REVIEWED
By Anne Nord at 12:04 pm, Nov 16, 2021

TS 11/9/2021 CS

Worklist: 5373

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2021-4396	3	UCK	AM 28 Urine Multi-Drug Confirmation Panel 2 by LC-QQ
P2021-3526	1	UCK	AM 28 Urine Multi-Drug Confirmation Panel 2 by LC-QQ
P2021-3615	1	UCK	AM 28 Urine Multi-Drug Confirmation Panel 2 by LC-QQ

REVIEWED
By Anne Nord at 12:04 pm, Nov 16, 2021

TS 11/10/2021

Worklist: 5379

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION	
P2021-3147	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ	
P2021-3396	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ	
P2021-3530	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ	

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AM# 28: Multi-Drug Quantitation by LC-MS/MS

Extraction Date: 11/08/2021
Plate lot#: 210609
Mobile phase A: 5mM Amm Form + 0.01% FA
Blank Blood Lot: Lampire 20L20725
Column: Agilent 120 EC-C18 (2.1x 100-2.7um)
LCMS-QQQ ID: 069901

Analyst: Celena Shrum
Plate Retest Date: 12/09/2021
Mobile phase B: 0.01% Formic Acid in MeOH
Blank Urine Lot: POC031319

Pre-Analytic:

☒ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
☒ 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
☒ 3. Create worklist

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☒ 2. Pipette **250µL blood (calibrated pipette) or 250µL hydrolyzed urine** in wells of analytical (standards) plate. **Pipette ID: #42**
☒ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 4. Pipette **250µL 0.5 M ammonium hydroxide** in wells of analytical plate.
☒ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
☒ 6. Transfer **300µL of blood+base/urine+base** mixture to corresponding wells of SLE+ plate.
☒ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). ***(Load at 85-100 PSI- Selector to the right)***
☒ 8. Wait 5 minutes.
☒ 9. Add **900uL ethyl acetate.**
☒ 10. Wait 5 minutes.
☒ 11. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 12. Add **900uL ethyl acetate.**
☒ 13. Wait 5 minutes.
☒ 14. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***
☒ 15. Remove plate containing eluate. **Urine samples add 50 ul 1% HCl in MeOH**. Place on SPE Dry and evaporate to dryness at approx. 35°C.
☒ 16. Reconstitute in **100µL 20% MeOH** and heat seal plate with foil.

Post-Analytic

☒ 1. Create batch and process data.
☒ 2. Make necessary changes to integration limits
☒ 3. Integration linear and R^2 values ≥0.98 for each analyte.
☒ 4. For unknown samples and controls: response ratio within 20% of average of controls and standards, RT within +/-5% (tramadol RT +/-2%), S/N for primary transition >10 and secondary transitions >5.
☒ 5. Did all QCs pass for each analyte? Yes, see comments Add Control data to QC tracking spreadsheet.
☒ 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

Acetyl-fentanyl, acetyl-norfentanyl, amitriptyline, carbamazepine, chlorpheniramine, doxepin, flurazepam, levamisole (5-500), methocarbamol, and phencyclidine are the only compounds that were analyzed in this batch.

The samples were inadvertently injected with the wrong acquisition method, when this was noticed, the samples were reinjected with the correct acquisition method.

Celena Shrum and Tamara Salazar both had samples in this batch. Celena Shrum acted as the primary analyst and performed steps 3-16.

I, Tamara Salazar, approved of all steps utilized in this method.

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	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + QC_1	IS + Sample	IS + Cal. 1	IS + QC_1	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 8		M2021-4396-3	IS + Cal. 8
B	IS + Cal. 2	IS + QC_2	IS + Sample	IS + Cal. 2	IS + QC_2	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 7		Urine Ext	IS + Cal. 7
C	IS + Cal. 3	IS + QC_3	IS + Sample	IS + Cal. 3	IS + QC_3	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 6		Urine NC	IS + Cal. 6
D	IS + Cal. 4	IS + QC_4	IS + Sample	IS + Cal. 4	IS + QC_4	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 5	P2021-3530-1	Blood NC	IS + Cal. 5
E	IS + Cal. 5	IS + Sample	IS + Sample	IS + Cal. 5	IS + Sample	IS + Sample	IS + Sample	IS + QC_4	IS + Cal. 4	P2021-3396-1	IS + QC_4	IS + Cal. 4
F	IS + Cal. 6	IS + Sample	IS + Sample	IS + Cal. 6	IS + Sample	IS + Sample	IS + Sample	IS + QC_3	IS + Cal. 3	P2021-3147-1	IS + QC_3	IS + Cal. 3
G	IS + Cal. 7	IS + Sample	IS + Sample	IS + Cal. 7	IS + Sample	IS + Sample	IS + Sample	IS + QC_2	IS + Cal. 2	P2021-3615-1	IS + QC_2	IS + Cal. 2
H	IS + Cal. 8	IS + Sample	IS + Sample	IS + Cal. 8	IS + Sample	IS + Sample	IS + Sample	IS + QC_1	IS + Cal. 1	P2021-3526-1	IS + QC_1	IS + Cal. 1

Samples were all moved six columns over to the left (i.e. samples in column 10 were all moved to column 4, column 11 to column 5, and column 12 to column 6) during the SLE portion of the extraction

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Idaho State Police Forensic Services

AM #28 Blood/Urine Multi-Drug Confirmatory Analysis by LCMS-QQQ---Panel 2

Methanol External Control Solution (Lot: 121720)

100 ul each 1 mg/mL stock solution in 9800 ul MeOH

Component	*Source*	*Source Lot Number*	*Expiration Date*
Methanol (LCMS)	Fisher	197468	
Amitriptyline	Cerilliant	FN02202004	03/31/2025
Flurazepam	Cerilliant	FE08231902	11/30/2024
Prepared:	12/17/2020		
Prepared By:	Celena Shrum		
Expires:	12/17/2021		

Urine External Control Solution (Lot: WS110821)

100 ul of methanol external control solution was added to 9900ul of urine. Approximately 100ng/mL of each compound.

Component	*Source*	*Source Lot Number*
Negative Urine		POC031319
Methanol External Control Solution	-	121720
Prepared:	11/08/2021	
Prepared by:	Celena Shrum	

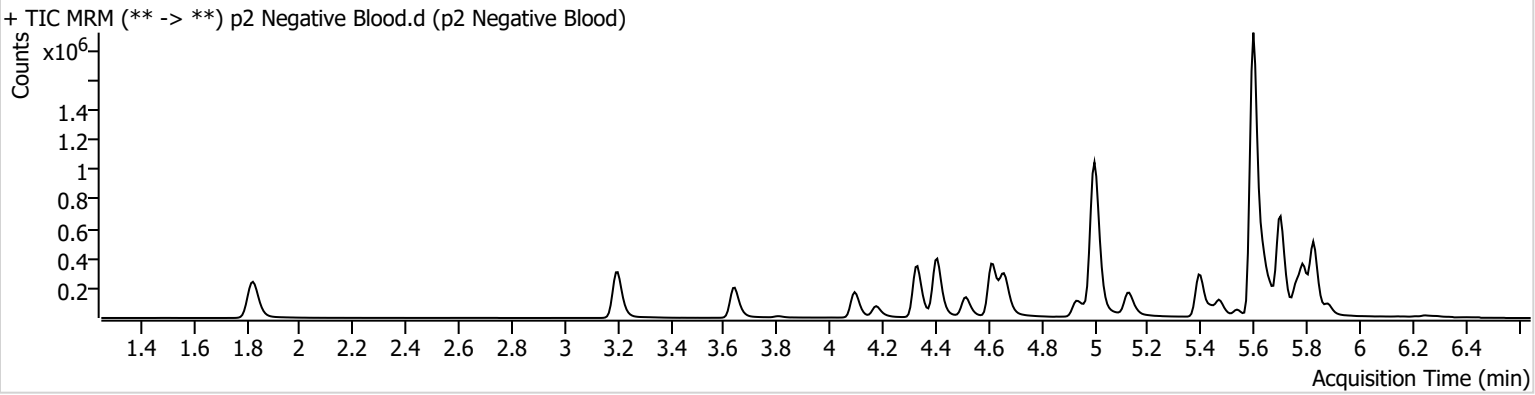
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Negative Blood.d
Type	Sample	**Sample**	p2 Negative Blood
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-D5	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 10:52:14 AM		
Sample Info.			

Sample Chromatogram



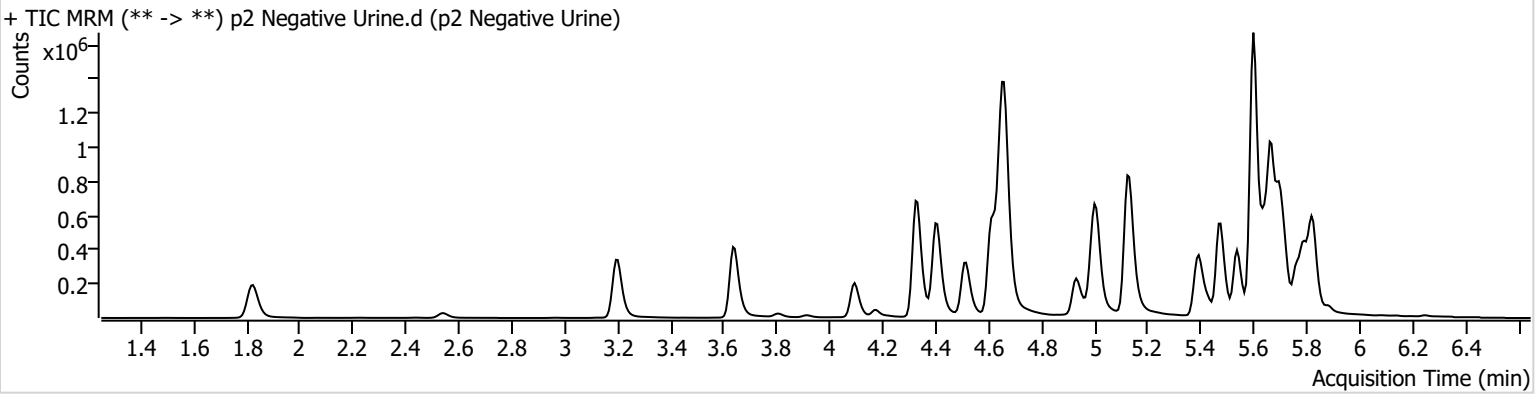
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Negative Urine.d
Type	Sample	**Sample**	p2 Negative Urine
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-C5	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 11:13:42 AM		
Sample Info.			

Sample Chromatogram



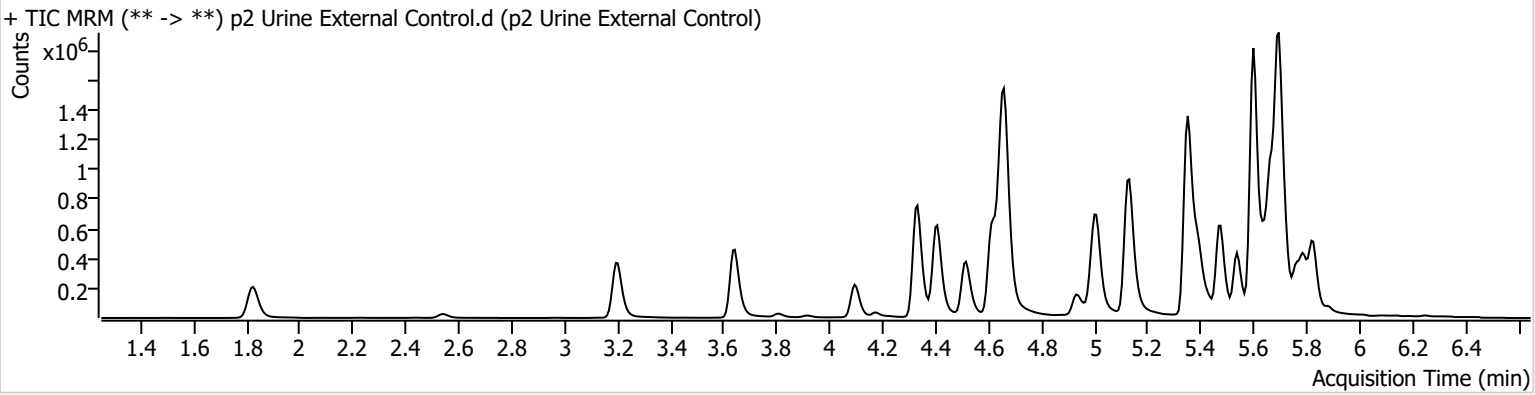
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Urine External Control.d
Type	Sample	**Sample**	p2 Urine External Control
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-B5	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 11:35:08 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amitriptyline	5.698	687825	2840.55	94.6	3376.55	254448	106.5050 ng/ml
Flurazepam	5.351	2979724	14665.40	12.8	2944.94	524482	47.0690 ng/ml

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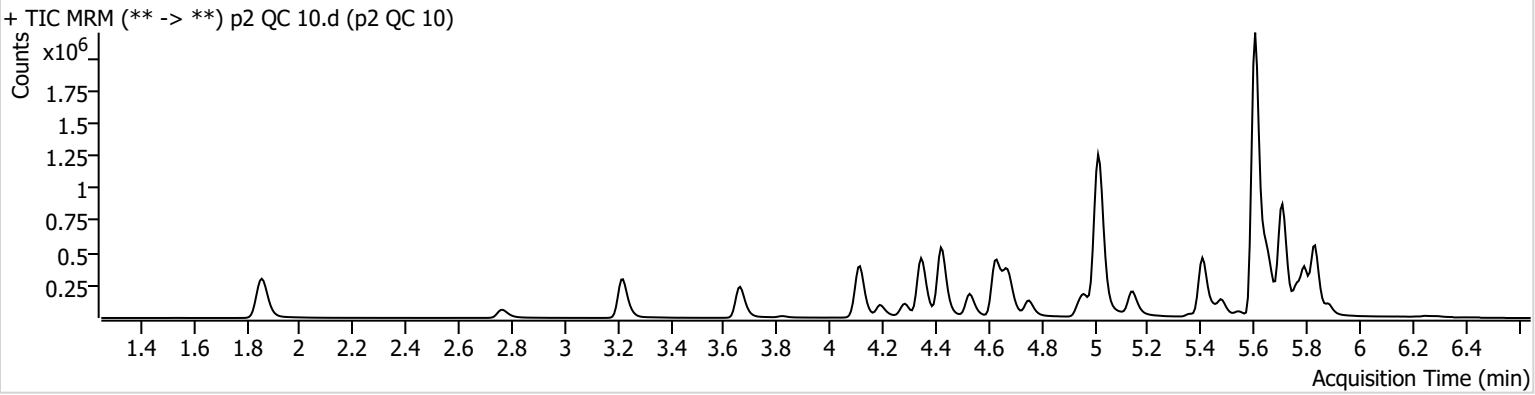
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 QC 10.d
Type	QC	**Sample**	p2 QC 10
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-H5	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 9:26:26 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.672	2966	141.99	99.4	219.86	174309	10.8967 ng/ml
Acetyl-norfentanyl	3.247	19650	1585.48	36.7	680.99	790929	9.6591 ng/ml
Amitriptyline	5.698	7200	265.85	120.7	19.81	28104	9.6633 ng/ml
Carbamazepine	5.611	723453	2667.68	4.8	262.03	4091913	9.7645 ng/ml
Chlorpheniramine	5.148	133918	852.63	0.2	8.51	352987	10.1708 ng/ml
Doxepin	5.396	11796	18.55	34.3	11.86	42521	8.1394 ng/ml
Flurazepam	5.358	49696	244.16	9.8	181.63	42521	9.6515 ng/ml
Levamisole	2.769	115284	1361.17	81.7	1391.51	247459	10.5387 ng/ml
Methocarbamol	4.437	53133	630.99	91.3	68.67	456840	11.3412 ng/ml
Phencyclidine	4.962	85691	669.43	43.1	399.15	247459	9.7841 ng/ml

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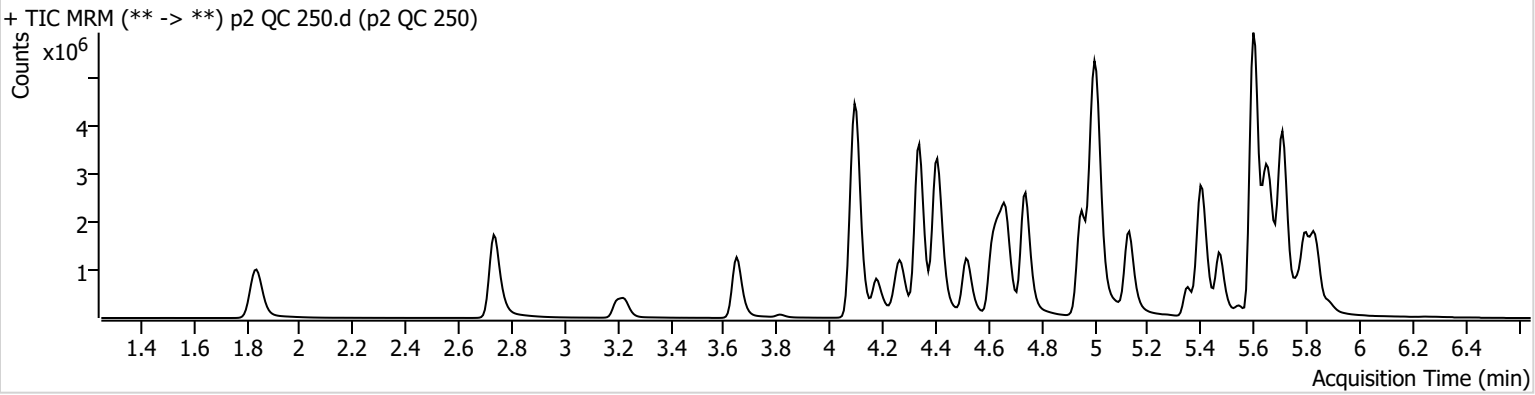
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 QC 250.d
Type	QC	**Sample**	p2 QC 250
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-F5	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 9:47:52 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.658	75942	3035.00	94.1	875.99	184958	252.9656 ng/ml
Acetyl-norfentanyl	3.227	558228	1604.69	35.8	53635.41	906774	261.9448 ng/ml
Amitriptyline	5.698	243503	8720.58	113.0	1987.51	38705	248.5020 ng/ml
Carbamazepine	5.604	11608461	16479.15	5.9	2651.42	2301276	259.4241 ng/ml
Chlorpheniramine	5.134	3918179	77533.49	0.2	570.67	426477	256.4625 ng/ml
Doxepin	5.389	377617	17474.72	38.9	231.98	50664	265.4357 ng/ml
Flurazepam	5.351	1332822	868484.21	11.7	1185.96	50664	218.0982 ng/ml
Levamisole	2.734	3106593	135294.42	81.9	364982.90	266702	274.6231 ng/ml
Methocarbamol	4.423	606133	1138.25	90.7	666.65	269159	246.3934 ng/ml
Phencyclidine	4.948	2288945	2084.57	47.4	3124.74	266702	258.7444 ng/ml

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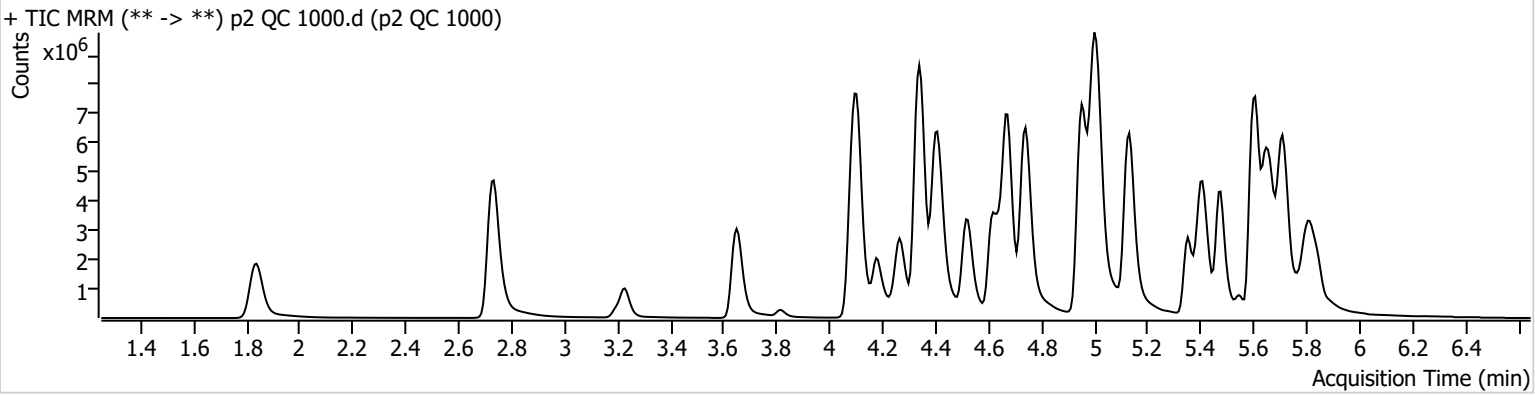
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 QC 1000.d
Type	QC	**Sample**	p2 QC 1000
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-E5	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 10:09:20 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.665	266053	1413.09	93.6	2219.09	166603	982.6236 ng/ml
Acetyl-norfentanyl	3.227	1851164	325552.86	35.4	15105.02	808471	976.8505 ng/ml
Amitriptyline	5.691	721926	1594.83	103.9	12032.31	28902	988.0682 ng/ml
Carbamazepine	5.610	18687314	3321.77	6.6	15350.29	950976	1008.5896 ng/ml
Chlorpheniramine	5.134	17242978	200188.24	0.2	25896.44	506225	952.0172 ng/ml
Doxepin	5.389	1339864	26961.65	41.7	1259.16	47643	1006.5352 ng/ml
Flurazepam	5.351	5921365	172553.42	12.8	175197.73	47643	1030.5197 ng/ml
~~Levamisole~~	~~2.734~~	~~9408023~~	~~145113.47~~	~~81.6~~	~~357626.33~~	~~280491~~	~~791.6562 ng/ml~~ *
Methocarbamol	4.430	801811	48004.21	92.3	6056.57	100928	872.9125 ng/ml
Phencyclidine	4.948	8087207	3323597.59	54.2	64581.43	280491	870.8566 ng/ml

*Outside curve range.

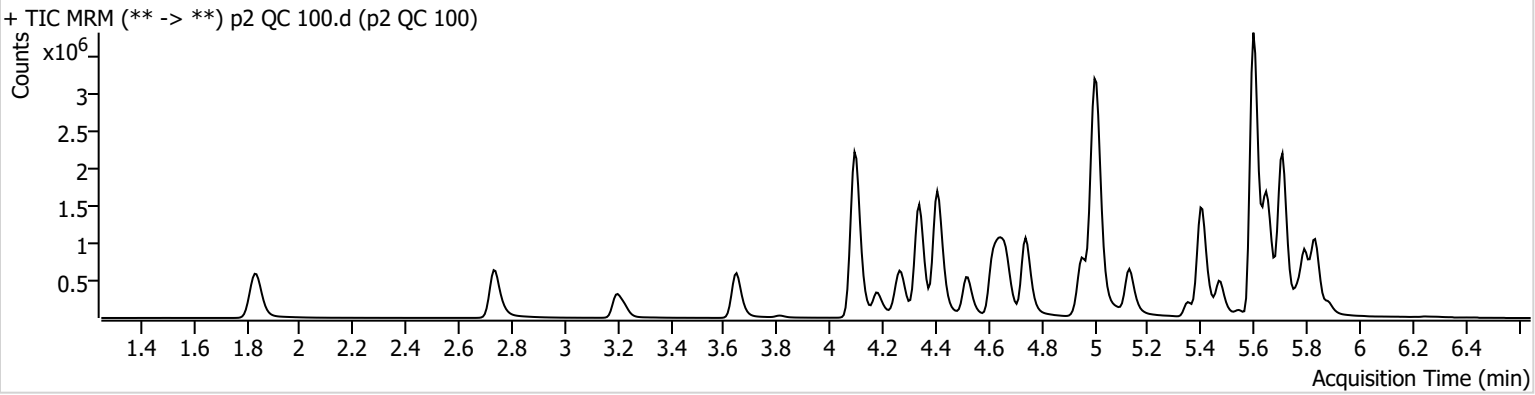
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 QC 100.d
Type	QC	**Sample**	p2 QC 100
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-G5	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 4:40:32 PM		
Sample Info.			

Sample Chromatogram

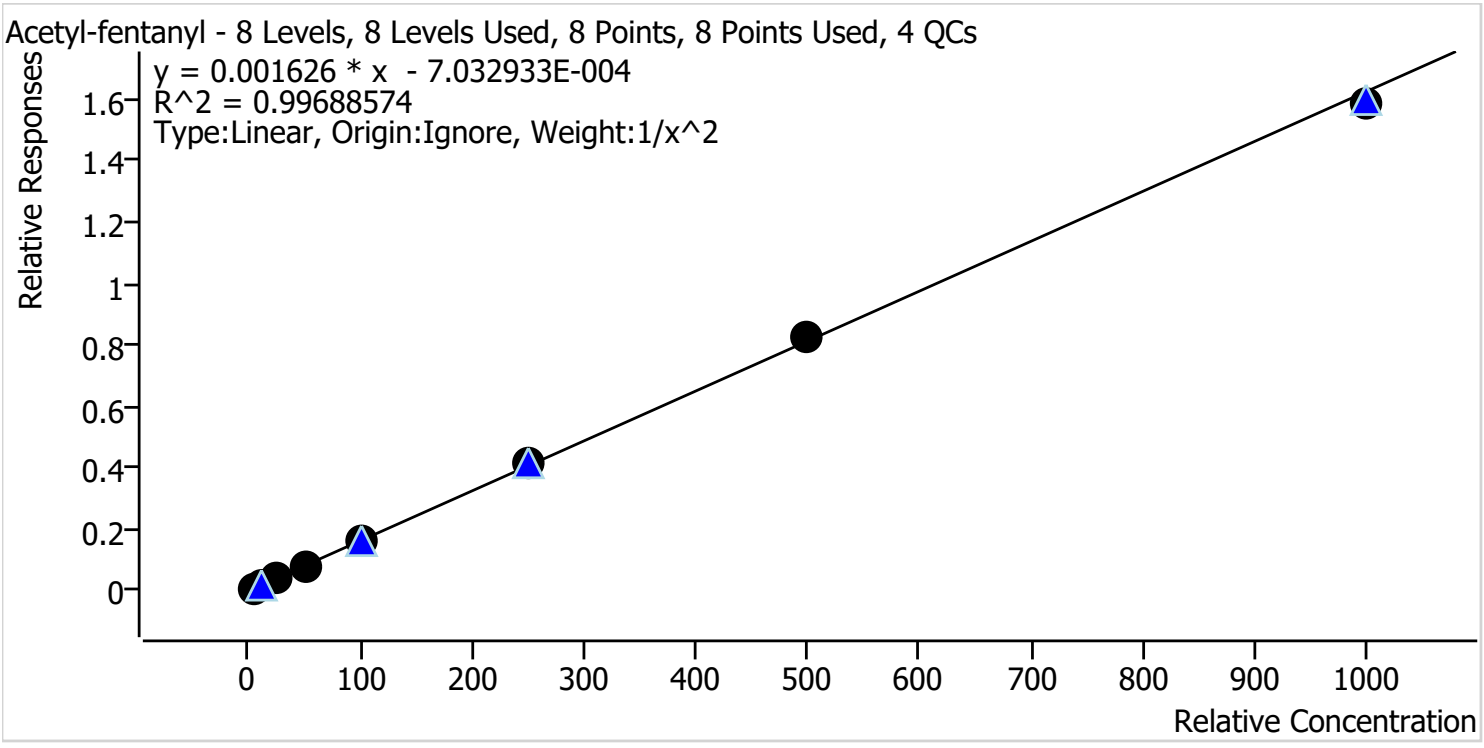


Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.665	23889	1056.87	91.9	24512.11	150553	98.0241 ng/ml
Acetyl-norfentanyl	3.227	196975	1319.36	36.0	1291.43	815416	102.2074 ng/ml
Amitriptyline	5.699	54491	418.39	117.5	385.05	23037	93.1367 ng/ml
Carbamazepine	5.605	5591571	5122.77	5.4	1418.26	2977585	97.0142 ng/ml
Chlorpheniramine	5.135	1218457	25434.77	0.2	15.76	327085	103.7282 ng/ml
Doxepin	5.390	101337	261.85	36.0	118.23	33623	106.2559 ng/ml
Flurazepam	5.351	425142	4337.31	10.9	39958.71	33623	104.8051 ng/ml
Levamisole	2.734	1151123	204150.64	80.7	57604.66	224829	120.4520 ng/ml
Methocarbamol	4.424	345138	11992.57	93.3	10117.55	330144	113.6001 ng/ml
Phencyclidine	4.956	800394	30584.44	43.8	5467.03	224829	106.9285 ng/ml

TS CS

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Last Cal. Update	11/15/2021 1:44 PM
Analyst Name	ISP\datastor
Analyte	Acetyl-fentanyl
Internal Standard	Acetyl-fentanyl-d5

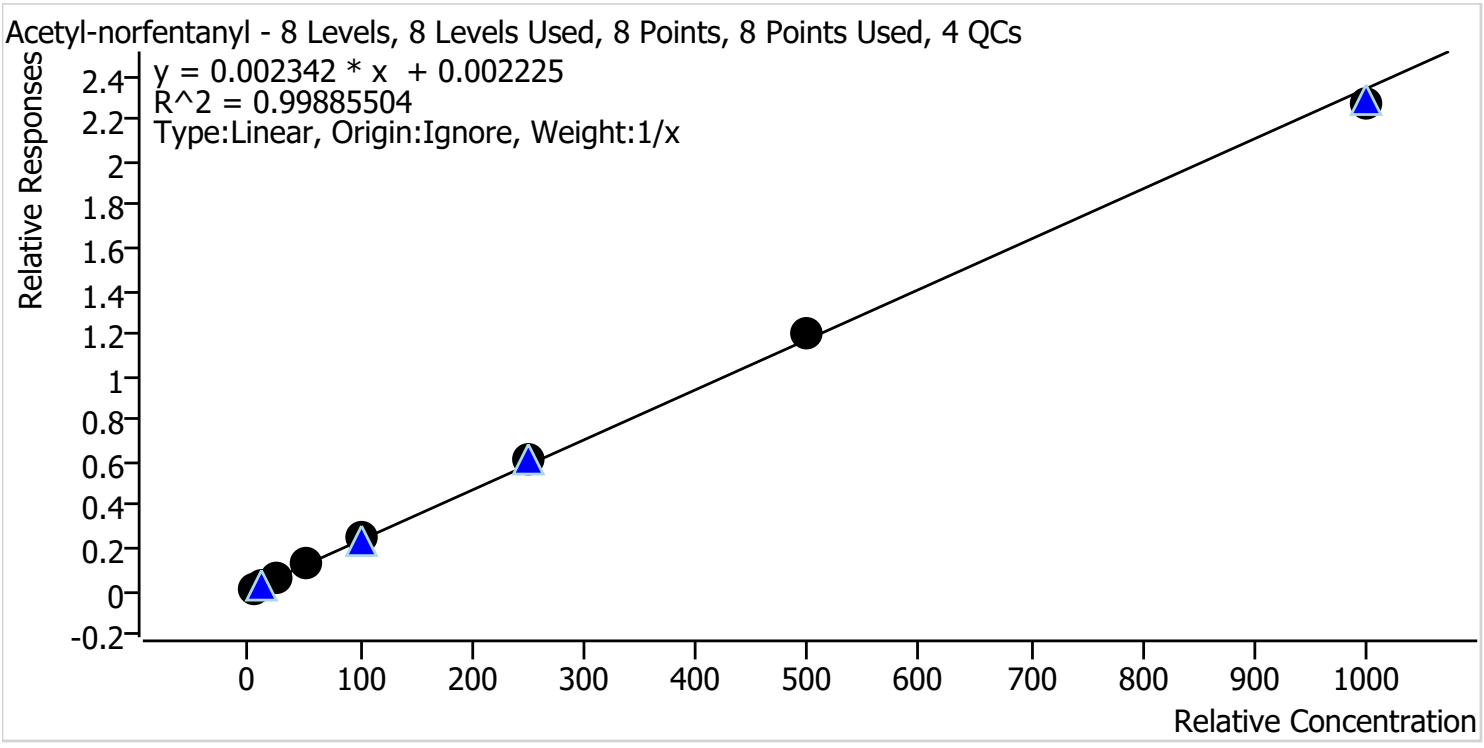


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.8	96.3
p2 Cal 2-10ng	2	✔	10.0	11.0	109.9
p2 Cal 3 -25ng	3	✔	25.0	23.8	95.3
p2 Cal 4-50ng	4	✔	50.0	48.4	96.7
p2 Cal 5-100ng	5	✔	100.0	98.8	98.8
p2 Cal 6-250ng	6	✔	250.0	258.5	103.4
p2 Cal 7-500ng	7	✔	500.0	508.4	101.7
p2 Cal 8-1000ng	8	✔	1000.0	979.4	97.9

TS CS

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Last Cal. Update	11/15/2021 1:44 PM
Analyst Name	ISP\datastor
Analyte	Acetyl-norfentanyl
Internal Standard	Acetyl-norfentanyl-d5



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.3	86.4
p2 Cal 2-10ng	2	✔	10.0	10.0	100.3
p2 Cal 3 -25ng	3	✔	25.0	25.2	100.8
p2 Cal 4-50ng	4	✔	50.0	51.3	102.6
p2 Cal 5-100ng	5	✔	100.0	106.5	106.5
p2 Cal 6-250ng	6	✔	250.0	259.9	103.9
p2 Cal 7-500ng	7	✔	500.0	511.5	102.3
p2 Cal 8-1000ng	8	✔	1000.0	971.3	97.1

TS CS

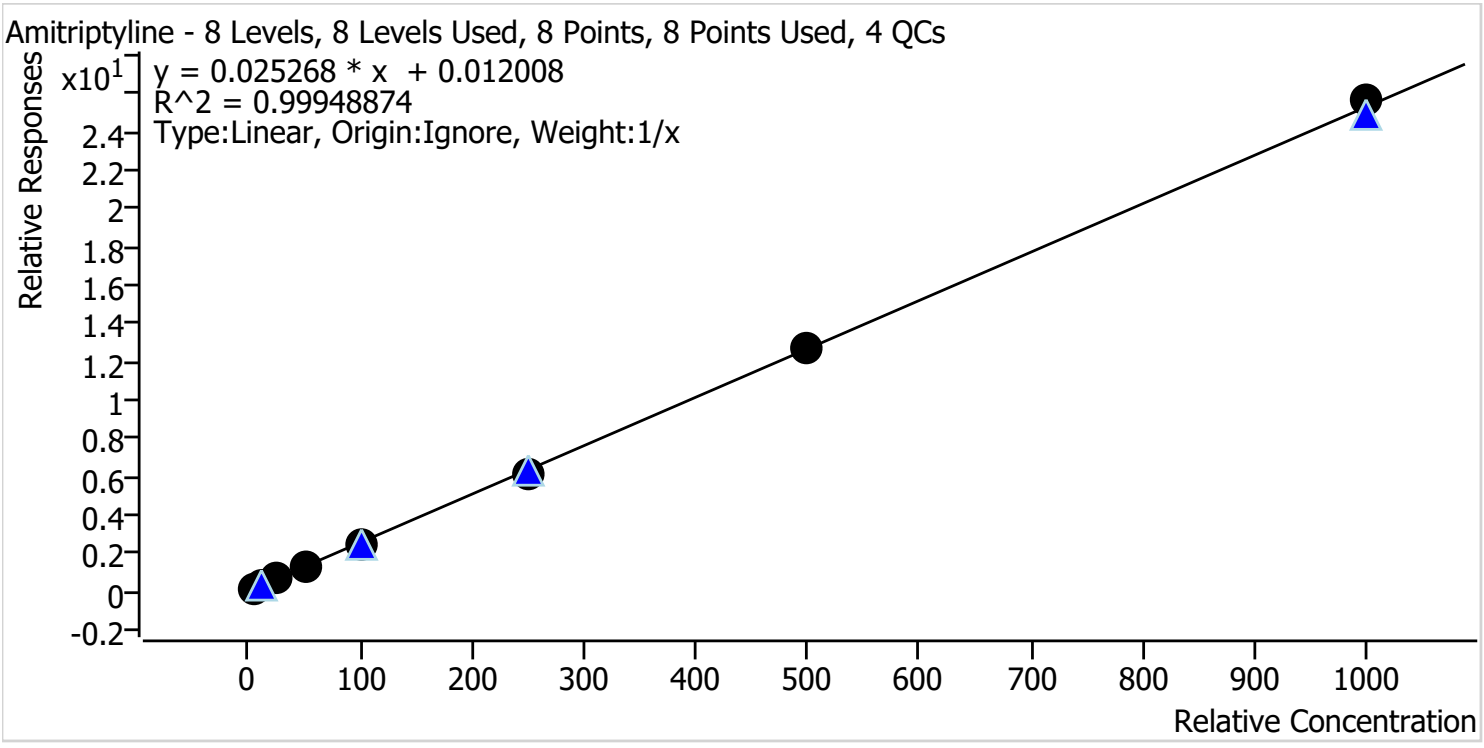
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin

Last Cal. Update 11/15/2021 1:44 PM

Analyst Name ISP\datastor

Analyte Amitriptyline **Internal Standard** Amitriptyline-D3

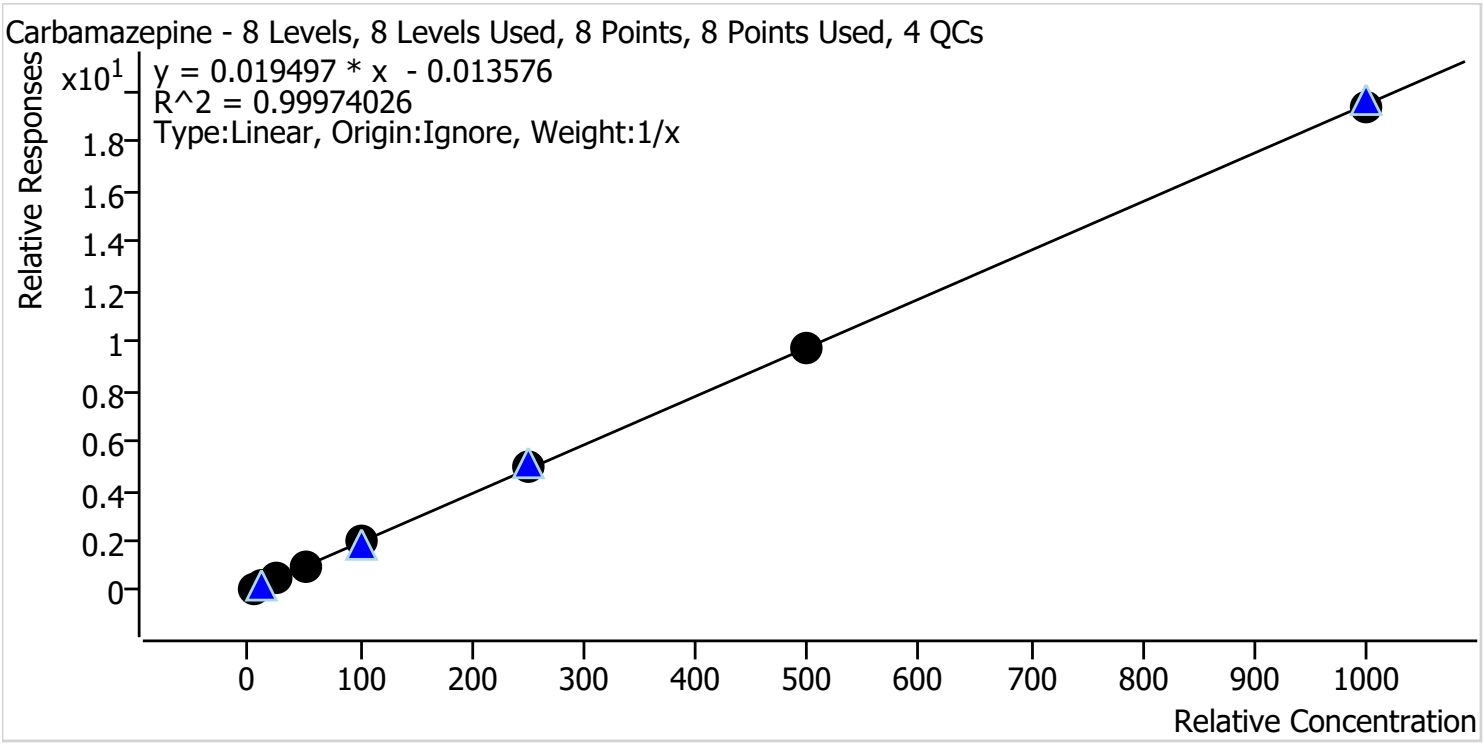


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.3	106.5
p2 Cal 2-10ng	2	✔	10.0	10.1	101.3
p2 Cal 3 -25ng	3	✔	25.0	25.6	102.3
p2 Cal 4-50ng	4	✔	50.0	47.6	95.2
p2 Cal 5-100ng	5	✔	100.0	97.5	97.5
p2 Cal 6-250ng	6	✔	250.0	238.8	95.5
p2 Cal 7-500ng	7	✔	500.0	501.2	100.2
p2 Cal 8-1000ng	8	✔	1000.0	1013.8	101.4

TS CS

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Last Cal. Update	11/15/2021 1:44 PM
Analyst Name	ISP\datastor
Analyte	Carbamazepine
Internal Standard	Carbamazepine-13C6

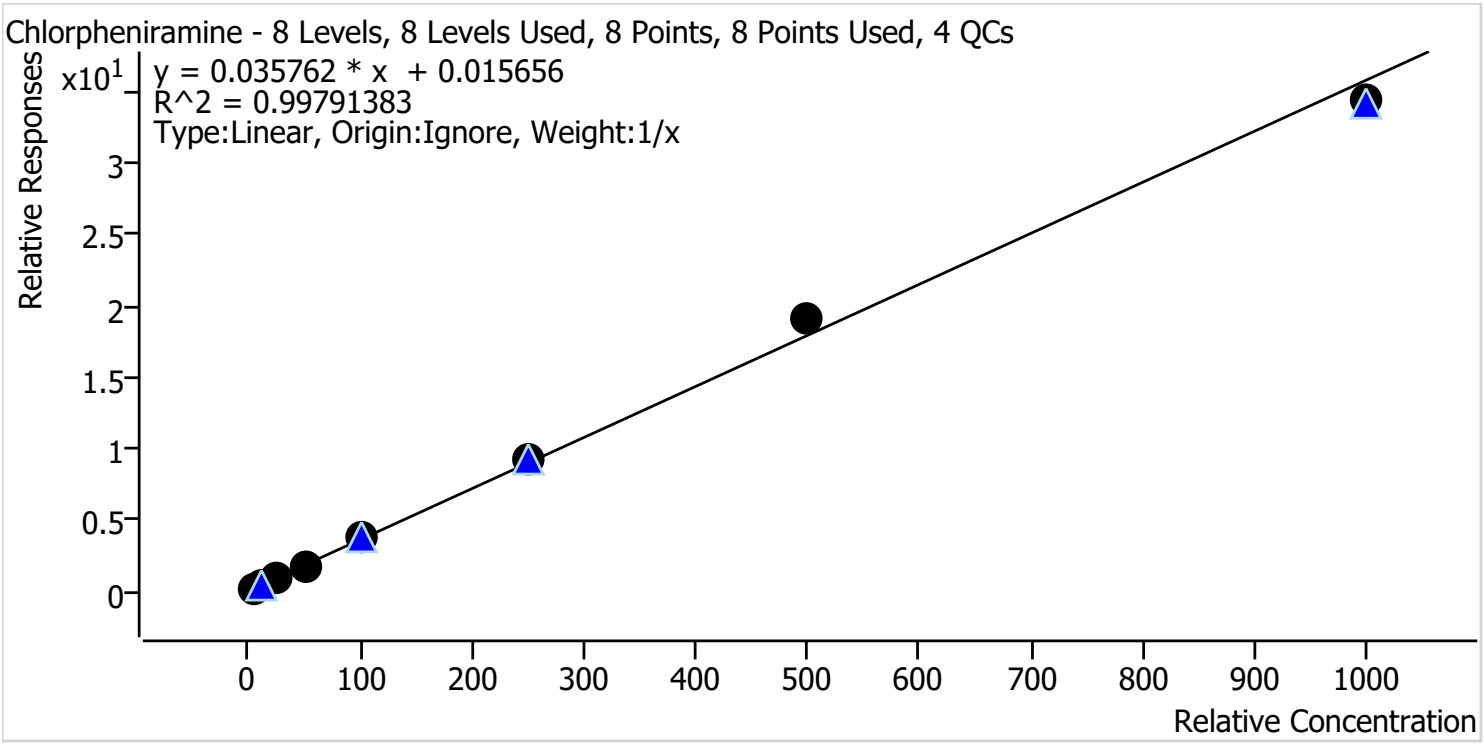


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.2	103.9
p2 Cal 2-10ng	2	✔	10.0	10.0	100.4
p2 Cal 3 -25ng	3	✔	25.0	23.9	95.7
p2 Cal 4-50ng	4	✔	50.0	48.4	96.8
p2 Cal 5-100ng	5	✔	100.0	100.3	100.3
p2 Cal 6-250ng	6	✔	250.0	258.5	103.4
p2 Cal 7-500ng	7	✔	500.0	501.3	100.3
p2 Cal 8-1000ng	8	✔	1000.0	992.3	99.2

TS CS

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Last Cal. Update	11/15/2021 1:44 PM
Analyst Name	ISP\datastor
Analyte	Chlorpheniramine
Internal Standard	Chlorpheniramine-D6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.6	91.2
p2 Cal 2-10ng	2	✔	10.0	10.3	103.0
p2 Cal 3 -25ng	3	✔	25.0	24.7	98.9
p2 Cal 4-50ng	4	✔	50.0	49.7	99.4
p2 Cal 5-100ng	5	✔	100.0	102.4	102.4
p2 Cal 6-250ng	6	✔	250.0	257.3	102.9
p2 Cal 7-500ng	7	✔	500.0	530.2	106.0
p2 Cal 8-1000ng	8	✔	1000.0	960.7	96.1

TS CS

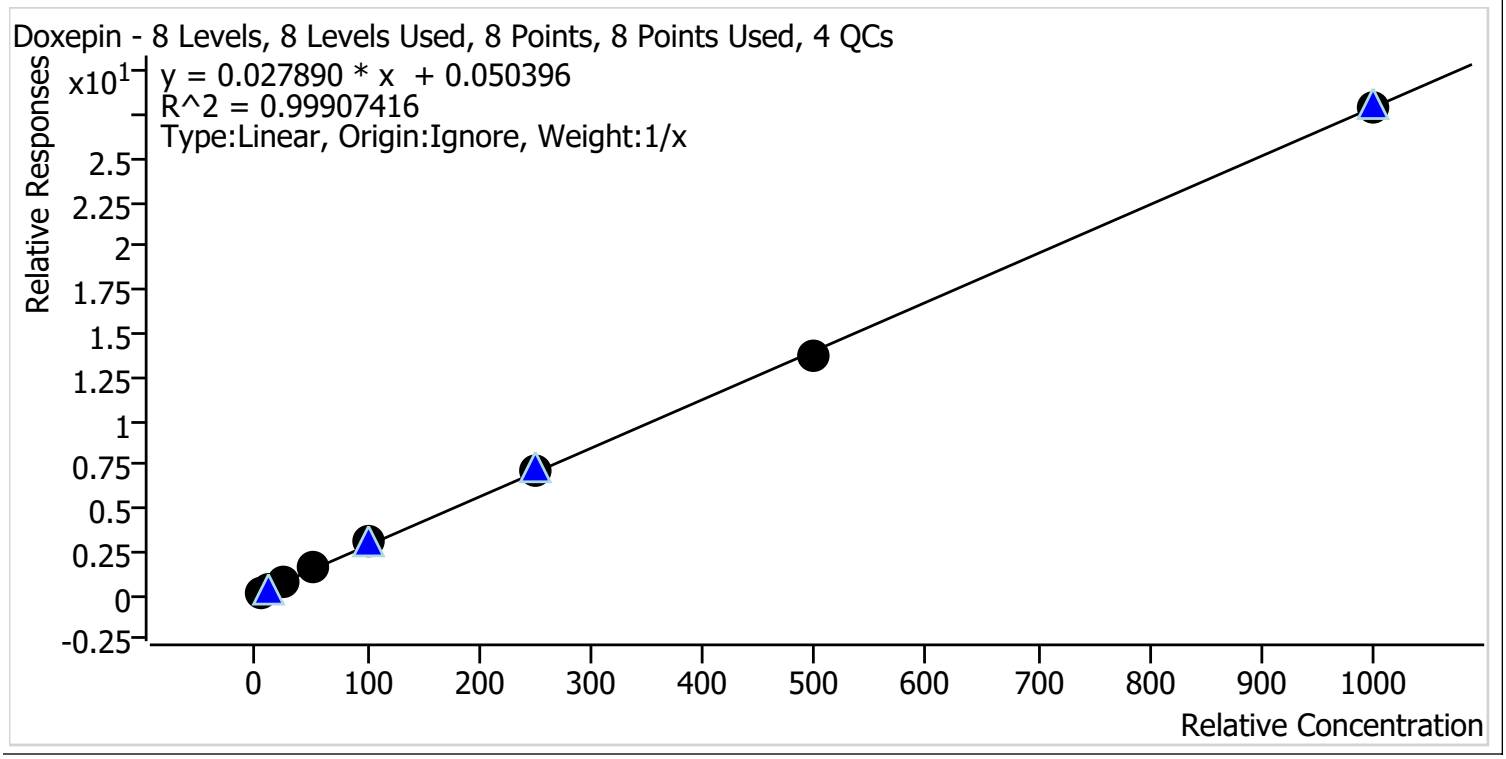
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin

Last Cal. Update 11/15/2021 1:44 PM

Analyst Name ISP\datastor

Analyte Doxepin **Internal Standard** Doxepin-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.2	83.6
p2 Cal 2-10ng	2	✔	10.0	10.0	100.3
p2 Cal 3 -25ng	3	✔	25.0	25.7	103.0
p2 Cal 4-50ng	4	✔	50.0	52.7	105.5
p2 Cal 5-100ng	5	✔	100.0	109.8	109.8
p2 Cal 6-250ng	6	✔	250.0	251.3	100.5
p2 Cal 7-500ng	7	✔	500.0	486.5	97.3
p2 Cal 8-1000ng	8	✔	1000.0	999.7	100.0

TS CS

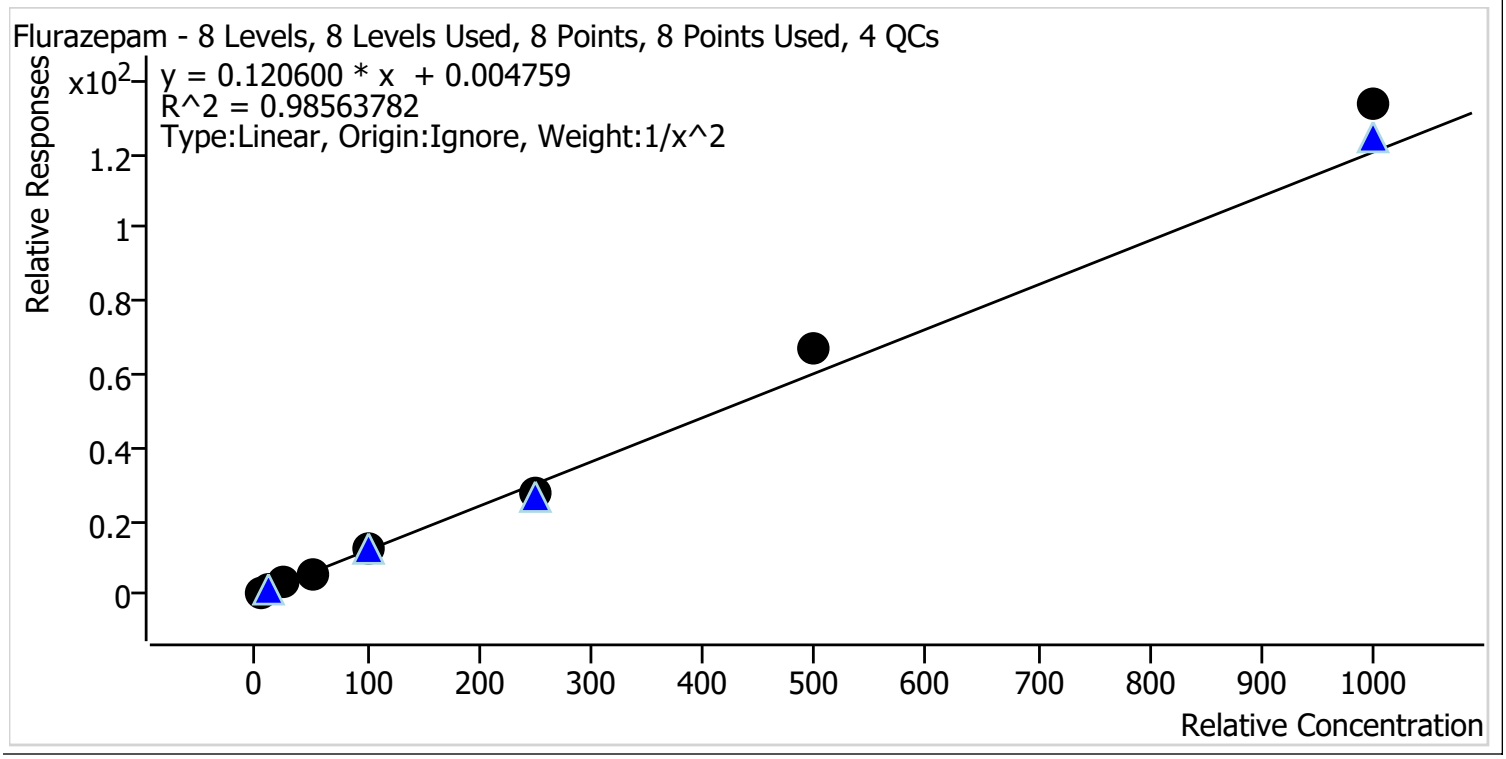
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin

Last Cal. Update 11/15/2021 1:44 PM

Analyst Name ISP\datastor

Analyte Flurazepam **Internal Standard** Doxepin-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.4	108.4
p2 Cal 2-10ng	2	✔	10.0	8.4	84.5
p2 Cal 3 -25ng	3	✔	25.0	25.6	102.3
p2 Cal 4-50ng	4	✔	50.0	44.2	88.4
p2 Cal 5-100ng	5	✔	100.0	101.5	101.5
p2 Cal 6-250ng	6	✔	250.0	230.8	92.3
p2 Cal 7-500ng	7	✔	500.0	559.1	111.8
p2 Cal 8-1000ng	8	✔	1000.0	1108.1	110.8

TS CS

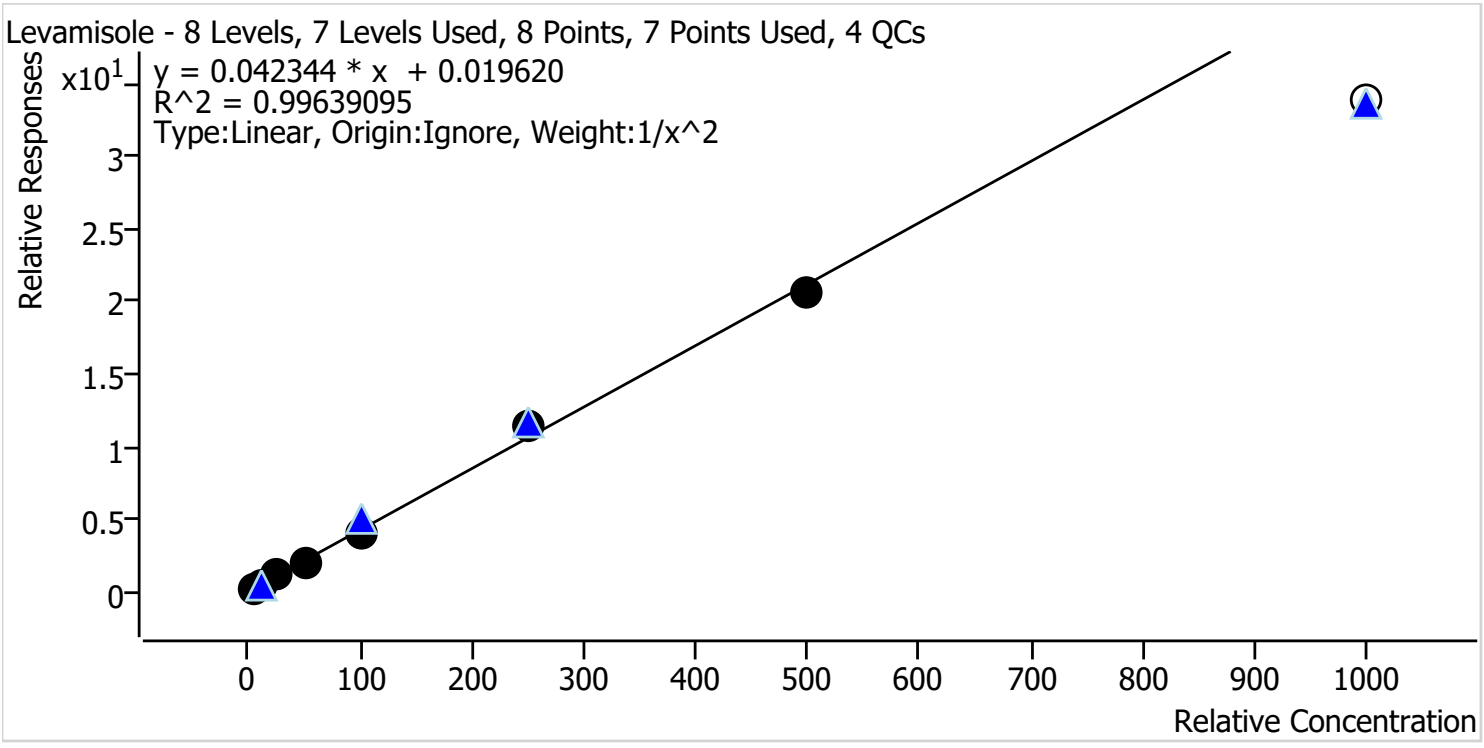
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin

Last Cal. Update 11/15/2021 1:44 PM

Analyst Name ISP\datastor

Analyte Levamisole **Internal Standard** Phencydlidine-D5



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.9	97.3
p2 Cal 2-10ng	2	✔	10.0	10.5	105.0
p2 Cal 3 -25ng	3	✔	25.0	26.0	103.8
p2 Cal 4-50ng	4	✔	50.0	48.1	96.2
p2 Cal 5-100ng	5	✔	100.0	93.2	93.2
p2 Cal 6-250ng	6	✔	250.0	266.5	106.6
p2 Cal 7-500ng	7	✔	500.0	489.1	97.8
p2 Cal 8-1000ng	8	✗	1000.0	799.4	79.9

Calibrator 8 dropped due to not meeting accuracy requirement.

TS CS

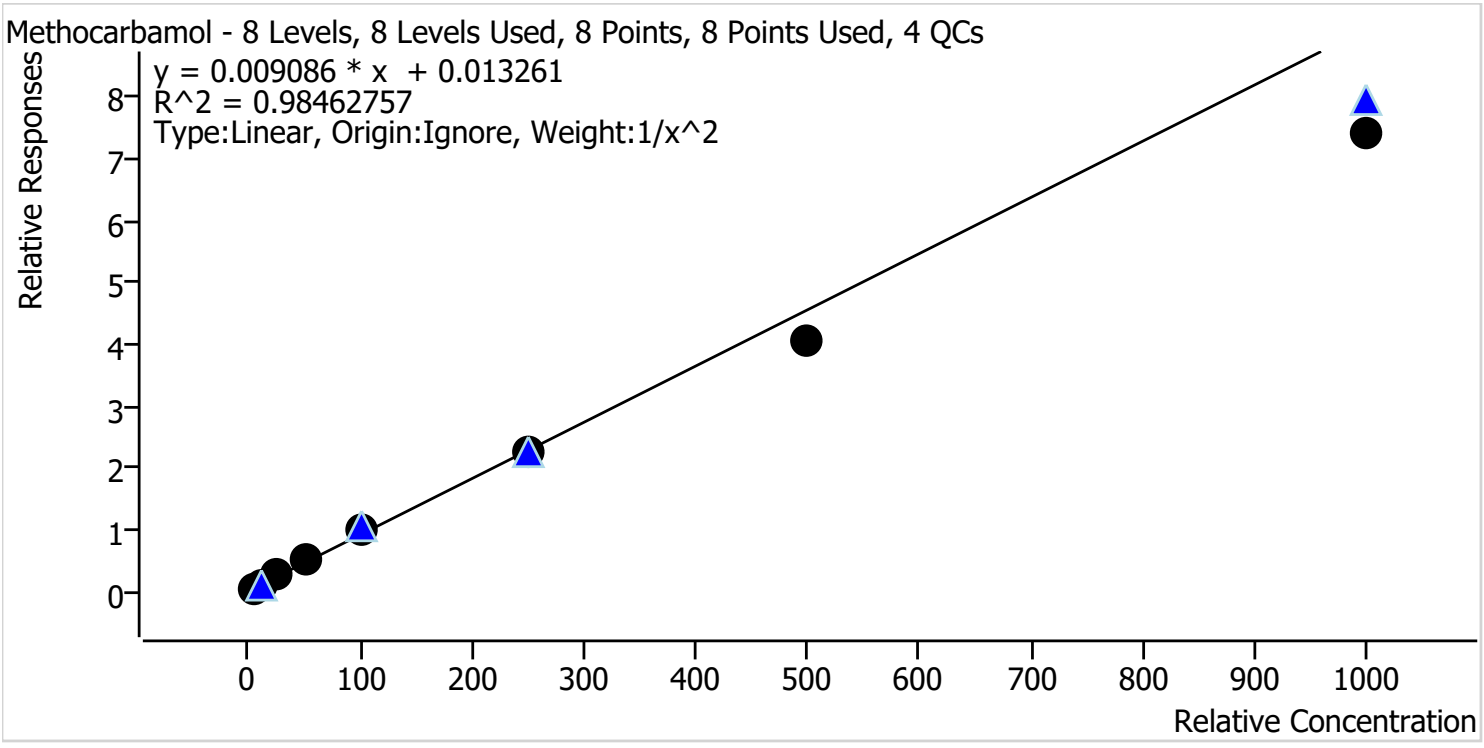
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin

Last Cal. Update 11/15/2021 1:44 PM

Analyst Name ISP\datastor

Analyte Methocarbamol **Internal Standard** Flunitrazepam-D7

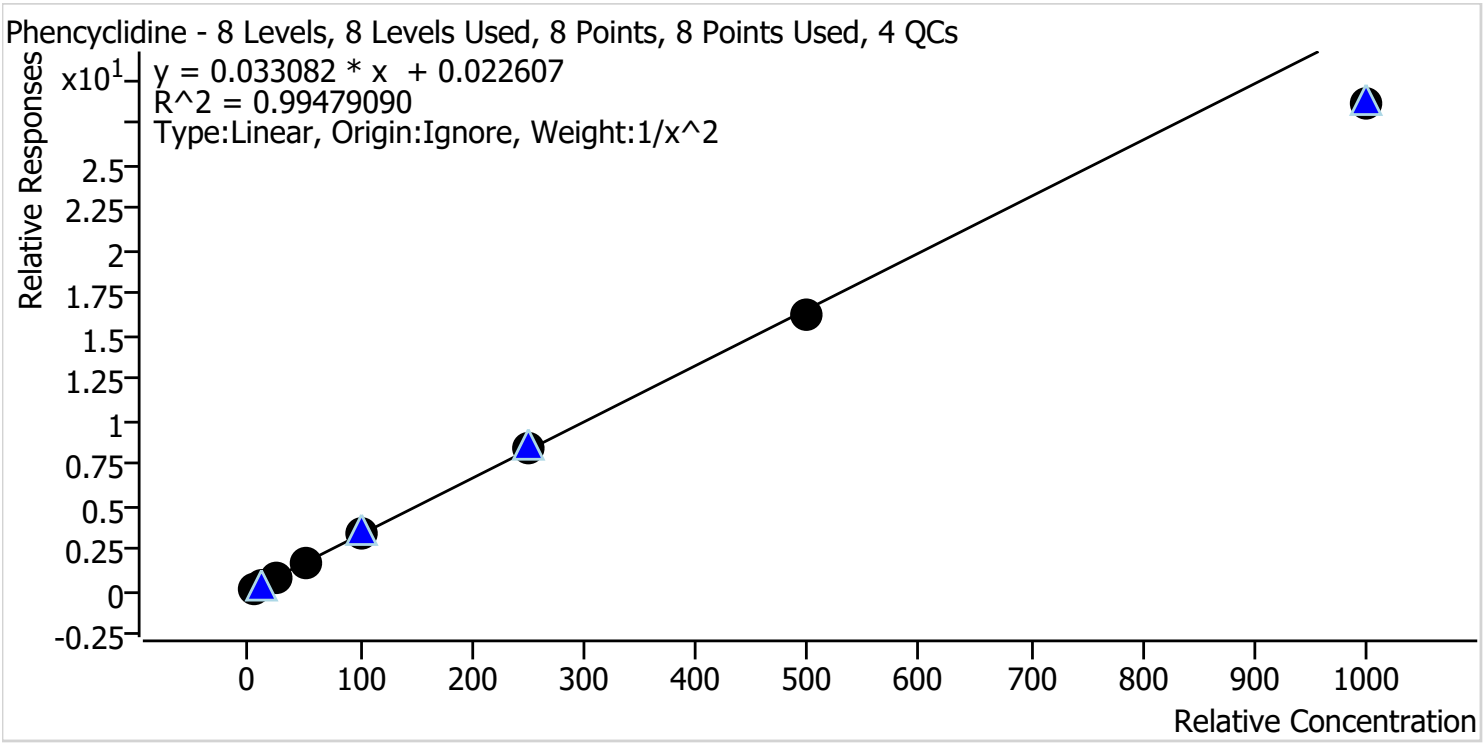


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.7	94.3
p2 Cal 2-10ng	2	✔	10.0	10.5	104.8
p2 Cal 3 -25ng	3	✔	25.0	27.3	109.1
p2 Cal 4-50ng	4	✔	50.0	56.7	113.4
p2 Cal 5-100ng	5	✔	100.0	108.0	108.0
p2 Cal 6-250ng	6	✔	250.0	248.1	99.2
p2 Cal 7-500ng	7	✔	500.0	448.1	89.6
p2 Cal 8-1000ng	8	✔	1000.0	817.0	81.7

TS CS

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Last Cal. Update	11/15/2021 1:44 PM
Analyst Name	ISP\datastor
Analyte	Phencyclidine
Internal Standard	Phencydlidine-D5



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.8	96.9
p2 Cal 2-10ng	2	✔	10.0	10.3	103.0
p2 Cal 3 -25ng	3	✔	25.0	26.5	105.8
p2 Cal 4-50ng	4	✔	50.0	51.4	102.8
p2 Cal 5-100ng	5	✔	100.0	104.9	104.9
p2 Cal 6-250ng	6	✔	250.0	256.0	102.4
p2 Cal 7-500ng	7	✔	500.0	488.0	97.6
p2 Cal 8-1000ng	8	✔	1000.0	865.9	86.6

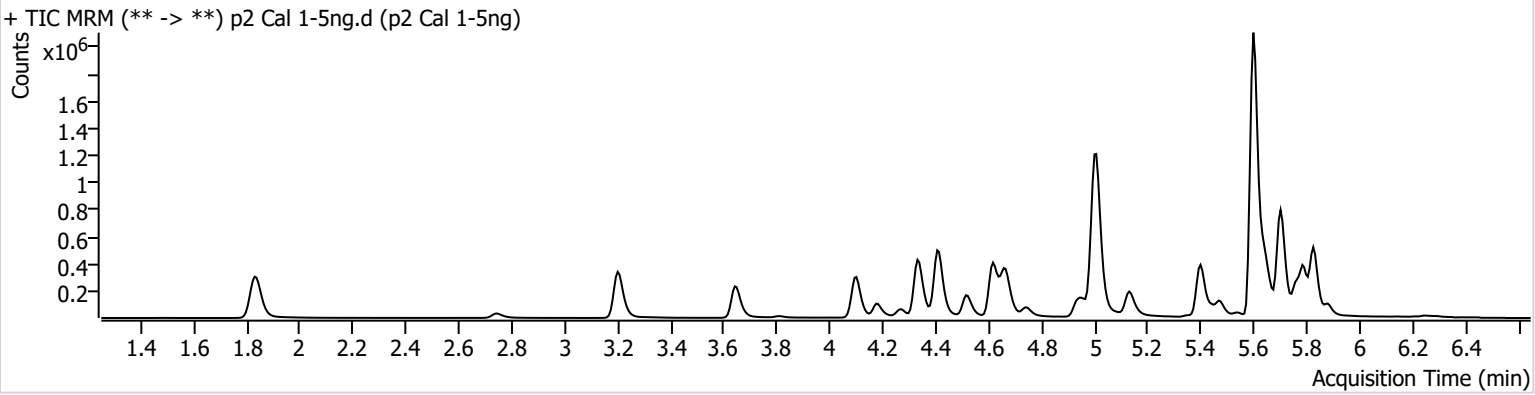
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Cal 1-5ng.d
Type	Cal	**Sample**	p2 Cal 1-5ng
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-H6	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 7:39:00 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.665	1209	26.58	118.7	6115.94	169695	4.8154 ng/ml
Acetyl-norfentanyl	3.233	11154	216.57	36.5	255.40	903553	4.3214 ng/ml
Amitriptyline	5.698	3651	17.40	103.4	1049.00	24917	5.3243 ng/ml
Carbamazepine	5.604	371337	1241.42	4.9	341.72	4235837	5.1928 ng/ml
Chlorpheniramine	5.134	70540	314.96	0.1	20.77	394714	4.5594 ng/ml
Doxepin	5.389	6432	12.40	34.8	15.98	38510	4.1818 ng/ml
Flurazepam	5.351	25346	35382.14	9.6	1023.95	38510	5.4180 ng/ml
Levamisole	2.747	60001	1318.01	78.6	619.36	265829	4.8671 ng/ml
Methocarbamol	4.423	28271	1936.64	93.1	9294.28	504080	4.7132 ng/ml
Phencyclidine	4.955	48605	19287.54	40.6	46.20	265829	4.8436 ng/ml

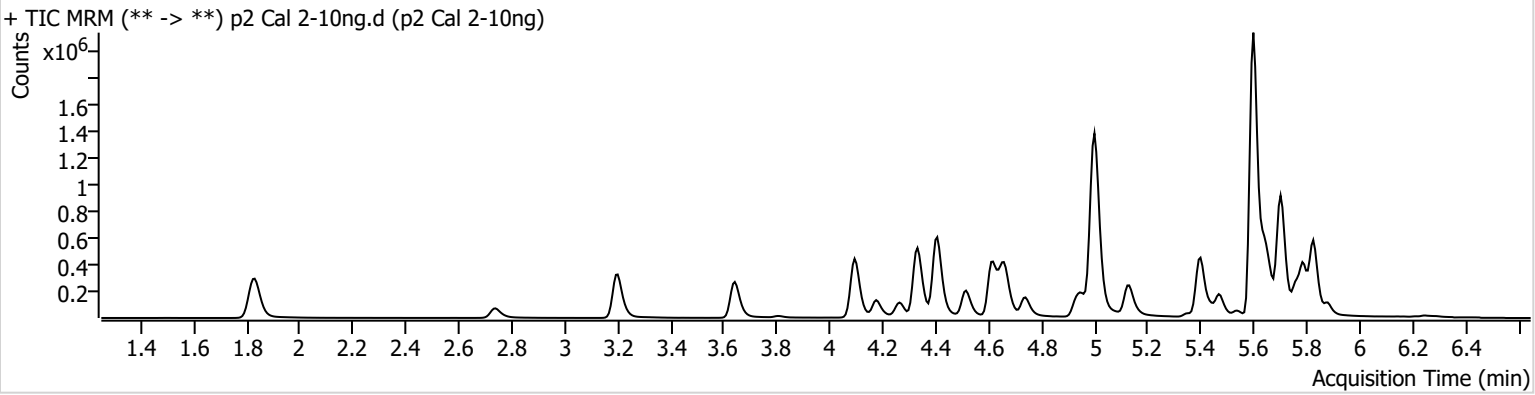
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Cal 2-10ng.d
Type	Cal	**Sample**	p2 Cal 2-10ng
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-G6	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 7:49:53 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.658	3444	151.61	94.4	1586.51	200615	10.9900 ng/ml
Acetyl-norfentanyl	3.227	22307	558.73	35.8	163.42	867380	10.0321 ng/ml
Amitriptyline	5.698	11148	139.43	108.3	80.10	41587	10.1336 ng/ml
Carbamazepine	5.604	725281	3765.13	4.7	232.79	3981539	10.0395 ng/ml
Chlorpheniramine	5.134	169100	3860.21	0.1	2.37	440459	10.2975 ng/ml
Doxepin	5.389	18351	344.88	29.8	35.71	55576	10.0322 ng/ml
Flurazepam	5.351	56884	64481.22	9.8	1544.96	55576	8.4476 ng/ml
Levamisole	2.740	128716	10785.81	81.7	637.81	277247	10.5008 ng/ml
Methocarbamol	4.416	51392	108.53	95.1	1741.33	473739	10.4800 ng/ml
Phencyclidine	4.948	100697	1567.18	41.7	72.82	277247	10.2955 ng/ml

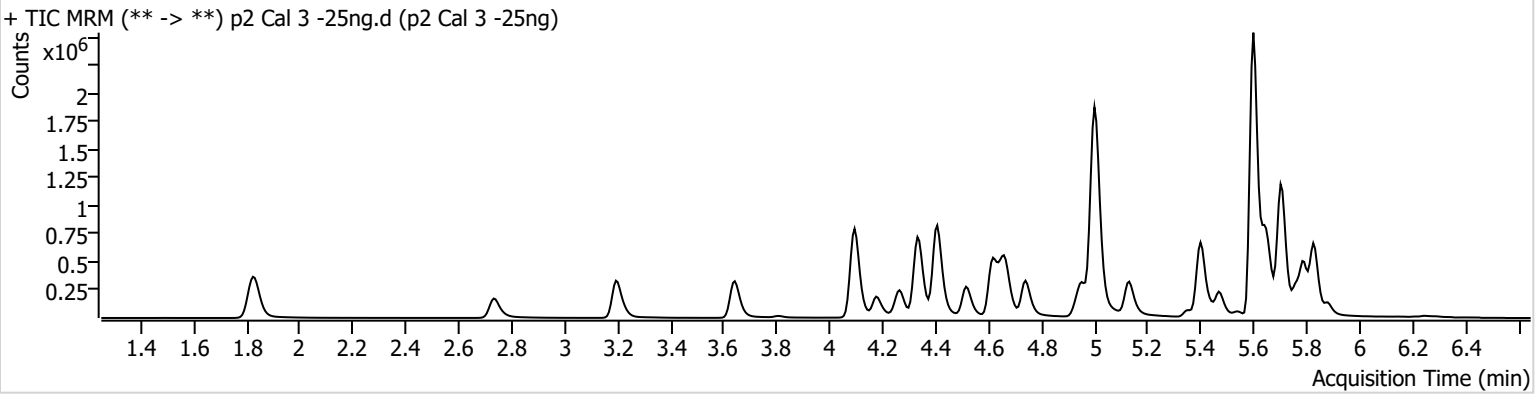
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Cal 3 -25ng.d
Type	Cal	**Sample**	p2 Cal 3 -25ng
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-F6	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 8:00:36 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.665	6992	110.57	109.3	2015.12	183886	23.8194 ng/ml
Acetyl-norfentanyl	3.227	53444	889.67	36.3	1364.88	873065	25.1908 ng/ml
Amitriptyline	5.698	17523	388.76	111.2	691.00	26624	25.5723 ng/ml
Carbamazepine	5.604	1728695	4788.04	4.8	703.95	3817663	23.9215 ng/ml
Chlorpheniramine	5.134	369092	1997.48	0.2	1321.40	410060	24.7310 ng/ml
Doxepin	5.389	32245	172.46	35.1	84.17	41965	25.7431 ng/ml
Flurazepam	5.351	129695	1372.20	10.8	246.84	41965	25.5873 ng/ml
Levamisole	2.734	309789	500.34	82.1	2636.30	276922	25.9559 ng/ml
Methocarbamol	4.416	118828	8392.07	93.1	3037.39	455316	27.2640 ng/ml
Phencyclidine	4.955	248655	961.67	42.3	823.99	276922	26.4590 ng/ml

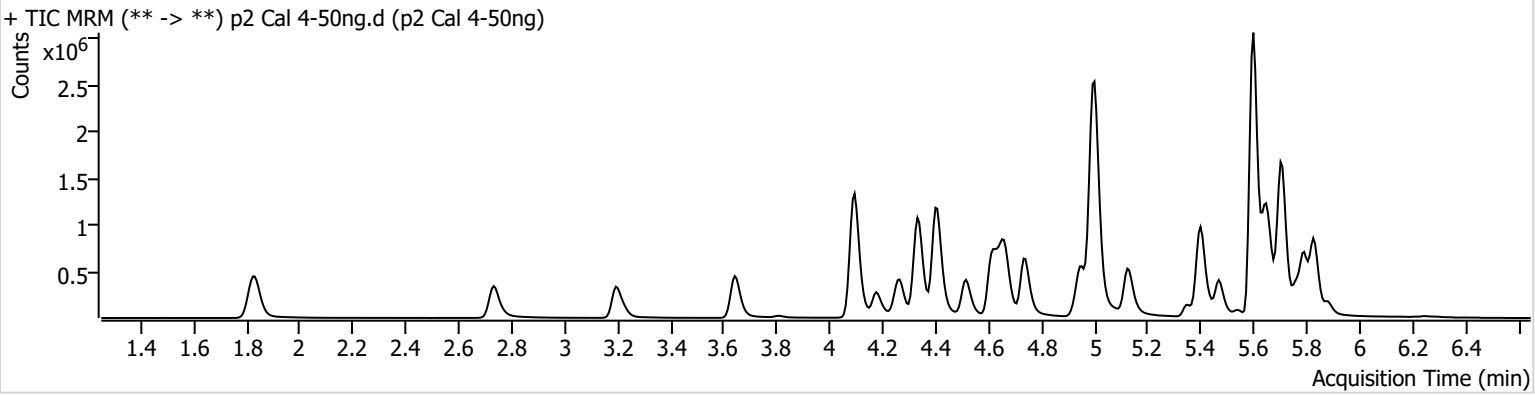
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Cal 4-50ng.d
Type	Cal	**Sample**	p2 Cal 4-50ng
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-E6	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 8:11:18 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.658	16313	490.63	101.8	18520.06	209335	48.3611 ng/ml
Acetyl-norfentanyl	3.227	107009	2898.04	36.2	7223.27	874429	51.3092 ng/ml
Amitriptyline	5.698	46756	390.07	122.5	918.88	38479	47.6131 ng/ml
Carbamazepine	5.604	3266340	9512.21	5.0	1399.78	3510197	48.4236 ng/ml
Chlorpheniramine	5.127	839384	33684.55	0.2	87.03	468021	49.7122 ng/ml
Doxepin	5.389	80664	596.93	34.3	319.37	53029	52.7335 ng/ml
Flurazepam	5.351	282961	245.07	10.2	486.48	53029	44.2060 ng/ml
Levamisole	2.734	606498	18816.78	82.0	1824.33	295041	48.0832 ng/ml
Methocarbamol	4.416	214560	11591.21	92.2	3291.38	406142	56.6847 ng/ml
Phencyclidine	4.948	508302	2818.67	44.5	1116.59	295041	51.3939 ng/ml

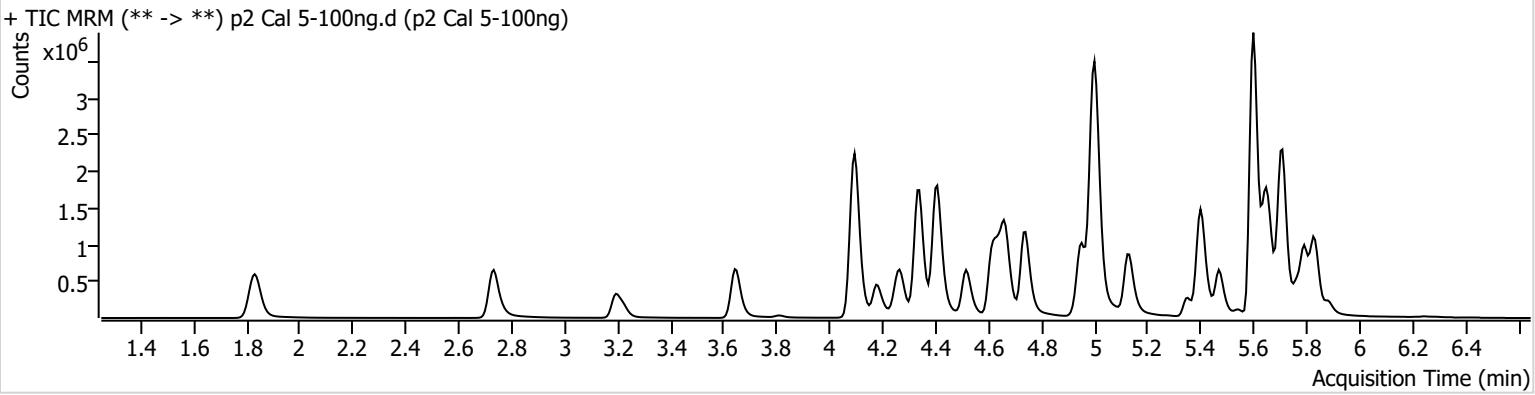
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Cal 5-100ng.d
Type	Cal	**Sample**	p2 Cal 5-100ng
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-D6	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 8:22:03 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.658	31483	263.80	96.2	54233.76	196873	98.7891 ng/ml
Acetyl-norfentanyl	3.220	210541	47243.73	36.0	2503.36	836813	106.4928 ng/ml
Amitriptyline	5.691	78198	359.55	116.2	662.34	31584	97.5098 ng/ml
Carbamazepine	5.604	5707112	20151.82	5.4	1473.10	2938447	100.3138 ng/ml
Chlorpheniramine	5.134	1689719	4736.85	0.2	49.57	459276	102.4389 ng/ml
Doxepin	5.389	143627	642.40	34.8	182.83	46133	109.8210 ng/ml
Flurazepam	5.351	564784	12042.81	10.9	5931.51	46133	101.4740 ng/ml
Levamisole	2.734	1160518	130165.04	82.1	772.47	292463	93.2482 ng/ml
Methocarbamol	4.416	342337	6280.55	93.0	15412.00	344350	107.9583 ng/ml
Phencyclidine	4.948	1021964	5594.34	45.1	2182.00	292463	104.9433 ng/ml

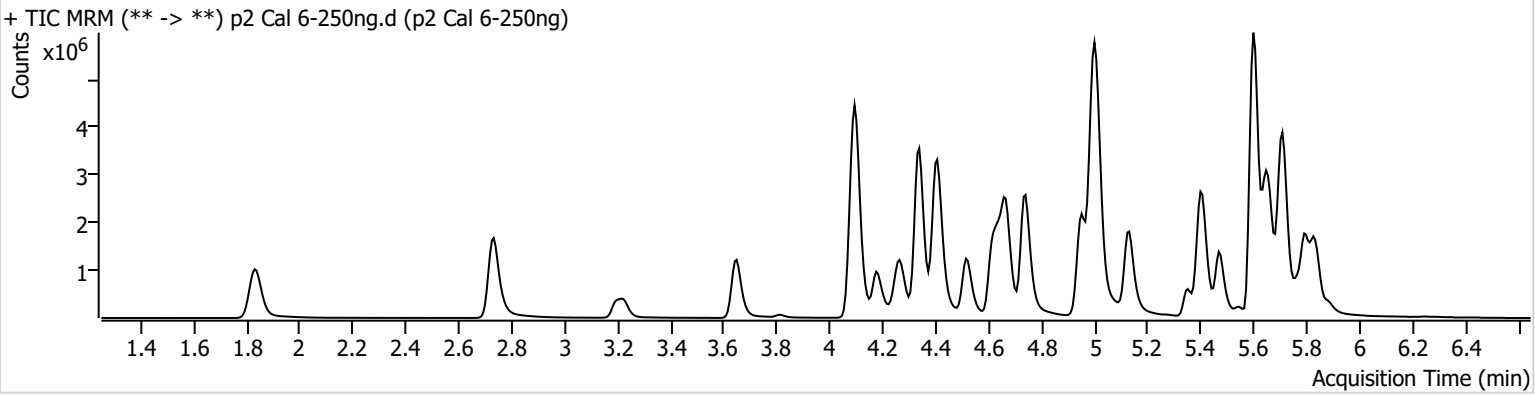
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Cal 6-250ng.d
Type	Cal	**Sample**	p2 Cal 6-250ng
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-C6	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 8:32:48 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.665	68426	3266.32	93.9	144498.94	163089	258.4855 ng/ml
Acetyl-norfentanyl	3.227	539290	1173.04	35.9	21255.00	882970	259.8730 ng/ml
Amitriptyline	5.698	182266	2501.25	115.8	1242.78	30144	238.8198 ng/ml
Carbamazepine	5.604	11553725	7020.87	5.9	727.95	2298219	258.5467 ng/ml
Chlorpheniramine	5.134	3996802	64875.20	0.2	137.91	433574	257.3281 ng/ml
Doxepin	5.389	320149	1968.06	38.1	473.84	45358	251.2697 ng/ml
Flurazepam	5.351	1262567	900671.05	11.4	350.70	45358	230.7725 ng/ml
Levamisole	2.734	2987688	128060.12	81.9	97762.89	264313	266.4859 ng/ml
Methocarbamol	4.423	601913	1623.73	92.5	243.61	265475	248.0831 ng/ml
Phencyclidine	4.948	2244774	6692.35	48.0	4394.18	264313	256.0383 ng/ml

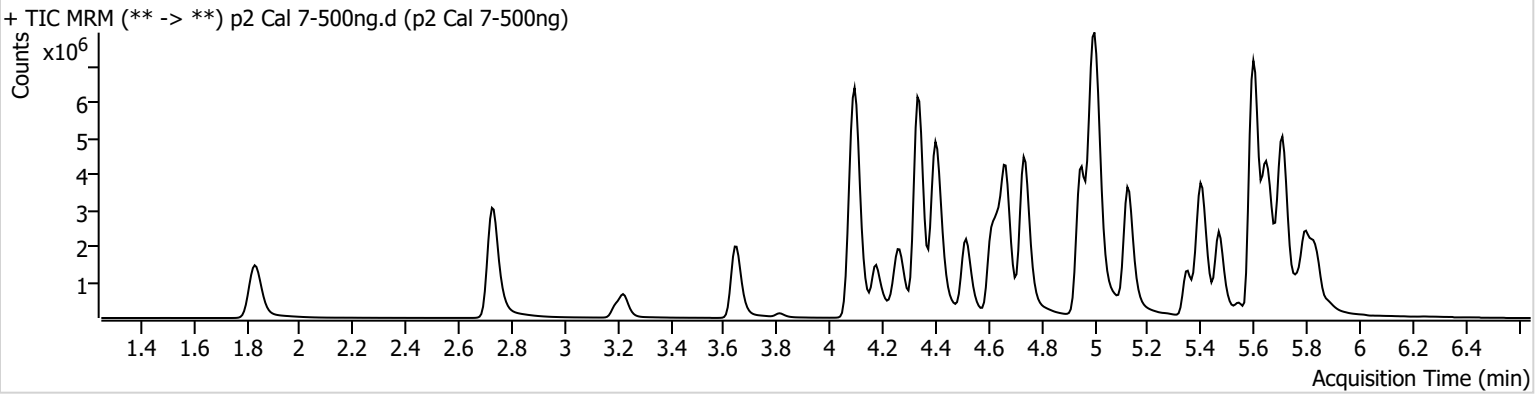
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Cal 7-500ng.d
Type	Cal	**Sample**	p2 Cal 7-500ng
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-B6	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 8:43:30 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.658	128013	2071.63	92.7	2732.60	155010	508.3627 ng/ml
Acetyl-norfentanyl	3.227	1072093	13937.77	36.3	100795.32	893402	511.5046 ng/ml
Amitriptyline	5.691	297542	218879.88	106.4	1559.44	23471	501.2186 ng/ml
Carbamazepine	5.604	16414671	26701.04	6.5	2028.04	1681856	501.2844 ng/ml
Chlorpheniramine	5.127	8681522	111142.21	0.2	117.11	457446	530.2413 ng/ml
Doxepin	5.382	568155	3754.57	40.1	419.63	41717	486.5110 ng/ml
Flurazepam	5.351	2812919	9903.51	12.0	3104.11	41717	559.0700 ng/ml
Levamisole	2.727	5778882	5835.41	81.7	190114.65	278778	489.0861 ng/ml
Methocarbamol	4.423	784529	6379.55	92.7	7962.86	192075	448.0854 ng/ml
Phencyclidine	4.948	4506726	8788.15	50.6	4681.59	278778	487.9806 ng/ml

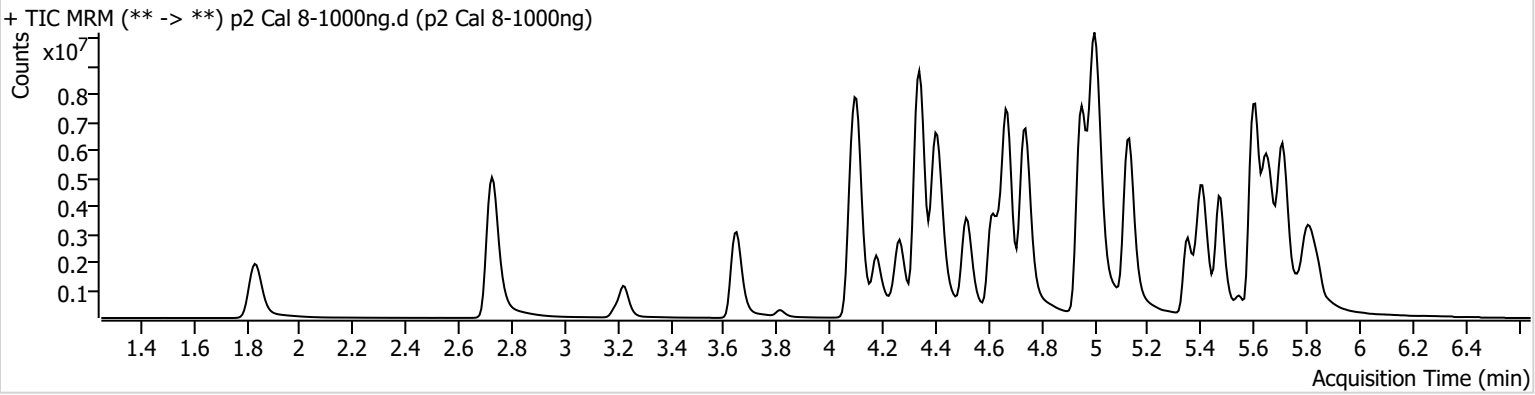
TS CS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\110821 AM 27 28 TS CS\QuantResults\AM 28 P2 Casework CS TS.batch.bin
Calibration Last Update 11/15/2021 1:44:17 PM

Instrument	Falco (069901)	**Data File**	p2 Cal 8-1000ng.d
Type	Cal	**Sample**	p2 Cal 8-1000ng
Acq. Method	AM 28 MDQ P2 102521.m	**Operator**	Celena Shrum
Sample Position	P2-A6	**Comment**	
Injection Volume	5		
Acq. Date-Time	11/10/2021 8:54:14 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Acetyl-fentanyl	4.665	266951	2920.80	93.5	255486.72	167723	979.3570 ng/ml
Acetyl-norfentanyl	3.227	2080253	10856.56	35.9	100502.68	913731	971.2763 ng/ml
Amitriptyline	5.691	656256	1297.31	101.7	3137.24	25606	1013.8085 ng/ml
Carbamazepine	5.609	19114690	7136.23	6.6	1039.63	988726	992.2777 ng/ml
Chlorpheniramine	5.134	17640154	145814.79	0.2	14803.99	513211	960.6915 ng/ml
Doxepin	5.382	1310572	2518.59	42.2	320.24	46920	999.7077 ng/ml
Flurazepam	5.351	6270219	190368.02	12.7	29973.06	46920	1108.0706 ng/ml
Levamisole	2.727	10212517	2896.30	81.8	127890.05	301532	799.3919 ng/ml
Methocarbamol	4.430	796782	33164.81	91.9	57574.85	107145	817.0131 ng/ml
Phencyclidine	4.948	8644817	164437.22	53.4	70986.90	301532	865.9407 ng/ml