom method directory so validators will have copies of the blender spreadsheets and methods and sequences used in that day's analysis.

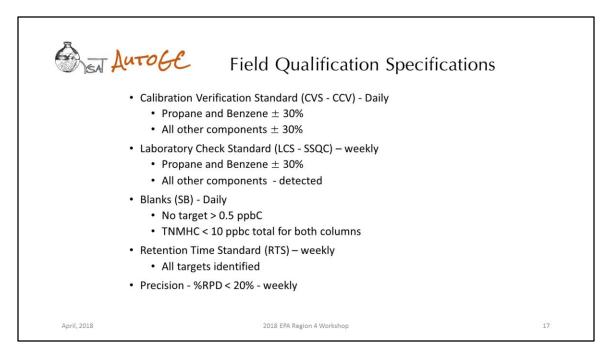
Aurofe			Valic	latio	n
Organize Include in library Share with Burn New Folder	• 😰 Search DataStor (D:)		Daily Z	ip file of	ASCII files for polling
Favorites Desktop	Date modified Type Size				
Downloads	CONTRACTOR CONTRACTOR - DataStor (D:) + TXIMMSD +			Search TX1MMS	
Constrive	Croanize ▼ Include in library ▼ Share with ▼ Burn New Folder				····
↓ EZ	Desktop Name	Date modified	Type -	Size	
Calubraries	Downloads	11/19/2017 00:34	Compressed (zippe	143 KB	
Documents Documents	CneDrive Secont Places TE17111099.20	11/20/2017 00:34	Compressed (zppe	143 KB	
Music Music	3 TE17112099.zip	11/21/2017 00:34	Compressed (zippe	142 KB	-
Pictures Videos Videos	4 📷 Libraries 📑 TE17112199.zip	11/22/2017 00:34	Compressed (zippe	144 KB	
videos mmoveez.ini	3 Documents IE17112299.zp	11/23/2017 00:34	Compressed (zippe	145 KB	
1 EZCHROM 2016	Music	11/24/2017 00:34	Compressed (zippe	145 KB	
🚢 OS (C:)	Videos 15 TE17112499.zp	11/25/2017 00:34	Compressed (zippe	144 KB	
BataStor (D:)	TE17112599.zip	11/26/2017 00:34	Compressed (zippe	144 KB	
	EZCHROM 2016	11/27/2017 00:34	Compressed (zippe	145 KB	
9 items	GS (C:) TE17112799.zp	11/28/2017 00:34 11/29/2017 00:34	Compressed (zippe Compressed (zippe	144 KB	
A Contraction of the second se		11/29/2017 00:34 11/30/2017 00:34	Compressed (zppe	144 KB	
	😪 dataaq ()(CONSCI) (C	12/1/2017 00:34	Compressed (zppe	146 KB	
		12/2/2017 00:34	Compressed (zippe	145 KB	
	Metwork	12/3/2017 00:34	Compressed (zippe	145 KB	
	ARP-2017	12/4/2017 00:34	Compressed (zippe	143 KB	
	R AUTOGC	12/5/2017 00:34	Compressed (zippe	141 KB	
	BIL-HP	12/6/2017 00:34	Compressed (zippe	144 KB	-
	141 items	12/2/2012 00:34	Conneared Isina	145.98	-

An additional folder is setup to allow the

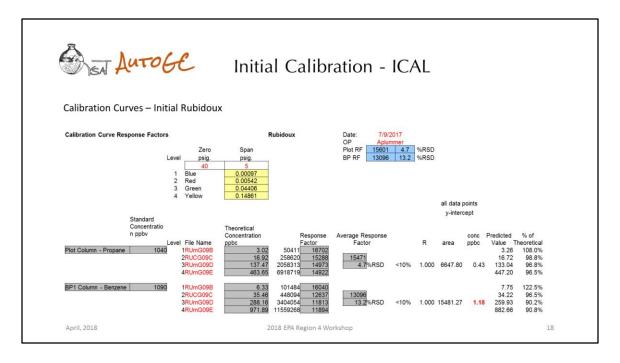
1. generation of daily zip files of the ASCII text report files to allow for separate polling of just the report information

Cognete - EZCARON 2016 - DataStar (0) - Cognete - Include in likery - Share with - Bun Iteer folder Construit Construit	Configuration settings: 1 18	Separate directory for EZChrom method files which are archived with each daily zip file
---	------------------------------	---

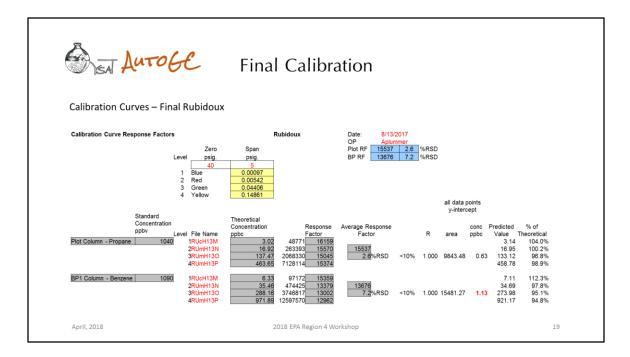
A separate fold holds the methods used by EZChrom to process all the data. Dilution system spreadsheets as well as logbooks are included in this directory so they will be included in the daily zip files of data.



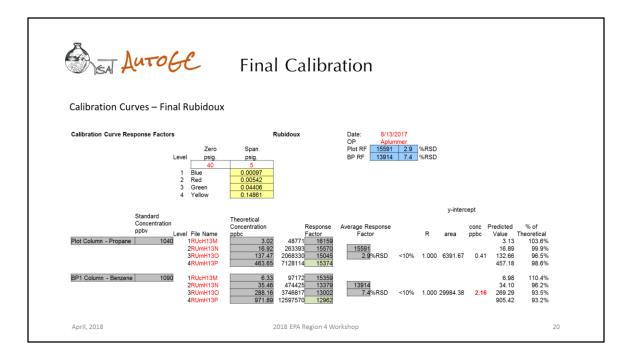
This is an example of the quality control limits used for the week long field qualification.



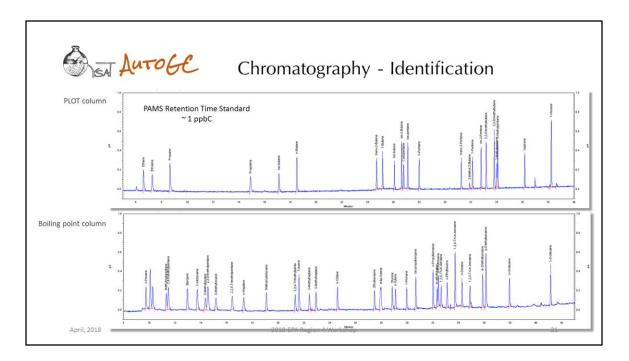
Orsat and Markes setup a system at SCAQMD which operated for about 6 weeks. This is an example of the calibration we generated at the beginning of the field study. Note we had benzene contamination which plagued this study for the duration although it reduced over time it adversely affected the QC data and calibration. The benzene in the blanks was from 2 ppbC and deteriorated over time. However it is significant to note that this did not appear to affect the ambient data as levels as low as 0.1 ppbC of benzene were routinely monitored. The contaminant was eventually isolated to a zero air line supplying the dilution system. It is also notable that in the initial calibration the lowest data point at nominally 1 ppbV showed a significantly higher response factor for both propane and benzene.



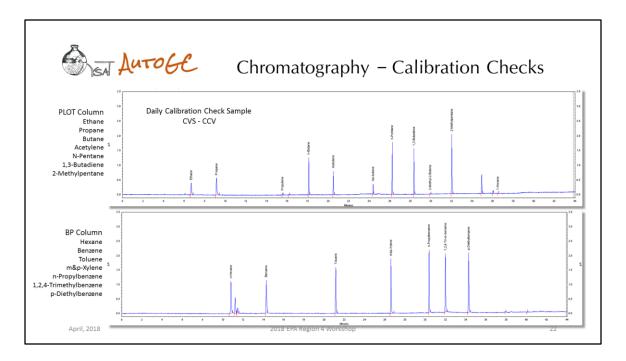
The calibration runs at the end of the field study were significantly better RSDs across response factors for both propane and benzene although there was still a significant contribution from the benzene contaminant.



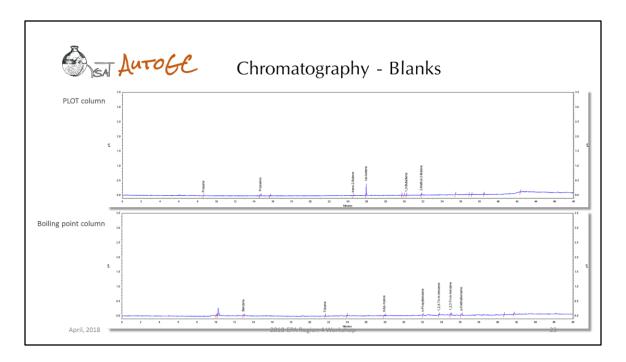
Since the range of this curve far exceeds potential ambient levels we calculated RSDs on only the lowest points. The FID is extremely linear and even on the higher RSD curves we never saw R values of anything but 1 and the variation of Response factors was not significant for the lowest point and was reduced over the course of the trial.



This is a chromatogram of the PAMS standard diluted to nominally 1 ppbC by partial injection of the PAMS standard followed by humidified zero air.



CVS – Calibration Verification Standard CCV – Continuing Calibration Verification



Method Blank - which is humidified diluent gas from the dilution system

<complex-block></complex-block>			Me		Au			/	pioi	CI				MAX
				-										
				2										
				and the latter	Decemental									
				C Seed	- vey	Chican + Filter		+ (1007)						
	2													
Munit Munit <th< td=""><td></td><td></td><td></td><td></td><td></td><td>Site Decignation</td><td>ADD Number</td><td></td><td></td><td>Address III</td><td>City 1 1 Pacadena</td><td>20 1</td><td>addate 1 1</td><td></td></th<>						Site Decignation	ADD Number			Address III	City 1 1 Pacadena	20 1	addate 1 1	
Image: marked biase in the second b	417K	Section and								plu Courty Reality)		77541		
1 0						10						1940		
No. 2010 No. 2010 <td< td=""><td>me' term</td><td>and the second s</td><td></td><td></td><td></td><td>12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	me' term	and the second s				12								
Norm						10								
1 1		and a second		50 215	178-0° MT	1	#05007	pM.			Fave Hand	202	130400	-9710000
1 1		and the state of t	timpste .			21						That		
No. N		And and a second se		91	987 N	17	10000					703	23 GUI 21	status .
Open Open <th< td=""><td>a.,</td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td>Test .</td><td></td><td></td></th<>	a.,					2						Test .		
Note Note <th< td=""><td></td><td></td><td></td><td></td><td></td><td>pt.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>						pt.								
No <			United States sensite mercent									7947		
Normal segment Applie Applie <th< td=""><td>£)</td><td>Martin Br. P. Carton</td><td></td><td></td><td></td><td>10</td><td></td><td></td><td></td><td></td><td></td><td>7007</td><td></td><td></td></th<>	£)	Martin Br. P. Carton				10						7007		
Normality Normality <t< td=""><td></td><td>and the second second</td><td>Automatical Statements</td><td>21</td><td>270-A ATC</td><td>14</td><td></td><td></td><td></td><td>1978.05</td><td></td><td>2028</td><td></td><td></td></t<>		and the second second	Automatical Statements	21	270-A ATC	14				1978.05		2028		
No. No. <td>P</td> <td></td> <td>Provide and a second</td> <td></td> <td></td> <td>11</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	P		Provide and a second			11								
And Processing And Pro		An age of the second		91	STEW EDWARD	AU 10		Haies	Against Pality 5, dam	suit 6 Southment	Postera			
All is an and a set of the set o		and the second s	-			A						-		
And State And State <t< td=""><td></td><td></td><td>6 29</td><td>- 21</td><td>978-H T090</td><td>8</td><td></td><td>DeeFait.</td><td>Hauton Deer Faik #2</td><td>asia 2/2 Darent Sk</td><td>Des Pal</td><td></td><td>2445000</td><td>451810</td></t<>			6 29	- 21	978-H T090	8		DeeFait.	Hauton Deer Faik #2	asia 2/2 Darent Sk	Des Pal		2445000	451810
Part Part <th< td=""><td></td><td>Contraction of the second</td><td>tenting and and and and and and and and and and</td><td></td><td></td><td>R</td><td>stenets</td><td></td><td></td><td>200-4 Certe 12</td><td>10.031</td><td>treat</td><td></td><td></td></th<>		Contraction of the second	tenting and			R	stenets			200-4 Certe 12	10.031	treat		
And the second		and the second se	at head of	28	978.4 1000	1		Claimet.ev	Canatilieu				10.0027075	16256af
Non- Part Part <th< td=""><td></td><td></td><td>and a sea</td><td></td><td></td><td>- M</td><td></td><td></td><td></td><td></td><td></td><td>THE</td><td></td><td></td></th<>			and a sea			- M						THE		
Line Mail and P P1 P2 P1 P2 P1 P2 P1 P2 P1 P2 P1 P2 P2 P1 P2 P2 <th< td=""><td></td><td></td><td>Mexico</td><td>01</td><td>178.7ed</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>			Mexico	01	178.7ed									
Method processing Mark prior						×								
			and protocold Party Protocold	2.0	976-C 1080	2		Larse	Bearront Coversore	200 Verrort Ave	Deurort	. 27745	10000	-94-07222
Second 1 is 2 of 2 within the second se			And Personal Property and Personal Property in the Person			22		210	Las PE TOyon	Last Southerine Aug	Peaders	1912 1918	1949/01	10.101271
			and the second s	Shewing	TH TOLINAM								Period	No. 1
			Annual Annual			18								

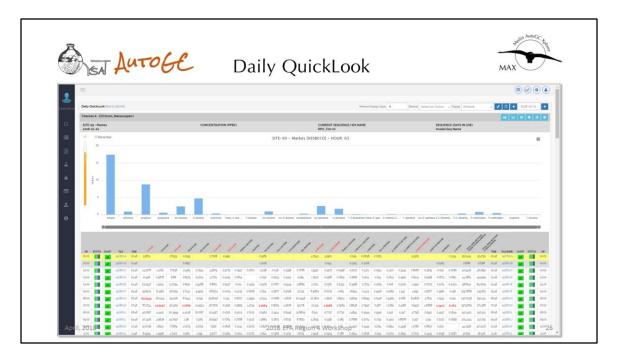
Orsat has developed a cloud-based database for the review of AutoGC data called the Merlin AutoGC Xplorer or MAX. It was specifically developed because other existing systems did not adequately allow the review of QC data, generation of control charts and easy identification of data not meeting data quality objectives. MAX not only allows for tracking quality control data it also allows configuration of networks with differing pass/fail criteria as well as tracking of calibration standards over time.

Breat Aut	OGE Data Verification	on and Validation
SITE-RU - SCAQMD Rubidoux		Routine operator review
Site Information	test in the second s	Instrument operation
Valdator crieyer Coextor Bran Snaph	Ne Solition Countries Farmers San Bernardino (1)	Data completeness
Data Validated Thru Initial Channel A RP 10001	Constant Orland	Quality Controls meet criteria
Initial Channel B RF Littia Initial Calibration Date 7/9/2007 Initial Calibration By crosser	5 00 Microsol Value	
The second	Con Chargen and Cone Cone State of Cone Stat	Technical Review
	COUCH Ing and Country Strengt Country and	Quality Controls meet criteria
Hormy Data Target Conscients E2Chrom, SCAOHD LCS		Review operator logs for
Choose year and month to generate _	200-02 Co	deviations in procedures
carly recovery	Total THE 1336 / 1488 Hecovery 89.78%	M
Date ^{III} Hours	Ver II	Flagging of data based on
Set 3.10.2007	ASSIGNED CONTRACT AND Method Town Report Factor	observed discrepancies
5.m.3x12220;7 6	Amount Level Memory Regionar Factor	Data Validation
Mon Jul 25 2017	33388888888888888888888888888888888888	
The JA 52 2027 A	38833888888888888888888888888888888888	Level 1 – Identify atypical data
Web.34.65,2027	Amout And Research Fictor	
Muser a	Amont An Amont Man Amont Provide Amont An Amont Amont Provide Amont Party Amont Party Part	Level 2 – Compare data set to historical
54 4 00 207 A	And Description of the second se	data (if available)
5.4.3.05.007 A 200		
Mer 3.4.10 2017 A	CONCEPTION OF CO	Level 3 – Compare dataset within the
Te 112107 A 20	CONCERCICULAR CONCERCE AND AN AND AN ADDRESS AND ADDRESS A ADDRESS AND ADDRESS	same population to observe systematic
April, 2018	2018 FPA Begion 4 Work	ishop bias 25

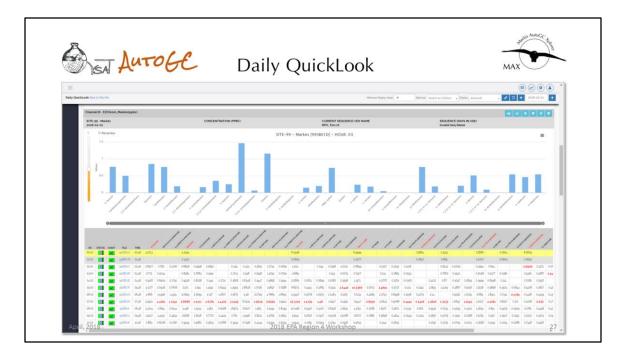
MAX can facilitation PAMS VOC data verification and Validation which is broken into several levels

- 1. Verification includes routine
 - operator review for general instrument operation, data completeness and pass/fail criteria for QC samples
 - And Technical review by technical staff of QC data, operator logs for deviations and well as flagging
- 2. Validation is broken into several levels and focuses on review of ambient data for outliers and comparison with historical data where it exists.

MAX shows missing data as well as data collected but not valid due to timing issues and calculates data completeness



The Daily QuickLook by amount shows the ppbC amount of all samples as well as a bar-chart representation of each sample. This is data for the light gases on the PLOT column. High values for each hour are highlighted.



Scrolling down on the QuickLook shows results from both chromatographic columns. This is the C6+ data. Filenames link directly to the information from each ASCII text file which was ingested into the system.

		A	ŚĄ	r J	Lu	T	oE	Æ	-			Sa	an	ηp	le	e S	Sta	tu	S	In	fc	orr	na	ati	or	ו				MA	A bedin		A design of the second se		
_	_	_	_	_	_		_			_	s	andard	Summ	ary							- 1	_					_				-	_		_	-
HR STATUS	CHART	PLE SSCECA	THE 00.40	1	32040	50 6531	10054	an and 222400	374793	0 5925	De	ename: pp: ta Acquisita cess Date Valict	en Time: 21	118-02-0	2 05-28 14 20					Perced	*	01785	0.43%5	07303	21510	22.55	01270	* 2 0720	- 11	200	THE SA	FILENAME	CHART ST		HR 00000
0100		9958008	01.45	25803	77301	17.8278	31000	94909	33,6320	07357	1	varu.									27	0.4243	0.5595	1 1019	4.6973	249	01283	0.762	155 3712	250.255	01.48	9958028		4	0100
0200	2	SACROSC	02.48	2111		29349	0.2207		37149	10,039		Deta Acquis	LABELS			FORMUL	A	054814	LUE	05,2012					68082		0.0229	0 3115	20.2535	315307	02.48	9908520		1	020
0300		9908020	0348				0.2008					lample Ter			A; - 00.	10		054034	00.40	05,0014						0.0548	0.0483		15085	15084	0340	000000		1	030
0400		995800E	0,526	142121	21794	101408	0.6165	47907	18-8773	0 9754	0			1	A ₁			05.48.24		054814		0.1924	0.2709	0.004	2,551	14729	0.0874	0.0625	80 9787	848903	06.66	995802E		1.1	010
0500		9958035	0548	12:104	2.0219	9.0572	0.8237	32005	10.0386	0.0825	03	lamie Hour Ialid Sampi		£:5.	A, - 003	ortruncate 0	to houri	054614-		05.00		01379	0.2314	0.5057	19022	1154	0.104	0.0806	50.8205	613074	05.48	9958035		1	050
05:00		9958025	06.45	9.2517	17370	7.484	07831	27546	127171	0.7885	9	/alid Sampl			5. + 013			05.00 + 00		00 20 00		0 1019	0 1926	0.9018	1.985	11845	0.0995	0.0302	95.8943	60.3259	05.45	99 58 02G			050
07:00		(95852H	07.46	8654	1,4193	8.0554	14542	23929	133029	0.5766	0	/alidity Test			5.25			050812-			- •	0193	01731	0.4391	15339	0.8677	0.0874	0.0874	527492	55.225	07.48	995B00H	-	1	07.0
0800		995808	08.46	9.551	5.0468	9.0934	18422	2.4434	11.5165	0.0503	03	/alidity Test	4		21.4.2	1		0540.340	001030	Ferent	- 1	0.1525	01531	0.4303	14805	0.8778	1.1694	0.0653	55-449	591907	08.45	9958001	-		080
0900		(solice)	09.48	0.0989	25971	20.1521	19330	20	9.0754	0.6241	03	Reproce	issed							Tur		01242	0.1505	0.4048	14317	087	0.0520		50 3417	53 5883	09-20	9958023			090
1000		995800K	12.45	10.2555	2043	123857	2.452)	34537	101675	0.0003	0	Reuploa	d.							Tue		01389	0.2002	0.4525	17419	10399	0.0528	0.0553	59.081	62:5001	10.45	995800%		1	100
11.00		willow.	11.45	107669	29409	11.5232	19555	34498	85009	0.784	0.	Mismato	h.							Table		013	01745	0.4523	10031	6qagit	0.0835	01984	579277	do agata	11.45	1508200		1	110
12:00		19958caM	12.45	10.4968	2.410	12.0813	2,5701	40785	20.9834	0.7885	0											01248	0.2329	0.4579	1,9255	10908	0.081	0.1571	641337	675413	12.46	995BQUM			120
1300		995802N	1346	10.4998	18837	9,8758	30833	30502	10.4795	0.5551	0										3	01433	0:05	0.4742	1528	0.8517	0.0759	0.1019	55-4248	58 3383	13.40	995802N		1	130
14:00		9958020	1640	11.2124	2.4514	12.4583	29014	31082	5 9962	0.7064	02										1	0 1222	01958	0.5005	18148	10307	0.0958	0.1002	58.0414	62.2275	14.40	9958020		1	140
1500		99M50/P	15.40	9.0737	31891	76938	10954	37401	131008	0.05	0 393	0.253	1337	0 1225	0.3499	6333	38061	02058	0.9890	07261	0000	01725	0.1976	0.5224	19559	11324	0.0839	0.2521	58.8238	62703	15.45	00MExcP			150
1500		99MBca0	20.40	50 9093		754515	0.2026	0.3358	100 394	20 9905	01498		0.8951	0.193		0.611	12319	959041		01235	0.0434			0.6038	542.99			76732	627.6555	678.918	10.0	9948020		1	100
17:00		PEDOS	17.45				0.172						0.7930				0.043	0.3452		0.0532					030			0.0713	18213	18214	17.48	1008800	_	-	170
1500		subficit.	18-40	0.8592	0.7471	11776	0.8821	07124	11927		0.8821	1045	0.7681	11808	0.0197	11018	0.7822	0.Bsth	0.8033	0.0409	0.7963	10276	13184	12595	0.7498	11744	11344	18905	22.6973	253003	12.46	societas			180
19:00		108406	39.40	237432	-	35.3045	0.1828	0.0967	40.7842	12:5217	0.0648		07474	0.0875		0.264	578033	45.088		0.0729		-		0.2986	67.4215			36388	294147	319.573	29.40	9046007		1	190
2000		102602J	20.45				0 188						0.6974					01712								0.2043		0.0304	12953	12953	20.48	996602U			200
21.00	-			21.0232	57088	240,67		5.2788	98076	08395	0.4305	0.4869		0 2002	0.2508	48037	3 3984		0.3168	0.4905	02476	0 1471	0.1728	0.4586	18035		01025		87494		21.48	9958021		i l	210
22:00		99580211	-22.45	31.6402	\$7.737	297205	44 5076	25.8945															0.1988	0.577	2137	12539		45122	184988	190.587	22.48	995802W			22.0
2300				14.3272													ziôn 4								5.2859			0.2482	707424	73.2758		995Bozx			2500

Status flags show details of each sample hour loaded such as Validity based on timing – this shows the calculation of the sample time from the data acquisition time from the chromatographic data system. If the sample time is outside the +/- 25% criteria the data will be flagged as invalid.

	Ĉ	A	ŝA	-1	lu	T	oE	Æ	-			Sa	ın	np	le	S	ta	tu	S	In	fo	rn	na	ti	or	ו 				MA)	-tuen	AutoGc	tolone		
											Sta	indard	Summ	ary							1										14				
	CHART		TIME	1	1	. 1	. ,	* .	. 1		Data	ame: 990 Acquisitio ess Date	Time: 20	18-02-0	2 05 48 14 10						and and	• •	1	and and and	1	1	1	·		il in	THE		СНАЯТ	STATUS	
00.00	-	995803A			31646	50.6531	10052	22.2400	37.4293	0.5925	1	/alid								Petred		01785		0.7905	39748	22135	0.1279	2.0728	209.0925			995802A			00.00
0200		9958028 9958028	01.10	25803	77301	178278	3 1500	9.4909	33 6320	07357	1	eoroce	ssed							114		0.4243	0.5595	1.1019	5,8082	249	01283	0/02	155.3/12	1002:0	01.40				0100
		000000				2.9349	0.2008		3/149	1002										-					50002	0.0548	ooutry	0.3148	1010335	19084		colling C			
0300		opposite	0348	14 21 21	21794	101405	0.2008	4.7907	18 6773			mula										01924	0.2709	0.054	2.653	14729	00403	0.0624	15085	19084 Bc 8901	0340	005700			010
0500		ostitost	05.28	12104	20219	0.0672	0.8237	2.7907	10.0386							Processe						0.12924	0.2709	0.004	4 554	14/09	0104	0.0606	x6.8254	61.3074		015803			050
0500		0058000		9.2517	17176	7484	0.7811	27540	127171			5046 Mi		02-02.0	(4014-2	018-02-11	2032.20					0.1010	0.1028	60000	1085	13845		50000	100 0000	60.3259		oofficeG			obo
0700	-	00580.0H	07.25	8/054	1/3/0	80554	1,00,02	2 3929	13.3020					60 Min	ites and							0 2019	0.1731		1000	0.8677		0.0872	52 7492		07.45	005802H			07.00
05:00		oc/Box	08.45	0.681	60109	0.0934	18/22	2.4434	11 5165	0.0503					Contract of	d channel						0.1625		0.4393	1.4604			0.0053	55.449	501007	08.40	and Berth			080
09.00		oosboo)	09.48	Afolia	2.5071	10 1621	10110	20	9.0754	0.0241	0	euploa	đ							True		01242	0.5506		14317	0.87	0040	****23	60 1417	63.6881	00.10	0055002/			090
1000		outeos.	10.08	10.2484	2044	123807	2.4539	31537	101075	0.6003	0 1	4ismato	n.							False		01389		0.4525	17429	10999		0.0553	59.081	62 5001		9958026			10.0
11.00	-	925803.	11.45	10.7880	20100	11.5232	10001	3.4408	8 6008	0.754	0.											013	01745		10055	D GLDB	22500	01084	\$215277	đu 1921	11.40	oof Book			11.00
12 00		995Bout	12.45	10,4988	2.435	12.0813	2 5701	40786	10.9834	0.7885	0										- 6	01248	02329		19255	10918	0.081	01571	641337	675413	12.48	socecute	-		12:00
1300		9958cch	13:05	10,4598	18837	9.8758	30833	30502	10.4795	0.5551	0									Clos		0.1433	0.105	0.4742	1528	0.8517	0.0719	01019	55.42.68	58 3383	13.48	995BccN		iii l	1300
1400	-	9958020	14.00	11.2124	2,4814	12.4583	19014	31082	5000.8	0.7054	0 1907	0.2974	11495	0.1508	0.3678	57767	41795	0.1433	0.2080	0.4798	01712	01222	0.1958	0.8065	1.8148	10307	0.0968	0 1002	58.0414	62.2275	14.40	8958020	-	iii.	1400
1500		99MBCIP	15.45	9.0737	31601	76938	10984	37401	13 1008	0.05	0.193	0.253	1337	01228	0.3439	83432	38051	0.2058	0.3899	07241	01803	01725	0.1970	0.5224	19089	11324	0.0839	0.2621	58.8238	62703	15.45	10MBOUP		iii l	15.00
1500		9948020	10.45	50.9893		76.4515	0.2026	0.3318	100 394	20 9305	01498		0.8951	0.193		0.611	12319	959041		0.1235	0.0434			0.6038	14299			76732	627.6556	678.918	10.45	99MB020			1000
17 00	-	Rubber	17.40				0.172						0.7930				0043	03412		0.0532					0347			0.0713	18213	18214	17.40	-	-		1700
1800		egitetets	18.40	0.8399	07471	11778	0.8821	0.7124	11977		0.8821	1040	0.7681	11808	0.0197	11015	0.7832	0.8171	0.8033	0.0409	67983	10276	1.3184	12558	0.7488	23764	14344	18605	22.8973	25,9003	18.46	sycification	K	11	80
1900	×	ps#iBcz7	19-25	237432		353045	01828	0.0987	487842	12.5217	0.0548		07474	0.0876		0.284	578033	45.088		0.0349				0.2965	67.4215			36388	294.142	339.521	19.40	99MB027			19:00
20:00	M	(negetecci)	20.48				0.188						0.6974					01712								0.2043		0.0304	12913	12913	20.48	998B02U	-		20.00
21.00		995Bozv	21.40	210232	5,7088	24,0463	4.405	5,2788	9.8076	0.8395	0.4305	0.4869	13334	0.3005	0.2508	48037	33984	0.2832	0.3358	0.4905	02476	0.3471	0.1728	0.4566	18035	11179	0.1010	0.3725	87.494	907235	21.48	995B02/			21.00
22:00		9968028	22.48	318405	17737	297203	44.5078	25 8945	10.7273	0.0553	0.3062	0 9033	3.4639	0.2512	0.2018	4901	3,3101	0.7077	0.224	0.7505	0.2062	0.1235	01986	0.577	2157	12539	0.6101	4.5522	184:985	190.587	22.48	9958czw			22:00
23.00		and the set	22.08	14.3272	12 6125	01070	77297	25799	0.9394	0.7184	0.092	0.2713	0.4463	0.0476	8254	28712	. 22047.	Wöłk	0,0555	01811	0.1294		0.3752	0.8693	5.2859	2.6687	0.049	0.2482	70.7424	73,2758	23.48	665802X	-		2100

Additional status flags include whether or not the data was reprocessed

(6		ŝA	-1	lu	T	oE	Æ	-			Sa	an	ηp	le	e S	ita	tu	S	In	fo	orr	na	ati	or	ו				ма)	A And	AutoGC	tallow		
_	_	_	_	_	_					_	s	tandard	Summ	ary							10	_	_				_	_			-	_	_	=	_
	s chart	FLE	THE	1	1	. 1	1004	* /	. ,	. /	D	iename: 99 Ita Acquisiti ocess Date	on Time: J	018-02-0	t 05 48 1. 10	,					and and a second	and gast	/ ,	and see	Concerna in	and a	1	• •	. 1			FLENAME			HR 0000
0100		9958028	00.40	49 6586		50.6531 178278	320054		37.4293		0	Valid.								Paned				0.7903	3,9748	2,2135	0.1251	2.6728	209.0925	213579 250228	01:00	9958024	-		0000
0200		SOCBORC	02.45	2003	77301	2 9349	0.2207	92909	3749		-	Reproce	essed							1220		0.4243	0.5595	1.1019	5,8082	2.49	0.000	0,02	105 5/24	31.5907	01.00		_		0200
0300		action of				* 3.748	0.2008		37 HER	Arrest		Reuplo								124					Davas	0.0540	no.da	0.340	14055		03.40				0300
0400		oviacie	02.20	14.2121	21704	101405	0.005	47907	15 0773											-		01024	0.2709	0.054	2.653	14729	0.0874	0.0625	\$0 o787	848005	0110	and Book			0,100
1500		on6BooF	05.20	12 104	2.0219	9.0572	0.8237	12006	10 0 380	0.0625	1	Date Re-u	ploaded.	2018-02	12 16 47	56					L.	01379	0.2314	0.5057	10072	1154	0104	0.0505	shek As	61 9074	05.20	without			0500
10 00 11		0058020		0.2417	17376	7484	0.7831	27528	127171		1	Mismab	n.							Tata		01010	0 2920	0 ADDB	1080	118.4	0.0001	0.0102	ut Anus	00,000	00.45	as/SRozC			0000
1700		au5BC2H		8064	1499	80662	1.0542	23929	13 3620		1										1	0393	01735	0,2392	16190	0.8877	0.0874	0.0872	62 7/05	10,225	07.15	out Boote	-		07.00
18.00		905803	08.45	0.01	10,008	60034	18422	24434	11 5255													0.1525		0.4303	14806	0.8778	11694	0.0543	85.449	801007	08.46	institution	-		080
09:00		995802)	os.a6	8.6989	2 5071	10 1621	10330	26	9.0754	0.6241	01									Clos	•	01242		81010	14317		00548		50 3417	63,6883	09-20	095802.)	_		09.00
1000		eg5Boak	10.45	102505	20443	12 1857	2.4529	32537	10.1075	08003	02948	0.2042	10858	0.1808	0 374	65506	46008	0.125	0.3187	0 5100	01797	01389	0.2002	0.4525	17449	10399	0.0520	0.0553	180.62	62,9001	10.48	995803%	_		10.00
11.00		100500	1140	10,7889	29409	115232	19591	34498	8.5009	0.754	02049	0.2928	10373	01363	0.5258	64298	48082	01481	0.3725	0.5021	0.1609	013	01745	0.4523	10031	0.9198	0.0835	01984	579277	611921	12.40	995803L	_		11 00
1200		995852M	12.08	10,4988	2.425	12 0813	25701	40785	10 9834	0.7855	01508	0.2435	10009	0.1125	0.9008	7798	5,8558	0184	0.2543	0.489	01794	01248	0.2329	0.4579	19255	10958	0081	01571	641357	675413	12.48	WSECOM		and the second s	12:00
1300		995802N	1345	10,4598	18837	98768	3.0833	30502	10.4795	0.5551	0.1574	0.2102	1.0255	0.0829	02451	6,4905	33786	0.0949	0.2798	0.5742	0.1803	0.1433	0100	0.4742	1528	0.8527	0.0719	0.3039	55.4248	58 3383	1340	99580211		ii i	1300
1400		9958020	16.48	11.2124	2.4814	12.4583	19614	31682	8 9962	07064	0.1907	0.2974	11495	0 2508	0.3678	\$7757	41795	0.1433	0.2585	0.4798	0:1712	0.1222	01968	0.5065	18148	10367	0.0958	0 10 02	58.0414	62.2275	14.48	9958020			14:00
15:00		99MBcoP	15.48	98737	31591	76938	10954	37401	131008	0.05	0.193	0.253	1337	0.1228	0.3439	83432	38051	0.2058	0.3899	0.7241	01863	01725	0.3976	0.6224	19589	11324	0.0839	0.2621	58.8238	62703	15.48	99MB00P			1500
1000 🚺		99M8020	10.40	50.9693		76,4535	0.2025	0.3318	100.394	20,9305	01498		08951	0.193		0.511	12319	959041		0.1235	0.0434			0.6038	142.99			78732	627.6568	678.918	15.45	99MB030			10.00
17 00		990002R	27.45				0.172						0.7936				0.043	0.3412		0.0532					030			0.0713	18213	18214	1740	RUBBER	-		17:00
1800		9908025	18.45	0.8339	0.7471	11778	0.8821	0.7124	11927		0.8821	1041	0.7681	11000	0.0097	13018	0.7622	08171	0.8033	0.0409	07963	10276	13184	1.2055	0.7488	31764	11344	18505	22.8973	25.3003	18.46	0008025			18:00
1900		99MBczt	19.48	237432		353045	0.1828	0.0987	40.7842	12 5217	0.0048		07474	0.0876		0.284	578033	45.088		0.07.49		1		0.2988	67,4215			36388	294142	329.521	2940	9948027	-		19.00
20:00		ogéticou	20.46				0.358						0.0074					01712								0.2043		0.0304	12003	12913	20.48	ooddarul			20.00
21:00		9958027	2148	210232	57086	240403	4.408	52788	9-8076	0.8395	0.4305	0.4869	13334	0 3002	0.2608	48037	33984	02832	03158	0.4905	0.2475	01471	0 1728	0.4500	18035	11179	0 1010	0.3725	87494	90.7228	25.48	995802/			2100
22:00		99580211	22.40	35.6402	17:737	297203	44.5076	25.8945	107273	0.0553	0.3062	0.9033	34639	0.2512	0.2615	4901	3,3081	0.7077	0.224	0.7501	0.2062	0.1235	0.1985	0.577	2137	12539	0.5101	4 5122	184985	190.587	22.45	9958028			22.00
2300		NATION I	ALM.	14.3272	12.6.26	01070	77297	2 5799	6 0.995	0.7584	0.062	0.2713	0.0161	0.0425	02514	28712	ion 4	01821	0.0553	0.5512	0.1294		0.1712	0.8403	5 2859	2.6687	0.049	0.2482	707424	752768	23.00	995B02X			2100

If the data was re-uploaded

)	G	h	ŚĄ	r ļ	lu	Ta	oE	Æ	-			Sa	an	np	ole	2 5	Sta	tu	S	In	fc	orr	na	ati	or	1				MA	-tuenin	AutoGC	400m		
											St	andard	Summ	nary							1														
	IS CHART	FLE		1	ed	* /	. ,	. ,	. ,	. /	Da	ename: 99 ta Acquisiti icess Date	on Time: 2	018-02-0	12 05 48 L	i.					-	nt and	/ ,	Surface and	and a	1	1	. ,	. 1	1					
00.00				49.6586		50.6531	10054	22.2400	37.4293	0.5925	1	Valid.								Passed	1	01785		0.7903	39728	2.2131	0.1279	2.6728	209.0925	213.579		995803A			00.00
0100		9958028		25803	77301	178278	32506	94909	33.6320			Reproc	essed							100		0.4243	0.5595	1.1019	409/3	249	0.1283	0762	155.3712	250.228	0145	9908025			010
0200		ggCB02C		2111		29349	0.2207		37149	10429										100					6.8082	opuð	0.0229	0.3115	202535	315307	84.50	0000000			020
0100		WEBOID 045B02E		147121	21794	101408	0.0006	47907	186773			Reuplo										0 1934	0.2709		2 553	14729		0.0624	80 9787	19084 848903	0540	9900000			010
0500		w/dbuilt		12 104	20219	0.0672	08237	12006	10.0386			Mismat	<u>ch</u>							False		01379		0.6067	10022	1154		0.0506	x6.826s	61 3074		onEBoof			050
08:00	-	9058020		9.2517	17376	7484	07811	27548	127171		F	lename	995802F	TXs							0	0.000	0 2926	0.600	1085	11845		0.0102	en.Bours		05.40	without			050
07.00		9908000 (95802H			1,4303	8-0554	1,25,22	2.1020	13.3029						02-02 05	46:14					ľ.	0.1019		0,2302	15390			0.0572	527251		07.40	ooSB02H			070
08:00		oo/ditat	05.45	oid1	60,68	0.0034	18:22	24434	11.5155	0.0503		alid Sam			5/F							01626		0.4303	14805	0.8778		0.0653	55.449	50 1007	08.40	9958001	- 2-		080
0900		oateczu	05.20	8.5080	2.5071	10 1421	10110	20	0.0764	0.0241	01	latch 995	9002 E 17								7	01242		0.4048	14317		0.0528		50.3417	\$3 5883		9958023			000
1000		995802K			20443	12 3857	2.4520	33537	10 1075	0.6003	03										0	01389	0.2002	0.4525	1740	10399	0.0548	0.0553	69.081		10.45	905800%			10.0
1100		ogiBon.	11.40	10.7869	29409	11.5232	19591	3.4498	8.5009	0.784	02											013	01745	0.4523	16031	Beag O	0.0835	01984	579277	đu 1925	11.45	yp58ccl.			110
12:00		995800M	12.45	10,4988	2.435	12 0813	25701	40785	10.0834	0.7885	0				_		-				_	0.1248	0.2329	0.4579	19255	10958	0081	0.1571	641337	675413	1240	99580214	-		12.0
23:00		995BopN	13,45	10,4598	18837	9.8758	30839	30502	10.4795	0.5551	01874	0.2502	10255	0.0529	0.2451	6,4905	33788	0.0949	0 2798	0.5742	0 1803	0.1433	0166	0.4742	1528	0.8517	0.0729	01019	55-4248	58 3383	1340	99580211			130
1400		9958020	1440	11.2124	2,4814	12.4583	19514	31082	\$9962	0.7084	0.1907	0.2974	13405	0100	0.3676	67767	41795	0.1433	0.2585	0.4798	01712	0 1222	0.1968	0.5005	18148	10307	0.0958	0.1002	58 0414	62.2276	1640	9958020			140
1500		99MB02P	15.40	9.0737	31691	70958	10964	37601	131558	0.05	0193	0.253	1337	0.1228	0.3439	83432	35051	0.2058	0.3899	0.7245	0:80)	01725	0.1976	0.5224	19589	11524	0.0539	0.2621	58.8238	62703	15.45	99M903P			150
1500		99/48030	10,45	50 90 93		78,4515	0.2026	0.3328	100 394	20.9305	01498		0.8951	0 193		oðis	123.19	95.9041		0.1235	0.0434			0.6038	142.99			76732	627.6566	678.918	10,40	99MB020			100
1700		REBUR	1740				0.072						07930				0.043	0.3412		0.0532					0347			0.0713	1.8213	18214	1748	9908008	-	11	170
1800		9908025	18.40	0.8319	0.7471	11778	0.8821	07124	11927		0.8821	1041	0.7681	11808	0.0197	1208	0.7822	0.8575	0.8033	0.0409	0.7963	10276	1,3184	12598	07488	21764	11344	18905	22.8973	253003	12.40	spiniture	×	11	180
s900		99MBG2T	19.46	257432		35,3045	0 1828	0.0987	487842	12 5217	0.0848		07474	0.0875		0384	57.8033	45,088		0.0749				0.2966	67.4215			36388	294.142	339.521	19.40	99MBodT			19.0
20.00		saggeory	20.48				0.188						0.6974					01712								0.2043		0.0304	1.2913	12913	20.48	996800J	-		200
21.00		996802/	21.45	210232	5,7086	24.0463	4.406	5.2788	9.8076	0.8395	0.4305	0.4869	13334	0 2002	0.2608	4.6037	33984	0.2832	0.3158	0.4905	0.2476	0.1471	0.1728	0.4966	18035	1.1179	0 1616	0.3725	87494	907228	21.45	995800V			210
22.00		995802W	22.45	31.6402	\$7737	297203	44.5076	25.8945	10.7273	0.0553	0.3062	0.9033	3.4639	0.2512	0.2518	4901	3:3001	0.7077	0.224	0.7501	0.2062	0.1236	01986	0.577	2.137	12539	0.6101	4.5122	184.986	190.587	22.40	995B02W		ш	22.0
2300		- 01/2020	1.23.45	14.3272	126976	9.1079	77297	2 5799	6 9394	07184	0.092	0.2713	0.9161	0.0425	02014	, 28712	gion 4	. 01823 .	0,0583	0 1811	0.1304		0.3762	0.6593	5 2859	2.6687	0.049	0.2482	707424	752758	23.45	(0)5802X			23:00

And if the filename does not match the actual acquisition time – which can occur if the system sequence has drifted off time due to sampling issues.

2												14	
												-	
- 6	Λ.		1 F		0	1.1	Check	0		1		(
Stral	10	110	T	-	(2	lıhr	(heck	1	ami	nlee		MAX	(-)
SA	1		~ ~		Cu	IIDI	Check	1 30	וווג	pics	12 C	110.04	\sim
	0	ckl oc	k Dail	Chack	Standar	d	uickLook V	Mook	v Ctat	in and	Course C	back St	andar
	Qui	CKLOC	K Daliy	Check	Stanuar	u	UICKLOOK V	veeki	y Stat	IC Z	source	neck Sta	anuar
Channel A: CV	Concent	ration (201	8-02-03				Channel A: LCS	S Concent	ration (201	8-02-03			
	Date On		dion Factor				Crister	Date On		ution Pactor			
	Dete On		abon Fector					2-10-18 05 00 00	In Use	0.005			
(Propane RF - 0818)							(Propane RF = 0018)						
								CARRON	CERT CONC	CALCORUTED	HEASURED CONC	RUN & S RECOVERY	RECOVERY
NAME	CAREON NUMBER	CERT CONC (PPM/)	CALC DILUTED	MEASURED CONC 1(PPBC)	RUN 5 % RECOVERY (39CB03A.TXD	RECOVERY MIN/MAX	NAME	NUMBER	(PPMV)	LIPPEC	MEASURED CONC L (PPBC)	RUN 1 % RECOVERY 1995/B0/3//TX13	RECOVERY MIN/MAX
ETHANE	2	110	109	2.02	11/27	75/125	87997E	2	201	30.30	12.79	102.85	70/130
PROPINE	3	130	254	289	1120	751125	PROPINE	3	0.95	14.75	35.64	109.79	20/130
N-BUTINE	4	147	330	372	112.99	751125	N-BUTANE	. 4 :	0.90	1920	2037	300.08	70/130
ACETYLENE	1	110	109	670	60.74 114.15	751125	ACETYLENE N-PENTANE	-	101	30.00	10.22 27.51	202.25 LOS.25	70/130 70/130
LY-BUTADENE	. 5	107	412	270	114.18	75125	12-BUTADENE	5	0.07	2500	2731	106.49	701130
2-NETHILPENTINE	6	104	480	574	10.00	75/125	2-METHYLPENTINE		105	3030	3355	130.72	701100
Blank Run: (gg880g87x)	010345						Blank Run: (pp880)387X	101-0345					
Channel B: CV	5 Concent	tration (201	8-02-03)				Channel B: LCS	S Concent	ration (201	8-02-03)			
Cylinder	Date On	Date Off Dis	ution Factor				Cylinder	Date On	Dete Of Di	lution Factor			
CC-80844 2017	80- K7 09:00:00	In Use	0.00077				CC-126878 2012	7-10-15-05:00:00	in Use	0.005			
(Benzene RF = 710)							(Benzene RF + 710)						
NAME	CARBON	CERT CONC (PPMD)	CALC DEUTED	MEASURED CONC 1/PPBCI	RUN 1 % RECOVERY (S9CB03A TX3)	RECOVERY MIN/MAX	NAME	CARBON	CERT CONC	CALCORUTED	MEASURED CONC	RUN 1 % RECOVERY	RECOVERY MIN/MAX
NHEWNE	0	103	470	5.76	112.68	751125	NHEWNE	8	102	30.60	3.5	101.00	70/130
BENCIDNE.	6	105	490	6.43	100.49	751125	85×25×6	6	104	34.00	3112	9973	701130
TOLUENE	7	105	571	0.09	106 61	75/125	TOWENE	7	104	340	30.00	9995	70/130
HEP-INLENE	8	109	0.71	702	104.64	751425	MEP-YOLENE	8	104	41.60	41.43	9975	70/130
N-PROPUBENZENE	9	107	741	703	302.94	75/125	N-PROPYLEENCENE		100	45.00	46.00	1027	70 130
124-TR-M-BENGENE P-DETH/LBENGENE	9	105	725	724	98.62	751125	122 TR M-BENEDIE		102	45,90	664	9877	701130
POE INTERCOR	10	101	776	/81	200.52	751325	Blank Run: (20080.)87X	10 0 9002					
	5.0.9002												

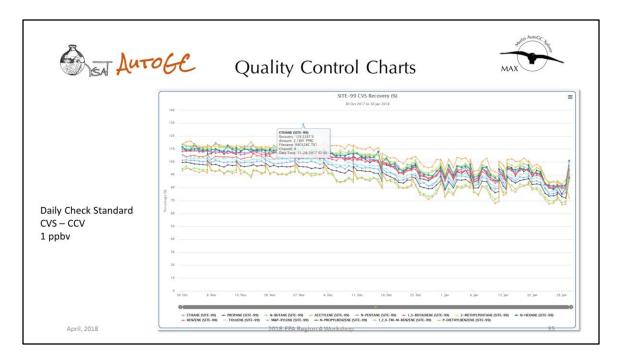
Below the Quicklook the daily QC sample recoveries are calculation so operators can have immediate pass/fail information. This shows both the daily CVS recoveries based on +/- 25% criteria and weekly second source standard recoveries based on +/- 30% Recoveries.

Ô	ISA	Au	TOE	£	F	Reten	tion Tin	ne (Che	eck	Sam	ple	MAX
							Channel B: RTS Co Cylinder Date CC-pfoldal addp-so-so	On Date	Of Dilution Fact				
							(Benzene RF = 710)						
							NAME	CARBON	CERT CONC (PPBC)	CALC DILUTED	MEASURED CONC. LIPPECI	BUN 4% RECOVERY	BECOVERY MIN/7HIX
							NHENANE	6	31.00	0.78	0.05	20.03	751428
Channel A: RTS	Concentrat		1001				METHYLCYCLOPENTAME	8	26.00	6.65	443	17.04	76140
							E2-DMETHYLPENDANE BENCENE	7	4100	1.02	1.10	1014	75105
		its Of Dilution F					CICOFEMA		31.00	0.78	0.05	10,00	751M8 761M8
CC-pfsRuß atop-sa	42 00:00:00	Ube 0.025					a ANETHIC AND VANIE		26.00	ote	147	17216	29 1429
(Propane Rf + 66ul)							2.5-DIMETHYLPENTANE	7	85.00	1.52	1.50	105.10	751425
							PARTNYLHIOANE	2	26.00	0.05		83.77	75/145
	CARRON	CERTICONC	CALC DILUTED	MEASURED CONC	RUN & % RECOVERY	RECOVERY	A.R.A. TRIMETHYLPRINTANE		39.00	0.78	6.79	singé	25 Laks
NAME	NUMBER	(7990)	a (PREC)	1 (FF9C)	R000BegWTX#	MIN/MAX	NHEPTANE	7	26:00	0.0g	0.04	62.00	75142
ETHANE	1	3400	1.54	0.72	\$2183	75/125	METHYLC/CLOHEXANE 252-TRMETHYLPENTANE	. 7	34.00	0.78	0.00	10028	291409
ETHYLENE RECEIVER		3000	1.0	6.30	LL77)	75125	1.52-TRIMETHYCPENTANE TOLUENE		41.00	100	1.79	103.75 Miso	75105
PROPAGA RECEVENE	3	25.00	142	1.07	14.59	75 415 75 425	2-METHYLHEPTANE		35.00	0.02	179	10733	No. 100
ISO-BUTANE		25.00		0.75	Hapt	75145	»-METHINLHEPTANE	1	25.00	0.05	0.58	10542	261182
N-BUTANE		4110	102	110	101.0	75/105	N-OCTANE		31.00	0.78	0.05	10.12	251428
ACKTYLENE	1	39.00	198	0.00		75 525	EDVILBINGENE		20.00	odg.	0.65	101	76100
TRANS-2-BUTENE	4	25.00	145	6.85	136.72	751475	MURICIANE	1	40.00	1.00	1.51	151.07	75145
s-BUTENE	4	1r.00	129	39.0	173.97	757425	\$7/9854		1400	0.00	oR	8740	75 1 sig
CIS-2-BUTENE		\$200	0.03	100	11428	75145	0-91LENE NUMBER		00.85 00.85	083	6.70	82.29 83,04	75105 75105
CYCLOPENTANE SC-PENTANE	4	20.00	140	0-55 5.00	101 10.7h	75 (125 75) 185	SC-2012M-BENZENE	-	2500	003	1.97	11304	76/409
N-PENTANE		25.00		4.70	1000	75145	N-PROPILARIATINE		39.00	673	110	Mash	791 Ho 791 Ho
12-BUTADENE	4	0.00	0.00	0.71	0	75/125	M-ETHYCTOLNENE		2500	0.03	073	nppi	751 ulg
TRANS-2-PENTENE	8	2700	- 18	672	108.95	75/445	P-ETHICTOLUENE		4100	1.02	ul.	554.63	761 Wg
s-PENTENE		25.00	183	6.77	1031	751125	1.30 ⁻¹²⁰⁻⁰⁴ -BENZIENE		2500	083	1.05	10427	75148
CIS-2-PENTENE	5	34.00	1.85	1.07	116-66	751125	0-87991270LUENE		10.00	978	1.82	109.37	79 419
2.0-DIMETHYLBUTINE		4100	1.62	123	112.07	75/222	124-TE-M-BENZENE N-CRCAVE	1	40.00	100	175	NO 95	No. Long
2.5-DIMETHYLEUTANE 3-METHYLEUTANE	4	52.00	190	1.12	43-75	75/125	N-CECANE LL 1-TELAN-BENZENE	- 10	90.52	0.00	0.05	10723	76148 76148
3-METHYLPENTANE		2100	102	100	52577 576.54	75/45	M-DETWOLBENZENE	10	44.00	1.01	104	9872	75.145
screed	6	2700	0.08	105	tesal	251425	P-DETHYLBENZENE	- 10	45.00	0.02	173	176.07	751429
PRESENT	4	61.00	162	174	113.99	75122	N-UNDECANE		32.06	680	48	101.01	75145
							N-DODECANE	10	48.00	530	0.87	71-25	751145
Blank Run: (9988098 Tr(1) 1													

If a retention time standard was run and a dilution supplied in the network setup the Quicklook will calculate the recoveries of this standard as well.

Auto	DE D	aily Bl	anks	MAX
Channel A: BLANK Concentration (2018-02	-03)			
NAME	RUN 1 (PPBC) ANOUNT 694889 (B T K II	MAX		
PROPILENE	0.1030	0.6		
1-PENTENE	0.0409	9.5	10	
2-METHYLFENTANE	0.0340	0.5	TOTAL BLANKS (TNMTC)	
CHANNEL & TRIMTC:	0.2687			RUN KIPPBCI AMOUNT
				AMOUNT opplibegit TX0
			TM/TC CHANNELA	0.2687
Channel B: BLANK Concentration (2018-02	-03)		TRATC CHANNEL B	0.0002
			TOTAL TINHTC:	11799
NAME	RUN & (PRBC) AMOUNT (gdBBc)B TXB	мах	TOTAL BLANKS (TNMHC)	
TOLLIENE	0.0490	0.6	TOTAL BLANKS (TNMHC)	
MEP-XYLENE	01753	0.8		
N-PROPYLEENZENE	0.3044	0.8		RUN 1 (PPBC) AMOUNT
12.4-781-M-88542ENE	0.1765	0.5	TRAHC CHANNEL &	10345
P-DIETHYLBENZENE	0.4050	0.5	TRAFIC CHANNEL B	5050
CHANNEL & THMTC :	0.9102		TOTAL TIMOHC	\$ \$447
April, 2018		2018 EPA R	egion 4 Workshop	34

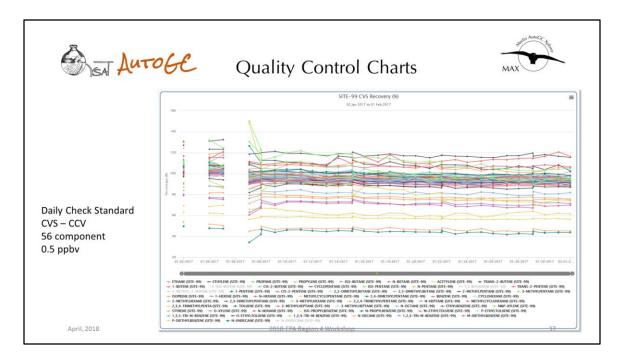
Daily blanks show any targets which occur in the daily blank and are highlighted based on the network pass/fail criteria. It also shows totals.



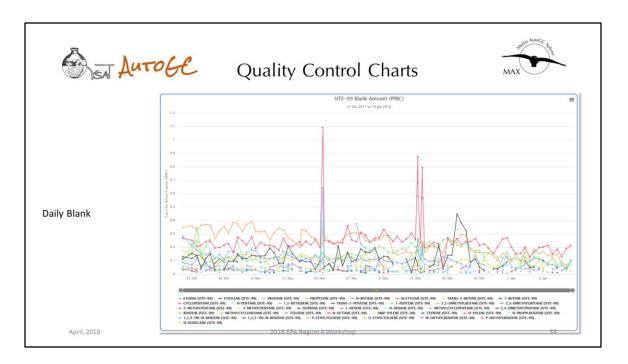
Unlike some other systems MAX was originally designed specifically to allow the charting of QC data. This is a graph of the nightly check sample over 4 months. MAX data supplies roll-over text which shows the recovery, amount, time and date as well as the actual filename so validators or operators can quickly locate the actual datafile for chromatographic review if necessary.



This is the control chart for the second source standard over the same time period.



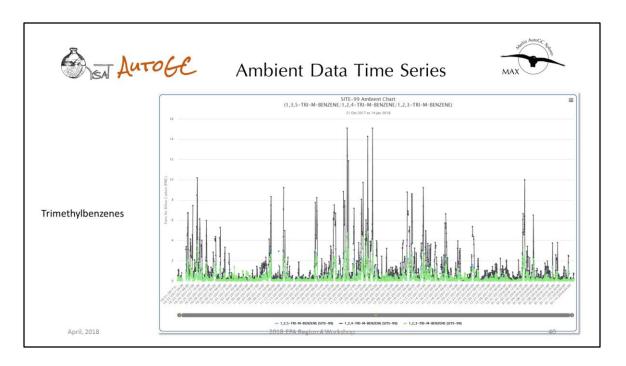
Because MAX can be setup for variations in QC it is capable of allowing for nightly checks with all targets or only a limited number.



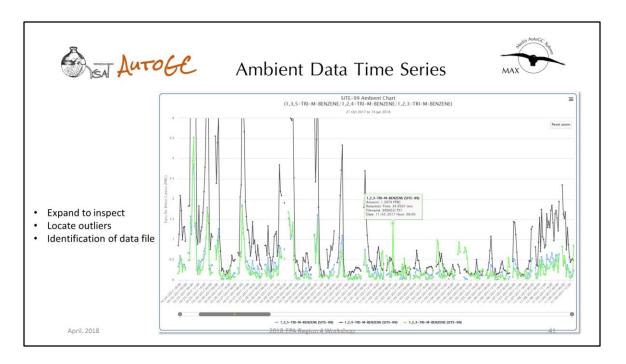
Blanks can also be charted across time.

A SA	ΓA	UT	0	6	E			Q	ua	al	it	y	С	or	nt	ro	C	ha	rts							MAX	Ľ)
																	aphe											
CSV Excel																										6	Hicle Data Ta	ble
DATE TIME IN C		PROPANE (SITE '99) PPBC	N-BUTANE (SITE-00) PPBC	ACETYLENE (SITE-90) PPBC	TRAMS-a-BUTENE (SITE-99) PPBC	- OUTENR (ERTE-ag) Projec Criclopentiane (SITE-ag) Projec M-PENTANE (SITE-ag) Projec	13-BUTADeres	TRANS 2-PENTENE	2-PENTENE (SITE-90) PPBC	2.2-DIMETHYLBUTANE (SITE	2-METHYLBUTANE (SITE 99) PPBC	3-METHYLPENTANE (SITE -99) PPBC	ISOPRENE (STTE-98) PPBC	N-HEYAME	Carle Carle - 940 PPBC	PRETHYLICYCLORENTAME (SITE-90) PPBC	BENZEME (SITE -90) FPBIC METHYLCVCI curve	TOLUENE (SITE 98) PPINC	M&P. XYLENE (STTE-99) PPBC	STYRENE (SITE 99) PPBC	N-PROPYLARUM	DBdd (IBLE -DB) bbBC	*****TRI-M-BENZENE (SITE 99) PPBC	1.2.3-TRI-M-BENZENE (SITE-90) PPBC	P-ETHYLTOLUENE (SITE-99) PPBC	O-ETHYLTOLLIENE ISITE-901 PPBC	P. DIETHYLABINZZME (SITE-99) PPBC	N-DODECANE (SITE -95) PPBr-
10/21/2017 01:00	01312	0.347		0.0338	0.0275			376									0.1155	0.0855	0.175			11	0 2804	0 1128	0.0487		0.2580	
10/23/2017 01:00	0.1173	0.362			0.0422	0.030	18 0.0						0.0247				0 1607	0.0704	0.15				0.2103	0.1535		0.0200	0.2523	
10/24/2017 03:00	0.1407	0.324			0.0444	0.030											0.3445	0.1214	0186				0.1798	0 1395		0.0134	0.2059	
10/25/2017 01:00	0.1370	0.365	6		0.0382	0.013	30									0.0348	0.1521	0.0586	0.114	0	0.0	667	0.1551	0.0454	0.1346		0.2161	
10/26/2017 03:00	0.0792	0.372		0.0290	0.0624	0.030	04 00	318						0.0	0191		0.0899	0.0800	0.140	8	0.0	1574	0.1454	0.1191	0.2075		0.2420	
10/27/2017 01:00		0.365		0.0451	0.0515		0.0	2276								0.0504	0.0990	0.0445	0148	2	0.0	646	01672	0.1522	0.2594		0.2458	
10/28/2017 03:00	0.0828	0.264		0.0332	0.0364		0.0	236									0 1229	0.0555	0.05	12	0.0	512	0 1172	0.0330			0 1950	
10/29/2017 02:00	0.1357	0.326	0.0431		0.0326		00	2325	0.013								0 1107	0.0550	0.09	0	0.0	657	0.1479				0.1986	
10/30/2017 03:00	0.0881	0.356		0.0440	0.0247		0.0	1322									0.1170		0.09	11	0.0	630	01070	0.0367			0.2158	
10/31/2017 01:00		0.308		0.0450	0.0503		00	2362								0.0326	0.1303	0.0369	013	4	00	707	01701	0.0990	0 1220		0.2264	
Showing 1 to 10 of 9	iz entries																					Previ	ous	1 2	3 4	5	10 N	lext

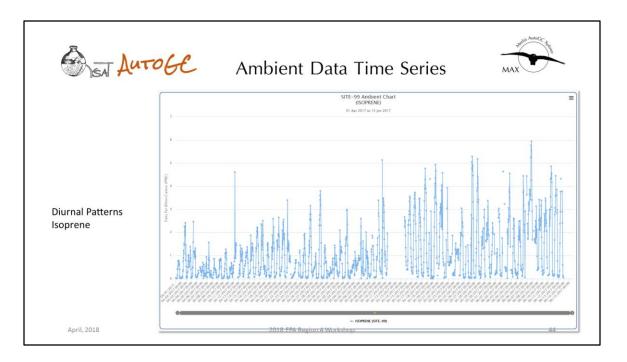
All charted data can be exported to csv or excel format. This is useful when attempting to generate MDLs using the new MUR requirements.



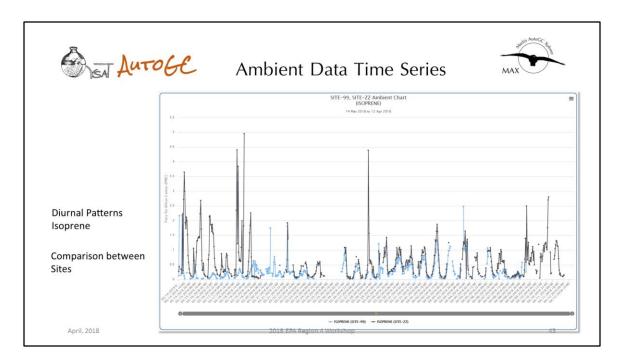
MAX can also facilitate validation of ambient air using time series.



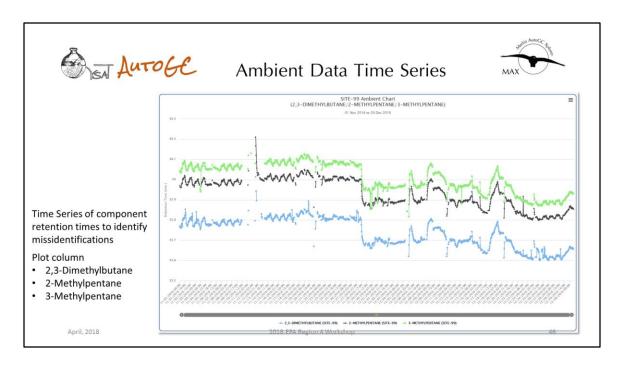
Time series of related species such at the trimethylbenzene can facilitate location of outliers and the actual datafiles associated with outlier data.



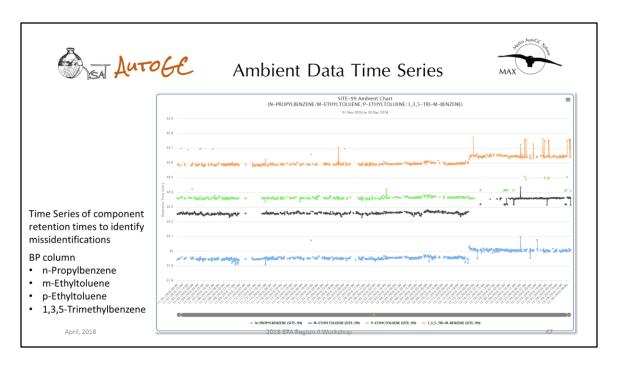
Time series can be used to review expected diurnal patterns for a single site or



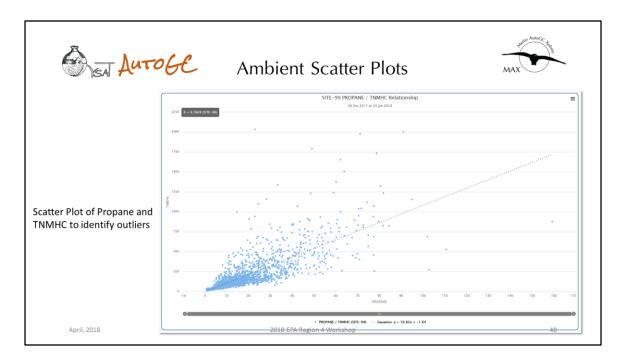
Or across multiple sites.



A unique feature of MAX is the ability to graph the retention times of targets. This is helpful to review closely eluting peaks such as the methylpentanes at the end of the PLOT column. This will show potential misidentifications.



Here are retention time plots of 4 closely eluting targets on the boiling point column.



MAX can also generate scatter plot relationships between targets.



MAX cloud services are designed to allow the uploading and review of data for validation prior to generation of AQS data sets.

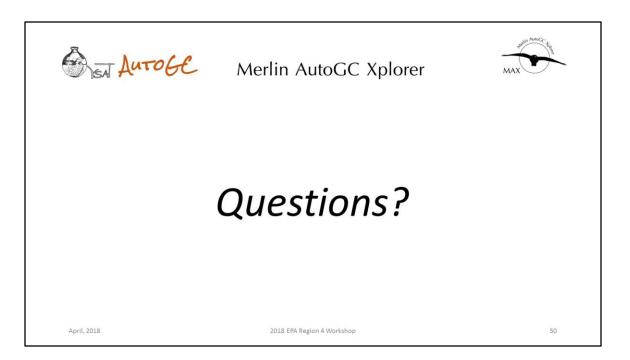
- It requires a specific text output currently for PE or Agilent data
- It allows uploading using zipped files
- Allows reloaded data after reprocessing

It is an SQL database

- Capable of holding years of data
- Graphing large amount of data
- Automatic association with AQS parameter codes
- · Allows user defined target lists and pass/fail
- Tracks C of A concentrations for recovery calculations

It is on a secure server

- Has user defined access levels for operators, validators and administratiors
- As well as user defined site access.



Scrolling down on the QuickLook shows results from both chromatographic columns. Filenames link directly to the information from each ASCII text file which was ingested into the system.