Joanne Oconnor

From: Garry Armstrong
Sent: 06 May 2021 06:58
To: Mark O Connor; Joanne Oconnor; Simon Moseley
Subject: FW: Access to new ABCA PC - 14023 and 14024
Attachments: SCN-ABCA_SABM-W&C_210506.pdf

Categories: SuiteCRM
CrmIdF399E43CD48A3E938A268148B2AC6D69: ea4d0b06-c0f0-fa65-c995-609385cbcf6d

FYI no install on this order? Can we discuss today?

Garry Armstrong

Director

Sercon Limited
Unit 3B Crewe Trade Park
Gateway
Crewe
Cheshire
CW1 6JT
UK

Tel: +44 (0) 1270 580008
Mob: +44 (0) 7733239705
Fax: +44 (0) 1270 252310
Email: garry.armstrong@sercongroup.com
Web: www.sercongroup.com

<><><>

From: James Barker [mailto:james@scientex.com.au]
Sent: 06 May 2021 03:09
To: Garry Armstrong <garry.armstrong@sercongroup.com>
Subject: RE: Access to new ABCA PC - 14023 and 14024

Hello Garry,

Yes finally. Government, I don't think they could add more hurdles to the system if they tried.

Order today, please see attached. As mentioned previously it must arrive to Adelaide on the 29th June. Our freight agent's details are included in the order.

Thanks for all your support, for an order that really should have been placed 3 years ago. However we will have the customer back up and running with a new system, so that will be great.

Regards

James

From: Garry Armstrong [mailto:garry.armstrong@sercongroup.com]
Sent: Thursday, 6 May 2021 2:46 AM
To: James Barker
Subject: RE: Access to new ABCA PC - 14023 and 14024

Hi James,

Any update on this one please? We are keen to begin work to meet the tight deadline.

Kind Regards

Garry Armstrong

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James

From: Garry Armstrong [mailto:garry.armstrong@sercongroup.com]
Sent: Wednesday, 5 February 2020 6:40 PM
To: James
Subject: FW: Access to new ABCA PC - 14023 and 14024

Hi James,

Following on from discussions with Simon, it would be preferable for the customer to go for the new system at this time. The price of the upgrade is significant but that wouldn't address the fact the vacuum system is also of an age. Replacing turbos etc can also be an expensive business as you know so please stress to them the new system being the best option in terms of a warranty on the wholes system.

Kind Regard

Garry Armstrong

Product Manager

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Fax: +44 (0) 1270 252310
Email: garry.armstrong@sercongroup.com
Web: www.sercongroup.com

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sercon
innovators in isotopes

From: Joanne Oconnor <joanne.oconnor@sercongroup.com>
Sent: 04 February 2020 13:26
To: James <james@scientex.com.au>; Simon Moseley <simon.moseley@sercongroup.com>; Garry Armstrong <garry.armstrong@sercongroup.com>
Subject: RE: Access to new ABCA PC - 14023 and 14024

Hi James,

Please find attached quotation number 14023 for the new ABCA2 system and also quotation number 14024 for the Upgrade.

The ABCA2 system is FDA approved and ISO13485 Certified (certificates attached).

I have also attached a copy of the latest ABCA2 brochure and also the brochure for the ^{13}C-Urea breath test kit for *Helicobacter pylori* infection.

Garry will contact you regarding the benefits of purchasing a new system.

Unfortunately we do not have any demo units available at the moment.

Delivery for both options would be within 90 days from receipt of order.

Best regards

Joanne

From: James <james@scientex.com.au>
Sent: 04 February 2020 03:53
To: Simon Moseley <simon.moseley@sercongroup.com>; Garry Armstrong <garry.armstrong@sercongroup.com>
Cc: Joanne Oconnor <joanne.oconnor@sercongroup.com>
Subject: RE: Access to new ABCA PC
Importance: High

Hi Simon,

I was talking with Esther today and she asked on timing for us to present pricing on both the upgrade electronics along with a new system. She needs to get the pricing into management quickly.

Esther confirmed the preference is for a new system and both her and the Biomed guys would prefer this, however as always it comes down to justification and price.

Are you able to guide us to when we can show Esther pricing but also the pros and cons of each option. If the upgrade to the new electronics effectively means and new system, that's fine just let us know.
If the new electronics require a service visit please include those as well, so I can inform Esther.

If there is a demo unit available, that would also be an acceptable option.

Thanks

James

From: James [mailto:james@scientex.com.au]
Sent: Monday, 3 February 2020 1:09 PM
To: 'Simon Moseley'
Cc: 'Joanne Oconnor (joanne.oconnor@sercongroup.com)'; 'Garry Armstrong'
Subject: FW: Access to new ABCA PC

Hello Simon,

I hope the start of the post Brexit era is as smooth as possible.

Thanks for continuing to look at Royal Adel W&C and offer some solutions.

Your first solution of a new unit has been under quotation for 2 years now, as Esther indicated in her email. Also with our meetings with them, it's been the classic while it's working the budget wont be approved but if the unit dies then …

Esther would like to have pricing for the electronics upgrade and will again present both the upgrade and new unit pricing to management. With this latest development, it would be good to look at how we can guide them to a new unit, again.
Reviewing the file we have locally, it even looks as if we have proposed selling a demo unit to them in the past, see attached from Joanne in June 2018. Especially with the End of Life statements you have help with previously.
Looking into all our records, and thinking about how we can work this towards a new unit, we have been making proposals to them to replace their unit since 2015 with Steve Bennett and Andy Wilson. Now must be the time.

Could we again look at the options here:-

- Electronics only upgrade, as suggested. What is the expected lifetime of this option given the age of the unit
- Demo units? Do you have any available? We could look to say "first come, first served" type of offer. This maybe enough for management to commit sooner rather than dragging it out.
- Brand new unit.

Could you send us pricing on all the options available, including if still viable trading in the flight tube, source, magnet etc. If they go for a new or demo unit.
Plus any commentary about lifetime, if only the electronics upgrade is chosen. If the new electronics will effectively make it a "new" unit again, that's fine just let us know the pros and cons.

We can then format for the hospitals requirements and talk with Esther about how to present the proposals. With the pros and cons of each option.

Thanks for your support of our efforts in Australia.

James

==========

Hi James,

Could you please quote on the Sercon System Controller Electronics Upgrade (highlighted section below)?
We will be putting this quote with the previous one from 2018. The decision on which one we get will be left to our finance division.
On our side is we did submit the request in 2018 so it is already on the replacement list.

Regards,
Esther

Dear All,

I have managed to dial in and take a another look at your instrument, the error on screen was caused by the trip and the electronics loosing communication with the PC I have managed to get control over the software again but it appears to have stalled and I cannot take it any further.

I believe you have two issues going on, the first issue causing the trip is the main source board is starting to fail I'm afraid which is causing the source to enter trip mode this usually happens when the board is about to fail but usually we see the first signs of this with much higher parameters and set points when using the board in Nitrogen mode, so the fact that it does this in standby also suggest the main source board is to blame.

The other issue is kind of linked to the first, in that because the source board has failed causing voltage spikes to the system the weakest point of failure in my experience is that then In turn the TDS stack then fails also, this board is the communication to all the circuitry and then relays this onto the PC and software. This is why the software has frozen and looks like a communication problem also at times.

The problem now is that we no longer sell or repair the electronics style you have I'm afraid as the boards are now obsolete , so there are two options available.

The first option is a complete replacement of the instrumentation with our new ABCA2 instrument.

The second option if budget is limited is to replace the electronics with new style electronics in the form of an upgrade to your existing ABCA this replaces all the old circuitry with new style, and also inclusive in the price is a new PC and operating system to run the Upgrade.

I'm sorry I can't offer any more solutions but as the instrument becomes older there becomes a point where this decision was inevitably going to happen.

I have attached some information in this email for both a new instrument and upgrade and if you would like some quotes for both of these options so you can decide on what to do next just let me know and I can have them sent to you immediately.

If you have any further questions, please don't hesitate to contact me.

Regards

Simon Moseley
Service Manager

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Web: www.sercongroup.com





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Regards,
Esther

From: Keet, Paul (Health)
Sent: Thursday, 30 January 2020 9:34 AM
To: Burt, Esther (Health)
Cc: Zacharakis, Betty (Health)
Subject: Re: Access to new ABCA PC

Hello Esther,

Sorry I have been on sick leave the last couple days.

Should be in later today.

I tried to remote in and leave the admin account logged in but that did not seem to work.

I will log in locally and leave it for Simon.

Regards

Paul

On 30 Jan 2020, at 9:07 am, Burt, Esther (Health) <Esther.Burt@sa.gov.au> wrote:

> Hi Paul,
>
> How can we give Simon access besides being here overnight?
>
> ---
>
> **From:** Simon Moseley [mailto:simon.moseley@sercongroup.com]
> **Sent:** Tuesday, 28 January 2020 11:23 PM
> **To:** Keet, Paul (Health)
> **Cc:** Burt, Esther (Health)
> **Subject:** RE: Access to new ABCA PC
>
> Hi All,
>
> I have tried numerous times now to log in but still I am locked out, until I can log in I cannot advise or help any further in diagnosing the issue the instrument has.
>
> If you could pleas allow me access, I can help you a lot more.
>
> Regards
>
> Simon Moseley
> Service Manager
>
> Sercon Limited
> Unit 3B Crewe Trade Park

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UK

Tel: +44 (0) 1270 580008
Fax: +44 (0) 1270 252310
Email: simon.moseley@sercongroup.com
Web: www.sercongroup.com

<image001.png>

<image002.png>

<image003.png>

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On 24 Jan 2020, at 9:45 pm, Simon Moseley <simon.moseley@sercongroup.com> wrote:

HI Esther,

I have tried to dial into your system but there Is now a log in required is it possible for you to let me know the password please?

Regards

Simon Moseley
Service Manager

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Fax: +44 (0) 1270 252310
Email: simon.moseley@sercongroup.com
Web: www.sercongroup.com

<image001.png>

<image002.png>

<image003.png>

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To: Simon Moseley <simon.moseley@sercongroup.com>; Andrew Park <andrew.park@sercongroup.com>
Cc: Keet, Paul (Health) <Paul.Keet@sa.gov.au>; Zacharakis, Betty (Health) <Betty.Zacharakis@sa.gov.au>; Coomans, Martin (Health) <Martin.Coomans@sa.gov.au>
Subject: RE: Access to new ABCA PC

Hi Simon/Andrew,

This morning the instrument had tripped again. I restarted etc and it looked fine. When I returned to it an hour or so later it had tripped again.
Restarted, I dropped the ecurrent back to 289, tripped again. Increased the ecurrent back to 499 tripped again. I didn't watch it the whole time but both times tripped within an hour. I've left it at 499.

I've looked back at our logs and the machine has not tripped at all since we had it installed in 2007 except just before the hard drive died on 23/12/19 recently. My memory is a bit sketchy however according to the log this is what happened:
Good run on 16/12/19. Data backed up 17/12/19.
Betty noticed trip on 19/12/19 – not all parameters flagged. Turned power off/on to MS. All parameters flagged. Settled for 1hr prior to calibrating.
Run loaded and started on 19/12/19
Run fine, data backed up manually on 20/12/19. I noticed the autosampler had moved beyond the racked tubes, the needle was still down, valves 12 and 13 were open (red). I switched to standby, turned power to MS off and restarted computer. Power came back on. There was a strange error message about lack of memory. Called Biomed to assess. Computer restarted still giving error message then following scan could not be restarted.

Biomed believe the PC problem was not related to the trip fault.

Tripping was occurring on our previous machine /older software.

The machine was serviced in 26/6/18 (by Serge organised by Scientex). (We had to reposition the magnet after he left as he had bumped it)
The only other maintenance has been autosampler microswitch replacements, oil changes, replacing a blown out fan, and Pfieffer pump reinstalled (loan pump installed 19/6/18)

I don't think the filament was changed at the service on 26/6/18. We have a "dead" 20-20 filament in our tool box as well as one that looks new.
If you think it needs replacing let us know if you think Biomed can do it otherwise we will need to get Serge in to do it again via James.

Regarding the board, I'm guessing that because of its age it can't be replaced?

In the meantime, Paul has managed to make all users local administrators to make the programme work on our networked PC.
He has also connected the PC to a monitored UPS so that power is maintained.

I have also had to order in a new He tank – I think the old hard drive dying might have meant the He valve was left open for the time it was not working. We also noticed the

tank pressure dropping substantially this morning when I was checking the valves were opening/closing.
Paul has attached a spare cylinder so that you can work on the instrument if you have to, but can you please turn off the He valve as this one is getting low too?

We have a public holiday on 27/1/20 so will not be able to test until Tuesday 28/1/20.

Thanks for your help so far. We really appreciate the time you are spending on the problem.

Regards,
Esther

From: Keet, Paul (Health)
Sent: Friday, 24 January 2020 9:09 AM
To: Burt, Esther (Health); Zacharakis, Betty (Health)
Subject: Fwd: Access to new ABCA PC

Begin forwarded message:

> **From:** Simon Moseley <simon.moseley@sercongroup.com>
> **Date:** 24 January 2020 at 3:03:37 am ACDT
> **To:** "Keet, Paul (Health)" <Paul.Keet@sa.gov.au>
> **Subject: RE: Access to new ABCA PC**
>
> HI Paul.
>
> I have dialled into your instrument for a couple of hours this afternoon and have managed to keep the source on the entire time without it tripping, I have left the source on in CO2 mode so that everything can warm back up and stabilise hopefully ready for when you arrive to it in the morning.
>
> I think what is happening is the main source board is warming back up after being off for some period of time as these boards are fairly old, they become quite temperamental and cause the instrument to trip and become unstable.
>
> When was the last time the filament in the source was changed?
>
> Lets see how the instrument behaves tomorrow I would try carrying out some runs and see how it performs I have also left the valves open with helium flowing into the source to help the source even more to stabilise and remove anything in there that shouldn't be in the flight tube like moisture.

You will find the source e current much higher than you are used to this has been done by myself to give the source am internal bake out and get that filament nice and hot to hopefully improve matters, it can be put back down to 250 or whatever you are used to running with.

Let me know how you find the instrument and if it performs ok tomorrow.

Regards

Simon Moseley
Service Manager

Sercon Limited
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Crewe
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Tel: +44 (0) 1270 580008
Fax: +44 (0) 1270 252310
Email: simon.moseley@sercongroup.com
Web: www.sercongroup.com

<image001.png>

<image002.png>

<image003.png>

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From: Keet, Paul (Health) <Paul.Keet@sa.gov.au>
Sent: 23 January 2020 13:16
To: Andrew Park <andrew.park@sercongroup.com>
Cc: Sercon Customer Support <service@sercongroup.com>
Subject: Re: Access to new ABCA PC

Thanks Andrew!!

> On 23 Jan 2020, at 9:53 pm, Andrew Park <andrew.park@sercongroup.com> wrote:
>
> Paul...
> It does look like a pre-existing condition.
> I checked it with software running and not running. It made no difference to the source tripping itself so I suspect there is an electronics fault somewhere.
> I'll talk it over with my service team and will get back with suggestions.
> Cheers
> Andrew
>
> **From:** "Keet, Paul (Health)" <Paul.Keet@sa.gov.au>
> **Date:** Thursday, 23 January 2020 at 02:53
> **To:** Andrew Park <andrew.park@sercongroup.com>
> **Subject:** FW: Access to new ABCA PC
>
> Hello Andrew,
>
> It seems that this issue may have been around before the death of the old PC.
> So basically we are back to the start of our fault finding.
>
> Do you know why the ABCA would "trip off" every 10 minutes ?
>
> Regards
>
> Paul
>
> **From:** Zacharakis, Betty (Health) <Betty.Zacharakis@sa.gov.au>
> **Sent:** Thursday, 23 January 2020 12:34 PM

To: Keet, Paul (Health) <Paul.Keet@sa.gov.au>
Subject: RE: Access to new ABCA PC

Hi Paul,
I went back to the instrument about 10mins after you left and noticed there had been a power trip. I have turned on power from software and looked ok...but just not sure why ?
Cheers
Betty

From: Keet, Paul (Health)
Sent: Thursday, 23 January 2020 12:23 PM
To: Zacharakis, Betty (Health)
Subject: FW: Access to new ABCA PC

From: Andrew Park <andrew.park@sercongroup.com>
Sent: Thursday, 23 January 2020 9:20 AM
To: Keet, Paul (Health) <Paul.Keet@sa.gov.au>
Cc: Sercon Customer Support <service@sercongroup.com>
Subject: Re: Access to new ABCA PC

Paul...
I will be here at 10:30 your time, that's midnight here. I aim to check the PC is ready for the ABCA software and then copy it over and install it. If all goes well we will have a working default system which will then need a bit of adjusting to suit your individual ABCA hardware.
Cheers
Andy

From: "Keet, Paul (Health)" <Paul.Keet@sa.gov.au>
Date: Wednesday, 22 January 2020 at 22:42
To: Andrew Park <andrew.park@sercongroup.com>
Subject: Re: Access to new ABCA PC

Hello Andrew,

Thanks for contacting me.
I was waiting for confirmation that there would be work done on the system, which I did not get.
I will only be available 10:30 local time.

If this is too late for you we can arrange to all be ready Monday morning at 8:30.

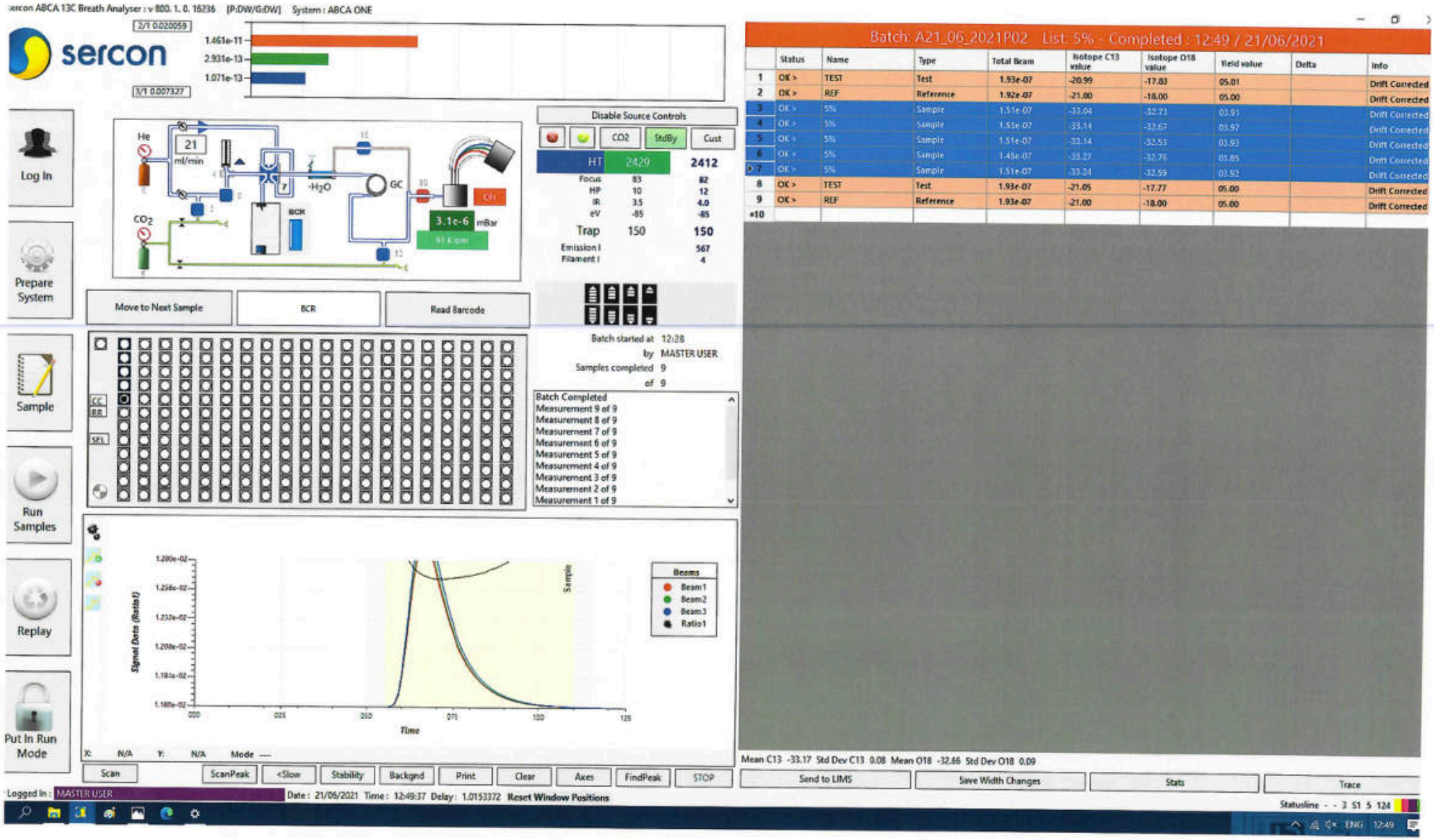
Thanks for your help and sorry about the confusion but we need to have a set definite day and time.

Regards

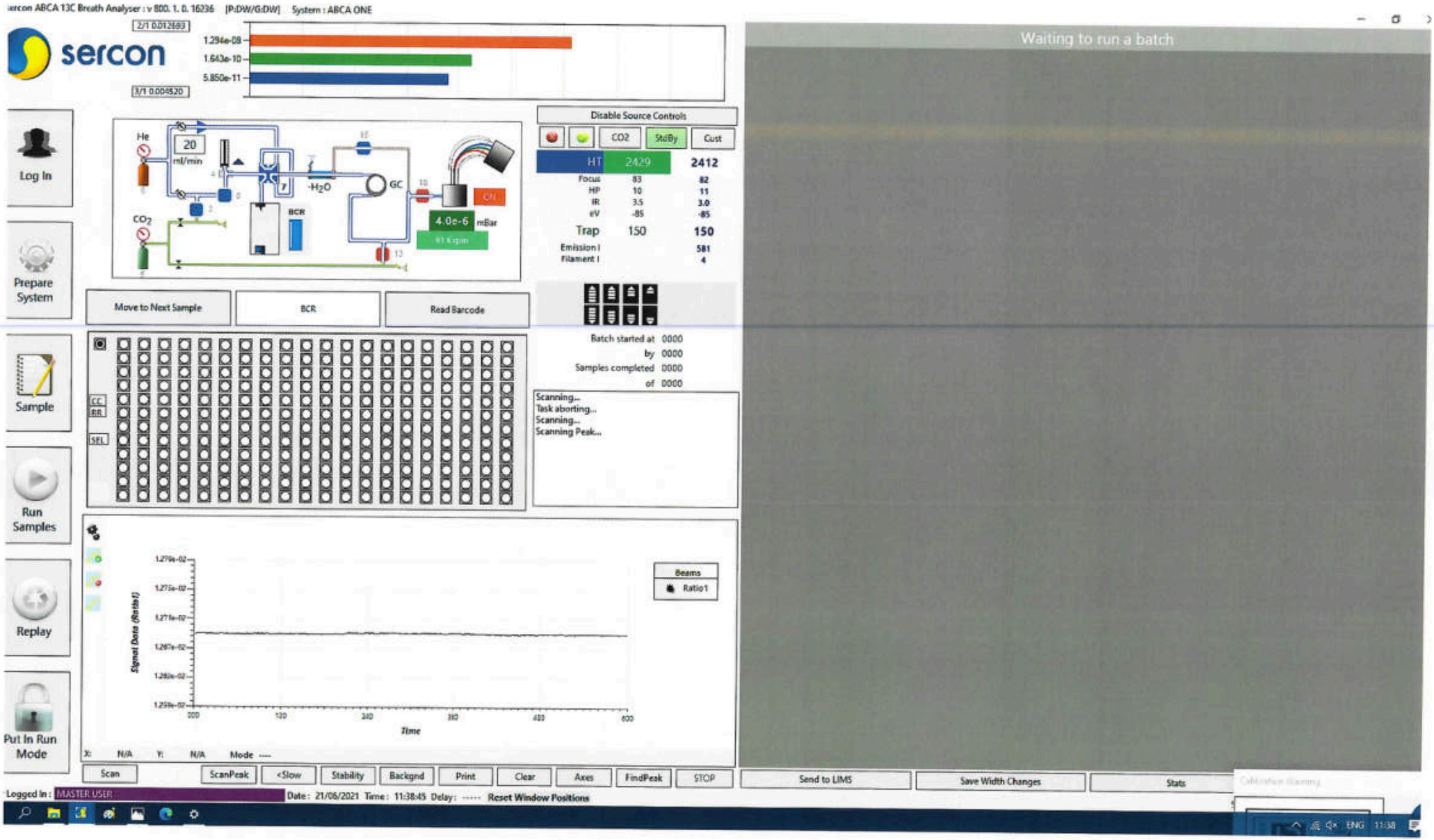
Paul

> On 23 Jan 2020, at 8:38 am, Andrew Park <andrew.park@sercongroup.com> wrote:
>
> Paul...
> This is Andy Park from Sercon. I'm ready to start re-installing the ABCA software.
> I am online to the new PC for the ABCA system. I need someone to log in at the Windows login screen. Can you help please.
> Cheers
> Andy

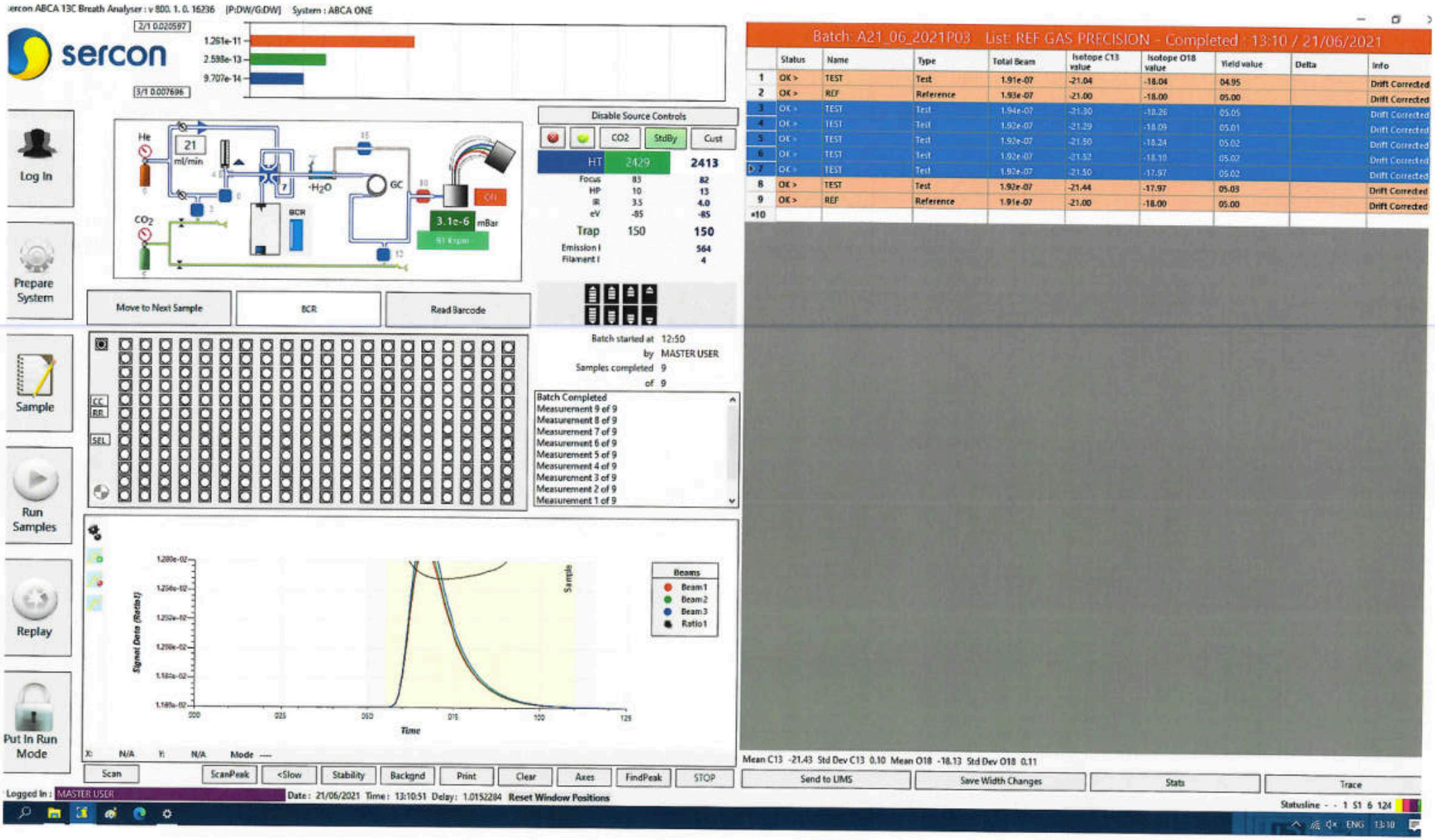
SHEET 2


sercon ABCA 13C Breath Analyser : v 800. 1. 0. 16236 [P:DW/G:DW] System : ABCA ONE
sercon
Log In
Prepare System
Sample
Run Samples
Replay
Put In Run Mode
Move to Next Sample
BCR
Read Barcode
Disable Source Controls
CO2
StdBy
Cust
HT 2429 2412
Trap 150 150
Batch started at 12:28
by MASTER USER
Samples completed 9
of 9
Batch Completed
Measurement 9 of 9
Measurement 8 of 9
Measurement 7 of 9
Measurement 6 of 9
Measurement 5 of 9
Measurement 4 of 9
Measurement 3 of 9
Measurement 2 of 9
Measurement 1 of 9
Batch: A21_06_2021P02 List: 5% - Completed : 12:49 / 21/06/2021
Mean C13 -33.17 Std Dev C13 0.08 Mean O18 -32.66 Std Dev O18 0.09
Scan
ScanPeak
<Slow
Stability
Backgnd
Print
Clear
Axes
FindPeak
STOP
Send to LIMS
Save Width Changes
Stats
Trace
Logged In : MASTER USER
Date : 21/06/2021 Time : 12:49:37 Delay : 1.0153372 Reset Window Positions

Sheet 6

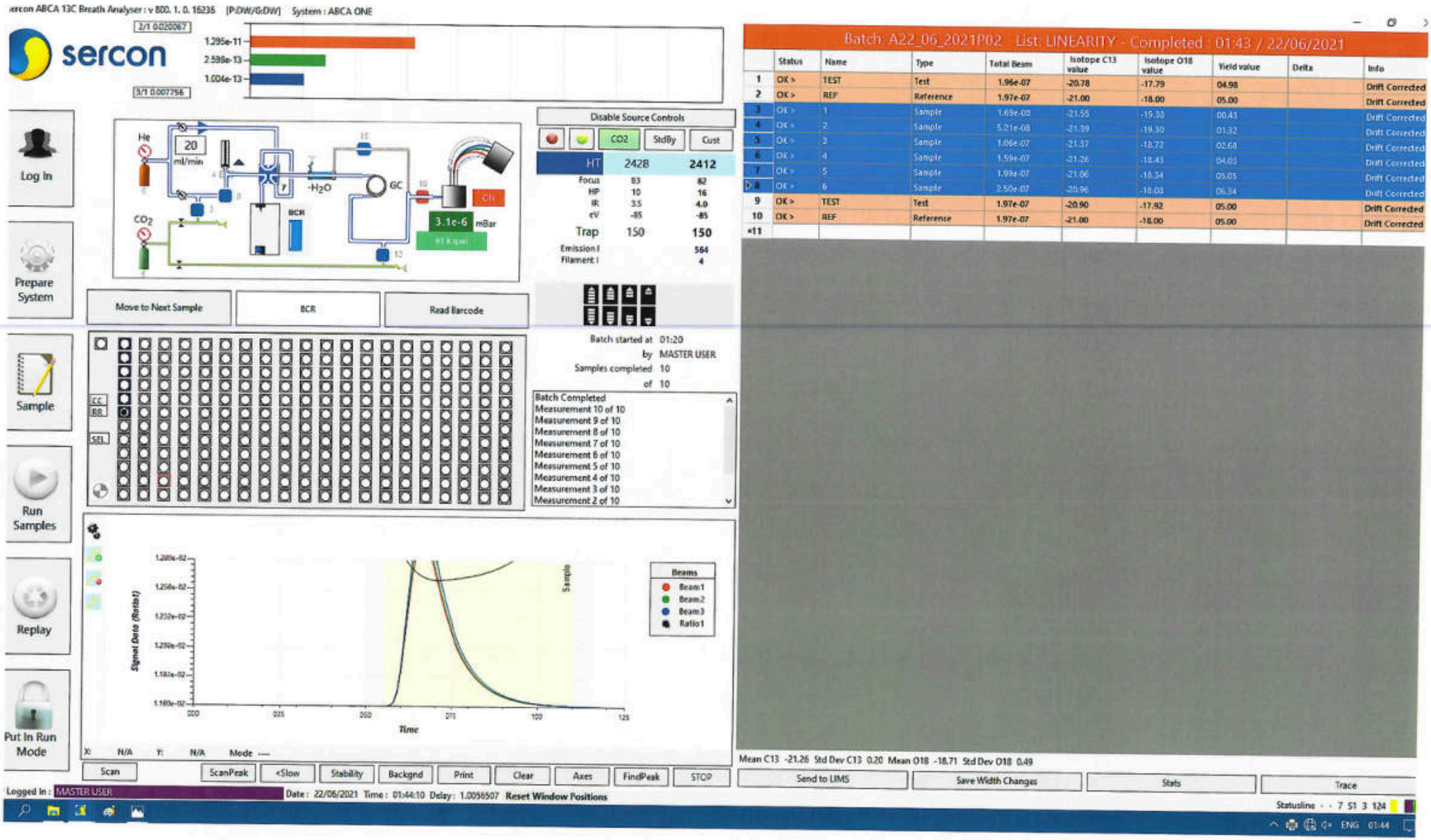

sercon ABCA 13C Breath Analyser : v 800. 1. 0. 16236 [P:DW/G:DW] System : ABCA ONE
sercon
1.294e-08
1.643e-10
5.850e-11
Log In
Prepare System
Sample
Run Samples
Replay
Put In Run Mode
He
20
ml/min
CO2
-H2O
GC
BCR
4.0e-6
mBar
Disable Source Controls
CO2
StdBy
Cust
HT
2429
2412
Focus
HP
IR
eV
Trap
150
150
Emission I
Filament I
Move to Next Sample
BCR
Read Barcode
Batch started at 0000
by 0000
Samples completed 0000
of 0000
Scanning...
Task aborting...
Scanning...
Scanning Peak...
Beams
Ratio1
Signal Data (Ratio1)
Time
X: N/A Y: N/A Mode ----
Scan
ScanPeak
<Slow
Stability
Backgnd
Print
Clear
Axes
FindPeak
STOP
Send to LIMS
Save Width Changes
Stats
Logged In : MASTER USER
Date : 21/06/2021 Time : 11:38:45 Delay : ----- Reset Window Positions
Waiting to run a batch

Sheet 1



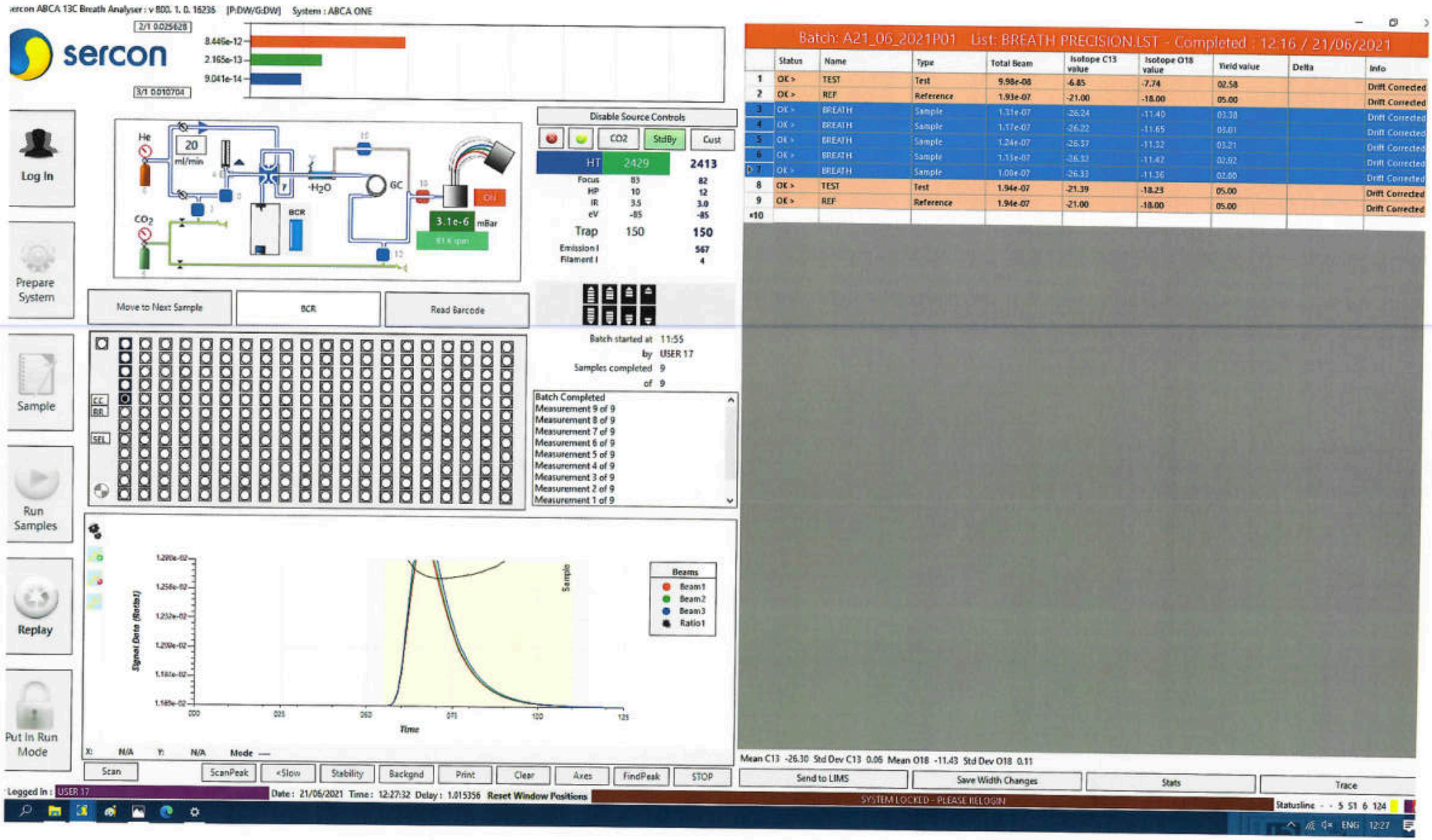
	Status	Name	Type	Total Beam	Isotope C13 value	Isotope O18 value	Yield value	Delta	Info
1	OK >	TEST	Test	1.91e-07	-21.04	-18.04	04.95		Drift Corrected
2	OK >	REF	Reference	1.93e-07	-21.00	-18.00	05.00		Drift Corrected
3	OK >	TEST	Test	1.94e-07	-21.30	-18.26	05.05		Drift Corrected
4	OK >	TEST	Test	1.92e-07	-21.29	-18.09	05.01		Drift Corrected
5	OK >	TEST	Test	1.92e-07	-21.50	-18.24	05.02		Drift Corrected
6	OK >	TEST	Test	1.92e-07	-21.52	-18.10	05.02		Drift Corrected
7	OK >	TEST	Test	1.92e-07	-21.50	-17.97	05.02		Drift Corrected
8	OK >	TEST	Test	1.92e-07	-21.44	-17.97	05.03		Drift Corrected
9	OK >	REF	Reference	1.91e-07	-21.00	-18.00	05.00		Drift Corrected
10									

SHEET 4



	Status	Name	Type	Total Beam	Isotope C13 value	Isotope O18 value	Yield value	Delta	Info
1	OK >	TEST	Test	1.96e-07	-20.78	-17.79	04.98		Drift Corrected
2	OK >	REF	Reference	1.97e-07	-21.00	-18.00	05.00		Drift Corrected
3	OK >	1	Sample	1.69e-08	-21.55	-19.38	00.43		Drift Corrected
4	OK >	2	Sample	5.21e-08	-21.39	-19.30	01.32		Drift Corrected
5	OK >	3	Sample	1.06e-07	-21.37	-18.72	02.68		Drift Corrected
6	OK >	4	Sample	1.59e-07	-21.26	-18.43	04.03		Drift Corrected
7	OK >	5	Sample	1.99e-07	-21.06	-18.34	05.05		Drift Corrected
8	OK >	6	Sample	2.50e-07	-20.96	-18.03	06.34		Drift Corrected
9	OK >	TEST	Test	1.97e-07	-20.90	-17.92	05.00		Drift Corrected
10	OK >	REF	Reference	1.97e-07	-21.00	-18.00	05.00		Drift Corrected
*11									

SHEET 3


ercon ABCA 13C Breath Analyser : v BD0. 1. 0. 16236 [P:DW/G:DW] System : ABCA ONE
sercon
Log In
Prepare System
Sample
Run Samples
Replay
Put In Run Mode
He
20
ml/min
CO2
H2O
GC
BCR
3.1e-6
mBar
Disable Source Controls
CO2
StdBy
Cust
HT
2429
2413
Focus
HP
IR
eV
Trap
150
150
Emission I
Filament I
Move to Next Sample
BCR
Read Barcode
Batch started at 11:55
by USER 17
Samples completed 9
of 9
Batch Completed
Measurement 9 of 9
Measurement 8 of 9
Measurement 7 of 9
Measurement 6 of 9
Measurement 5 of 9
Measurement 4 of 9
Measurement 3 of 9
Measurement 2 of 9
Measurement 1 of 9
Signal Data (Ratio)
Time
Sample
Beams
Beam1
Beam2
Beam3
Ratio1
Scan
ScanPeak
<Slow
Stability
Backgnd
Print
Clear
Axes
FindPeak
STOP
Batch: A21_06_2021P01 List: BREATH PRECISION.LST - Completed : 12:16 / 21/06/2021
Status
Name
Type
Total Beam
Isotope C13 value
Isotope O18 value
Yield value
Delta
Info
Mean C13 -26.30 Std Dev C13 0.06 Mean O18 -11.43 Std Dev O18 0.11
Send to LIMS
Save Width Changes
Stats
Trace
Logged In : USER 17
Date : 21/06/2021 Time : 12:27:32 Delay : 1.015356 Reset Window Positions
SYSTEM LOCKED - PLEASE RELOGIN
Statusline
ENG 12:27

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Sercon Ltd, Unit 3B Crewe Trade Park, Gateway
Crewe, Cheshire CW1 6JT, UK
Tel: +44 (0)1270 580008 Fax: +44 (0)1270 252310
Company Registration No. 4290072 Vat No. 771 1100 74

8 - Serial Numbers Record Document

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

Units	S/N
MS/ABCA	20602/1-2021/1257
Integra 2	/
Prep Unit 1	/
Prep Unit 2/Misc	/
Electronics Upgrade	/
CETAC	032011A7400HR
Gas Box	10602/2021/1257
Autosampler	/
BCR	/
Dual Heater Block	/

Pump Kit and Optics	S/N
Turbo pump S	200118044
Turbo pump A	/
Rotary Pump	200290046
Voltage	110 / (240)
Gauge S	200535792
Gauge A	/
Source	20101-177
Collector 1	20301-102
Collector 2	/
Magnet	13/05/21

Parts	S/N
Fan PSU	/
24V PSU	/

PCBs	S/N
Electronics Box	20210003
Prep PCB	/
VFC PCB	/
Watchdog PCB	/
Head Amp PCB 1	21001
Head Amp PCB 2	/
Electromagnet RP	/

Furnaces	S/N
Combustion	
Reduction	
HT-EA	
GC Oven	
Furnace 1	
Furnace 2	

PC	S/N
PC	~~GR5MMD3~~
Monitor	~~77NKC23~~
Printer	—

Key

Pumps:	E: Edwards P: Pfeiffer
Furnaces:	V/S: Vecstar E; Elite
Magnet:	E: Electromagnet S: Standard
Turbos & Gauges:	S: Source A: Analyser
Collectors:	Std: Standard S: Sulphur HD: Hydrogen Deuterium

Additional System Info:

PC : GR5MMD3

Monitor: 77NKC23

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Packing List

Reference: SCN21/210506

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
Crewe
CW1 6JT
UK

Tel: +44 (0) 1270 580008
Reference: IN1257

Consignee:

Scientex Pty Ltd
C/o: SA BIOMEDICAL ENGINEERING
ZONE C, LG, GFB, 72 KING WILLIAM RD
WCH SA BMA
NORTH ADELAIDE, SA, 5006,
AUSTRALIA
GLN: 9337722089749

Contact Name: Paul Keet
Contact Tel Number:

BOX: 3

Quantity	Product Code	Product Description	Serial Number: *if available*
☑ 1		CETAC Autosampler	032011A7400HR
☑ 1		CETAC Arm & Needle	
☑ 1		Gas Box	10602/2021/1257
☑ 1		Power supply – *CETAC cable*	
☑ 1		Mains leads for above – *CETAC cable*	
☑ 1		USB Cable – *CETAC cable*	

Packed by: P Hughes

Date: 23/6/21

Claims for damage or shortages must be made within 3 days

BOX: Dimensions and weights

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Packing List

Reference: SCN21/210506

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
Crewe
CW1 6JT
UK

Tel: +44 (0) 1270 580008
Reference: IN1257

Consignee:

Scientex Pty Ltd
C/o: SA BIOMEDICAL ENGINEERING
ZONE C, LG, GFB, 72 KING WILLIAM RD
WCH SA BMA
NORTH ADELAIDE, SA, 5006,
AUSTRALIA
GLN: 9337722089749

Contact Name: Paul Keet
Contact Tel Number:

BOX: 1

Quantity	Product Code	Product Description	Serial Number: *if available*
☑ 1	20602/1	ABCA	20602/1-2021/1257

Packed by: P. Hayes

Date: 23/6/21

Claims for damage or shortages must be made within 3 days

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Packing List

Reference: SCN21/210506

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
Crewe
CW1 6JT
UK

Tel: +44 (0) 1270 580008
Reference: IN1257

Consignee:

Scientex Pty Ltd
C/o: SA BIOMEDICAL ENGINEERING
ZONE C, LG, GFB, 72 KING WILLIAM RD
WCH SA BMA
NORTH ADELAIDE, SA, 5006,
AUSTRALIA
GLN: 9337722089749

Contact Name: Paul Keet
Contact Tel Number:

BOX: 2

Quantity	Product Code	Product Description	Serial Number: *if available*
5	SI1770	CETAC racks	
1	SI1768	CETAC BASE	
1	SI0103	Rotary Pump	200290046
1	SI0101	Permanent Magnet + feet	13/05/21
3	SI2511	Mains Cables	
1		Ribbon Cable – *to gas box*	
1		Flow Cable – *to gas box*	
1	70101-1	ABCA Spares Kit	
3		Tubing to connect gas box to ABCA.	
1		Manual on software back up drive.	
1		Windows Recovery drive.	
1		Software back up drive.	
1		PC	CFZGWC3
1		Monitor	H7NKC23

Packed by: P Hayes

Date: 23/6/21

Claims for damage or shortages must be made within 3 days

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Packing List

Reference: SCN21/210506

Shipper / Exporter:

Sercon Limited
Unit 3B Crewe Trade park
Gateway
Crewe
CW1 6JT
UK

Tel: +44 (0) 1270 580008
Reference: IN1257

Consignee:

Scientex Pty Ltd
C/o: SA BIOMEDICAL ENGINEERING
ZONE C, LG, GFB, 72 KING WILLIAM RD
WCH SA BMA
NORTH ADELAIDE, SA, 5006,
AUSTRALIA
GLN: 9337722089749

Contact Name: Paul Keet
Contact Tel Number:

	L		W		H			
Box 1	64	x	64	x	99	cm	gw 98	kg
Box 2	97	x	75	x	108	cm	gw 90	kg
Box 3	70	x	70	x	75	cm	gw 45	kg

Master Airway Bill Number

618BHX34109655

NES	HAWB No.
	108667

Shippers Name and Address
SERCON LIMITED
UNIT 3B CREWE TRADE PARK
GATEWAY CREWE
CHESHIRE CW1 6JT
UNITED KINGDOM

Shipper account Number

NOT NEGOTIABLE CONSIGNMENT NOTE / AIR WAYBILL
Airfreight Worldwide Limited
Unit H Flaxley Park
Flaxley Way Stechford
Birmingham B33 9AN

Consignees Name and Address
SCIENTEX PTY LTD
C/O: SA BIOMEDICAL ENGINEERING
ZONE C, LG, GFB, 72 KING WILLIAM RD WCH SA BMA, NORTH ADELAIDE
SA, 5006, AUSTRALIA GLN:9337722089749

Consignees account Number

It is agreed that the goods described here in are accepted in apparent good order and condition (except as noted) for carriage SUBJECT TO THE CONDITION OF CONTRACT ON THE REVERSE HEREOF, THE SHIPMENT ATTENTION IS DRAWN TO THE NOTICE CONCERNING CARRIERS LIMITATION OF LIABILITY. Shipper may increase such limitation of liability by declaring a higher volume for carriage and paying a supplemental charge required.

Issuing Carriers Agent Name and City
Airfreight Worldwide Limited
Unit H Flaxley Park
Flaxley Way Stechford
Birmingham B33 9AN

Accounting Information
REF No: AEX108667A

Agents IATA CODE
91/4 7133 0005

Account No.

NES Entry No: S55-D181305 NES Entry Date: 23.6.21

Airport of Departure (Addr. of first Carrier) and requested Routing
BIRMINGHAM BHX/LHR/SIN/MEL

to	By first Carrier	Routing and Destination	to	by	to	by	Currency	CHGS Code	WT/VAL PPD	WT/VAL COLL	Other PPD	Other COLL	Declared Value for Carriage	Declared Value for Customs
LHR	SINGAPORE AIRLINES		SIN		MEL		GBP	C		✓		✓	NVD	NCV

Airport of Destination: MELBOURNE
Flight/Date: SQ3908/ 23
For Carrier Use only: +SQ0305/ 25+SQ0237/ 2
Flight/Date

Amount of Insurance: XXX

Insurance: If carrier offers insurance, and such insurance is requested in accordance with conditions on reverse hereof, indicate amount to be insured in figures in box marked 'Amount of insurance'.

Handling Information
FULLY ADDRESSED INVOICES ATTACHED

Notify:

No of Pieces RCP	Gross Weight	kg lb	Rate Class / Commodity Item No.	Chargeable Weight	Rate / Charge	Total	Nature and Quantity of Goods (incl. Dimensions or Volume)
3	230.0	K		240.0	GBP 0.00	AS AGREED	COMPLETE SERCON ABCA2 SYSTEM DIMS 98X85X80 64X64X99 70X70X75 CMS
3	230.0	K					

We hereby certify that these goods were despatched on:
Flight No. SQ305 Date 25.6.21
MAWB No. 618 34096 55
Signed AS AGREED

Vol 1.44M3

Prepaid / Weight Charge / Collect
AS AGREED

Valuating Charge

Tax

Total other Charges Due Agent

Total other Charges Due Carrier

Other Charges
Airfreight Worldwide Ltd
As agents for Carrier SQ

Shipper certifies that the particulars on the face hereof are correct and that insofar as any part of the consignment contains dangerous goods, such part is properly described by name and is in proper condition for carriage by air according to the applicable Dangerous Goods Regulations.

Airfreight Worldwide Limited
As Agents to the Carrier SINGAPORE AIRLINES

Total prepaid / Total Collect
AS AGREED

Signature of Shipper or his Agent

Currency Conversion Rates / cc charges in Dest. Currency

17-Jun-2021 BIRMINGHAM Graham Dewhirst
Executed on (Date) at (place) Signature of Issuing Carrier or its Agent

For Carriers Use only at Destination / Charges at Destination / Total collect Charges

108667

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ABCA2 Maintenance Report

Job Number:			
Customer:	Womens and Childrens Hospital		
Instrument Serial #		20602/1-2021/1257	
ASX 7400 Serial #	032011A7400HR	Software Version	800.1.0.16236
Contact:	Betty Zacharakis or Esther Burt		
Date of Visit:	7-11 FEB 2022	Days:	5 DAYS
Engineer:	James Barker		

Pre Maintenance Checks

Initial Tuning Parameters:

HT	2427	IR	-3.0
Focus	83	eV	-85
HP	10	Trap	50 / 150
Emission	509		
Vacuum	$7.9e^{-7}$ / $4e^{-6}$		

Initial Performance Evaluation

Peak Shape	Sheet Number
Stability	Sheet Number
Ref Gas Precision	Sheet Number
Linearity	Sheet Number
Breath Precision	Sheet Number

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Maintenance Checklist		
Filament Change	Initial: N/A	Date:
Oil Change	Initial: N/A	Date:
Filament Condition	Initial: NEN	Date:
Tune Optimisation	Initial: JB	Date:
Replace Syringe O Rings	Initial: N/A	Date:
Gas Flow Check and Optimisation	Initial: N/A	Date:
Magnet Position Optimisation (If Applicable)	Initial: JB	Date:
System Leak Check	Initial: JB	Date: 7/2/22

Final Performance Evaluation

HT	2427	IR	-3.0
Focus	83	eV	-85
HP	10	Trap	50/150
Emission	509		
Vacuum	7.9e-7 / 4e-6		

Final Performance Evaluation

Peak Shape	Sheet Number
Stability	Sheet Number
Ref Gas Precision	Sheet Number
In Tube Precision	Sheet number
Sensitivity	Sheet Number
Linearity	Sheet Number
Breath Precision	Sheet Number

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Faults and Issues:
New Unit install Shipping issues → loose cable → Disconnected power box Trace Power Supply → Unreproducible S/W crashes ↳ see images P/C recovered only by forced reset
Follow Up:

Engineer:	James Baker	Date:	10/2/22
Signed:			
Customer:	Daniel Fletcher	Date:	11/2/22
Signed:			



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ABCA2 Installation Acceptance Certificate

Job no.:	IN1257
Customer:	Royal Adelaide W&C C/O: Scientex Pty Ltd
Address	Scientex Pty Ltd C/o: SA BIOMEDICAL ENGINEERING ZONE C, LG, GFB, 72 KING WILLIAM RD WCH SA BMA NORTH ADELAIDE, SA, 5006, AUSTRALIA GLN: 9337722089749
Contact:	
System:	ABCA2
ABCA2 Serial Number	20602/1-2021/1257
Gas Box Serial Number	10602/2021/1257
Autosampler Serial Number	032011A7400HR
Software:	V800.1.0.16236
Engineer:	James Barker
Installation Start Date:	7/2/22
Installation Completion Date:	11/2/22
Maintenance Required by Date:	Feb 2023
Delivery Date:	June 2021
Warranty Commences:	
Warranty Expires:	
Consignor:	Sercon Limited Unit 3B, Crewe Trade Park Gateway Crewe CW1 6JT U.K.
Outstanding Installation Requirements:	

I hereby agree that the installation has been completed and meets the manufacturer's specifications and that basic training has been provided.

Customer Acceptance	D Fletcher	Date:	11/2/22

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Engineer's Signature		Date:	11/2/22

^{13}C			
Ref Gas Injection Precision	100% CO_2 (n=5)	≤0.1‰ 0.07	Observed Precision: Pass/Fail: Sheet Number:
Ref gas in tubes precision	5% CO_2 in Exetainers (n=5)	≤0.1‰ 0.06	Observed Precision: Pass/Fail: Sheet Number:
Breath Precision	Breath in Exetainers (n=5)	≤0 2‰ 0.12	Observed Precision: Pass/Fail: Sheet Number:
Sensitivity	5% CO_2 in Exetainers	Major beam 5e-9 with trap of 150 9.4e-9	Observed Sensitivity: Pass/Fail: Sheet Number:
Linearity	0.5 to 8.0% CO_2 in Helium Exetainers	≤0.5 ‰ change 0.49	Observed Linearity: Pass/Fail: Sheet Number:
Peak Shape	Beam 1.2 and 2/1	Minimum 5V wide 2/1. Gradient acceptable due to single turbo pump	Observed Peak Shape: Pass/Fail: Sheet Number:
Stability	2/1 ratio over 600 seconds	Flat, no spikes or variations. Slight gradient acceptable	Observed Stability: Pass/Fail: Sheet Number:

Special Tests

Specification Acceptance

Engineer Signature:		Date:	11/2/22
Customer Signature:		Date:	11/2/22

Sercon Ltd
Unit 3B Crewe Trade Park
Gateway Crewe Cheshire
CW1 6UT United Kingdom
Phone: +44 (0)1270 581000
Email: info.sercongroup.com
www.sercongroup.com

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Customer Training Checklist

Tuning Parameters:

- What do they mean with respect to what is actually happening in the source?
- How do they affect peak shape, sensitivity and stability?

Gas Box and ASX7400 overview.

- Describe the sample pathway for tube injection, internal ref gas loop loading, ref gas pulse
- Adjusting the autosampler bed layout
- Replacing the needle
- Leak Checking

Running Samples

- How to create the sample list? BCR vs Disk File
- Choosing the correct references and method set up for your application, from tube, ref gas pulse, internal loop loading.
- Event files, when to modify them and how
- Timings, how to adjust the timings to ensure the sample peak is completely integrated
- Measuring and setting the helium flow; valco and syringe.
- Report set up, drift/undrift corrected

The Gas Handling
Routine Maintenance:

- Discuss routine maintenance, including filament and oil change, using the manual as a reference guide.
- A physical demonstration of replacing the needle.



Training Completed			
Engineer Signature:	[signature]	Date:	11/2/22
Customer Signature:	D Fletcher	Date:	11/2/22



Sercon Ltd
Unit 3B Crewe Trade Park
Gateway, Crewe, Cheshire
CW1 6JT United Kingdom
Phone: +44 (0)1270 580008
Email: info.sercongroup.com
www.sercongroup.com



Sercon Ltd
Unit 3B Crewe Trade Park
Gateway, Crewe, Cheshire
CW1 6JT United Kingdom
www.sercongroup.com

Details of Visit:
Installation
Recommendations:
Faults and Shortages:
Shipping H/W Issues Trac Power Supply

Additional Parts Used:

Part Description	Part Code	Cost

Sercon Ltd
Unit 3B Crewe Trade Park
Gateway, Crewe, Cheshire
CW1 6JT United Kingdom
Phone: +44 (0)1270 580008
Email: info@sercongroup.com
www.sercongroup.com

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Sercon Ltd, Unit 38, Crewe Trade Park, Gateway, Crewe, Cheshire CW1 6UT, UK
Tel: +44 (0)1270 680008 Fax: +44 (0)1270 252310
Company Registration No. 4280001 Vat No. 771 1100 14

6 - ABCA2 TEST / ACCEPTANCE SPECIFICATION

Customer	Royal Adelaide W&C L.O. Scientex Pty Ltd		
Quotation Number	14020	Date	04/02/2020
Job Number	IN1251	Date	06/05/2021
Unit Serial Number			
Gas Box Serial Number			
Autosampler Serial Number			

^{13}C

Ref Gas Injection Precision	100% CO_2 (n=5)	≤0.1‰	Test	✓	Install	
			Sheet		Sheet	
Ref gas in tubes precision	10ml 5% CO_2 (n=5)	≤0.1‰	Test	✓	Install	
			Sheet		Sheet	
Breath Precision	Breath in Exetainer (n=5)	≤0.2‰	Test	✓	Install	
			Sheet		Sheet	
Sensitivity	10ml 5% CO_2 in Exetainer	Major beam 5e-9 with trap of 150	Test		Install	
			Sheet		Sheet	
Linearity	0.5% / 8.0% CO_2 in Exetainer	≤0.3 ‰ change	Test	✓	Install	
			Sheet		Sheet	
Peak Shape	Beam 1:2 and 2:1	Minimum 5V wide 2:1 Gradient acceptable due to single turbo pump	Test	✓	Install	
			Sheet		Sheet	
Stability	2:1 ratio over 500 seconds	Flat, no spikes or variations. Slight gradient acceptable	Test	✓	Install	
			Sheet		Sheet	
Software Test	All read backs Valves function Autosampler ceo DETAC Firmware Version No		Date		Initial	

Flow Meter S/N [illegible]

Leak Detector S/N [illegible]

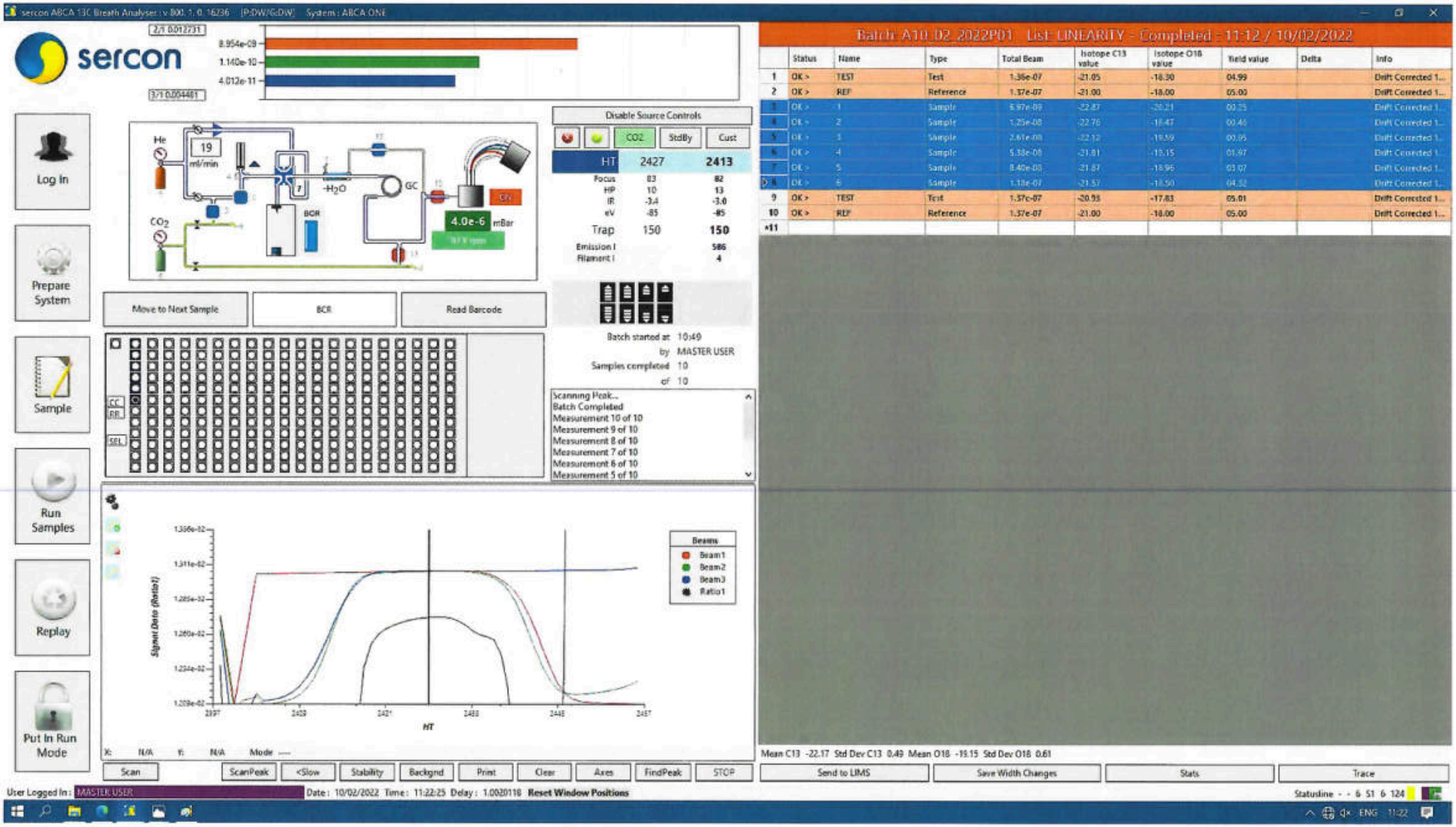
Multi-Meter S/N DVM7

Special Tests

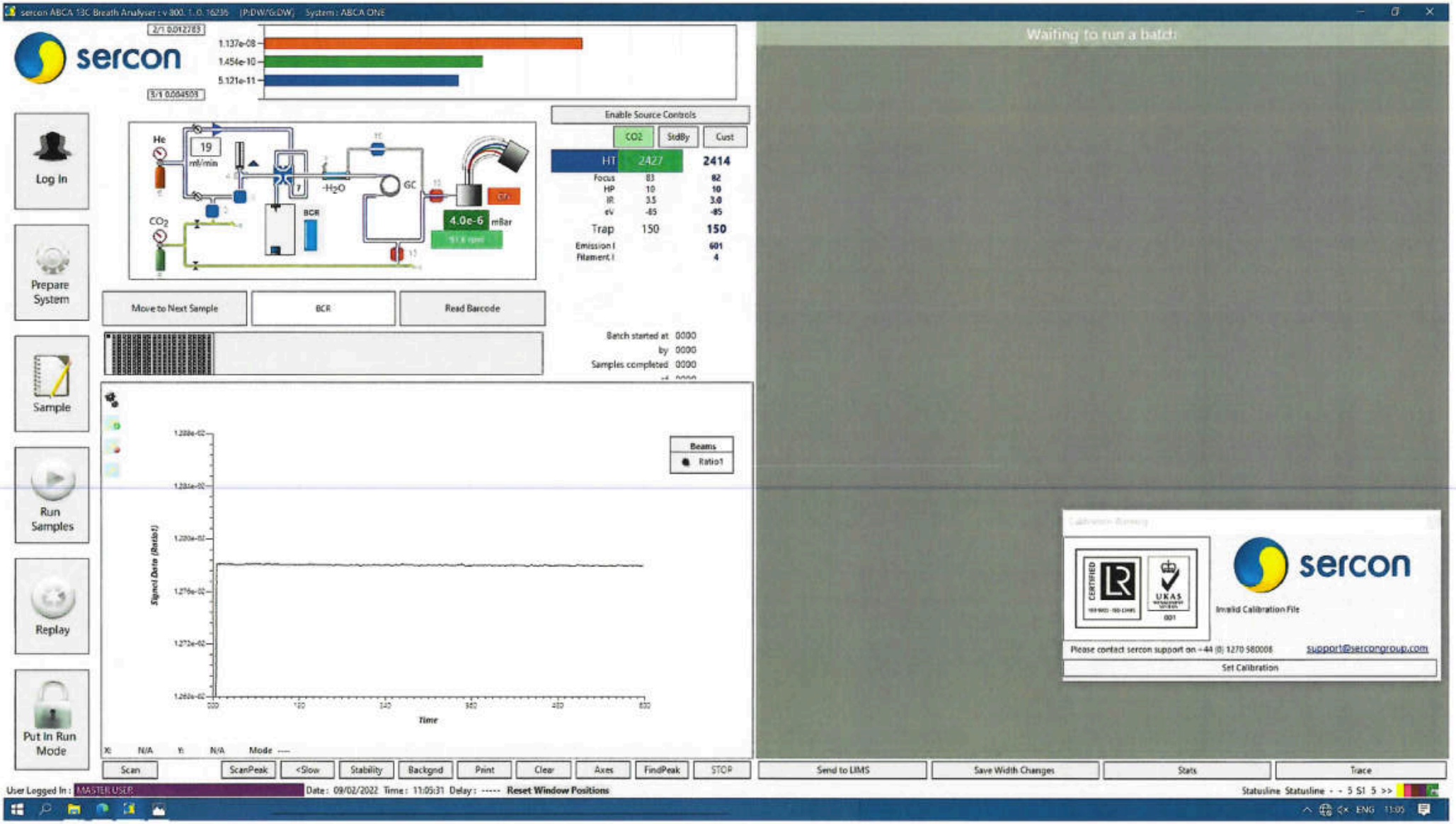
Linearity to be better than 0.3‰ and recorded

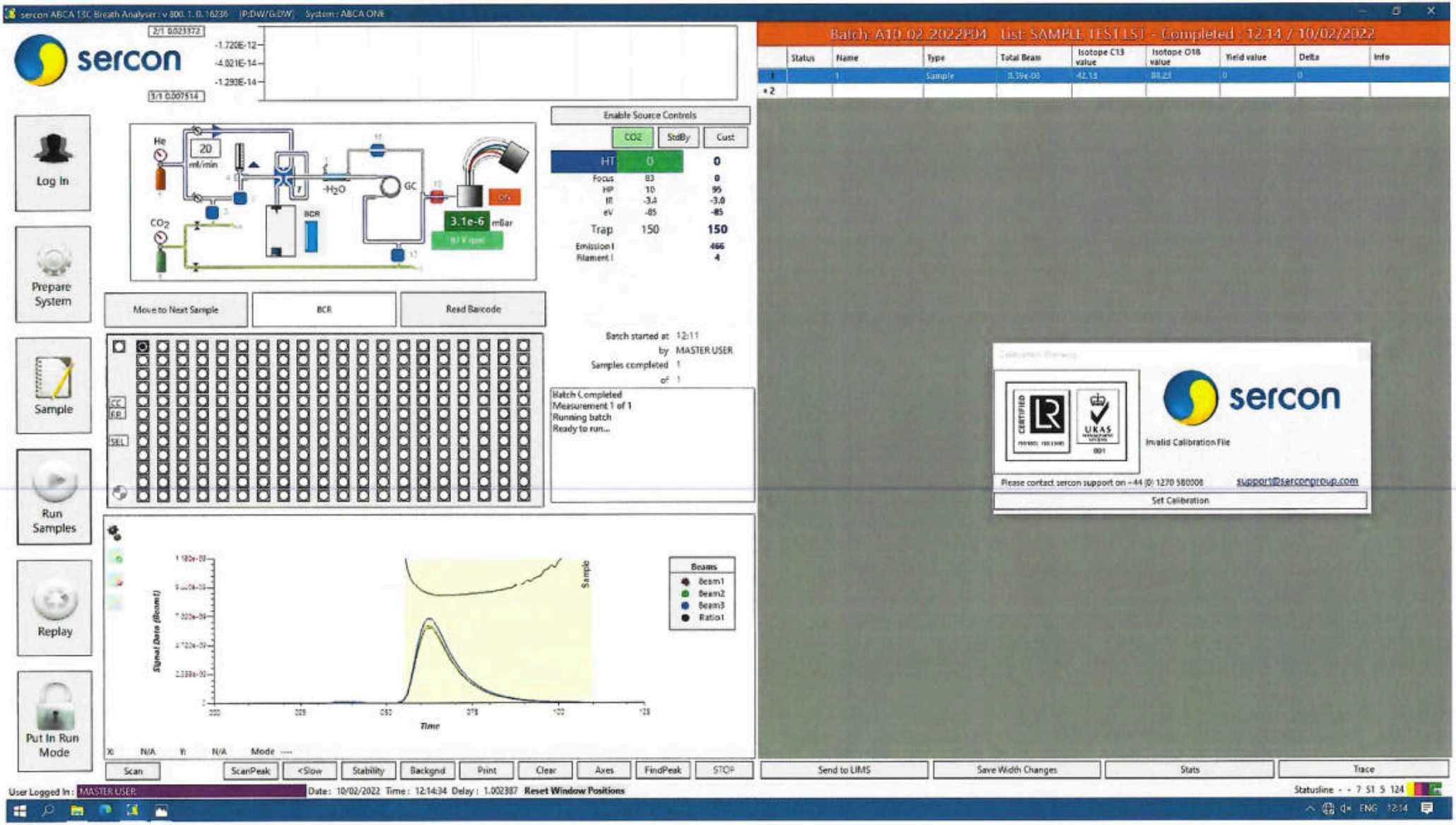
Sales Signature		Required	Date
Test Signature	✓	Completed	Date
Install Signature		Completed	Date

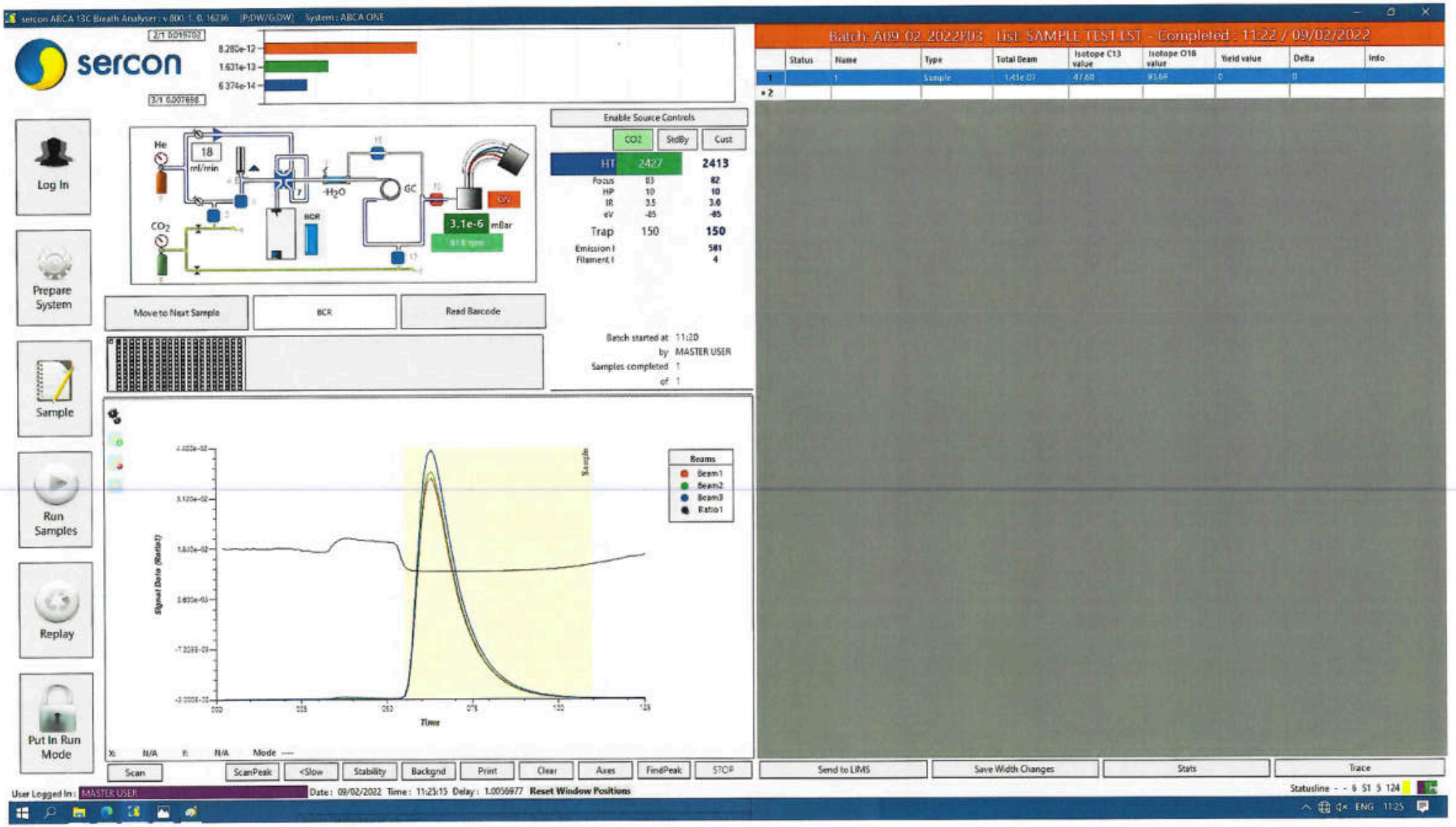
Data to be transferred to
CENTRAL SERVER Centralities SERV SPREADSHEETS Instrument Performance Spreadsheet v1.

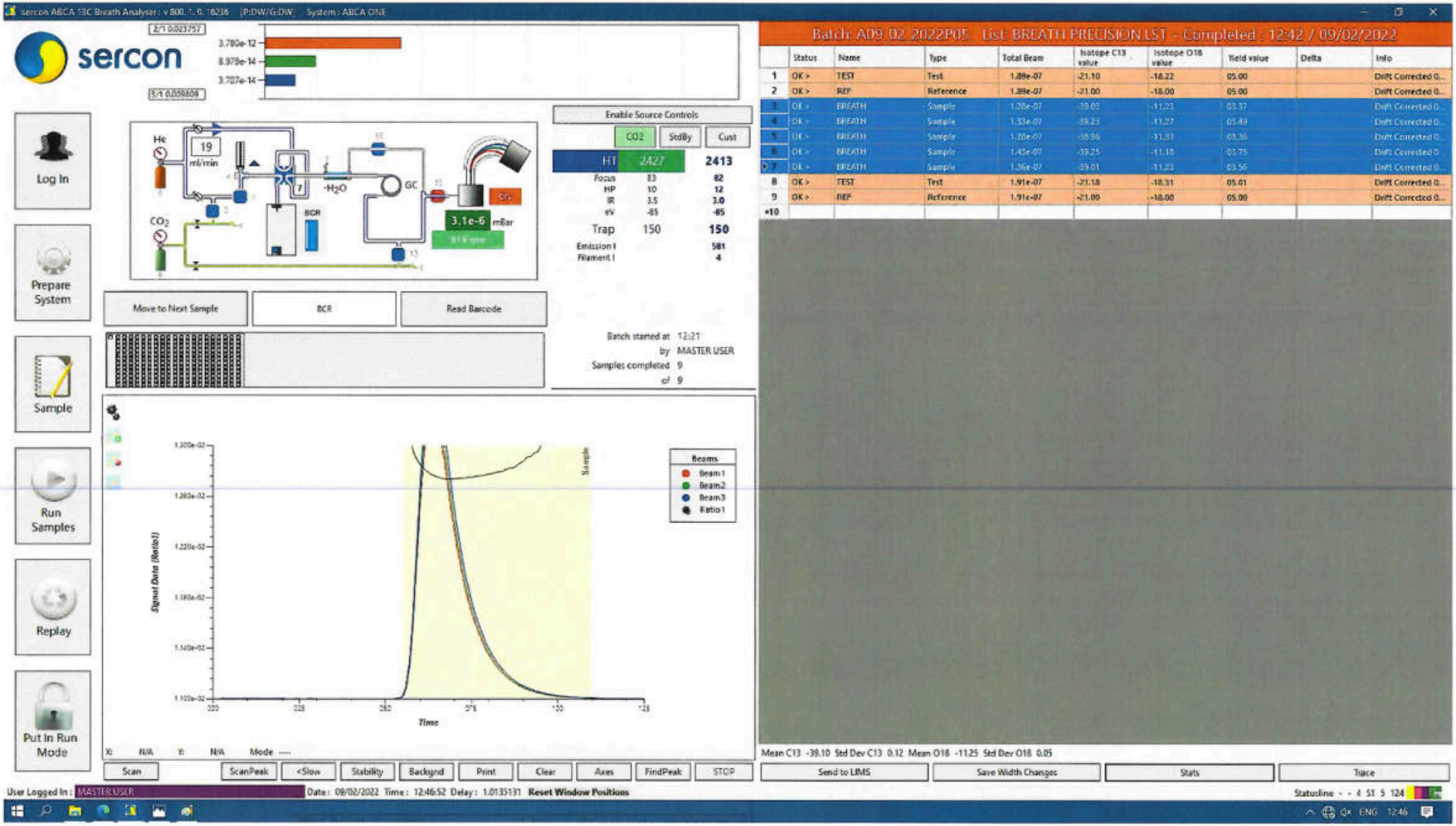


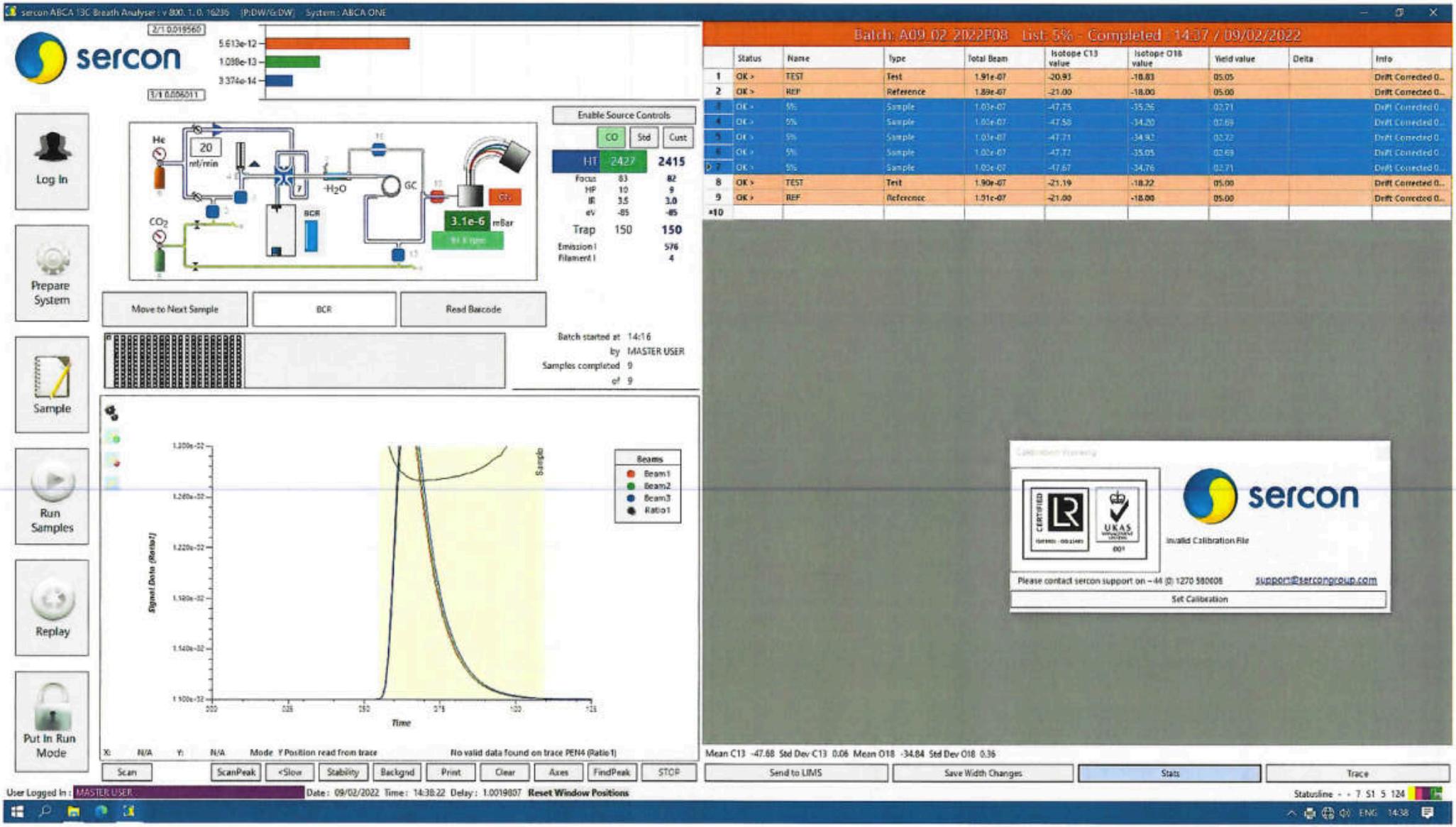
	Status	Name	Type	Total Beam	Isotope C13 value	Isotope O18 value	Yield value	Delta	Info
1	OK >	TEST	Test	1.36e-07	-21.05	-18.30	04.99		Drift Corrected 1...
2	OK >	REF	Reference	1.37e-07	-21.00	-18.00	05.00		Drift Corrected 1...
3	OK >	1	Sample	8.97e-08	-22.87	-20.21	00.25		Drift Corrected 1...
4	OK >	2	Sample	1.25e-08	-22.76	-18.47	00.46		Drift Corrected 1...
5	OK >	3	Sample	2.61e-08	-22.12	-19.59	00.95		Drift Corrected 1...
6	OK >	4	Sample	5.38e-08	-21.81	-19.15	01.97		Drift Corrected 1...
7	OK >	5	Sample	8.40e-08	-21.87	-18.96	03.07		Drift Corrected 1...
8	OK >	6	Sample	1.18e-07	-21.57	-18.50	04.32		Drift Corrected 1...
9	OK >	TEST	Test	1.37e-07	-20.93	-17.83	05.01		Drift Corrected 1...
10	OK >	REF	Reference	1.37e-07	-21.00	-18.00	05.00		Drift Corrected 1...
*11									

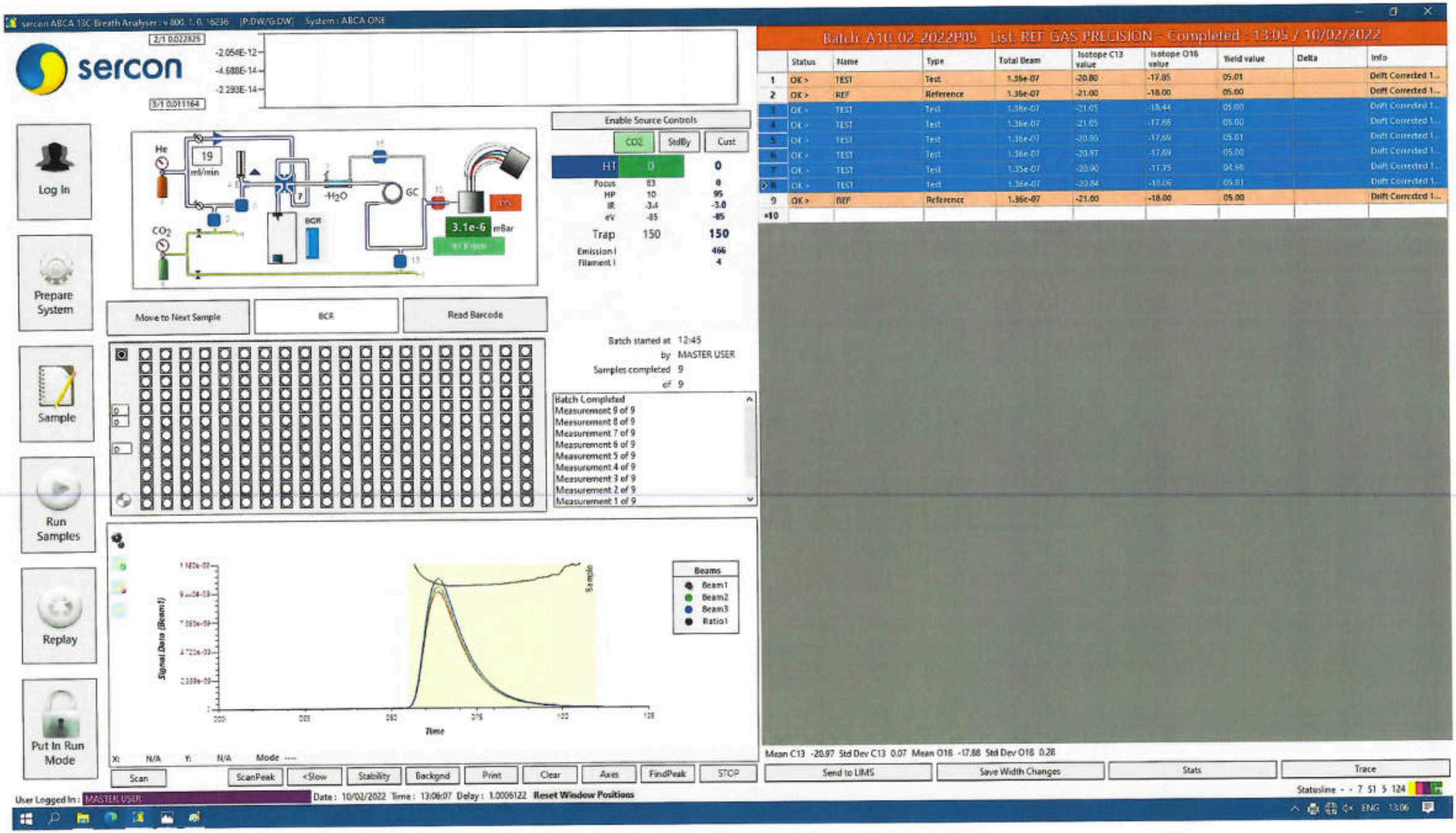

sercon ABCA 13C Breath Analyser : v 800. 1. 0. 16236 [P:DW/G:DW] System : ABCA ONE
sercon
2/1 0.012283
3/1 0.004509
1.137e-08
1.454e-10
5.121e-11
Log In
Prepare System
Sample
Run Samples
Replay
Put In Run Mode
He
19
ml/min
CO_2
$-H_2O$
GC
BCR
4.0e-6
mBar
Enable Source Controls
CO2
StdBy
Cust
HT
2427
2414
Focus 83 82
HP 10 10
IR 3.5 3.0
eV -85 -85
Trap 150 150
Emission I 601
Filament I 4
Move to Next Sample
BCR
Read Barcode
Batch started at 0000
by 0000
Samples completed 0000
Beams
Ratio1
Signal Data (Ratio1)
Time
X: N/A Y: N/A Mode ----
Waiting to run a batch
Invalid Calibration File
Please contact sercon support on +44 (0) 1270 580008
support@sercongroup.com
Set Calibration
Scan
ScanPeak
<Slow
Stability
Backgnd
Print
Clear
Axes
FindPeak
STOP
Send to LIMS
Save Width Changes
Stats
Trace
User Logged In : MASTER USER
Date : 09/02/2022 Time : 11:05:31 Delay : ----- Reset Window Positions
Statusline Statusline - - 5 S1 5 >>
ENG 11:05


sercon ABCA 13C Breath Analyser : v 800. 1. 0. 16236 (P:DW/G:DW) System : ABCA ONE
sercon
Log In
Prepare System
Sample
Run Samples
Replay
Put In Run Mode
He
20
ml/min
CO_2
$-H_2O$
GC
BCR
3.1e-6
mBar
Enable Source Controls
CO2
StdBy
Cust
HT
Focus
HP
IR
eV
Trap
150
Emission I
Filament I
Move to Next Sample
BCR
Read Barcode
Batch started at 12:11
by MASTER USER
Samples completed 1
of 1
Batch Completed
Measurement 1 of 1
Running batch
Ready to run...
Signal Data (Beam1)
Time
Sample
Beams
Beam1
Beam2
Beam3
Ratio1
Scan
ScanPeak
<Slow
Stability
Backgnd
Print
Clear
Axes
FindPeak
STOP
Batch: A10.02.2022P04 List: SAMPLE TEST LST - Completed : 12:14 / 10/02/2022
Status
Name
Type
Total Beam
Isotope C13 value
Isotope O18 value
Yield value
Delta
Info
Sample
Invalid Calibration File
Please contact sercon support on +44 (0) 1270 580008
support@sercongroup.com
Set Calibration
Send to LIMS
Save Width Changes
Stats
Trace
User Logged In : MASTER USER
Date : 10/02/2022 Time : 12:14:34 Delay : 1.002387 Reset Window Positions
Statusline - - 7 51 5 124

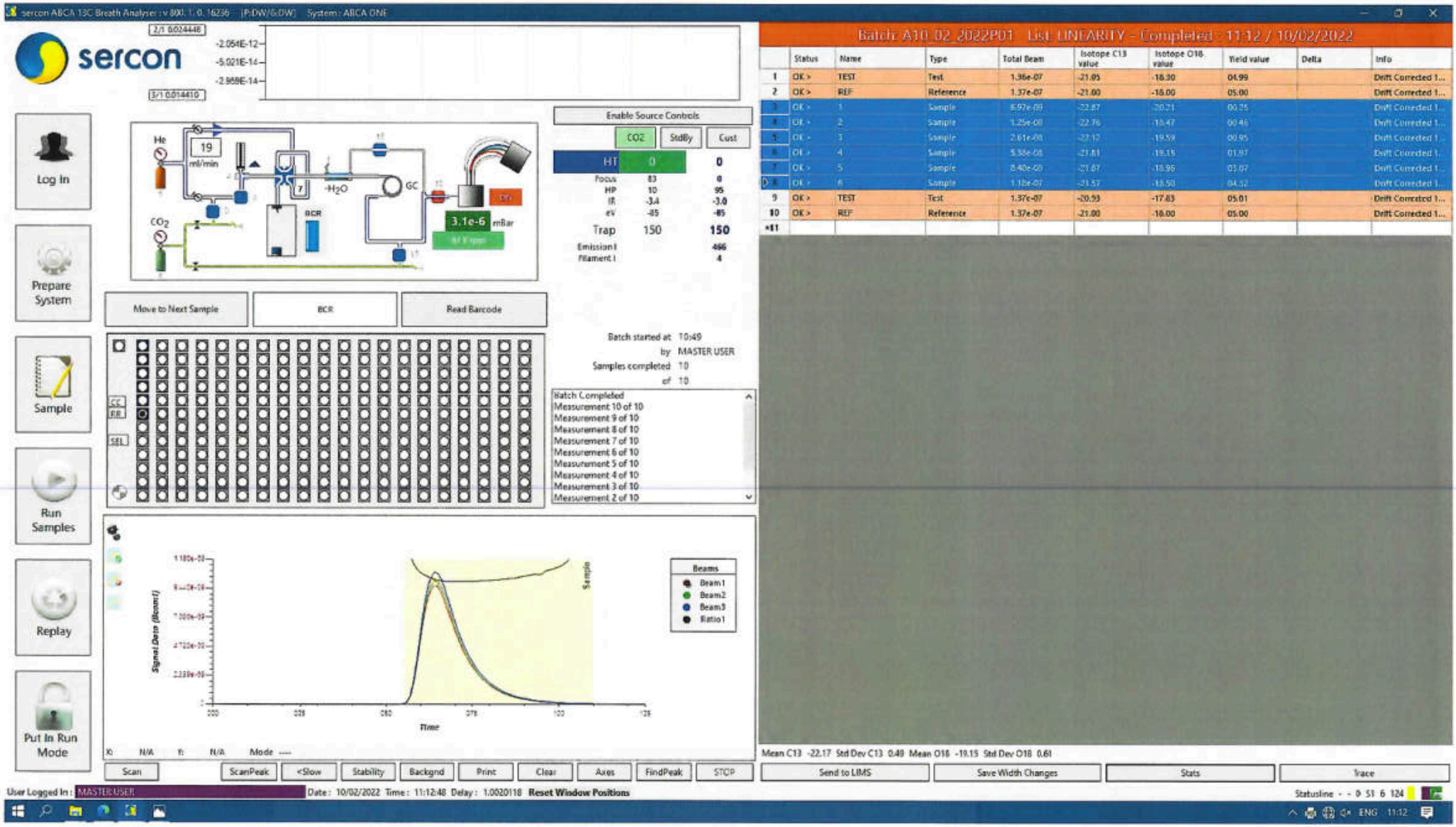

sercon ABCA 13C Breath Analyser : v.80(1.1.0.16236 [P:DW/G:DW] System : ABCA ONE
sercon
Batch: A09.02.2022P03 List: SAMPLE TEST LST - Completed : 11:22 / 09/02/2022
Status
Name
Type
Total Beam
Isotope C13 value
Isotope O18 value
Yield value
Delta
Info
Log In
Prepare System
Sample
Run Samples
Replay
Put In Run Mode
He
18 ml/min
CO2
GC
BCR
3.1e-6 mBar
Enable Source Controls
CO2
StdBy
Cust
HT
2427
2413
Focus
HP
IR
eV
Trap
150
150
Emission I
Filament I
Move to Next Sample
BCR
Read Barcode
Batch started at 11:20
by MASTER USER
Samples completed 1
of 1
Beams
Beam1
Beam2
Beam3
Ratio1
Signal Data (Ratio)
Time
Sample
Scan
ScanPeak
<Slow
Stability
Backgnd
Print
Clear
Axes
FindPeak
STOP
Send to LIMS
Save Width Changes
Stats
Trace
User Logged In : MASTER USER
Date : 09/02/2022 Time : 11:25:15 Delay : 1.0056977 Reset Window Positions
Statusline - - 6 51 5 124
ENG 11:25


sercon ABCA 13C Breath Analyser : v 800. '. 0. 16236 [P:DW/G:DW] System : ABCA ONE
sercon
Log In
Prepare System
Sample
Run Samples
Replay
Put In Run Mode
Enable Source Controls
CO2
StdBy
Cust
HT
2427
2413
Focus
HP
IR
eV
Trap
150
150
Emission I
Filament I
Move to Next Sample
BCR
Read Barcode
Batch started at 12:21
by MASTER USER
Samples completed 9
of 9
Batch: A09_02_2022P05 List: BREATH PRECISION.LST - Completed - 12:42 / 09/02/2022
Status
Name
Type
Total Beam
Isotope C13 value
Isotope O18 value
Yield value
Delta
Info
1 OK > TEST Test 1.89e-07 -21.10 -18.22 05.00 Drift Corrected 0...
2 OK > REF Reference 1.89e-07 -21.00 -18.00 05.00 Drift Corrected 0...
3 OK > BREATH Sample 1.28e-07 -39.03 -11.23 03.37 Drift Corrected 0...
4 OK > BREATH Sample 1.33e-07 -39.23 -11.27 03.49 Drift Corrected 0...
5 OK > BREATH Sample 1.20e-07 -38.96 -11.33 03.36 Drift Corrected 0...
6 OK > BREATH Sample 1.45e-07 -39.25 -11.18 03.75 Drift Corrected 0...
7 OK > BREATH Sample 1.36e-07 -39.01 -11.23 03.56 Drift Corrected 0...
8 OK > TEST Test 1.91e-07 -21.18 -18.31 05.01 Drift Corrected 0...
9 OK > REF Reference 1.91e-07 -21.00 -18.00 05.00 Drift Corrected 0...
*10
Beams
Beam1
Beam2
Beam3
Ratio1
Signal Data (Ratio1)
Time
Sample
X: N/A Y: N/A Mode ----
Mean C13 -39.10 Std Dev C13 0.12 Mean O18 -11.25 Std Dev O18 0.05
Scan
ScanPeak
<Slow
Stability
Backgnd
Print
Clear
Axes
FindPeak
STOP
Send to LIMS
Save Width Changes
Stats
Trace
User Logged In : MASTER USER
Date : 09/02/2022 Time : 12:46:52 Delay : 1.0135131 Reset Window Positions
Statusline
ENG 12:46


sercon ABCA 13C Breath Analyser : v 800. 1. 0. 16235 [P:DW/G:DW] System : ABCA ONE
sercon
Log In
Prepare System
Sample
Run Samples
Replay
Put In Run Mode
Enable Source Controls
CO
Std
Cust
HT 2427
2415
Trap 150
150
3.1e-6 mBar
Move to Next Sample
BCR
Read Barcode
Batch started at 14:16
by MASTER USER
Samples completed 9
of 9
Batch: A09_02_2022P08 List: 5% - Completed : 14:37 / 09/02/2022
Status
Name
Type
Total Beam
Isotope C13 value
Isotope O18 value
Yield value
Delta
Info
Beams
Beam1
Beam2
Beam3
Ratio1
Time
Signal Data (Ratio1)
Invalid Calibration File
Please contact sercon support on +44 (0) 1270 580008
support@sercongroup.com
Set Calibration
Mean C13 -47.68 Std Dev C13 0.06 Mean O18 -34.84 Std Dev O18 0.36
Scan
ScanPeak
<Slow
Stability
Backgnd
Print
Clear
Axes
FindPeak
STOP
Send to LIMS
Save Width Changes
Stats
Trace
User Logged In : MASTER USER
Reset Window Positions



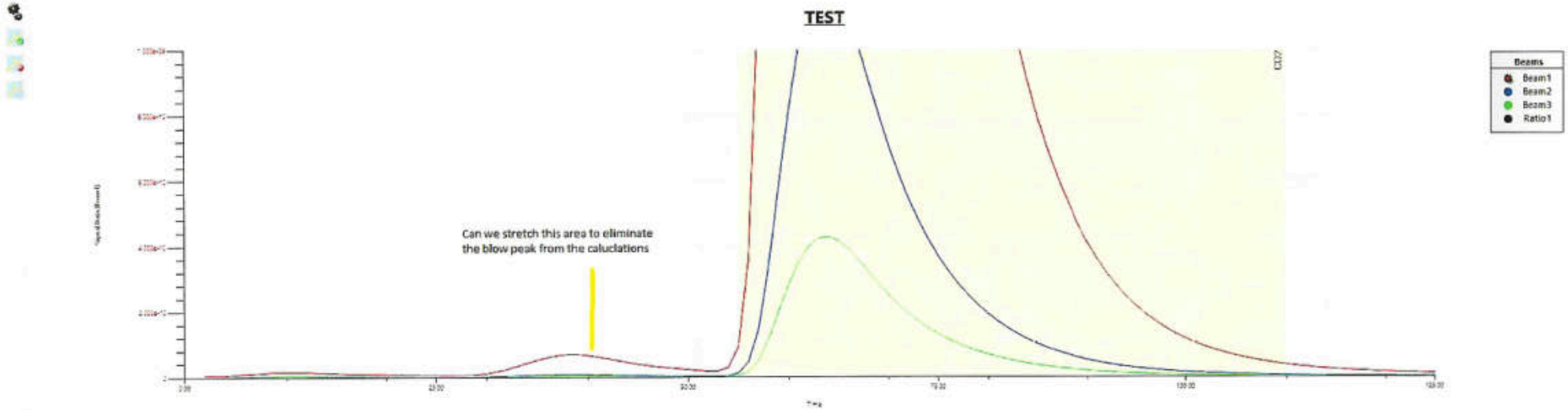
	Status	Name	Type	Total Beam	Isotope C13 value	Isotope O18 value	Yield value	Delta	Info
1	OK >	TEST	Test	1.36e-07	-20.80	-17.85	05.01		Drift Corrected 1...
2	OK >	REF	Reference	1.36e-07	-21.00	-18.00	05.00		Drift Corrected 1...
3	OK >	TEST	Test	1.36e-07	-21.05	-18.44	05.00		Drift Corrected 1...
4	OK >	TEST	Test	1.36e-07	-21.05	-17.68	05.00		Drift Corrected 1...
5	OK >	TEST	Test	1.36e-07	-20.99	-17.69	05.01		Drift Corrected 1...
6	OK >	TEST	Test	1.36e-07	-20.97	-17.69	05.00		Drift Corrected 1...
7	OK >	TEST	Test	1.35e-07	-20.90	-17.75	04.96		Drift Corrected 1...
8	OK >	TEST	Test	1.36e-07	-20.84	-18.06	05.01		Drift Corrected 1...
9	OK >	REF	Reference	1.36e-07	-21.00	-18.00	05.00		Drift Corrected 1...
*10									



	Status	Name	Type	Total Beam	Isotope C13 value	Isotope O18 value	Yield value	Delta	Info
1	OK >	TEST	Test	1.36e-07	-21.05	-18.30	04.99		Drift Corrected 1...
2	OK >	REF	Reference	1.37e-07	-21.00	-16.00	05.00		Drift Corrected 1...
3	OK >	1	Sample	8.97e-09	-22.87	-20.21	00.25		Drift Corrected 1...
4	OK >	2	Sample	1.25e-08	-22.76	-18.47	00.46		Drift Corrected 1...
5	OK >	3	Sample	2.61e-08	-22.12	-19.59	00.95		Drift Corrected 1...
6	OK >	4	Sample	5.36e-08	-21.81	-19.15	01.97		Drift Corrected 1...
7	OK >	5	Sample	8.40e-08	-21.67	-18.95	03.07		Drift Corrected 1...
8	OK >	6	Sample	1.18e-07	-21.57	-18.50	04.32		Drift Corrected 1...
9	OK >	TEST	Test	1.37e-07	-20.93	-17.83	05.01		Drift Corrected 1...
10	OK >	REF	Reference	1.37e-07	-21.00	-16.00	05.00		Drift Corrected 1...
*11									

ABCA Reprocessor

File Tools LIMS



X: 1.25 Y: 4.963e-12 Mode Y Position read from trace

	Id	Name	Weight	Type	Match	Total Beam	UndrftCorrected Yield value	UndrftCorrected Isotope C13 value	UndrftCorrected Isotope O18 value	DrftCorrected Yield value	DrftCorrected Isotope C13 value	DrftCorrected Isotope O18 value	Delta	Result
▶	1	TEST	100	Test		1.36e-07	0.00	61.35	81.89	5.30	-27.73	-18.01		
	2	REF	100	Reference		1.36e-07	5.30	-27.70	-18.00	5.30	-27.70	-18.00		
	3	5%	100	Sample		6.74e-08	2.62	-54.53	-34.00	2.62	-54.52	-34.00		
	4	5%	100	Sample		6.74e-08	2.62	-54.50	-33.80	2.61	-54.49	-33.81		
	5	5%	100	Sample		6.73e-08	2.62	-54.67	-34.17	2.61	-54.65	-34.18		
	6	5%	100	Sample		6.64e-08	2.58	-54.83	-34.21	2.57	-54.81	-34.22		
	7	5%	100	Sample		6.70e-08	2.61	-54.86	-33.79	2.59	-54.83	-33.80		
	8	TEST	100	Test		1.36e-07	5.29	-27.84	-17.95	5.26	-27.81	-17.97		
	9	REF	100	Reference		1.37e-07	5.30	-27.70	-18.00	5.30	-27.70	-18.00		

Filename : C:\Sercon\abca\Results\A10_02_2022P07.REC

Mean C13 --- Std Dev C13 --- Mean O18 --- Std Dev O18 --- Reference Values 13C -27.7 Delta PDB / O18 -18 Delta PDB

ENG 13:51

sercon
innovators in isotopes

Sercon Ltd, Unit 3B Crewe Trade Park, Gateway
Crewe, Cheshire CW1 6JT, UK
Tel: +44 (0)1270 580008 Fax: +44 (0)1270 252310
Company Registration No. 4290072 Vat No. 771 1100 74

7: ASSEMBLY AND TEST RECORD

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

PRODUCT: ABCA 2

SERIAL NUMBER: 20602/1-2021/1257

ASSEMBLED: (Name) [signature] / P. Hayes Date: 09/06/21

PRE-TEST INSPECTION: (Production name) P. Hayes Date: 09/06/21

PRE-TEST INSPECTION: (Test name) [signature] Date: 09-JUN-21

SYSTEM TEST: (Name) [signature] Date: 22-JUN-21

PRE-DESPATCH INSPECTION: (Name) P. Hayes Date: 23/6/21

P.A.T. Test results

In compliance with Low Voltage directive 73/23/EEC
To Low Voltage standard EN61010 – 1:1993

Earth Continuity 0.076 Ω

Insulation >300 MΩ

Earth Leakage Current 1.25 mA. @ 0.05 kVA.

Tested by: P. Hayes

Date: 9/6/21

Batch Picking List

Works Order Number	WO01282	Sales Order No.	Quantity	DueDate
BOM Reference	20602/1			
BOM Description	ABCA2 220-240 VOLTS (E)			
Qty Required	1.000			
Qty Outstanding	1.000			
Manuf.Instructions				
Works Order Notes				

Build 1N 18/6/22

Drawings

Reference/Description	Valid From	ValidTo	Revision Number	Date

Required By

Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	20101 Standard Source Assy	1.000	0.000	0.000	1.000	MARKS OFFICE Each
20.00	20301 Standard Collector Assy	1.000	0.000	0.000	1.000	MARKS OFFICE Each
30.00	41903 Three channel 100M/5G/5G amp assy	1.000	0.000	0.000	1.000	D-U1 Each
40.00	70101/12 20-22 Source Cable	1.000	0.000	0.000	1.000	B-H1 Each
50.00	70101/13 Standard Head Amp Cable	1.000	0.000	0.000	1.000	B-H1 Each
60.00	SI0006 20-20 Single Pump Flight Tube	1.000	0.000	1.000	1.000	D-Z Each
70.00	SI0022 Capillary Crimp Parts A & B	1.000	0.000	1.000	1.000	B-I4 Each
80.00	SI0048 Magnet Adjusting Screw	3.000	0.000	3.000	3.000	B-I3 Each
90.00	SI0049 Big Magnet Adjusting Foot	1.000	0.000	1.000	1.000	B-I3 Each
100.0(	SI0050 Magnet Foot	2.000	0.000	2.000	2.000	B-I3 Each
110.0(	SI0101 Columax Magnet	1.000	0.000	1.000	1.000	D-V4 Each
120.0(	SI0112 NW10/16 Clamping Ring Stainless Steel - Edwards	1.000	0.000	1.000	1.000	D-Z5 Each
130.0(	SI0113 NW10/16 Adapt/Cent Viton® SS - Edwards	1.000	0.000	1.000	1.000	D-Z5 Each
140.0(	SI0204 Bulkhead Union 1/16 SS	3.000	0.000	3.000	3.000	B-J7 Each

150.0(	SI0344 2P red illum round rocker swithc, 10A	3.000	0.000	3.000	3.000	B-H5 Each
160.0(	SI0346 SPCO Plug-in Power Relay, 10A 24V DC Coil	1.000	0.000	1.000	1.000	B-H3 Each
170.0(	SI0347 DIN Rail Socket For SPCO G2R-1 Relay	1.000	0.000	1.000	1.000	B-H3 Each
180.0(	SI0355 DPCO Plug-in Relay, 10A 24V DC Coil	1.000	0.000	1.000	1.000	B-H3 Each
190.0(	SI0373 34 Way IDC Header DIN Rail Terminal	1.000	0.000	1.000	1.000	B-H9 Each
200.0(	SI0374 Connector,Terminal,Screw,Single Pole,Interlocking,Tab/Tab	4.000	0.000	4.000	4.000	B-H6 Each
210.0(	SI0375 Connector,Terminal,Screw,Single Pole,Interlocking, End Plate	2.000	0.000	2.000	2.000	B-H6 Each
220.0(	SI0376 DIN/Surface Socket For 6A DPCO Relay	1.000	0.000	1.000	1.000	B-H3 Each
230.0(	SI0385 25 Way Machine Cont Straight D Skt, 750Vac	1.000	0.000	1.000	1.000	D-X4 Each
240.0(	SI0388 9 Way Machine Cont Straight D Skt, 750Vac	1.000	0.000	1.000	1.000	D-X4 Each
250.0(	SI0508 TIS DIN Rail Univ Input SMPSU 24V 300W	1.000	0.000	1.000	1.000	B-H9 Each
260.0(	SI0534 3307 Telescopic Slide 457mm L 483mm	1.000	0.000	1.000	1.000	B-H9 Each
270.0(	SI0570 15 way Solder Contact ZD skt 5A 1000 Vac	2.000	0.000	2.000	2.000	D-X4 Each
280.0(	SI0630 Axial fan finger guard 80Hx80Wmm	7.000	0.000	7.000	7.000	B-H7 Each
290.0(	SI0631 9 Way D Hood	1.000	0.000	1.000	1.000	D-X4 Each
300.0(	SI0632 15 Way D Hood	1.000	0.000	1.000	1.000	D-X4 Each
310.0(	SI0687 1/8" PTFE Ferrules - Blank	1.000	0.000	1.000	1.000	B-J5 Each
320.0(	SI0697 MOVPT-1-50 Pneumatic Valve	1.000	0.000	1.000	1.000	B-K3 Each
330.0(	SI0703 1/8-1/16" PTFE Reducing Ferrule	1.000	0.000	1.000	1.000	B-J5 Each
340.0(	SI0756 Connector, Crimp Terminal, Adaptor, Male-Male	10.000	0.000	10.000	10.000	D-W1 Each
350.0(	SI0762 PSR16-16 PTFE Sealing Rings Pk/20	0.200	0.000	0.200	0.200	B-J6 Each

360.0(	SI0777 Spacer,circular,Nylon,M4,tapped/studded,25mm	4.000	0.000	4.000	4.000	D-W3 Each
370.0(	SI0793 Fan,axial,DC,80mm sqx15mm,3000rpm,53.0cu.m/h 24V	7.000	0.000	7.000	7.000	B-H7 Each
380.0(	SI0895 Blue Cat5e UTP patch lead, 2m	1.000	0.000	1.000	1.000	B-H1 Each
390.0(	SI0900 25 Way D Hood	1.000	0.000	1.000	1.000	D-X4 Each
400.0(	SI0903 I.E.C Socket Mount	1.000	0.000	1.000	1.000	B-H5 Each
410.0(	SI0960 IEC Cord - Plug	1.000	0.000	1.000	1.000	B-I2 Each
420.0(	SI0961 IRMS Electronics, basic unit plus Clk/Handshake PCB	1.000	0.000	1.000	1.000	D-V3 Each
430.0(	SI1004 Right-Angled Bracket 25mm	1.000	0.000	1.000	1.000	D-W3 Each
440.0(	SI1241 Solenoid Valve.3-Port.	1.000	0.000	1.000	1.000	B-J4 Each
450.0(	SI1244 Seal Kit	1.000	0.000	1.000	1.000	B-J3 Each
460.0(	SI1245 SOL Cable	1.000	0.000	1.000	1.000	B-J3 Each
470.0(	SI1246 2-Station Manifold - M5	1.000	0.000	1.000	1.000	B-J2 Each
480.0(	SI1255 M5 Plug	1.000	0.000	1.000	1.000	B-J3 Each
490.0(	SI1328 FN9222 Screw mount inlet filter, 15A	1.000	0.000	1.000	1.000	B-H4 Each
500.0(	SI1329 RPS-60 Series SMPSU, 24V 2.5A	1.000	0.000	1.000	1.000	B-H5 Each
510.0(	SI1330 Cover kit for 2x4inch power supplies	1.000	0.000	1.000	1.000	B-H5 Each
520.0(	SI1331 Connector kit, VHR-3N,VHR-4N,BVH-21T-P1.1	1.000	0.000	1.000	1.000	B-H5 Each
530.0(	SI1344 IEC connector retaining clamp kit, KT0006	2.000	0.000	2.000	2.000	B-H4 Each
540.0(	SI1364 SOSS 101 Invisible Hinge 43x10mm	2.000	0.000	2.000	2.000	B-H8 Each
550.0(	SI1375 Anti surge T HBC min fuse,3.15A 5x20mm	1.000	0.000	1.000	1.000	B-K7 Each
560.0(	SI1418 Metal EMC screen filter, 80Hx80Wmm	3.000	0.000	3.000	3.000	B-H7 Each

570.0(	SI1478 Double Flange	1.000	0.000	1.000	1.000	B-H8 Each
580.0(	SI1482 34 Way IDC Bump Polarised Socket, 1A	1.000	0.000	1.000	1.000	D-X4 Each
590.0(	SI1548 Anti surge T LBC min fuse, 4A 5x20mm	1.000	0.000	1.000	1.000	B-K7 Each
600.0(	SI1579 Door Pin	1.000	0.000	1.000	1.000	B-H8 Each
610.0(	SI1580 Source Block Stud	2.000	0.000	2.000	2.000	D-U2 Each
620.0(	SI1594 15 Way D Plate	1.000	0.000	1.000	1.000	D-U3 Each
630.0(	SI1595 37 Way D Plate	1.000	0.000	1.000	1.000	D-U3 Each
640.0(	SI1693 Non Magnetic Catch	1.000	0.000	1.000	1.000	B-H8 Each
650.0(	SI1743 ABCA 2 Cabinet	1.000	0.000	1.000	1.000	B Each
660.0(	SI1758 ABCA 2 FLIGHT TUBE BASE	1.000	0.000	1.000	1.000	D-Z Each
670.0(	SI1759 ABCA 2 MAGNET BASE	1.000	0.000	1.000	1.000	D-Z Each
680.0(	SI1792 Jack Screw Mounting Kit	1.000	0.000	1.000	1.000	D-X4 Each
690.0(	SI1793 37 Way IDC D Hood	1.000	0.000	0.000	1.000	D-X4 Each
700.0(	SI1794 37 Way IDC D Socket - Metal	1.000	0.000	1.000	1.000	D-X4 Each
710.0(	SI1795 37 Way IDC D Plug - Metal	1.000	0.000	1.000	1.000	D-X4 Each
720.0(	SI1821 3 Port valve	1.000	0.000	1.000	1.000	B-J3 Each
740.0(	SI1899 1/16 x M5 Fitting	4.000	0.000	4.000	4.000	B-J6 Each
750.0(	SI1900 Dowty Seal - M5	4.000	0.000	4.000	4.000	B-J6 Each
760.0(	SI1919 Power cord C13 bottom angle one end 2m	1.000	0.000	1.000	1.000	B-I2 Each
770.0(	SI2288 Internal USB 4.5m	1.000	0.000	1.000	1.000	B-H2 Each
780.0(	SI2289 Oil Mist Eliminator	1.000	0.000	1.000	1.000	D-Z6 Each

790.0(	SI2294 NW10 x 3/8" Bsp Adapter	1.000	0.000	1.000	1.000	D-Z5 Each
800.0(	SI2304 Screwdriver bayonetcap fuseholder 5x20mm	2.000	0.000	2.000	2.000	B-H6 Each
810.0(	SI2411 Split cable gland	1.000	0.000	1.000	1.000	B-H2 Each
820.0(	SI2412 Quick Insert Pk 10	1.000	0.000	1.000	1.000	B-H2 Each
840.0(	SI2477 ABCA2 Door Graphic	1.000	0.000	1.000	1.000	C Each
830.0(	SI2512 3 Metre UK 13 amp Fused plug to IEC C 13	1.000	0.000	0.000	1.000	B-I1 Each
730.0(	SI2662 nEXT85 ABCA KIT	1.000	0.000	0.000	1.000	D-Z Each

41903- heel amp

70101|12 -
13

20301-

Batch Picking List

Works Order Number	WO01285	Sales Order No.	Quantity	DueDate
BOM Reference	41903			
BOM Description	Three channel 100M/5G/5G amp assy			
Qty Required	1.000			
Qty Outstanding	1.000			
Manuf.Instructions				
Works Order Notes				

Drawings

Reference/Description	Valid From	ValidTo	Revision Number	Date

Required By

Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
20.00	SI0035 Feedthru' Connector	4.000	0.000	4.000	4.000	D-X6 Each
30.00	SI1599 Brass Clip	4.000	0.000	4.000	4.000	D-X Each
40.00	SI1802 M3x8mm Hex Spacer	0.000	0.000	0.000	0.000	B-H2 Each
50.00	SI2235 Head Amp Plate Blank	1.000	0.000	1.000	1.000	D-U1 Each
60.00	SI2237 Head amp Cover	1.000	0.000	1.000	1.000	D-U1 Each
70.00	SI2253 Brass F-F threaded hex spacer, M3x40mm	0.000	0.000	0.000	0.000	B-H2 Each
80.00	SI2260 15 way IDC DIN41652 class2 D plug	0.000	0.000	0.000	0.000	B-H2 Each
90.00	SI2261 15 way IDC DIN41652 class2 D socket	0.000	0.000	0.000	0.000	B-H2 Each
10.00	SI2526 Three channel 100M/5G/5G amp pcb	1.000	0.000	1.000	1.000	D-U1 Each

Batch Picking List

Works Order Number	WO01286	Sales Order No.	Quantity	DueDate
BOM Reference	70101/12			
BOM Description	20-22 Source Cable			
Qty Required	1.000			
Qty Outstanding	1.000			
Manuf.Instructions				
Works Order Notes				

Drawings

Reference/Description	Valid From	ValidTo	Revision Number	Date

Required By

Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	SI1127 Plug Housing, 9way	1.000	0.000	1.000	1.000	D-U2 Each
20.00	SI1128 Strain Relief, 9way	2.000	0.000	2.000	2.000	D-U2 Each
30.00	SI1157 Cable for Source	0.000	0.000	0.000	0.000	D Each
40.00	SI1334 Crimp pin, mate-n-lok Pk/100	0.000	0.000	0.000	0.000	D-W2 Each
50.00	SI1476 Feedthrough Boss	1.000	0.000	1.000	1.000	D-U2 Each
60.00	SI1477 FeedThrough Boss Cover	1.000	0.000	1.000	1.000	D-U2 Each
70.00	SI1599 Brass Clip	9.000	0.000	9.000	9.000	D-X Each

Batch Picking List

Works Order Number	WO01287	Sales Order No.	Quantity	DueDate
BOM Reference	70101/13			
BOM Description	Standard Head Amp Cable			
Qty Required	1.000			
Qty Outstanding	1.000			
Manuf.Instructions	To be used on HD cable for 20/22.1 METER LONG ABCA/2 2 METERS LONG. INTEGRA/2 1.2 METERS LONG.			
Works Order Notes	To be used on HD cable for 20/22.1 METER LONG ABCA/2 2 METERS LONG. INTEGRA/2 1.2 METERS LONG.			

Drawings

Reference/Description	Valid From	ValidTo	Revision Number	Date

Required By

Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	SI0567 15 Way Solder Contact ZD Plug 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each
20.00	SI0570 15 way Solder Contact ZD skt 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each
30.00	SI0632 15 Way D Hood	2.000	0.000	2.000	2.000	D-X4 Each
40.00	SI2439 6 Pair Twisted Pair Industrial Cable	0.000	0.000	0.000	0.000	 Each

S12662 - ABLA kit

SL2

2154S

IN257
Harry

ate: 18/06/2021
ime: 10:43:36

Sercon Limited

Batch Picking List

Works Order Number	WO01289
BOM Reference	20602
BOM Description	ABCA2 SYSTEM
Qty Required	1.000
Qty Outstanding	1.000
Manuf.Instructions	
Works Order Notes	

Sales Order No. **Quantity** **DueDate**

Raised IN 18/6/21

Drawings

Reference/Description	Valid From	ValidTo	Revision Number	Date

Required By

Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	10502/1 ABCA2 Sercon XYZ Autosampler	1.000	0.000	1.000	1.000	D Each
20.00	10602 ABCA 2 GAS BOX	1.000	0.000	1.000	1.000	D Each
30.00	20602/1 ABCA2 220-240 VOLTS	1.000	0.000	1.000	1.000	 Each
40.00	70101-1 ABCA2 spares kit (supp. with ABCA2)	1.000	0.000	1.000	1.000	Z Each
50.00	SI0155 Windows 7 based data system	1.000	0.000	1.000	1.000	 Each
70.00	SI2351 4 Port PCI Express (PCIe) SuperSpeed USB 3.0 Card Adapter	1.000	0.000	1.000	1.000	 Each
90.00	SI2391 PC Monitor	1.000	0.000	1.000	1.000	 Each

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7: ASSEMBLY AND TEST RECORD

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

PRODUCT: ABCA2 GAS BOX

SERIAL NUMBER: 10602/2021/1257

ASSEMBLED: (Name) [signature] Date: 9/6/21

PRE-TEST INSPECTION: (Production name) P. Hayes Date: 9/6/21

PRE-TEST INSPECTION: (Test name) [signature] Date: 09-JUN-21

SYSTEM TEST: (Name) [signature] Date: 22-JUN-21

PRE-DESPATCH INSPECTION: (Name) P. Hayes Date: 23/6/21

P.A.T. Test results

In compliance with Low Voltage directive 73/23/EEC
To Low Voltage standard EN61010 – 1:1993

Earth Continuity _____ Ω

Insulation _____ MΩ

Earth Leakage Current _____ mA. @ _____ kVA.

Tested by: _____

Date: _____

Batch Picking List

Works Order Number	WO01283	Sales Order No.	Quantity	DueDate
BOM Reference	10602			
BOM Description	ABCA2 GAS BOX			
Qty Required	1.000			
Qty Outstanding	1.000			
Manuf.Instructions				
Works Order Notes				

Rec'd IW 18/6/21

Drawings

Reference/Description	Valid From	ValidTo	Revision Number	Date

Required By

Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	SC2463 10ml Gas Tight Syringe	1.000	0.000	1.000	1.000	B-K3 Each
20.00	SI0022 Capillary Crimp Parts A & B	2.000	0.000	2.000	2.000	B-I4 Each
30.00	SI0060 Piston	1.000	0.000	1.000	1.000	B-K2 Each
40.00	SI0070 Syringe Adaptor	1.000	0.000	1.000	1.000	B-K2 Each
50.00	SI0071 Syringe Coupling	1.000	0.000	1.000	1.000	B-K2 Each
60.00	SI0196 Reducing Union 1/4 OD x 1/16 OD SS	2.000	0.000	2.000	2.000	B-J7 Each
70.00	SI0198 Tee Union 1/16 SS	3.000	0.000	3.000	3.000	B-J7 Each
80.00	SI0199 Male Connector 1/16 OD x 1/8 NPTM SS	8.000	0.000	8.000	8.000	B-J7 Each
90.00	SI0204 Bulkhead Union 1/16 SS	4.000	0.000	4.000	4.000	B-J7 Each
100.0(	SI0205 Bulkhead Union 1/8 SS	2.000	0.000	2.000	2.000	B-J7 Each
110.0(	SI0366 Flow Meter AWM3100V	1.000	0.000	1.000	1.000	B-J3 Each
120.0(	SI0567 15 Way Solder Contact ZD Plug 5A 400 Vac	2.000	0.000	2.000	2.000	D-X4 Each
130.0(	SI0568 37 Way Solder Contact ZD Plug , 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each
140.0(	SI0570 15 way Solder Contact ZD skt 5A 400 Vac	1.000	0.000	1.000	1.000	D-X4 Each

150.0(	SI0632 15 Way D Hood	2.000	0.000	2.000	2.000	D-X4 Each
160.0(	SI0648 M3x13mm Nylon Pillar Male-Female,	2.000	0.000	2.000	2.000	D-W3 Each
170.0(	SI0701 PTFE Ferrules 1/4" (RE21128/214400)	2.000	0.000	2.000	2.000	B-J7 Each
180.0(	SI0703 1/8-1/16" PTFE Reducing Ferrule	4.000	0.000	4.000	4.000	B-J5 Each
190.0(	SI0767 6 Way VALCO	1.000	0.000	1.000	1.000	B-K6 Each
200.0(	SI0837 Perma Pure Dryer	1.000	0.000	1.000	1.000	B-K3 Each
210.0(	SI0883 M3x30mm Nylon Spacers Male-Female Pk/50	0.100	0.000	0.100	0.100	D-W3 Each
220.0(	SI0926 0/60 psi Gauge	2.000	0.000	2.000	2.000	B-K3 Each
230.0(	SI1043 Black steel spring clip, 5/8in	4.000	0.000	4.000	4.000	D-W3 Each
240.0(	SI1052 3 Way MOLEX Clip	1.000	0.000	1.000	1.000	B-J2 Each
250.0(	SI1186A O-Ring Seals for Syringe Plunger Pk/1	1.000	0.000	1.000	1.000	B-K3 Each
260.0(	SI1187A Syringe Block O-Ring (for Gas Box) Pk/1	1.000	0.000	1.000	1.000	B-K3 Each
270.0(	SI1242 2 Way Solenoid Valve	3.000	0.000	3.000	3.000	B-J4 Each
280.0(	SI1245 Cable for mini solenoid valve	4.000	0.000	4.000	4.000	B-J3 Each
290.0(	SI1251 Solenoid Valve (Autosampler)	2.000	0.000	2.000	2.000	B-J3 Each
300.0(	SI1535 1 Way Ref Gas Manifold	2.000	0.000	2.000	2.000	B-J2 Each
310.0(	SI1603 Bulkhead fitting 4 to 1/8	1.000	0.000	1.000	1.000	B-K5 Each
320.0(	SI1604 Male Conn 1/8-UNI 1/8	1.000	0.000	1.000	1.000	B-K5 Each
330.0(	SI1720 Speed Controller 1/8-4mm Tube	2.000	0.000	2.000	2.000	B-K5 Each
340.0(	SI1756 Gas Box Assy	1.000	0.000	1.000	1.000	C Each
350.0(	SI1774 1/8 Female Coupling BSP	2.000	0.000	2.000	2.000	B-J9 Each

360.0(	SI1784 4mm Y Fitting	1.000	0.000	1.000	1.000	B-K5 Each
370.0(	SI1792 3342-2 jack screw mounting kit	2.000	0.000	2.000	2.000	D-X4 Each
380.0(	SI1793 37 way IDC flat cable plastic D backshell	2.000	0.000	0.000	2.000	D-X4 Each
390.0(	SI1794 37 way IDC class 2 metal shell D socket	1.000	0.000	1.000	1.000	D-X4 Each
400.0(	SI1795 37 way IDC class 2 metal shell D plug	1.000	0.000	1.000	1.000	D-X4 Each
410.0(	SI1821 3 Port valve	2.000	0.000	2.000	2.000	B-J3 Each
420.0(	SI1829 Metal spacer M4x20mm	2.000	0.000	2.000	2.000	D-W3 Each
430.0(	SI1899 1/16 x M5 Fitting	14.000	0.000	14.000	14.000	B-J6 Each
440.0(	SI1900 Dowty Seal - M5	14.000	0.000	14.000	14.000	B-J6 Each
450.0(	SI2078 Right Angle Bracket	1.000	0.000	1.000	1.000	D-W3 Each
460.0(	SI2244 Male Elbow 4mm to M5	8.000	0.000	8.000	8.000	B-K4 Each
470.0(	SI2296 Precision Flow Control	2.000	0.000	2.000	2.000	B-J4 Each
480.0(	SI2307 60 psi Regulator	2.000	0.000	2.000	2.000	B-J4 Each
490.0(	SI2329 Double acting roundline cylinder, 20x25mm	1.000	0.000	1.000	1.000	B-K2 Each
500.0(	SI2330 Rear clevis for 20/25mm cylinder	1.000	0.000	1.000	1.000	B-K2 Each
510.0(	SI2542 ABCA2 HayeSep Q 60-80 mesh Packed Column - Fast Run Ti	1.000	0.000	1.000	1.000	A-D2 Each

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Company Registration No. 4290072 Vat No. 771 1100 74

7: ASSEMBLY AND TEST RECORD

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

PRODUCT: ABCA2 XY2 AUTOSAMPLER

SERIAL NUMBER: 032011A7400HR

ASSEMBLED: (Name) P. Hayes Date: 9/6/21

PRE-TEST INSPECTION: (Production name) [signature] Date: 9/6/21

PRE-TEST INSPECTION: (Test name) [signature] Date: 09-JUN-21

SYSTEM TEST: (Name) [signature] Date: 22-JUN-21

PRE-DESPATCH INSPECTION: (Name) P. Hayes Date: 23/6/21

P.A.T. Test results

In compliance with Low Voltage directive 73/23/EEC
To Low Voltage standard EN61010 – 1:1993

Earth Continuity _____ Ω

Insulation _____ MΩ

Earth Leakage Current _____ mA. @ _____ kVA.

Tested by: _____

Date: _____

Batch Picking List

Works Order Number	WO01284
BOM Reference	10502/1
BOM Description	ABCA2 XYZ AUTOSAMPLER
Qty Required	1.000
Qty Outstanding	1.000
Manuf.Instructions	
Works Order Notes	

Sales Order No. Quantity DueDate

Build in 18/6/21

Drawings

Reference/Description	Valid From	ValidTo	Revision Number	Date

Required By

Works Order No.	BOM Reference	Quantity

Seq	Product Code	Qty Required	Qty Allocated	Qty Issued	To Issue	Bin Location/UOM
10.00	SI0708 SSUE 16/16 Stainless Steel Union	1.000	0.000	1.000	1.000	B-J9 Each
20.00	SI0762 PSR16-16 PTFE Sealing Rings Pk/20	0.100	0.000	0.100	0.100	B-J6 Each
30.00	SI1718 ASX-7400HR SerCon version autosampler	1.000	0.000	0.000	1.000	C Each
40.00	SI1730 ABCA CTAC Needle	1.000	0.000	1.000	1.000	A-G1 Each
50.00	SI1768 ABCA 2 CTAC Base	1.000	0.000	1.000	1.000	D-V2 Each
60.00	SI1770 ABCA 2 CTAC Tube Racks	5.000	0.000	5.000	5.000	D-V2 Each
70.00	SI1788 Tubing Tamers ($15)	2.000	0.000	2.000	2.000	B-I4 Each
80.00	SI2351 4 Port PCI Express (PCIe) SuperSpeed USB 3.0 Card Adapter	1.000	0.000	0.000	1.000	 Each

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Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

☐ 1 QUOTATION

☐ 2 CUSTOMER ORDER

☐ 3 MACHINE SPECIFICATION DOCUMENT_S023_v11

☐ 4 LOG SHEET_S028_v3

☐ 5 FAULT REPORTING DOCUMENT_S029_v3

☐ 6 TEST ACCEPTANCE SPECIFICATION_S031_v6

☐ 7 ASSEMBLY AND TEST RECORD_S023_v5

☐ 8 SERIAL NUMBER FORM_S053_v4

☐ 9 TEST DATA

☐ 10 PACKING LIST_ S080b_v3

☐ 11 INSTALLATION REPORT_S084_v3

ADDITIONAL:

Payment Terms:
50% / 40% / 10%
Other: please specify

_____

Penalty Clause **Yes / No**
Please specify: _____

Blue Book Completion:

Signed		Date	
Verified		Date	

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14023

Quotation

To: Scientex Pty Ltd
Unit 2, 26 Ellingworth Parade
Box Hill 3128
Victoria
Australia

VAT No.

Quotation Date:	04/02/2020
Quotation Reference:	14023
Customer Ref:	Royal Adelaide W&C
Account Ref.	SCI002
Quotation Validity:	04/05/2020

Quantity	Product Code	Product Description	Unit Price £	Discount £	Net Price £
		AGENTS PRICES Customer: Royal Adelaide W&C			
1	20602	Complete Sercon ABCA2 system High performance, high sample throughput IRMS for 13C breath tests. Including 240 place XYZ autosampler and gas box. Includes 70101-1 - ABCA2 spares kit - filament, copper gaskets, source tool kit, pump oil, 100 12 ml Exetainer vials, tubing and needle. Inlcuding Windows based PC and printer	49,000.00	4,900.00	44,100.00 ✓
1	SI1767	CVL505 - Barcode Reader Bar code reader for error free sample loading, secure patient identification and GLP compliance.	1,190.00	119.00	1,071.00 ✗
1,000	SC9973	^{13}C-Urea breath test kit for Helicobacter Pylori infection	13.00	1,300.00	11,700.00 ✗
1	WARR	1 year warranty	0.00	0.00	0.00
1	INST	Installation and start up training at Customer's site	9,500.00	0.00	9,500.00 ?
1	CIP	Estimated CIP - Destination Airport	2,500.00	0.00	2,500.00 ✗
		** DISCOUNT FOR TRADE IN OF OLD FLIGHT TUBE -£1,000 ** ✓			

This quotation is issued in		Pound Sterling
Total Net Amount	£	68,871.00
Total VAT Amount	£	0.00
Order Total	£	68,871.00

*** The price quoted does not include any local taxes or duties**
See separate document for terms and conditions

Payment Details:-
50% with order, 40% on delivery and 10% installation
Payment is required within 30 DAYS of invoice date by bank transfer.
All bank transfer charges are the responsibility of the customer.

Sercon Bank Details:-
National Westminster Bank, 36 High Street,
Nantwich, Cheshire CW5 5GA U.K.

Sterling:	IBAN: GB74NWBK54101736755133
Euro:	IBAN: GB14NWBK60721013806831
US Dollar:	IBAN: GB94NWBK60730113806556
BIC:	NWBKGB2LXXX

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3 - MACHINE SPECIFICATION

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

Ref No.	Product Description	Required
HS2022 (continuous flow)		
20402/1	HS2022 Ref Gas + P Mag	
20402/2	HS2022 Ref Gas + E-Mag	
20402/3	HS2022 Ref Gas + Hd Collector + E-Mag	
20402/4	HS2022 Ref Gas + Hd Collector+E-Mag+Trap Loop	
20501	Hd Collector Assy ***	
50101/2	Trapping Loop Assy	
70201-1	*70201-1 Analyser spares kit – Included*	
EA Units		
10202/11	iso-EArth	
10202/13	iso-EArth+	
10202/14	iso-Earth HT Furnace Upgrade	
10202/15	Iso-Earth (Without Autosampler)	
11802/1	Earth+PC	
11802/2	EArth+Clarity+PC	
70501-1	*Consumables for C and N for Combustion Only*	
70501-11	*Simultaneous CNS Consumables Kit (approx. 10000 analysis)*	
70501-3	*Sample Prep Kit (Inc.)*	
70501-4	*GSL Combustion and Gas C & N Start Up Kit*	
70501-5	*Simultaneous NCS Consumables Kit*	
70501-6	*C&N Combustion Only Consumables Kit (approx. 5000 samples)*	
70501-8	*Simultaneous CNS Consumables Kit (approx. 5000 samples)*	
70601-1	*Sulphur Start Up Kit (Inc. with Sercon EA Systems)*	
70601-2	*Sulphur Consumables Kit for 1000 Samples*	
70601-4	*Sulphur Consumables Kit (approx. 5000 Samples)*	
70801-2	*Pyrolysis Consumables Kit-Low temp for Solids*	
71701-1	*Sub Microgram Nitrogen Analysis Start Up Kit*	
SI2040	*PN150 Pneumatic Autosampler with one no.50 pos, carousel*	
SI2345	ME Micro Balance	
SI2737/A	Sercon 50 Position Autosampler Assy	
SI2789	Extra 50 Position Carousel	
SI2744	Automatic Liquid Sampler 15 Position	
SI2743	Liquid Sampler Mounting Plate	
Headspace Equilibration		
10202/10	XYZ Gas Sampling Control Box	
10302/1	Aqua System	
11103	µCarbs for CF	
11103-1	µCarbs for DI	
11601	200 Place Dual Heated Block 240 Volt	
11801	Sercon XYZ Gas Autosampler	
71107-1	*CF oxygen-18 equilibration kit*	
71107-2	*DI Oxygen-18 Equilibration kit*	
71201-1	*CF deuterium equilibration kit*	
71201-2	*DI Deuterium Equilibration kit*	
71801-1	*WES-DI start up kit (Inc. with WES-DI)*	
GC Units		
10402/2	Orchid module 1500C (Will run Hd 70901-1 C Spares Kit Inc)	
10901	Nitrogen Option (71301-1 N Spares kit Included)	
HP7890/1	Agilent 7890B GC System	
HP7890/2	Agilent 7890B GC with Auto Injector	
HP7890/3	Agilent 7890B GC + Auto Injector + 150 Vial Sample Tray	
SI2561	Nexis GC 2010 Plus	

*** When ordered alone IN no. / Blue book **NOT** required

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3 - MACHINE SPECIFICATION

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

Ref No.	Product Description	Required
GC Units *continued*		
SI2564	Nexis GC-2030	
70901-3	*GC Pyrolysis H and O Start Up Kit*	
70901-4	*GC Pyrolysis H Spares Kit*	
70901-5	*GC Combustion C Spares Kit (approx. 5000 samples)*	
70901-6	*GC Pyrolysis h Start Up Kit (approx. 5000 samples)*	
71301-1	*GC N Spares kit*	
ABCA2 Units		
10502/1	ABCA2 Sercon XYZ Autosampler	
10602	ABCA2 Gas Box	
20602	Complete Sercon ABCA2 system	Y
20603	ABCA IR Analyser	
70101-1	*ABCA2 spares kit (Inc.With ABCA2)*	Y
70101-2	*ABCA2 Spares Kit for AB Analitica Systems*	
70101-3	*ABCA2 Autosampler Upgrade Kit*	
SI1767	*CVL505 – Barcode Reader*	
SC9973	*13C Urea breath test kit for Helicobacter pylori infection*	
SC9974	*Helicobacter Test kit for children age 3-11 (45mg)*	
Integra2 Units		
20802/4	Integra2	
70201-2	*Integra2 analyser spares kit - Included*	
70401-1	*Integra-2 consumables (Inc. With Integra2)*	
Trace Gas Systems		
10802/4	CryoPrep	
10802/5	Automated LN refiller	
10802/6	CryoFlex (TOC)	
10802/7	CryoGas	
10802/8	CryoFlex (LA)	
SI2533	Silicon Carbide Vertical Furnace	
SI2731	213nm Laser Ablation System	
SI2733	isoScell 100 sampler chamber	
71001-1	*Cryoprep Spares Kit*	
71001-5	*CryoGas Consumables Kit*	
TOC Units		
14001	Thermalox Environmental TOC-IRMS	
14002	Thermalox Environmental TOC-Standalone	
14003	Thermalox Environmental TOC-Standalone No Sampler	
SI2772	CO2 Detector, High sensitivity Option	
SI2773	NOx detector Option	
SI2774	Vacuum pump Option	
SI2775	Stirred Vial rack Option	
72101-1	TOC Start Up Kit	
72101-2	TOC Chem Pack	
72101-3	TOC & TN Instrument with heavy usage - one year	
72101-4	TOC only - economy holding	
GEO 20-22 (dual inlet)		
10702	GEO 20-22 Water Equilibration System (D & 18O)	
21802/1	GEO 20-22	
21802/2	GEO 20-22 + E-Mag	

*** When ordered alone IN no. / Blue book **NOT** required

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3 - MACHINE SPECIFICATION

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

21802/3	GEO 20-22 + E-Mag +Hd	
21802/4	GEO 20-22 Inlet	
70301-1	*GEO start up kit - Included*	
70301-3E	*Comprehensive GEO 20-22 spares kit for 5 years operation*	
HT-EA		
11501/4	HT-EA (With Autosampler)	
11501/5	HT-EA With Liquid Option	
11501/6	HT-EA Stand Alone	
11501/7	HT-EA (Without Autosampler)	
SI2622	CTC PAL3-LSI-L-S	
SI2624	CTC PAL3-Kit-Standalone	
70801-1	*Pyrolysis Consumables Kit-High Temp for Solids*	
71501-1	*HT-EA Pyrolysis Start Up kit O and H*	
71501-2	*HT-EA Pyrolysis Kit for Water injections*	
71501-3	*HT-EA Sensitivity Start Up Kit for O & H in small samples*	
71501-4	*HT-EA Sensitivity Consumables Kit for O & H in small samples*	
71501-5	*HT-EA Sensitivity Kit for O&H in Small Samples (5000 samples)*	
71501-7	*HT-EA Kit for Room Temp Equilibration*	
71501-8	*HT-EA Pyrolysis Kit for Water injections (approx.1 year kit)*	

Ref No.	Product Description	Required
Upgrades		
12101	Evacuation System ***	
12102	2 Ref Gas+ Dilutor Box ***	
20101	Standard Source Assy ***	
20102	HS Source Assy ***	
20301	Standard Collector Assy ***	
30202/1	System Control Upgrade (Pmag) installation not included	Edwards Or Pfeiffer
30202/2	System Controller Upgrade (Emag) installation not included	Edwards Or Pfeiffer
10202/7	Preparation PCB Upgrade	
30202/3	Hijack Box ***	
30302/4	nEXT85 Edwards Pumping System Upgrade Single - installation not included	
30302/5	nEXT85 Edwards Pumping System Upgrade Dual - installation not included	
30302/6	nEXT85 Edwards Pumping System Upgrade Triple- installation not included	
SI2542	ABCA2 Upgrade Kit	
CALLISTOW	Callisto software upgrade ***	
Specials		
11702	LC-I interface	
12202	Leco Interface Unit	
SI2320	Agilent 1260 Series Refractive Index Detection HPLC System	
71401-1	*ABCA-G Start Up/Spares Kit*	
71401-2	*ABCA-G Equilibration Spares Kit - Room temp O only*	
71401-3	*ABCA-G Equilibration Spares Kit - Room Temp O & H*	
71601-1	*LC Interface Spares Kit*	
ADDITIONS		
PC	Windows 7 based PC System with Callisto Software	Y
Printer	Printer	
INST1	Installation and start up training at customer's site by **Sercon** Engineer	TBC
INST2	Installation and start up training at customer's site by **Agents** Engineer	
WARR	1 year warranty	Y
WARR2	2 year warranty	
TRAIN	Training in UK for one person for 3 days	
SCONTRACT	Maintenance Service Contract – 1 year	

*** When ordered alone IN no. / Blue book **NOT** required

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Company Registration No. 4290072 Vat No. 771 1100 74

3 - MACHINE SPECIFICATION

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

SPECIFICATION REQUIREMENTS		
Voltage	230 Volts 50/60Hrzs	Y
Plug Type	SI2510 3 Metre USA/Japan plug to IEC C 13	
	SI2511 2.5 Metre Australian plug to IEC C 13	Y
	SI2512 3 Metre UK 13 amp Fused plug to IEC C 13	
	SI2523 3metre Schuko (Euro) Plug to IEC C13 Socket	
	SI2514 2.5 metre Chinese mains to IEC C13	
Pallet	Stamped for export heat treated for 30 min @ 56 °C	Y
	Complies with all Export Requirements	

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Job Number:	IN1257	Date:	06/05/2021

SPECIAL REQUIREMENTS (DETAILED SPECIFICATION)
System will be sent out and kept at the customer's site a separate order for the installation will be sent at a later date.
Old flight tube to be returned to Sercon at Scientex coast

Approved by Sales: *G Armstrong*	Date:07/06/2021
Approved by Tech.: *M O'Connor*	Date: 07/06/2021

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3 - MACHINE SPECIFICATION

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Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

No.	ACTIONS FROM MEETING	ACTIONEE	RESPONSE

Scientex Pty Ltd
ACN 006 697 310 ABN 18 006 697 310
2/26 Ellingworth Parade,
BOX HILL 3128
(P.O. Box 1378, DONCASTER EAST 3109),
Vic., AUSTRALIA
Tel. +61 3 9899 6100
e-mail: accounts@scientex.com.au

6 May 2021

Order Number:- SCN21/210506

PURCHASE ORDER

SUPPLIER
Sercon Limited
Unit 3B Crewe Trade Park
Gateway, Crewe
Cheshire, CW1 6JT
UK

DELIVER TO
Scientex Pty Ltd
C/o SA BIOMEDICAL ENGINEERING
ZONE C, LG, GFB, 72 KING WILLIAM RD
WCH SA BME
NORTH ADELAIDE, SA, 5006, Australia
GLN:9337722089749

ITEM	QTY	CAT NO.	DESCRIPTION	UNIT PRICE	TOTAL PRICE
1	1	20602	Complete Sercon ABCA2 system High performance, high sample throughput IRMS for 13C breath tests. Including 240 place XYZ autosampler and gas box. Includes 70101-1 - ABCA2 spares kit - filament, copper gaskets, source tool kit, pump oil, 100 12 ml Exetainer vials, tubing and needle. Inlcuding Windows based PC and printer	44,100.00	**44,100.00**
2	1	Warr	1 year Warranty	0.00	**0.00**
3	1		Discount for trade in of old flight tube	-1,000.00	**-1,000.00**
			Refer Sercon Q 14023 and email from Garry 20/4/21		
		Ancillary item	Not Applicable		
			Total for this Order	**Select Currency**	**43,100.00**
			Incoterms	**FCA**	
			Other Charge (Delete if not applicable)	GBP	

INCOTERMS:
FCA – Free Carrier (named place of delivery), **CIP** – Carriage and Insurance Paid to (named place of destination),
DAP – Delivered at Place (named place of destination)

SCIENTEX

Please Consign Shipment to:

Mr Steve Wetton
Airfreight Worldwide
Unit H, Flaxley Park, Flaxley Way, Stechford,
Birmingham B33 9AN. UK

Tel: 0121 785 4870
Fax: 0121 789 9582
E-mail: info@airfreightworldwide.com
Web: www.airfreightworldwide.com
Company Registration No 2877078

Customs Agent Australia:

Mr Bruno Saico
Diamond Freight Services Pty Ltd
Unit 1, 102 – 104 Logistics Street
TULLAMARINE
VICTORIA, 3043
AUSTRALIA
Tel: +61 3 9335 5023
Fax: +61 3 9335 5026
Email: bruno@diamondfreight.com.au

Signed .....

James Barker

INCOTERMS:

FCA – Free Carrier (named place of delivery), **CIP** – Carriage and Insurance Paid to (named place of destination),
DAP – Delivered at Place (named place of destination)

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4 - LOG SHEET

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

Date	Action Taken	By Whom
9/6/21	UNIT PLACED INTO TEST	PH I.D
"	UNIT P.A.T TESTED OK.	PH.
9/6/21	GAS BOX SET UP AND LEAKED CHECKED	I.D
11/6/21	UNIT LEFT TO PUMP DOWN OVER WEEKEND - SOURCE + COLLECTOR BLANKED OFF.	PH.
14/6/21	UNIT FULLY PUMPED DOWN OVER WEEKEND. SOURCE AND COLLECTOR ADDED.	PH
15/6/21	GOT TO 2.4-8. DAVE H OKAY WITH THAT, SOURCE PIPE ADDED	PH.
17-JUN-21	PEAK SHAPE BAD. WRAPAROUND BENT WRONG ALONG ETCHINGS. UNWRAPPED	CM
18-JUN-21	PEAK SHAPE BETTER BREATH PRECISION 0.20 BUT COULD BE BETTER.	
19-JUN-21	RETUNE - MUCH BETTER	CM
21-JUN-21	PEAK SHAPE, STABICITY REF GAS PRECISION (0.10‰), BREATH PRECISION (0.06‰), IN TUBE PRECISION (0.08‰), LINEARITY (0.20‰) PASS. BACKGROUND SCAN OK, AUTOSAMPLER ALIGNED	CM
22-JUN-21	NEW .EXE PROVIDED BY WAYNE TO ADDRESS ERROR MESSAGE. ODENT IN OFFLINE MODE	CM

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Job Number:	IN1257	Date:	06/05/2021

Date	Action Taken	By Whom

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Job Number:	IN1257	Date:	06/05/2021

Date	Action Taken	By Whom

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Job Number:	IN1257	Date:	06/05/2021

Date	Action Taken	By Whom

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5 - FAULT REPORTING

Client:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021

Fault(s)	Action Taken	By Whom	Total Time Taken to Resolve

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Job Number:	IN1257	Date:	06/05/2021

Fault(s)	Action Taken	By Whom	Total Time Taken to Resolve

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Job Number:	IN1257	Date:	06/05/2021

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Job Number:	IN1257	Date:	06/05/2021

Fault(s)	Action Taken	By Whom	Total Time Taken to Resolve

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6 - ABCA2 TEST / ACCEPTANCE SPECIFICATION

Customer:	Royal Adelaide W&C C/O: Scientex Pty Ltd		
Quotation Number:	14023	Date:	04/02/2020
Job Number:	IN1257	Date:	06/05/2021
Unit Serial Number	20602/1-2021/1257		
Gas Box Serial Number	10602/2021/1257		
Autosampler Serial Number	0320/1A7400HR		

^{13}C				
Ref Gas Injection Precision	100% CO_2 (n=5)	≤0.1‰ 0.10 RECORD VALUE HERE	Test ☑ Sheet 1	Install ☐ Sheet
Ref gas in tubes precision	10ml 5% CO_2 (n=5)	≤0.1‰ 0.08 RECORD VALUE HERE	Test ☑ Sheet 2	Install ☐ Sheet
Breath Precision	Breath in Exetainer (n=5)	≤0.2‰ 0.06 RECORD VALUE HERE	Test ☑ Sheet 3	Install ☐ Sheet
Sensitivity	10ml 5% CO_2 in Exetainer	Major beam 5e-9 with trap of 150 7e-9 RECORD VALUE HERE	Test ☑ Sheet 2	Install ☐ Sheet
Linearity	0.5% - 8.0% CO_2 in Exetainer	≤0.3 ‰ change 0.2 RECORD VALUE HERE	Test ☑ Sheet 4	Install ☐ Sheet
Peak Shape	Beam 1,2 and 2/1	Minimum 5V wide 2/1. Gradient acceptable due to single turbo pump	Test ☑ Sheet 5	Install ☐ Sheet
Stability	2/1 ratio over 600 seconds	Flat, no spikes or variations. Slight gradient acceptable	Test ☑ Sheet 6	Install ☐ Sheet
Software Test	All read backs ☑ Valves function ☑ Autosampler bed ☑ CETAC Firmware Version No.:	N/A	Date: 22-JUN-21	Inital: CM

Flow Meter S/N..CE.125793.. **Leak Detector S/N**..118323.....

Multi-Meter S/N..DVM2.....

Special Tests

Linearity to be better than 0.3‰ and recorded

Sales Signature: .....(Required)	Date: .....
Test Signature: ..... (Completed)	Date: 22-JUN-21
Install Signature: .....(Completed)	Date: .....

Data to be transferred to:
\\CENTRAL-SERVER\CentralFiles\SER_SPREADSHEETS\Instrument Performance Spreadsheet.xls