










2/16/2021

REVIEWED

By Britany Wylie at 2:32 pm, Feb 17, 2021

Worklist: 4787

<u>LAB CASE</u>	<u>ITEM</u>	<u>ITEM TYPE</u>	<u>DESCRIPTION</u>	
C2021-0070	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ	
C2021-0084	2	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ	
C2021-0197	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ	
C2021-0227	1	AVK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ	
C2021-0242	1	UCK	AM 28 Urine Multi-Drug Confirmation Panel 1 by LC-QQ	
C2021-0256	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ	
C2021-0262	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ	
C2021-0268	1	AVK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ	
C2021-0289	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ	

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

Extraction Date 2/11/21 Analyst: Anne Nord
Plate lot#: 201207 (part IDP-121) Plate Expiration: 06/07/21

Mobile phase A: 5mM Amm Form + 0.01% FA **Mobile phase B:** 0.01% Formic Acid in MeOH
0.5M Ammonium Hydroxide Ethyl Acetate 20% Methanol in Water

Blank Blood Lot: 20J20793 **Urine Blank lot:** 10120

Column: Agilent 120 EC-C18 (2.1x 100-2.7um)

LCMS-QQQ ID: 69679

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. Urine hydrolysis pipette 250 ul urine in blank well, add 40 ul BG Turbo, add 100 ul 500 mm sodium phosphate buffer, mix for at least 5 minutes at ambient temperature. Pipette 250µL blood (calibrated pipette) Pipette ID: 1926134 or 250µL hydrolyzed urine in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 4. Pipette 250µL 0.5M 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) Manifold ID: 66792
- 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. Add 50 ul 1% HCl in MeOH, Place on SPE Dry and evaporate to dryness at approx. 35°C.
SPE Dry ID: 66819
- 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 R² 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.

COMMENTS: started run 2/11 pressure maxed out, 2/12 changed pre column, changed needle seat, changed column. Started run 2/12 acquisition windows were off. Adjusted method started run again, part way through run instrument shut down due to a leak. Tightened fitting from column, Started run again acquisition windows off, adjusted method restarted run, acquisition windows still off. 2/16/12 adjusted method and started run.

Only evaluated: amphetamine, diphenhydramine, fentanyl, methamphetamine, morphine and tramadol in this run.

Curve limits: amphetamine 5-250, fentanyl .5-25 (qualitative only), methamphetamine 5-250 (qualitative only)

~~A~~

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + QC_1			IS + Cal. 1	IS + QC_1	197-1					IS + Cal. 8
B	IS + Cal. 2	IS + QC_2			IS + Cal. 2	IS + QC_2	256-1					IS + Cal. 7
C	IS + Cal. 3	qc3			IS + Cal. 3	IS + QC_3	262-1					IS + Cal. 6
D	IS + Cal. 4	IS + QC_4			IS + Cal. 4	IS + QC_4	268-1				qc2 urine	IS + Cal. 5
E	IS + Cal. 5	Qc 2 urine			IS + Cal. 5	qc2 urine	289-1				IS + QC_4	IS + Cal. 4
F	IS + Cal. 6				IS + Cal. 6	070-1	negative blood				IS + QC_3	IS + Cal. 3
G	IS + Cal. 7				IS + Cal. 7	227-1	negative urine				IS + QC_2	IS + Cal. 2
H	IS + Cal. 8				IS + Cal. 8	084-2	242-1				IS + QC_1	IS + Cal. 1

Run blanks before

c2021-0__-__

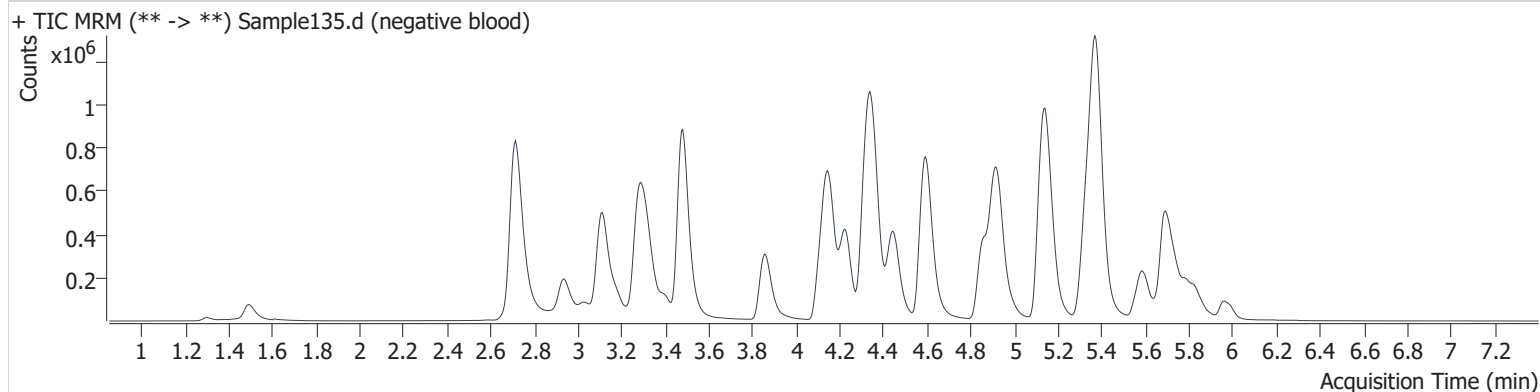
Ⓐ

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	Sample135.d
Type	Sample	Sample	negative blood
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-F7	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 1:59:19 PM		
Sample Info.			

Sample Chromatogram



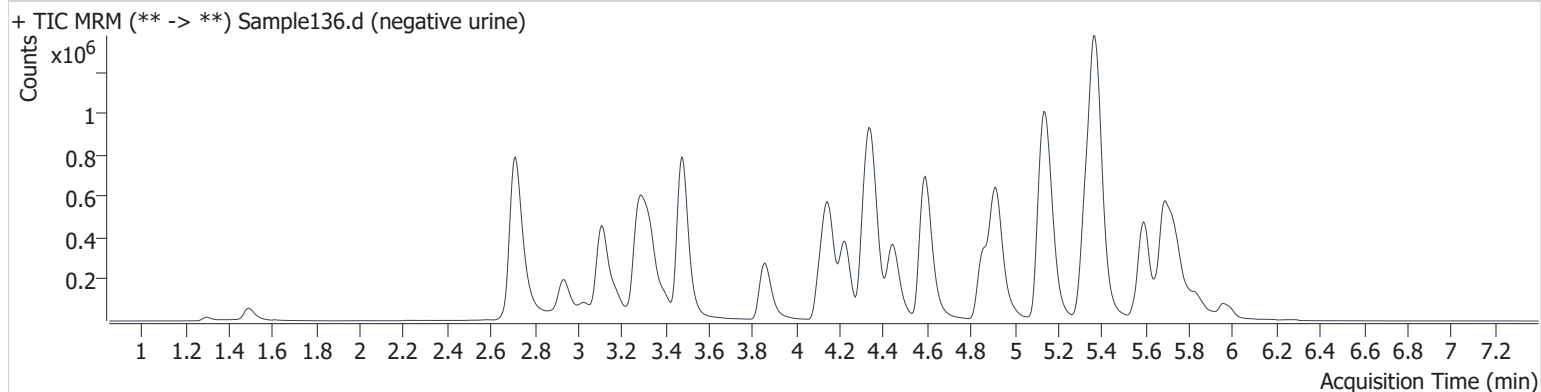
GA

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	Sample136.d
Type	Sample	Sample	negative urine
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-G7	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 2:08:21 PM		
Sample Info.			

Sample Chromatogram



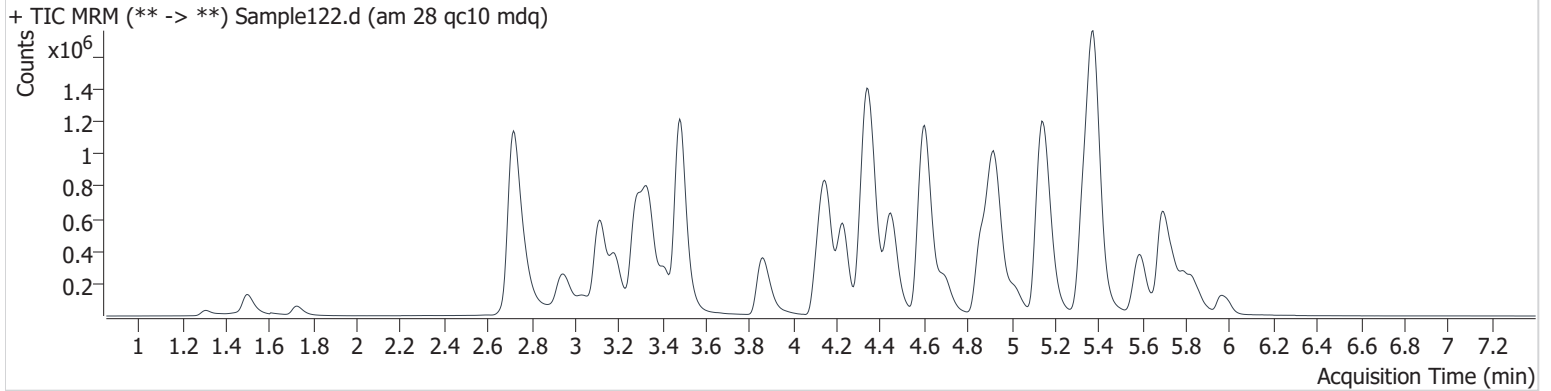
GA

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	Sample122.d
Type	QC	Sample	am 28 qc10 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-A6	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 11:08:12 AM		
Sample Info.			

Sample Chromatogram



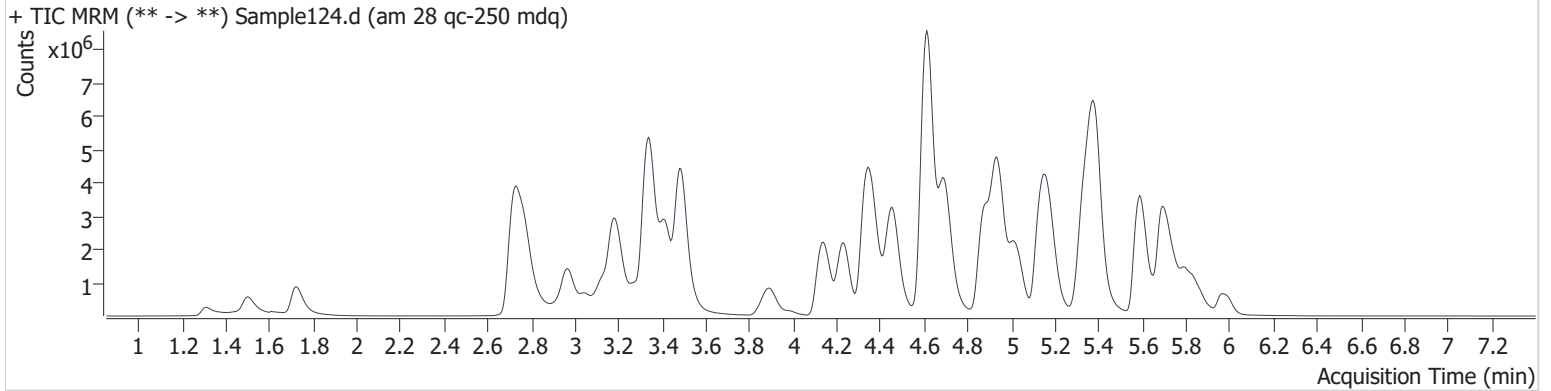
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.192	577555	3496.9	45.3	830.3	840826	10.173 ng/ml
Diphenhydramine	5.386	742729	2383.7	30.0	524.0	3904361	9.439 ng/ml
Fentanyl	5.180	10625	183.9	137.0	184.5	540955	0.753 ng/ml
Methamphetamine	3.344	711543	1160.0	41.0	374.7	2596348	9.341 ng/ml
Morphine	1.317	20850	8093.4	18.1	47.1	26481	8.786 ng/ml
Tramadol	4.339	646537	860.6	3.4	165.6	3026083	10.020 ng/ml

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	Sample124.d
Type	QC	Sample	am 28 qc-250 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-C6	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 11:17:14 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.186	8220845	9091.0	45.2	19500.1	587996	215.841 ng/ml
Diphenhydramine	5.388	12730066	11475.3	29.3	9932.3	2508825	238.443 ng/ml
Fentanyl	5.180	216853	6249.7	135.4	1760.1	395246	25.735 ng/ml
Methamphetamine	3.339	10142608	153198.3	39.7	7793.3	2211804	229.882 ng/ml
Morphine	1.312	365182	107625.0	17.1	103953.7	19872	238.805 ng/ml
Tramadol	4.334	10644907	25035.3	3.4	2363.3	2174151	247.893 ng/ml

GA

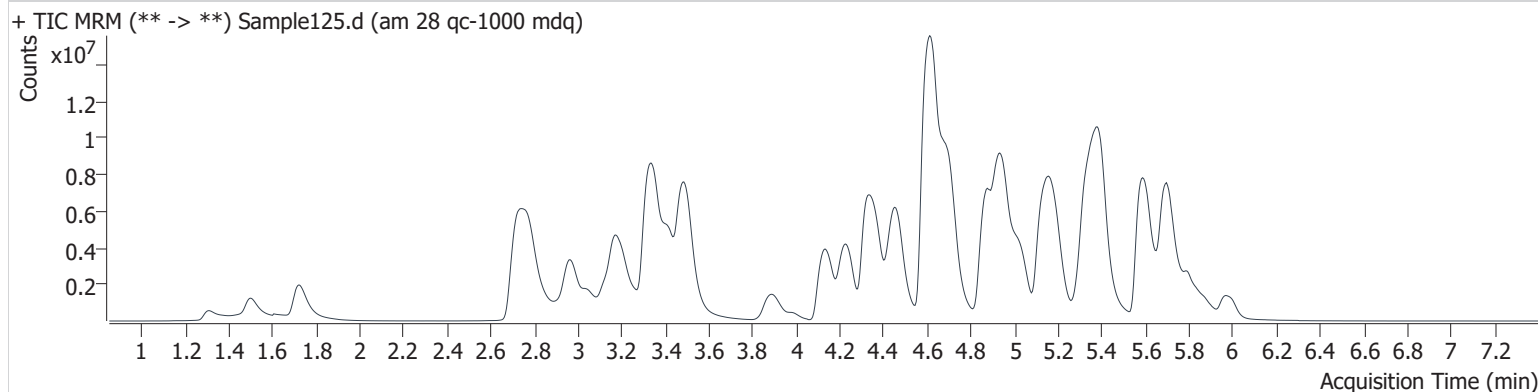
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	Sample125.d
Type	QC	Sample	am 28 qc-1000 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-D6	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 11:26:16 AM		

Sample Info.

Sample Chromatogram



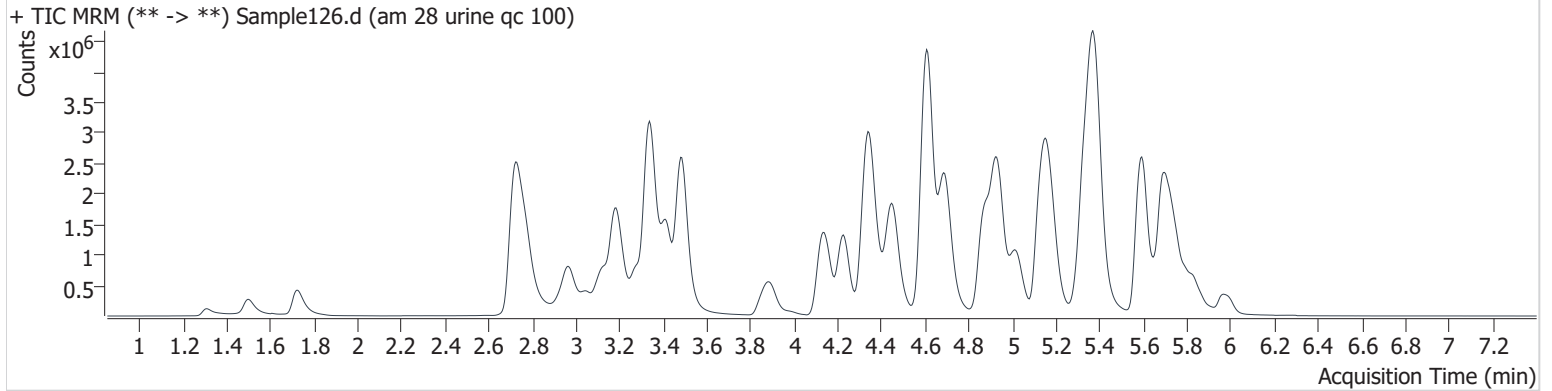
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.186	14289146	101405.8	46.2	58347.4	321355	687.445 ng/ml ocr
Diphenhydramine	5.395	24782128	86333.4	29.5	7823.5	1185844	980.436 ng/ml
Fentanyl	5.185	687291	23609.5	143.6	291588.5	286331	113.177 ng/ml ocr
Methamphetamine	3.339	20184508	2290.8	39.0	68744.5	1686785	607.403 ng/ml ocr
Morphine	1.312	966484	41239.8	17.5	72515.2	13069	965.531 ng/ml
Tramadol	4.324	22386882	182042.8	3.3	1998.9	1304934	870.683 ng/ml

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	Sample126.d
Type	QC	Sample	am 28 urine qc 100
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-E6	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 11:35:18 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.186	4670448	6410.4	44.2	5094.6	657028	109.518 ng/ml
Diphenhydramine	5.386	6975253	12573.3	30.2	3874.8	3345556	98.281 ng/ml
Fentanyl	5.175	225859	806.9	133.1	4019.5	981750	10.689 ng/ml
Methamphetamine	3.344	5233873	7799.2	40.7	4593.1	2252567	114.172 ng/ml
Morphine	1.312	158373	1247349.0	17.5	18428.5	17862	114.436 ng/ml
Tramadol	4.336	5549115	30991.7	3.5	733.6	2543263	110.008 ng/ml

GA

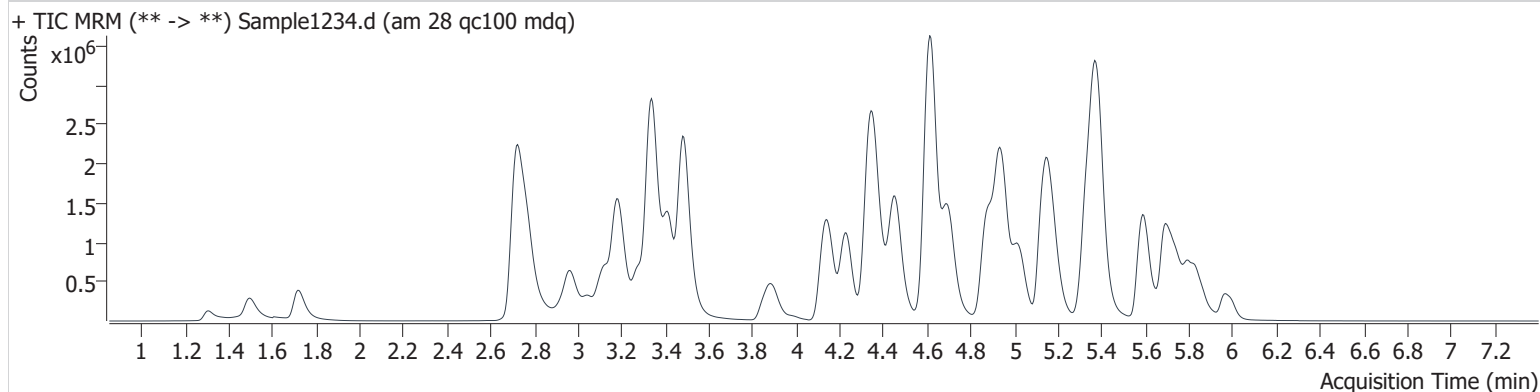
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	Sample1234.d
Type	Sample	Sample	am 28 qc100 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-B6	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 2:26:27 PM		

Sample Info.

Sample Chromatogram



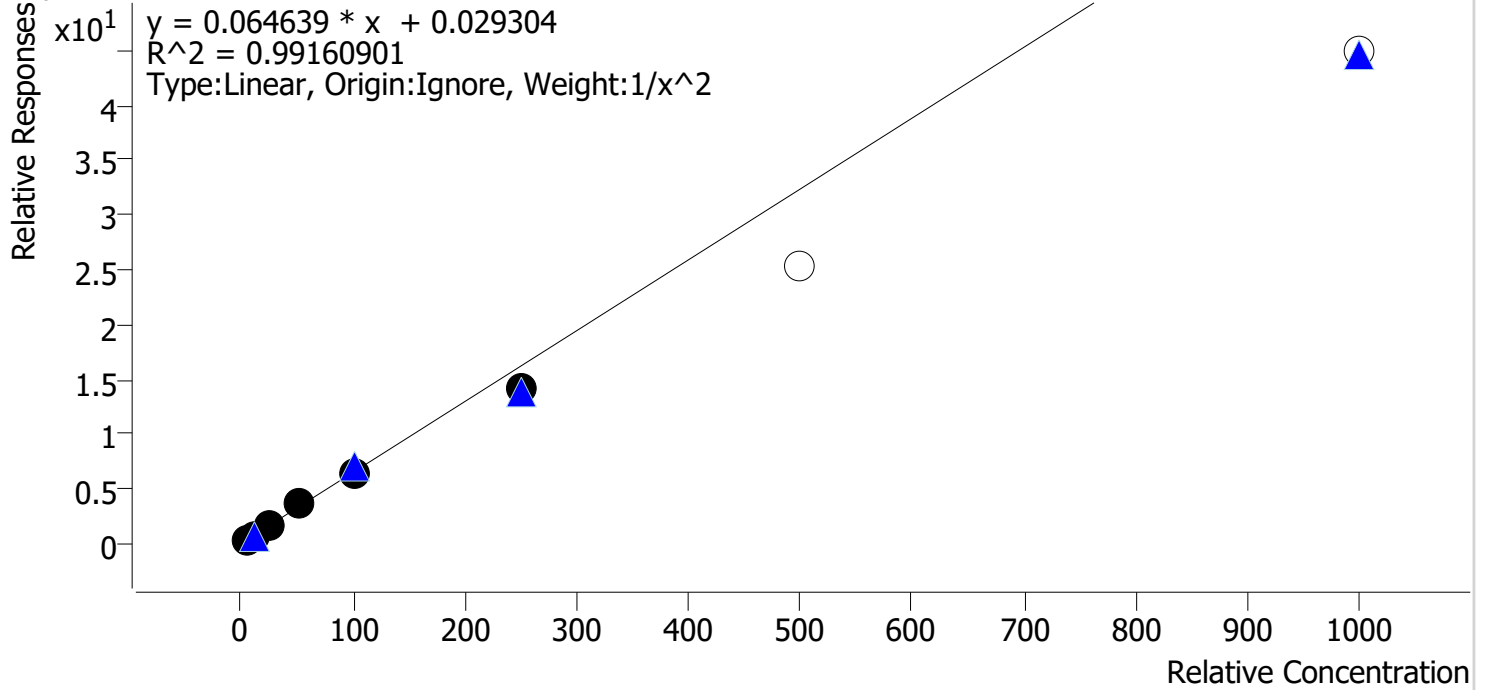
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.186	4077957	51632.8	43.8	2224.6	624865	100.509 ng/ml
Diphenhydramine	5.386	5034749	12341.5	29.7	31080.9	2460266	96.475 ng/ml
Fentanyl	5.175	64777	3396.2	130.8	16237.7	300487	10.005 ng/ml
Methamphetamine	3.344	4586103	319.9	40.5	4499.1	1990057	113.200 ng/ml
Morphine	1.307	155528	846768.7	17.0	47.1	19900	100.691 ng/ml
Tramadol	4.340	4791986	2591.0	3.5	1050.7	2241292	107.781 ng/ml

Compound Calibration Report



Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Last Cal. Update 2/16/2021 2:42 PM
Analyst Name ISP\datastor
Analyte Amphetamine **Internal Standard** Amphetamine-D11

Amphetamine - 8 Levels, 6 Levels Used, 8 Points, 6 Points Used, 4 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
am 28 cal 1 mdq	1	✓	5.0	4.8	96.3
am 28 cal 2 mdq	2	✓	10.0	10.5	105.3
am 28 cal 3 mdq	3	✓	25.0	25.5	101.9
am 28 cal 4 mdq	4	✓	50.0	54.6	109.1
am 28 cal 5 mdq	5	✓	100.0	99.8	99.8
am28 cal 6 mdq	6	✓	250.0	219.1	87.6
am 28 cal 7 mdq	7	x	500.0	390.7	78.1
am 28 cal 8 mdq	8	x	1000.0	694.0	69.4

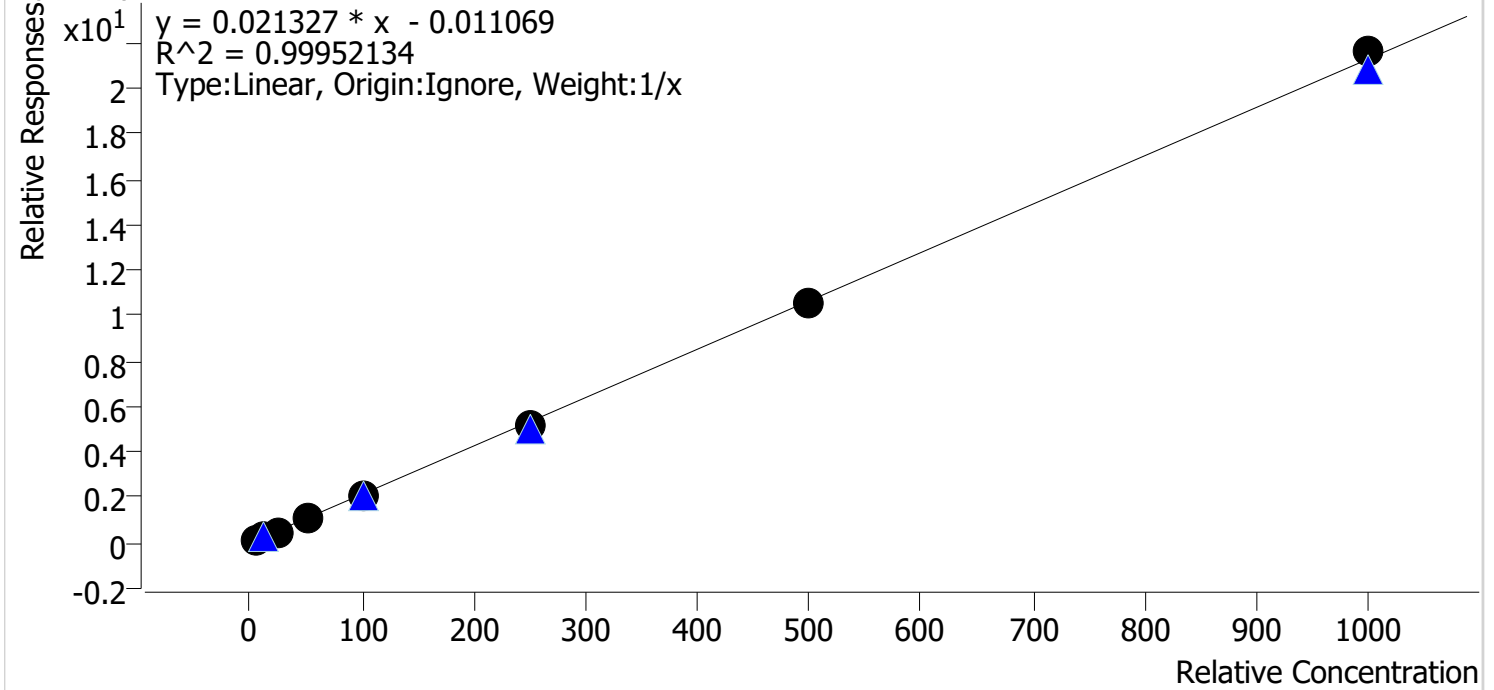
Cal 7 and 8 removed from curve, curve is not linear at those levels.

Compound Calibration Report



Batch results	D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin		
Last Cal. Update	2/16/2021 2:42 PM		
Analyst Name	ISP\datastor		
Analyte	Diphenhydramine	Internal Standard	Diphenhydramine-D3

Diphenhydramine - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs



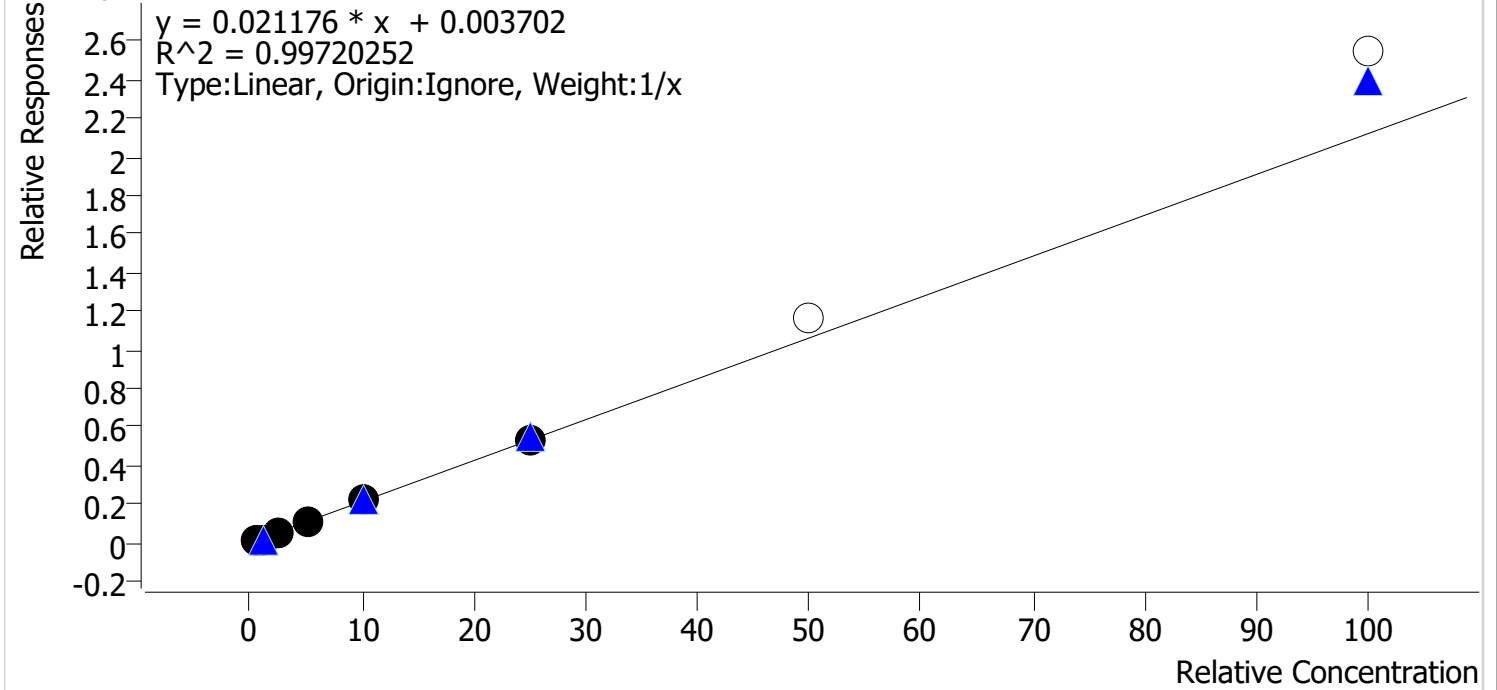
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
am 28 cal 1 mdq	1	✓	5.0	5.9	117.7
am 28 cal 2 mdq	2	✓	10.0	9.6	95.9
am 28 cal 3 mdq	3	✓	25.0	23.3	93.1
am 28 cal 4 mdq	4	✓	50.0	49.4	98.7
am 28 cal 5 mdq	5	✓	100.0	95.8	95.8
am28 cal 6 mdq	6	✓	250.0	245.2	98.1
am 28 cal 7 mdq	7	✓	500.0	495.3	99.1
am 28 cal 8 mdq	8	✓	1000.0	1015.5	101.6

Compound Calibration Report



Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Last Cal. Update 2/16/2021 2:42 PM
Analyst Name ISP\datastor
Analyte Fentanyl **Internal Standard** Fentanyl-D5

Fentanyl - 8 Levels, 6 Levels Used, 8 Points, 6 Points Used, 4 QCs



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
am 28 cal 1 mdq	1	✓	0.5	0.6	125.4
am 28 cal 2 mdq	2	✓	1.0	0.9	86.7
am 28 cal 3 mdq	3	✓	2.5	2.2	87.2
am 28 cal 4 mdq	4	✓	5.0	4.9	98.9
am 28 cal 5 mdq	5	✓	10.0	10.1	100.6
am28 cal 6 mdq	6	✓	25.0	25.3	101.3
am 28 cal 7 mdq	7	✗	50.0	54.9	109.8
am 28 cal 8 mdq	8	✗	100.0	120.1	120.1

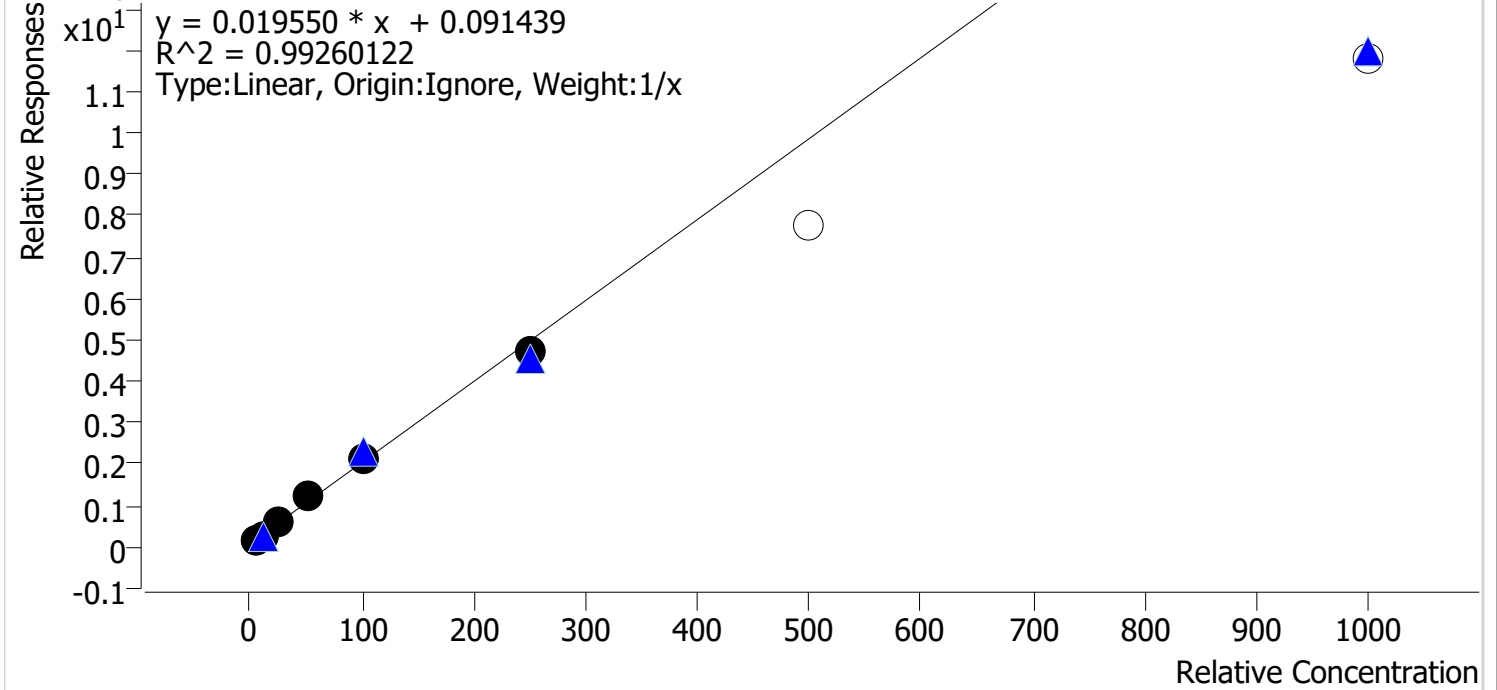
removed cal 7 and 8 from curve, with those points in not all points meet accuracy requirements, or linearity requirements.

Compound Calibration Report



Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Last Cal. Update 2/16/2021 2:42 PM
Analyst Name ISP\datastor
Analyte Methamphetamine **Internal Standard** **Methamphetamine-D11**

Methamphetamine - 8 Levels, 6 Levels Used, 8 Points, 6 Points Used, 4 QCs



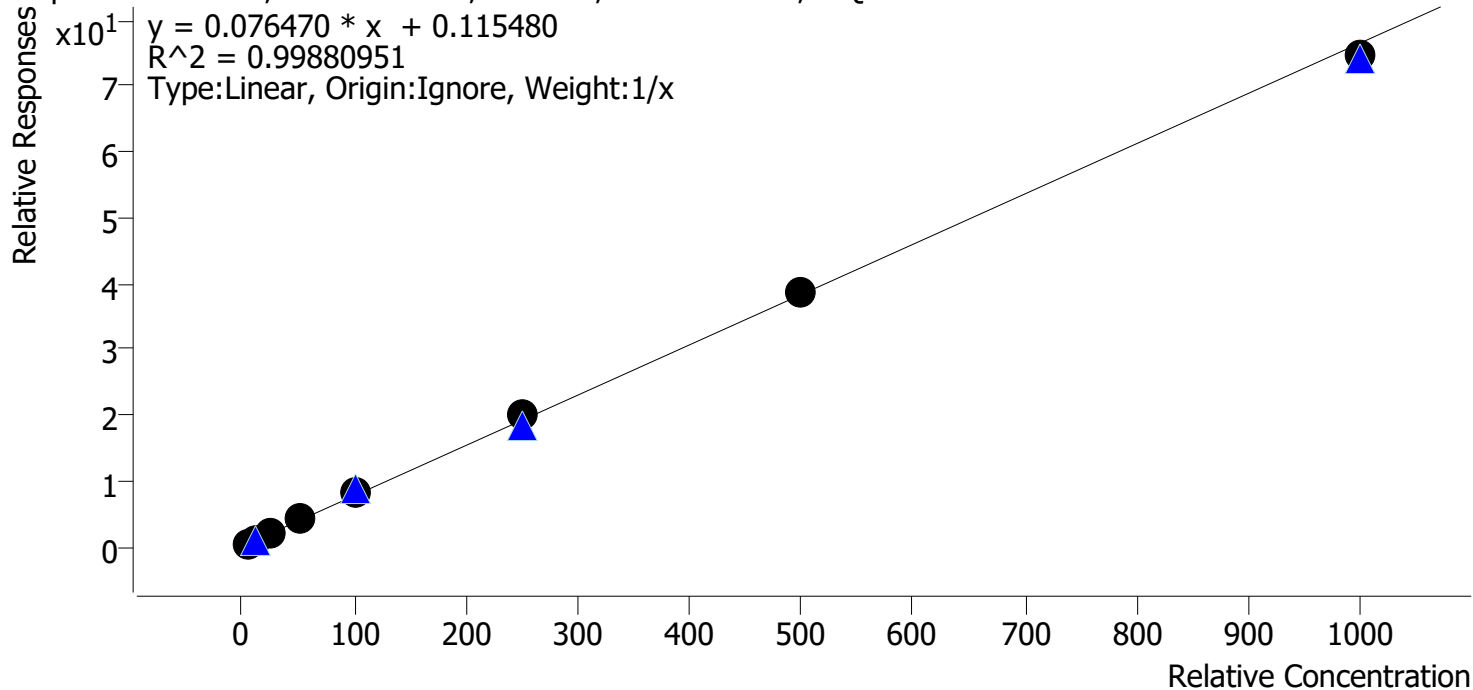
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
am 28 cal 1 mdq	1	✓	5.0	4.3	86.2
am 28 cal 2 mdq	2	✓	10.0	9.2	92.4
am 28 cal 3 mdq	3	✓	25.0	26.3	105.3
am 28 cal 4 mdq	4	✓	50.0	57.7	115.4
am 28 cal 5 mdq	5	✓	100.0	106.3	106.3
am28 cal 6 mdq	6	✓	250.0	236.2	94.5
am 28 cal 7 mdq	7	✗	500.0	394.0	78.8
am 28 cal 8 mdq	8	✗	1000.0	597.0	59.7

removed cal 7 and 8 curve is not linear in that range.

Compound Calibration Report

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Last Cal. Update 2/16/2021 2:42 PM
Analyst Name ISP\datastor
Analyte Morphine **Internal Standard** Morphine-D6

Morphine - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs



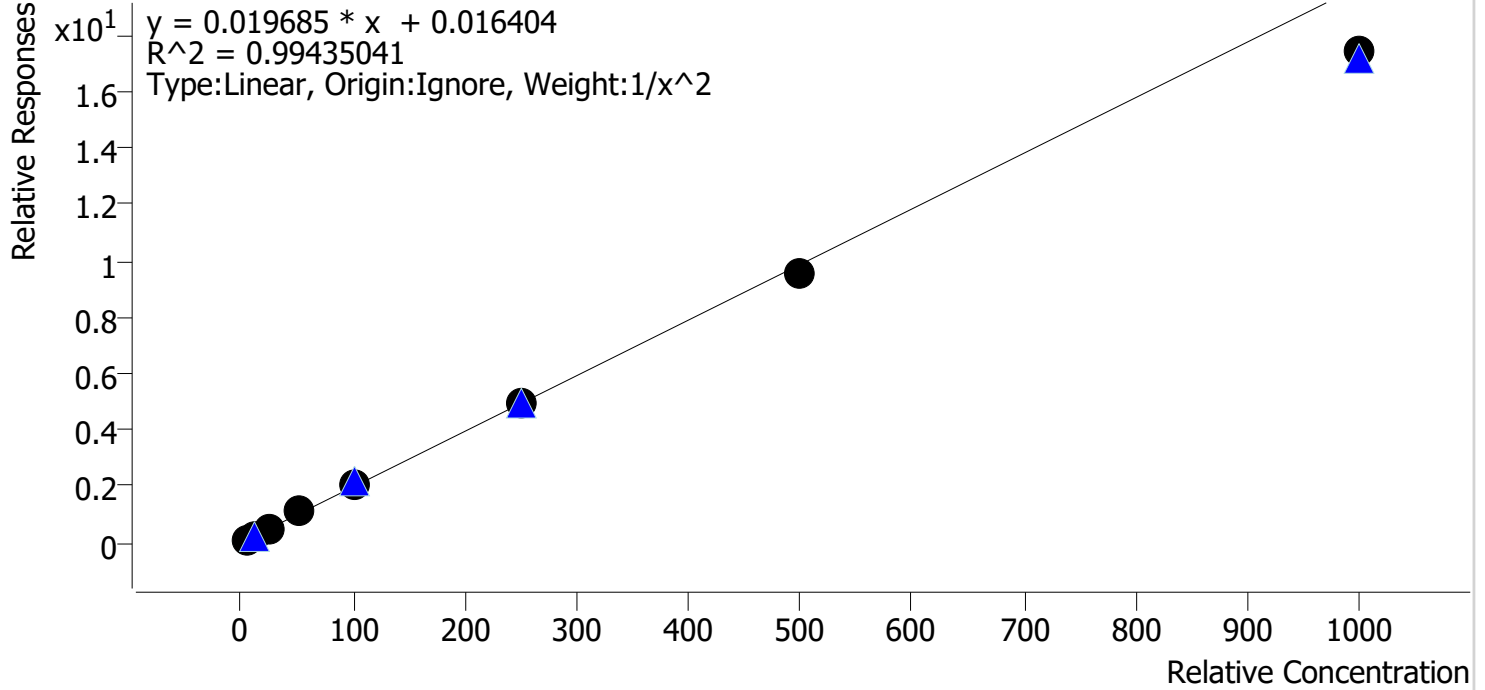
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
am 28 cal 1 mdq	1	✓	5.0	4.7	93.1
am 28 cal 2 mdq	2	✓	10.0	9.0	89.8
am 28 cal 3 mdq	3	✓	25.0	25.3	101.0
am 28 cal 4 mdq	4	✓	50.0	53.1	106.1
am 28 cal 5 mdq	5	✓	100.0	106.5	106.5
am28 cal 6 mdq	6	✓	250.0	263.6	105.4
am 28 cal 7 mdq	7	✓	500.0	502.9	100.6
am 28 cal 8 mdq	8	✓	1000.0	975.1	97.5

Compound Calibration Report



Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Last Cal. Update 2/16/2021 2:42 PM
Analyst Name ISP\datastor
Analyte Tramadol **Internal Standard** Tramadol-13C-D3

Tramadol - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs



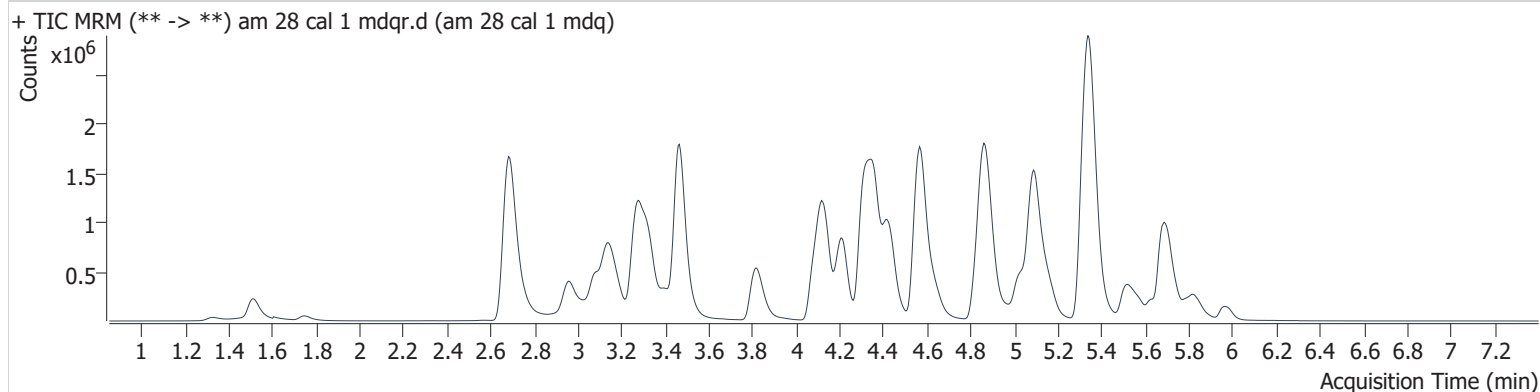
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
am 28 cal 1 mdq	1	✓	5.0	5.0	99.0
am 28 cal 2 mdq	2	✓	10.0	9.9	98.7
am 28 cal 3 mdq	3	✓	25.0	25.5	101.9
am 28 cal 4 mdq	4	✓	50.0	55.6	111.1
am 28 cal 5 mdq	5	✓	100.0	104.6	104.6
am28 cal 6 mdq	6	✓	250.0	249.2	99.7
am 28 cal 7 mdq	7	✓	500.0	483.5	96.7
am 28 cal 8 mdq	8	✓	1000.0	882.9	88.3

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	am 28 cal 1 mdqr.d
Type	Cal	Sample	am 28 cal 1 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-A5	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 9:55:55 AM		
Sample Info.			

Sample Chromatogram



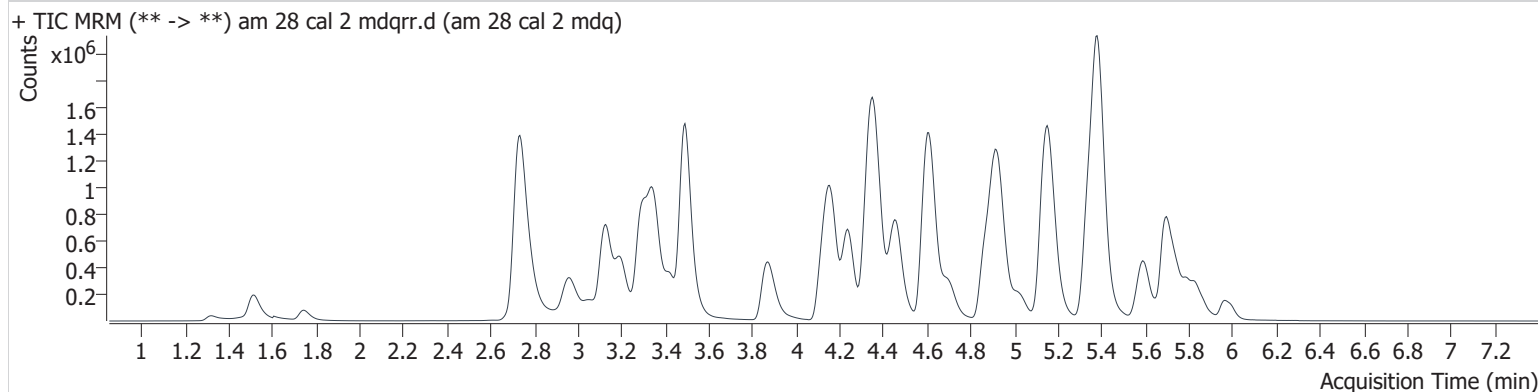
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.161	501532	2389.0	44.3	1612.1	1472208	4.817 ng/ml
Diphenhydramine	5.339	712103	361223.4	31.1	1882.7	6223675	5.884 ng/ml
Fentanyl	5.169	19721	256.8	140.5	7136.7	1161479	0.627 ng/ml
Methamphetamine	3.334	730189	337.6	42.0	1366.3	4155387	4.311 ng/ml
Morphine	1.332	17173	49.4	16.6	384.0	36439	4.653 ng/ml
Tramadol	4.329	559257	9746.7	3.6	159.6	4911873	4.951 ng/ml

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	am 28 cal 2 mdqrr.d
Type	Cal	Sample	am 28 cal 2 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-B5	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 10:04:58 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.202	742460	2886.8	45.2	1466.4	1046201	10.526 ng/ml
Diphenhydramine	5.391	920818	670.3	30.3	193583.5	4759453	9.591 ng/ml
Fentanyl	5.190	14727	360.9	127.7	5211.2	667813	0.867 ng/ml
Methamphetamine	3.355	863274	654.2	40.4	1430.2	3172825	9.240 ng/ml
Morphine	1.327	24848	71.3	16.7	65.8	30967	8.983 ng/ml
Tramadol	4.349	771443	4262.2	3.5	216.9	3660452	9.873 ng/ml

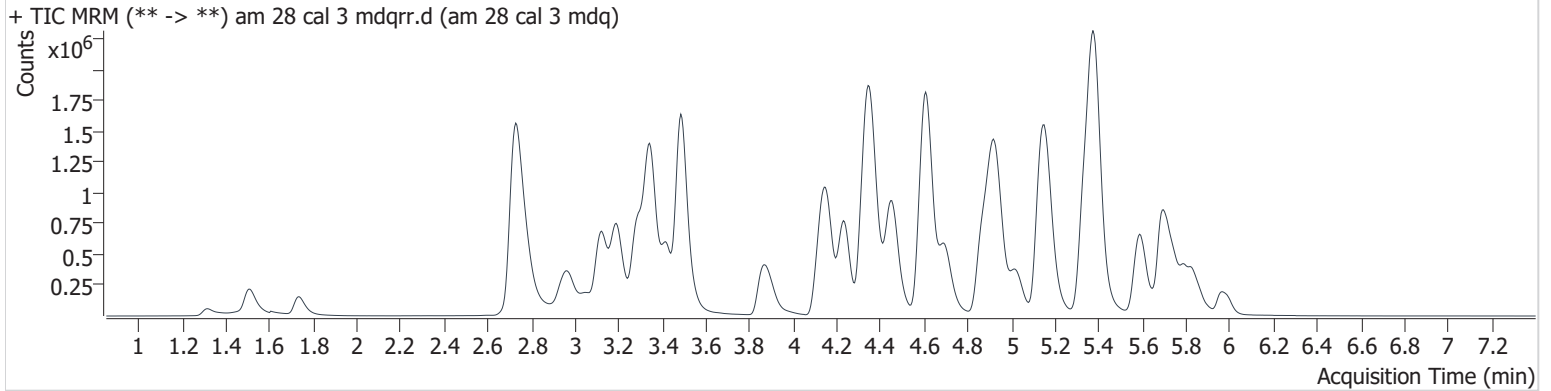
GA

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	am 28 cal 3 mdqrr.d
Type	Cal	Sample	am 28 cal 3 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-C5	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 10:14:00 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.197	1540442	10822.1	45.0	1550.4	919031	25.478 ng/ml
Diphenhydramine	5.386	1943405	1269699.2	30.2	2453.8	4003468	23.281 ng/ml
Fentanyl	5.175	27440	376.9	133.0	2440.9	550512	2.179 ng/ml
Methamphetamine	3.350	1688687	3176.4	41.3	2018.4	2787242	26.313 ng/ml
Morphine	1.322	57991	134109.4	16.0	208.7	28338	25.251 ng/ml
Tramadol	4.344	1670087	11601.0	3.5	564.9	3225701	25.468 ng/ml

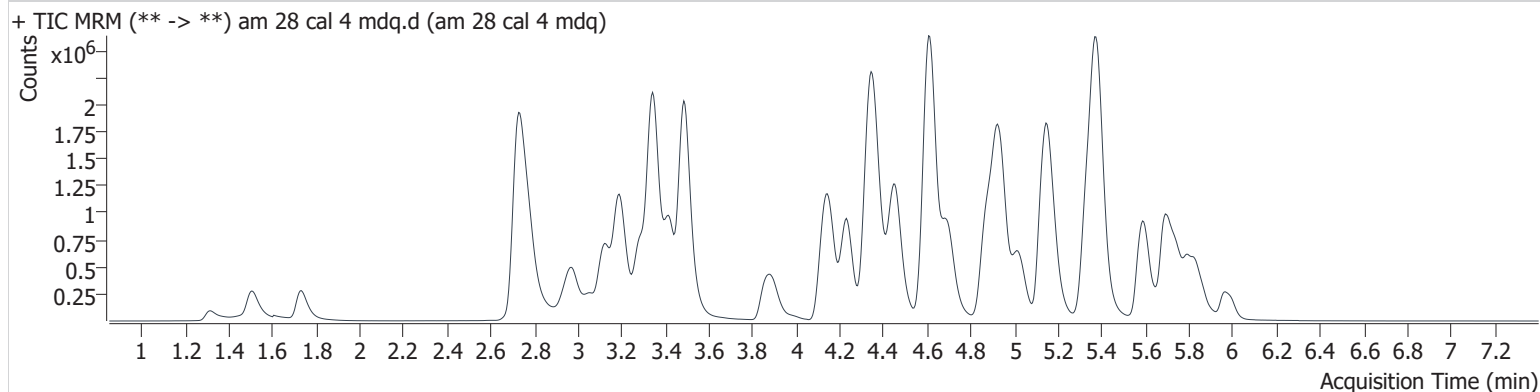
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	am 28 cal 4 mdq.d
Type	Cal	Sample	am 28 cal 4 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-D5	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 10:23:02 AM		

Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.197	2871668	25320.9	43.2	11843.5	807656	54.553 ng/ml
Diphenhydramine	5.386	3242685	5311.7	30.1	30592.2	3112434	49.371 ng/ml
Fentanyl	5.175	43024	1166.6	131.2	1581.5	396916	4.944 ng/ml
Methamphetamine	3.350	3028358	226.4	41.1	4316.5	2483353	57.699 ng/ml
Morphine	1.317	109247	418834.7	17.6	107122.0	26180	53.060 ng/ml
Tramadol	4.339	3175032	10682.2	3.4	943.1	2859629	55.571 ng/ml

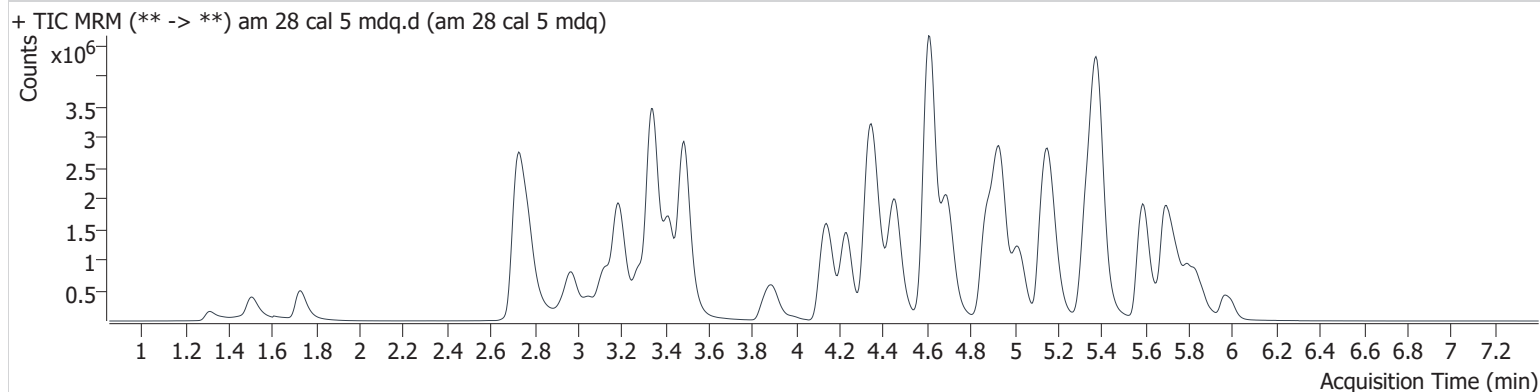
GA

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	am 28 cal 5 mdq.d
Type	Cal	Sample	am 28 cal 5 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-E5	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 10:32:04 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.192	5010685	23602.2	44.4	23751.5	773558	99.756 ng/ml
Diphenhydramine	5.386	6958046	1586.2	29.9	1249.5	3422691	95.842 ng/ml
Fentanyl	5.175	103516	1813.1	134.7	31476.8	477572	10.061 ng/ml
Methamphetamine	3.344	5578714	5540.0	40.5	450.5	2572320	106.255 ng/ml
Morphine	1.317	210742	160700.0	17.3	30446.2	25522	106.469 ng/ml
Tramadol	4.334	5856259	112550.1	3.5	731.4	2821886	104.593 ng/ml

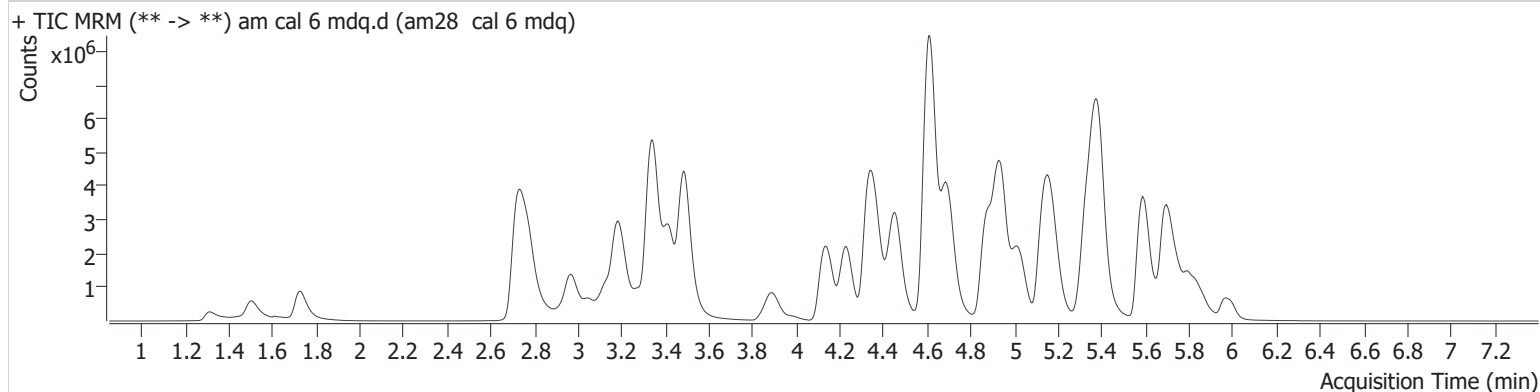
GA

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	am cal 6 mdq.d
Type	Cal	Sample	am28 cal 6 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-F5	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 10:41:05 AM		

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.192	8256640	111349.7	45.1	5518.3	581839	219.082 ng/ml
Diphenhydramine	5.386	13324933	16854.8	28.8	25263.5	2553147	245.238 ng/ml
Fentanyl	5.180	230399	3419.6	137.2	36124.0	426724	25.322 ng/ml
Methamphetamine	3.345	9984080	35506.8	39.9	10760.8	2120292	236.181 ng/ml
Morphine	1.317	412066	59236.5	16.8	261175.7	20328	263.574 ng/ml
Tramadol	4.335	10642927	21700.4	3.4	1427.5	2162629	249.172 ng/ml

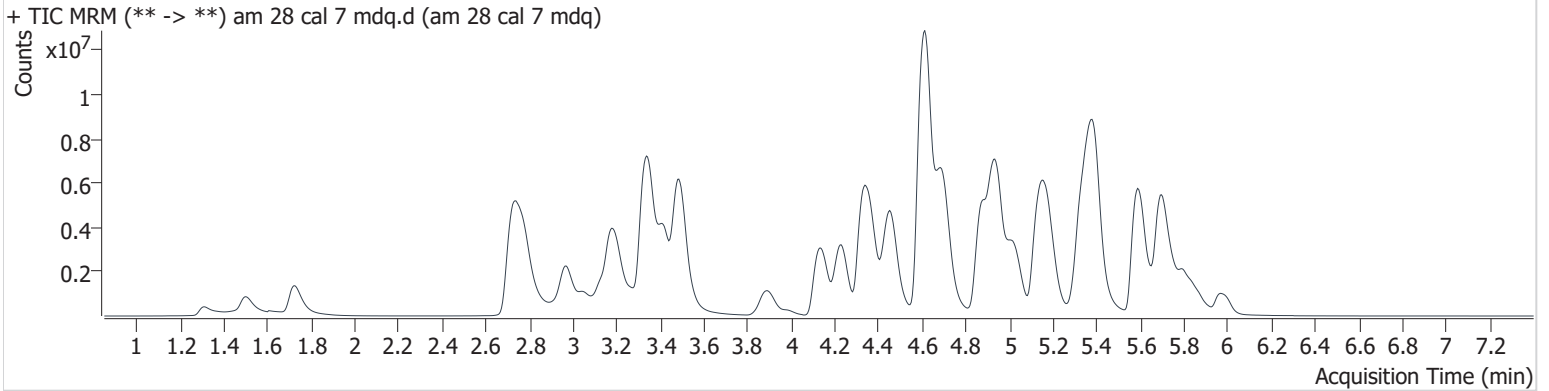
A

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument 69679 **Data File** am 28 cal 7 mdq.d
Type Cal **Sample** am 28 cal 7 mdq
Acq. Method mdqp1 1-21-21long.m **Operator** Anne Nord
Sample Position P1-G5 **Comment**
Injection Volume 3
Acq. Date-Time 2/16/2021 10:50:08 AM
Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.192	11546777	6094.3	45.6	7016.5	456667	390.716 ng/ml
Diphenhydramine	5.391	19833196	56659.8	29.2	21607.4	1879622	495.286 ng/ml
Fentanyl	5.180	397524	185290.0	133.8	14803.6	340938	54.886 ng/ml
Methamphetamine	3.344	15155199	16532.6	38.6	1105.2	1944507	393.982 ng/ml
Morphine	1.312	656877	130120.6	17.6	270395.0	17029	502.912 ng/ml
Tramadol	4.329	16520625	12321.9	3.3	911.0	1732934	483.467 ng/ml

GA

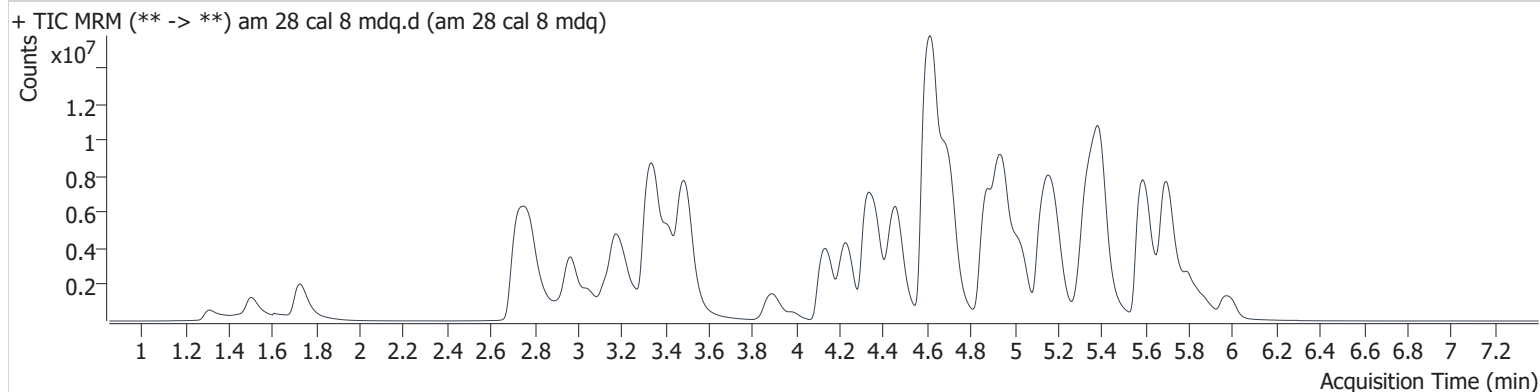
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\am 27-28\021621\QuantResults\mdq.batch.bin
Calibration Last Update 2/16/2021 2:42:42 PM

Instrument	69679	Data File	am 28 cal 8 mdq.d
Type	Cal	Sample	am 28 cal 8 mdq
Acq. Method	mdqp1 1-21-21long.m	Operator	Anne Nord
Sample Position	P1-H5	Comment	
Injection Volume	3		
Acq. Date-Time	2/16/2021 10:59:10 AM		

Sample Info.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Amphetamine	3.186	14684819	122877.1	45.9	115622.5	327160	693.951 ng/ml
Diphenhydramine	5.396	26205744	26058.7	29.3	74915.0	1210636	1015.508 ng/ml
Fentanyl	5.190	663687	312516.3	141.9	336996.3	260664	120.063 ng/ml
Methamphetamine	3.339	20317073	267220.9	39.5	1876.0	1727151	597.024 ng/ml
Morphine	1.312	1057697	14971466.1	17.4	35402.1	14163	975.098 ng/ml
Tramadol	4.324	23183648	140623.1	3.2	1880.7	1332770	882.851 ng/ml