REVIEWED
By Sarah Collins at 2:33 pm, Apr 27, 2021

TS 4/15/2021

Worklist: 4906

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION	
M2021-1319	2	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ	
P2021-0238	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ	
P2021-0968	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ	
P2021-1048	1	BCK	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QQQ	

TS

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

Extraction Date: 4/15/2021 Analyst: Tamara Salazar – HOA Amber Gerheart
Plate lot#: 201207 Plate Expiration: 6/7/2021
Mobile phase A: 5mM Amm Form + 0.01% FA **Mobile phase B:** 0.01% Formic Acid in MeOH
Blank Blood Lot: 20L20724 **Blank Urine Lot**: N/A
Column: Agilent 120 EC-C18 (2.1x 100-2.7um) **LCMS-QQQ ID**: 069901

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) 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 0.5M 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)***
☒ 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. If run contains urine, add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying (optional). 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.

COMMENTS: Compounds evaluated: Cocaethylene, Doxepin, Methylphenidate, Midazolam, Norketamine
Curve ranges: Norketamine 5-500 ng/mL

Analytical Plate Map

TS

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + QC_1	P2021-0968-1	IS + Sample	IS + Cal. 1	IS + QC_1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 8
B	IS + Cal. 2	IS + QC_2	P2021-1048-1	IS + Sample	IS + Cal. 2	IS + QC_2	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 7
C	IS + Cal. 3	IS + QC_3	IS + Sample	IS + Sample	IS + Cal. 3	IS + QC_3	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 6
D	IS + Cal. 4	IS + QC_4	IS + Sample	IS + Sample	IS + Cal. 4	IS + QC_4	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_2	IS + Cal. 5
E	IS + Cal. 5	IS + QC_2	IS + Sample	IS + Sample	IS + Cal. 5	IS + QC_2	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_4	IS + Cal. 4
F	IS + Cal. 6	Negative Blood	IS + Sample	IS + Sample	IS + Cal. 6	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_3	IS + Cal. 3
G	IS + Cal. 7	M2021-1319-2	IS + Sample	IS + Sample	IS + Cal. 7	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_2	IS + Cal. 2
H	IS + Cal. 8	P2021-0238-1	IS + Sample	IS + Sample	IS + Cal. 8	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_1	IS + Cal. 1

All wells to contain 60 µl of Trapping Solution

SLE and Sample Plate Map

TS

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + QC_1	IS + Sample	IS + Sample	IS + Cal. 1	IS + QC_1	P2021-0968-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 8
B	IS + Cal. 2	IS + QC_2	IS + Sample	IS + Sample	IS + Cal. 2	IS + QC_2	P2021-1048-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 7
C	IS + Cal. 3	IS + QC_3	IS + Sample	IS + Sample	IS + Cal. 3	IS + QC_3	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 6
D	IS + Cal. 4	IS + QC_4	IS + Sample	IS + Sample	IS + Cal. 4	IS + QC_4	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_2	IS + Cal. 5
E	IS + Cal. 5	IS + QC_2	IS + Sample	IS + Sample	IS + Cal. 5	IS + QC_2	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_4	IS + Cal. 4
F	IS + Cal. 6	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 6	Negative Blood	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_3	IS + Cal. 3
G	IS + Cal. 7	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 7	M2021-1319-2	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_2	IS + Cal. 2
H	IS + Cal. 8	IS + Sample	IS + Sample	IS + Sample	IS + Cal. 8	P2021-0238-1	IS + Sample	IS + Sample	IS + Sample	IS + Sample	IS + QC_1	IS + Cal. 1

All wells to contain 60 µl of Trapping Solution

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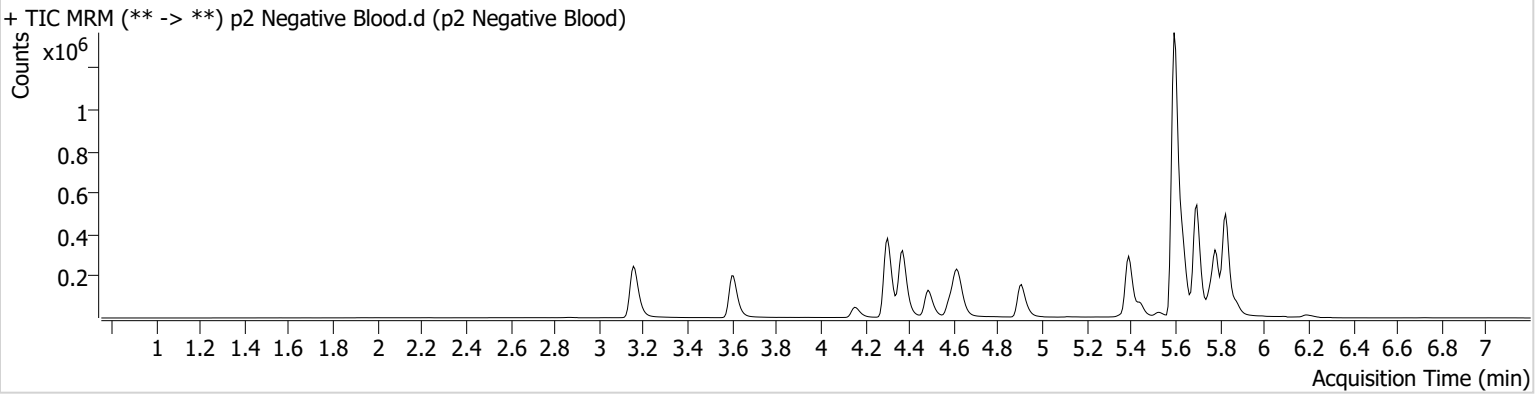
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 Negative Blood.d
Type	Sample	**Sample**	p2 Negative Blood
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-F6	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 4:27:33 PM		
Sample Info.			

Sample Chromatogram



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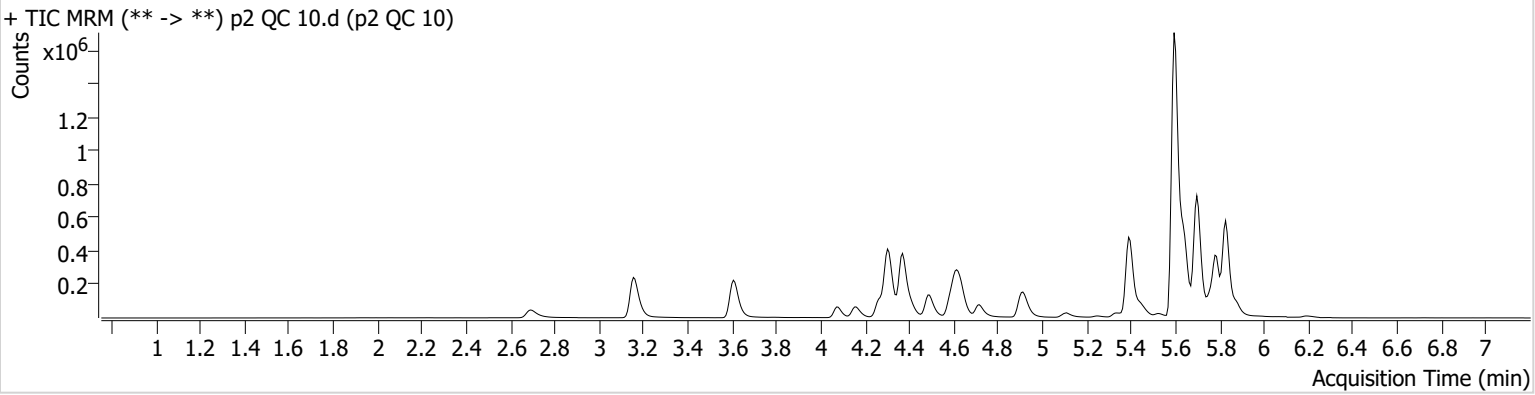
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 QC 10.d
Type	QC	**Sample**	p2 QC 10
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-A6	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 3:24:02 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	125080	5361.78	54.8	2229.22	241000	9.9061 ng/ml
Doxepin	5.356	6774	106.59	49.8	12.08	29652	10.5833 ng/ml
Methylphenidate	4.310	216134	7561.16	21.8	46245.88	817738	9.8642 ng/ml
Midazolam	5.764	16641	2696.48	100.8	933.28	241000	9.9429 ng/ml
Norketamine	4.075	30972	162.21	441.6	3151.85	669558	12.0861 ng/ml

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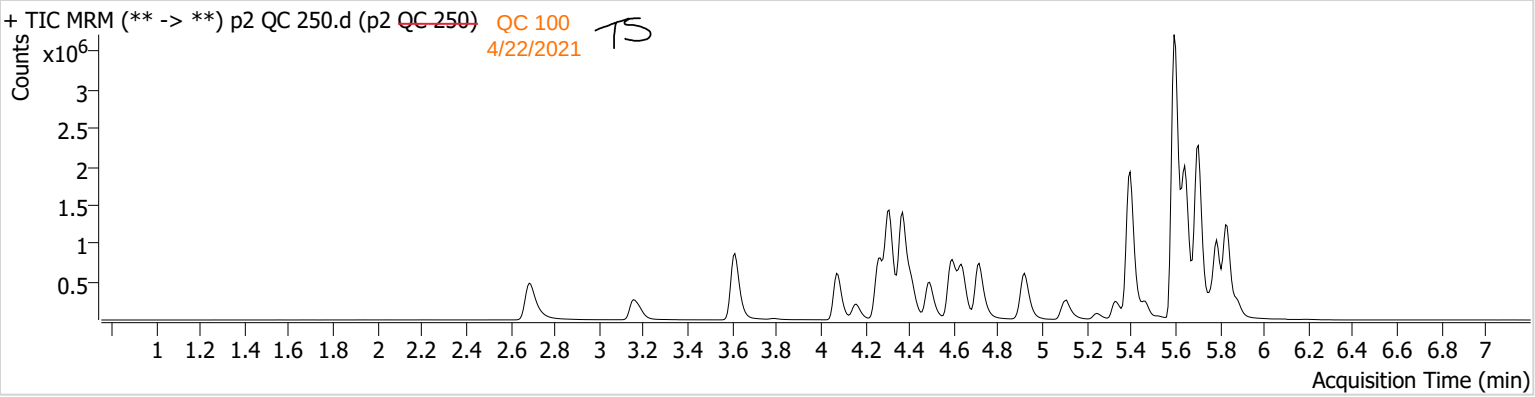
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 QC 250.d
Type	QC	**Sample**	p2 ~~QC 250~~ QC 100 4/22/2021 TS
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-B6	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 3:45:13 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	1293761	595.50	54.6	32185.77	251812	92.1237 ng/ml
Doxepin	5.356	68142	169.51	44.1	226.15	29523	102.8033 ng/ml
Methylphenidate	4.310	2255236	48511.46	21.8	22521.43	853385	97.8896 ng/ml
Midazolam	5.764	175502	1072.75	89.4	2477.41	251812	98.6245 ng/ml
Norketamine	4.075	306499	2109.01	429.1	14148.41	700492	122.2698 ng/ml

AM #28 Multi-Drug Quant. Results

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Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 QC 100.d
Type	QC	**Sample**	p2 ~~QC 100~~ QC 250
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar 4/22/2021
Sample Position	P6-C6	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 6:13:27 PM		
Sample Info.			

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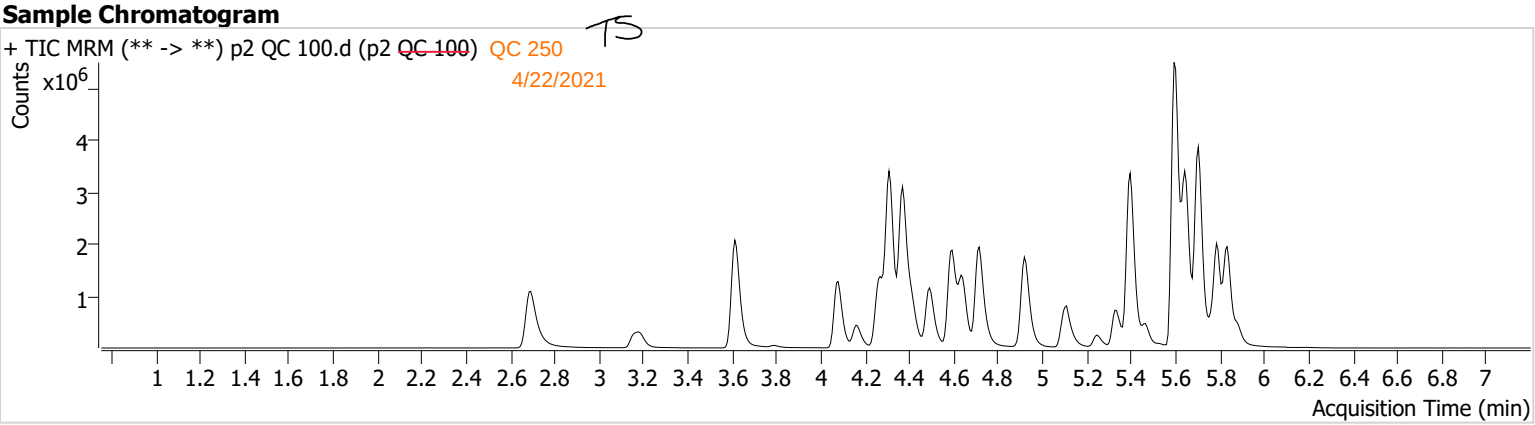
Sample Chromatogram



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Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	3470772	1494068.05	54.0	3013967.64	252597	245.2547 ng/ml
Doxepin	5.356	176029	1286.95	46.2	287.60	31611	247.3842 ng/ml
Methylphenidate	4.310	6249130	196872.67	21.3	15119.73	918545	251.8755 ng/ml
Midazolam	5.771	446759	1132.14	94.0	4680.57	252597	249.9860 ng/ml
Norketamine	4.081	658110	4596.77	428.8	7965.65	694009	266.0843 ng/ml

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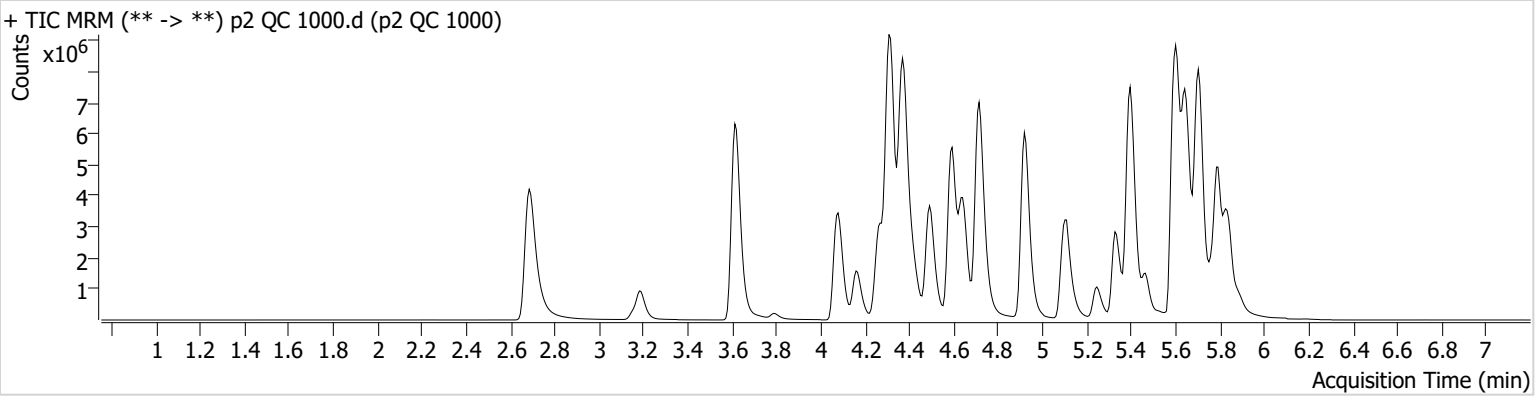
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 QC 1000.d
Type	QC	**Sample**	p2 QC 1000
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-D6	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 4:06:23 PM		
Sample Info.			

Sample Chromatogram



	Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
	Cocaethylene	4.714	13401859	71683.99	54.0	1499829.41	241773	987.3863 ng/ml
	Doxepin	5.356	747284	8103.93	48.8	547.79	33136	1000.4871 ng/ml
	Methylphenidate	4.318	20208096	87027.76	24.0	65637.61	819499	912.7286 ng/ml
	Midazolam	5.764	1678761	1712.81	88.7	914.68	241773	980.8564 ng/ml
*	~~Norketamine~~	~~4.081~~	~~1960595~~	~~3846.42~~	~~442.4~~	~~2529492.49~~	~~767339~~	~~718.5381 ng/ml~~

*Outside curve range

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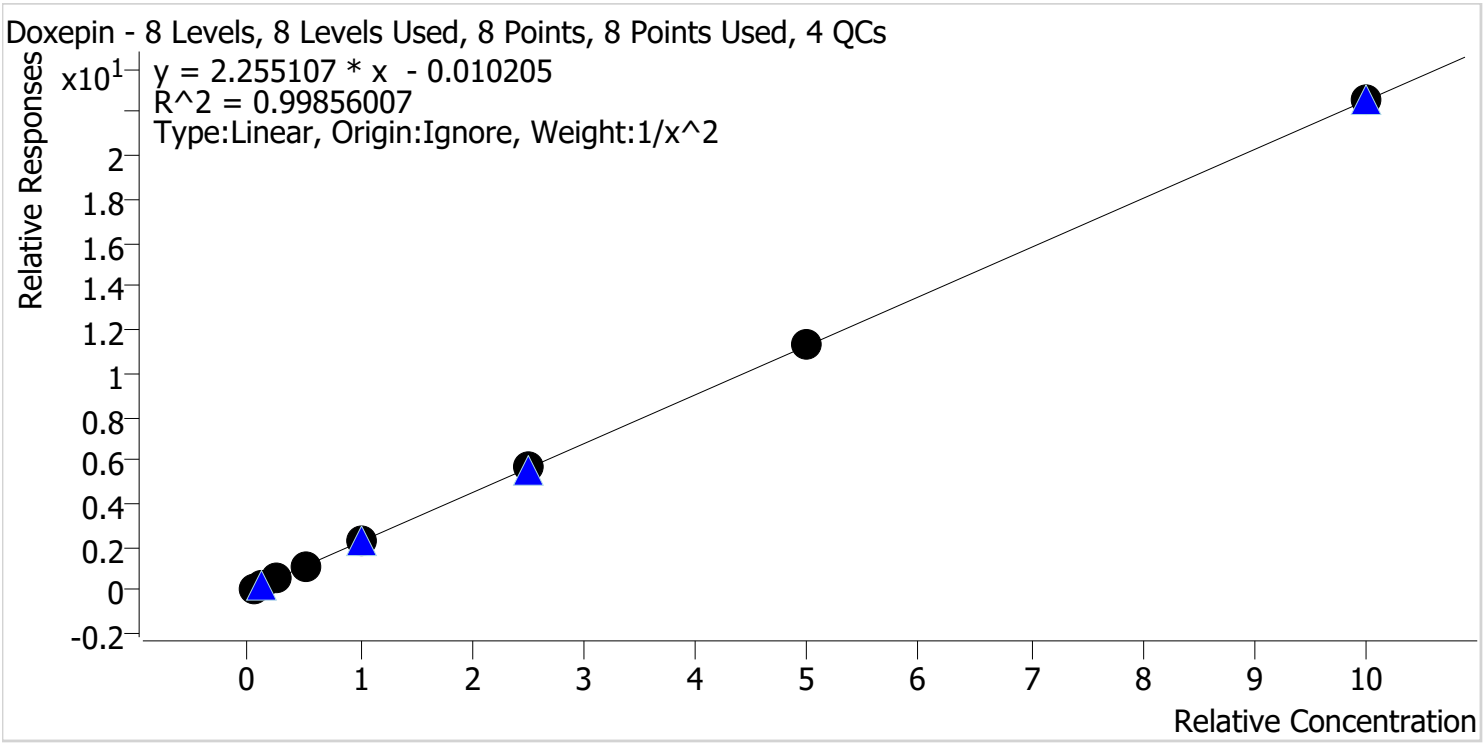
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results	D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Last Cal. Update	4/20/2021 3:29 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	5.0	100.5
p2 Cal 2- 10ng	2	✔	10.0	10.2	101.7
p2 Cal 3 -25ng	3	✔	25.0	23.0	92.0
p2 Cal 4-50ng	4	✔	50.0	51.0	101.9
p2 Cal 5-100ng	5	✔	100.0	101.5	101.5
p2 Cal 6-250ng	6	✔	250.0	253.7	101.5
p2 Cal 7-500ng	7	✔	500.0	505.1	101.0
p2 Cal 8-1000ng	8	✔	1000.0	999.2	99.9

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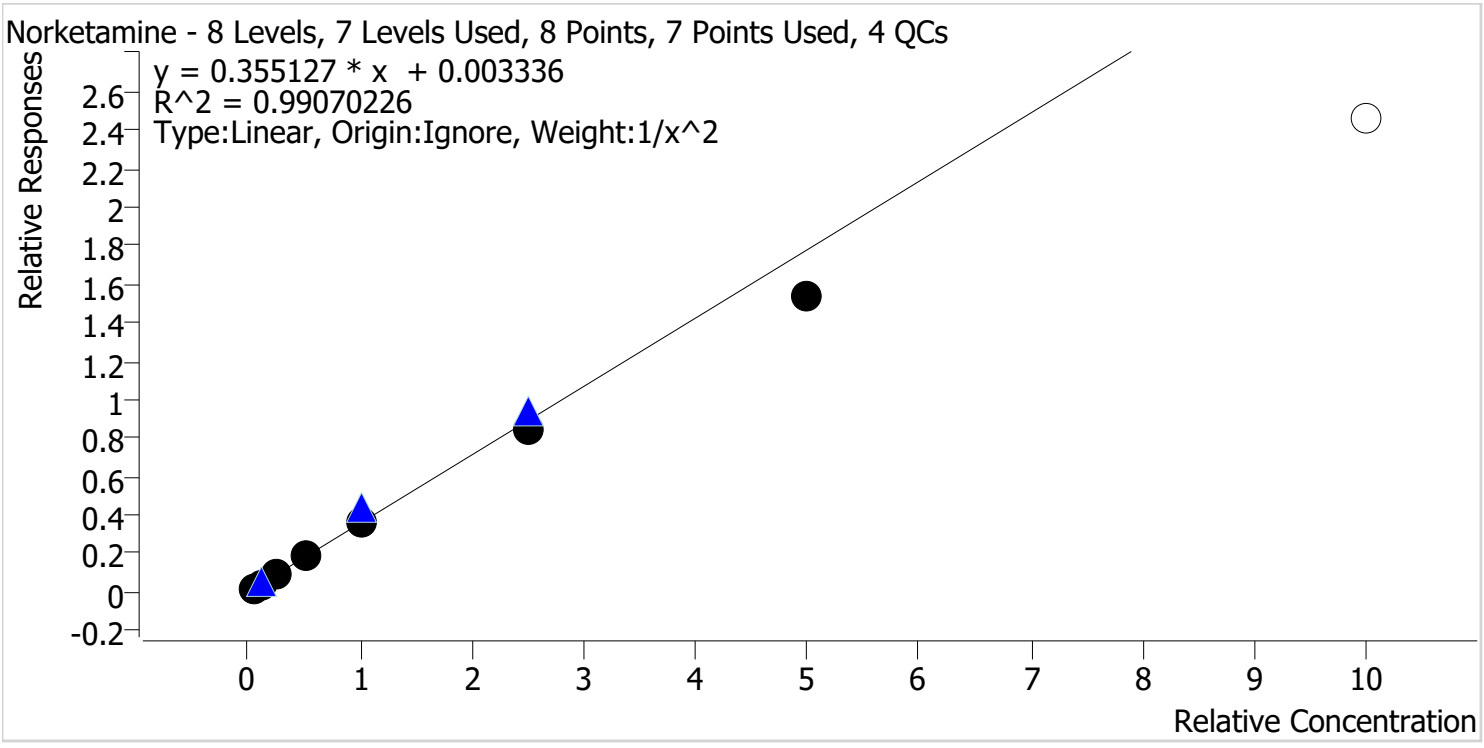
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin

Last Cal. Update 4/20/2021 3:29 PM

Analyst Name ISP\Datastor

Analyte Norketamine **Internal Standard** acetyl-norfentanyl-d5



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	4.7	94.6
p2 Cal 2- 10ng	2	✔	10.0	10.6	105.8
p2 Cal 3 -25ng	3	✔	25.0	27.6	110.4
p2 Cal 4-50ng	4	✔	50.0	53.2	106.3
p2 Cal 5-100ng	5	✔	100.0	100.5	100.5
p2 Cal 6-250ng	6	✔	250.0	238.8	95.5
p2 Cal 7-500ng	7	✔	500.0	434.5	86.9
* p2 Cal 8-1000ng	8	✗	1000.0	693.0	69.3

*Cal 8 removed due to accuracy

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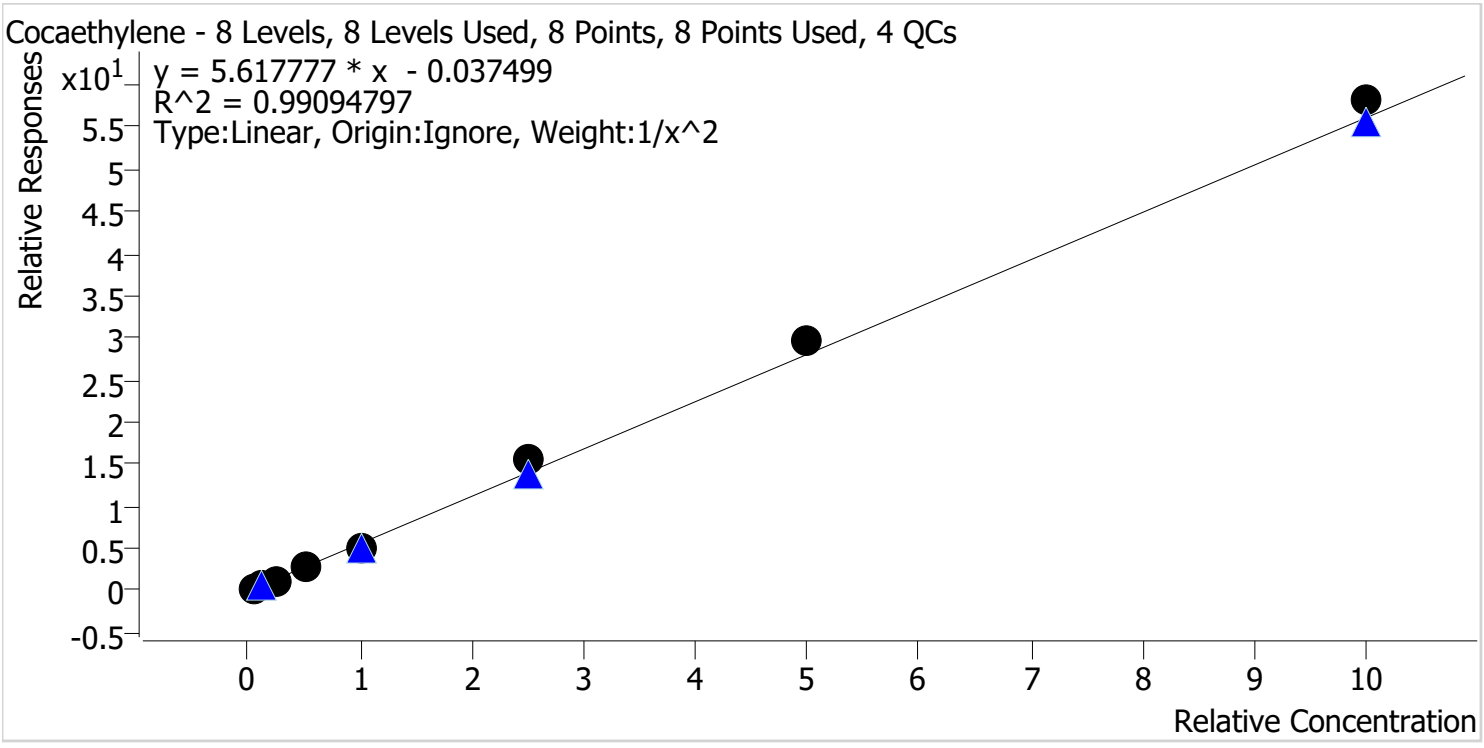
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin

Last Cal. Update 4/20/2021 3:29 PM

Analyst Name ISP\Datastor

Analyte Cocaethylene **Internal Standard** Midazolam-D4



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.3	105.8
p2 Cal 2- 10ng	2	✔	10.0	9.3	93.5
p2 Cal 3 -25ng	3	✔	25.0	21.7	86.9
p2 Cal 4-50ng	4	✔	50.0	51.2	102.4
p2 Cal 5-100ng	5	✔	100.0	91.7	91.7
p2 Cal 6-250ng	6	✔	250.0	277.0	110.8
p2 Cal 7-500ng	7	✔	500.0	526.7	105.3
p2 Cal 8-1000ng	8	✔	1000.0	1036.9	103.7

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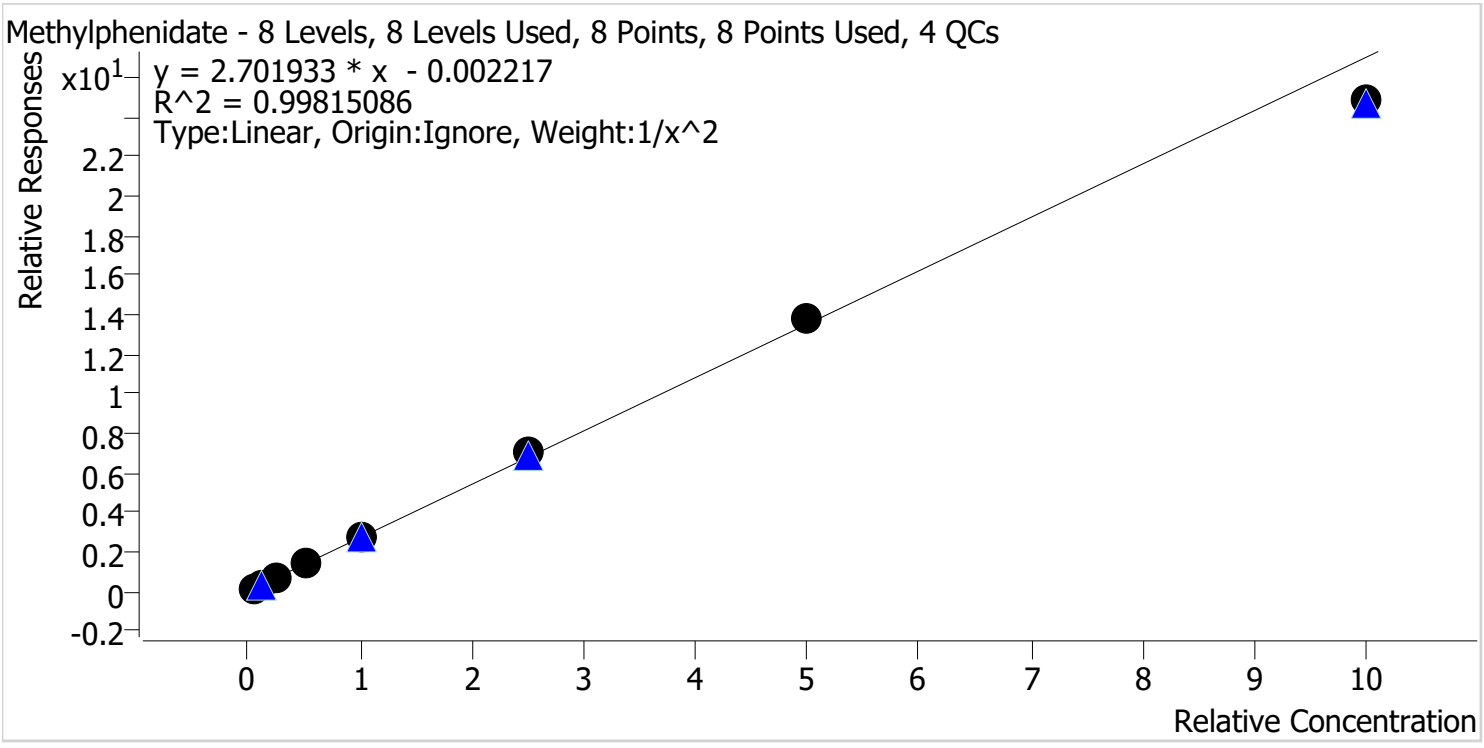
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin

Last Cal. Update 4/20/2021 3:29 PM

Analyst Name ISP\Datastor

Analyte Methylphenidate **Internal Standard** Methylphenidate-D4



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.0	99.3
p2 Cal 2- 10ng	2	✔	10.0	10.2	101.7
p2 Cal 3 -25ng	3	✔	25.0	24.7	98.7
p2 Cal 4-50ng	4	✔	50.0	50.0	100.0
p2 Cal 5-100ng	5	✔	100.0	101.3	101.3
p2 Cal 6-250ng	6	✔	250.0	260.6	104.2
p2 Cal 7-500ng	7	✔	500.0	514.2	102.8
p2 Cal 8-1000ng	8	✔	1000.0	919.5	91.9

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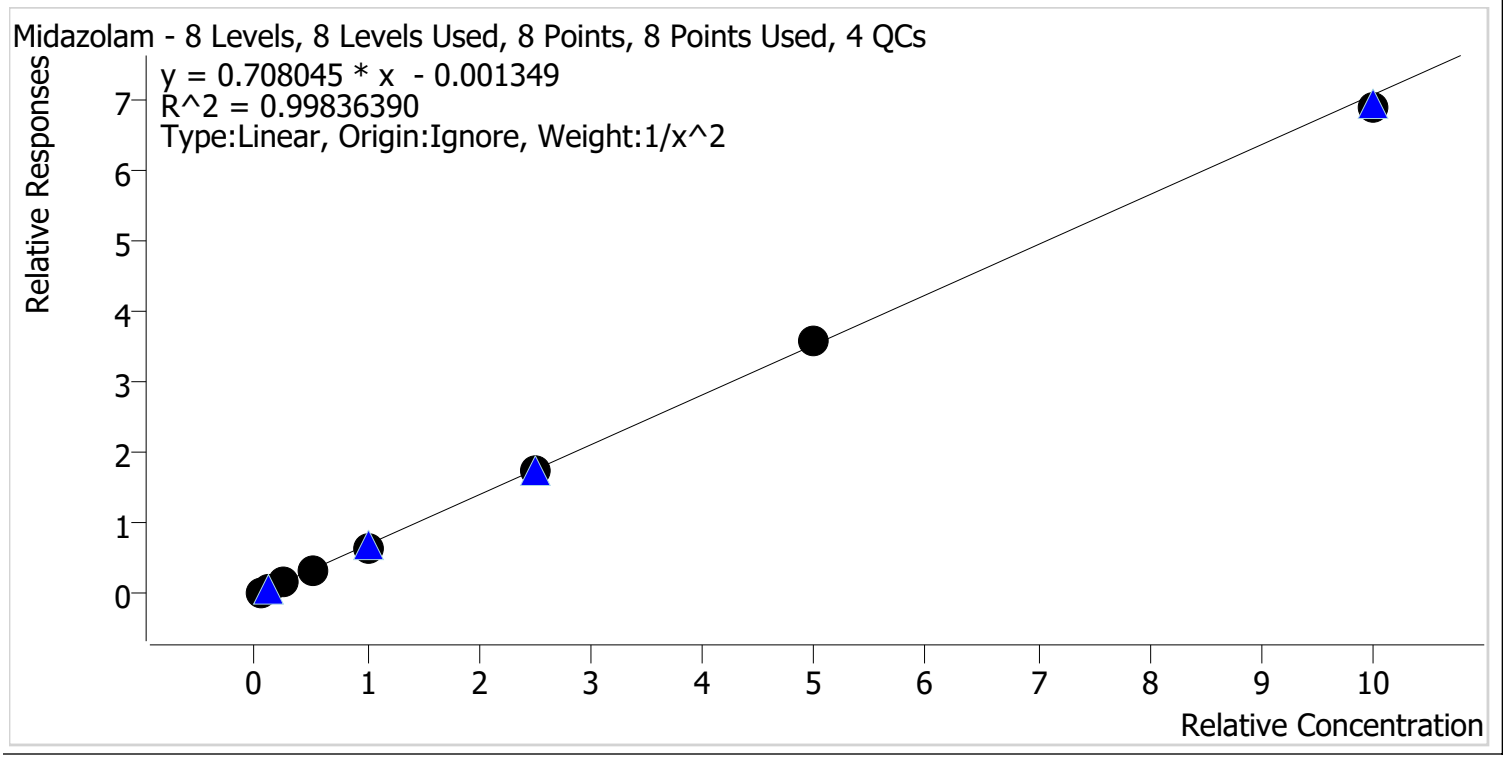
AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin

Last Cal. Update 4/20/2021 3:29 PM

Analyst Name ISP\Datastor

Analyte Midazolam **Internal Standard** Midazolam-D4



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p2 Cal 1-5ng	1	✔	5.0	5.0	99.2
p2 Cal 2- 10ng	2	✔	10.0	9.9	98.7
p2 Cal 3 -25ng	3	✔	25.0	27.0	107.8
p2 Cal 4-50ng	4	✔	50.0	50.5	101.0
p2 Cal 5-100ng	5	✔	100.0	96.3	96.3
p2 Cal 6-250ng	6	✔	250.0	245.9	98.4
p2 Cal 7-500ng	7	✔	500.0	504.5	100.9
p2 Cal 8-1000ng	8	✔	1000.0	977.1	97.7

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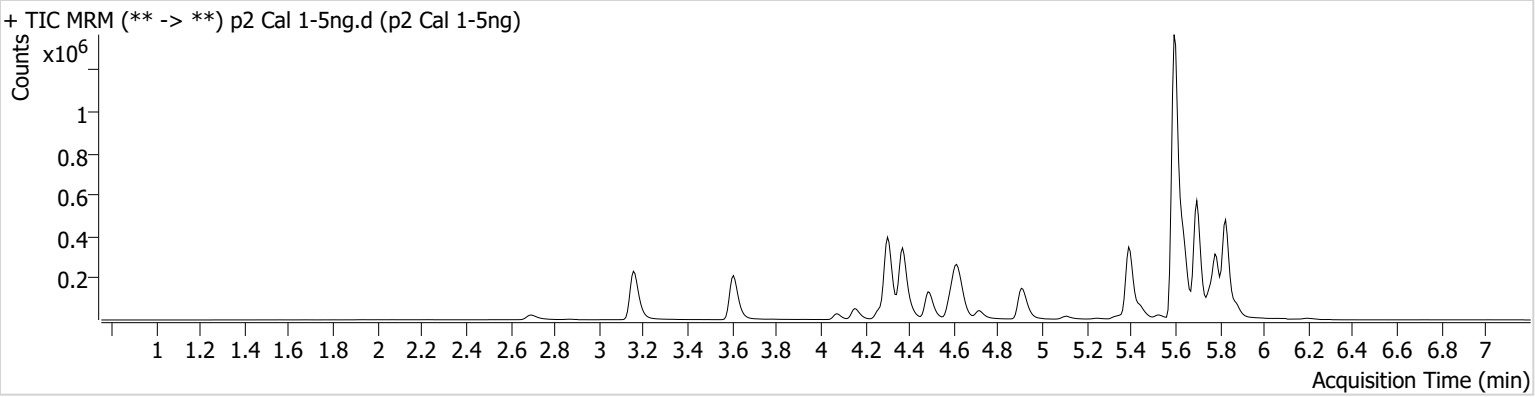
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 Cal 1-5ng.d
Type	Cal	**Sample**	p2 Cal 1-5ng
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-A5	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 1:37:54 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	65639	163175.34	55.1	403.12	252850	5.2885 ng/ml
Doxepin	5.363	3359	41.70	52.2	10.73	32589	5.0230 ng/ml
Methylphenidate	4.310	119948	3315.35	22.5	48514.81	909327	4.9641 ng/ml
Midazolam	5.764	8541	532.16	90.3	11582.17	252850	4.9613 ng/ml
Norketamine	4.075	13072	102.83	447.7	5916.98	649433	4.7286 ng/ml

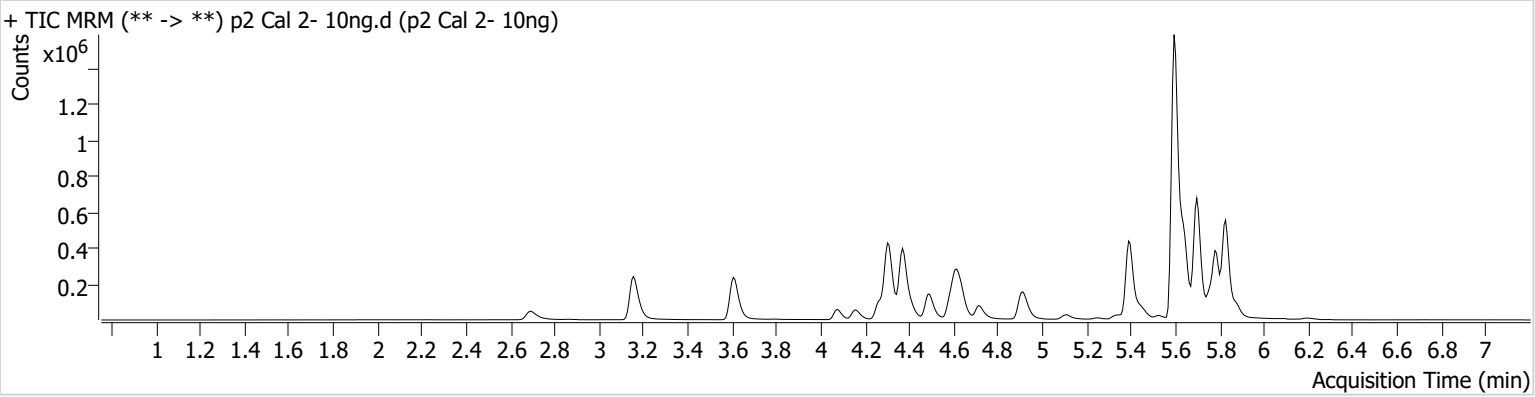
TS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 Cal 2- 10ng.d
Type	Cal	**Sample**	p2 Cal 2- 10ng
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-B5	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 1:48:41 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	128338	281631.94	54.5	91319.06	263115	9.3500 ng/ml
Doxepin	5.356	6540	71.93	51.1	8.78 **Low**	29858	10.1659 ng/ml
Methylphenidate	4.317	232950	14581.23	21.5	5062.61	854757	10.1687 ng/ml
Midazolam	5.764	18026	7680.97	96.3	7343.81	263115	9.8664 ng/ml
Norketamine	4.075	27222	202.25	444.4	7755.84	665192	10.5843 ng/ml

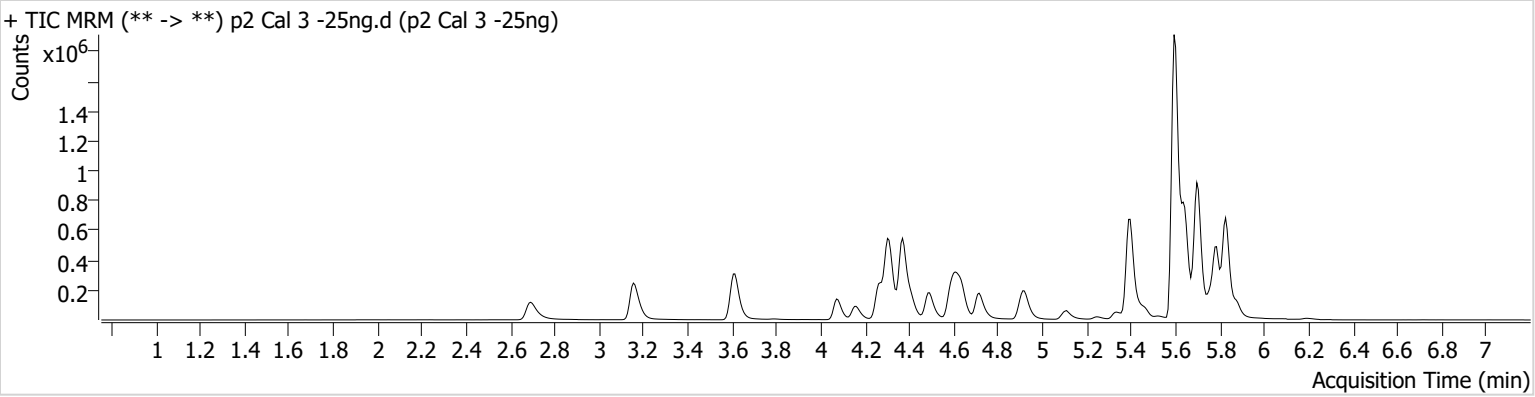
TS

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 Cal 3 -25ng.d
Type	Cal	**Sample**	p2 Cal 3 -25ng
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-C5	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 1:59:16 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	303905	295166.35	56.0	350450.92	256998	21.7170 ng/ml
Doxepin	5.356	15355	43.24	47.5	40.69	30195	23.0029 ng/ml
Methylphenidate	4.310	525474	228.06	21.8	5593.54	791109	24.6654 ng/ml
Midazolam	5.764	48694	63564.42	88.9	1390.14	256998	26.9502 ng/ml
Norketamine	4.075	68592	356.05	432.7	25680.88	677038	27.5889 ng/ml

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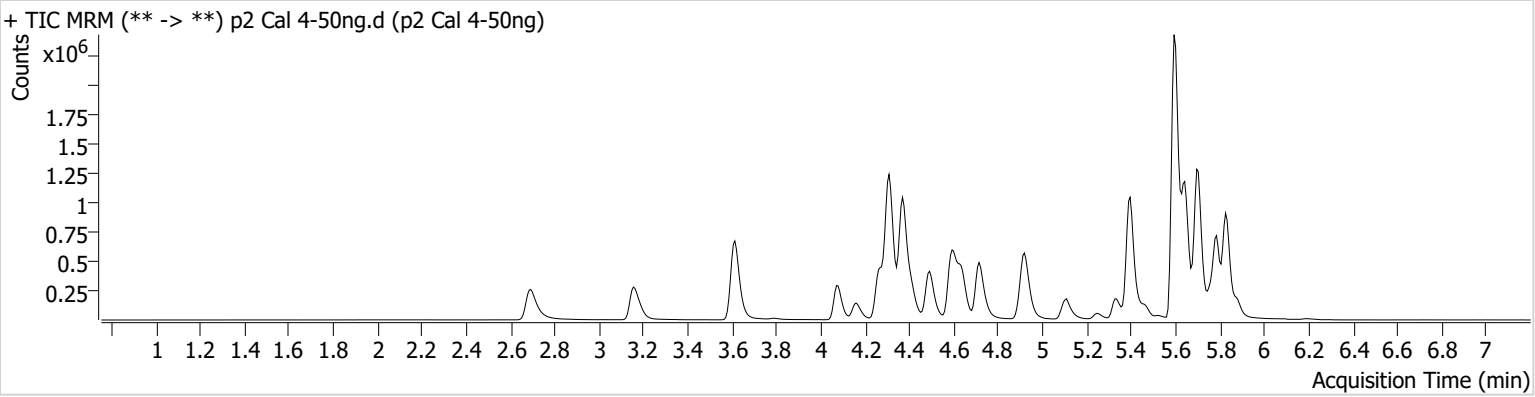
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 Cal 4-50ng.d
Type	Cal	**Sample**	p2 Cal 4-50ng
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-D5	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 2:09:52 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	848477	2544755.87	56.1	352355.42	299019	51.1774 ng/ml
Doxepin	5.356	38892	640.00	46.9	391.96	34138	50.9717 ng/ml
Methylphenidate	4.310	1656764	1163.62	21.3	3850.13	1227899	50.0192 ng/ml
Midazolam	5.764	106523	770.08	94.6	722.14	299019	50.5038 ng/ml
Norketamine	4.075	146658	1072.16	430.9	3247.39	763399	53.1571 ng/ml

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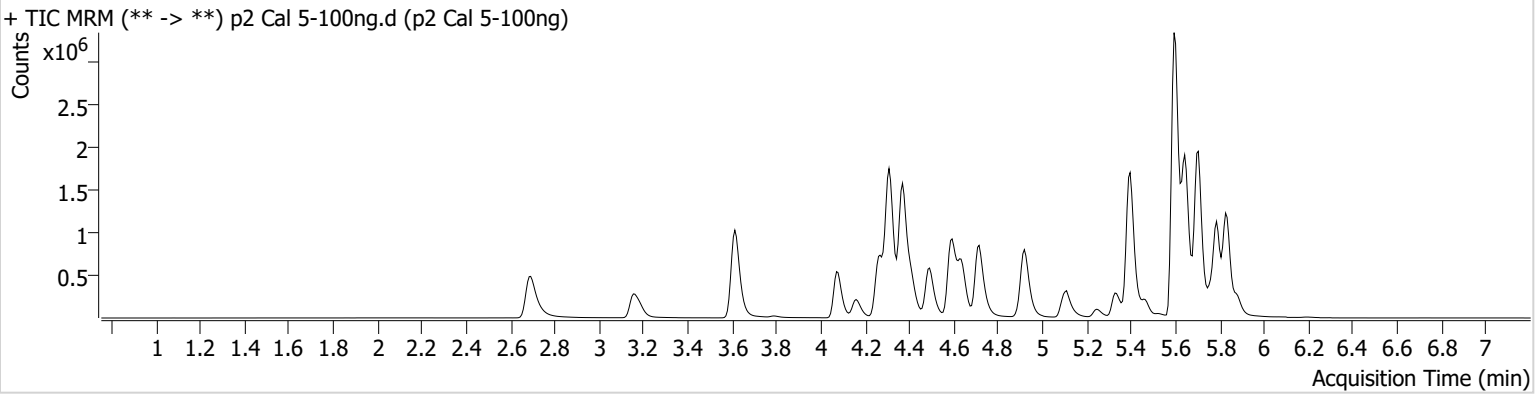
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 Cal 5-100ng.d
Type	Cal	**Sample**	p2 Cal 5-100ng
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-E5	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 2:20:26 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	1501847	21839.46	54.9	1722425.37	293765	91.6715 ng/ml
Doxepin	5.356	78058	126.96	44.6	245.75	34252	101.5098 ng/ml
Methylphenidate	4.310	2818039	753704.04	21.5	14410.01	1030169	101.3248 ng/ml
Midazolam	5.764	199981	3272.95	98.0	1108.72	293765	96.3356 ng/ml
Norketamine	4.075	269396	884.23	432.3	7867.16	747943	100.4843 ng/ml

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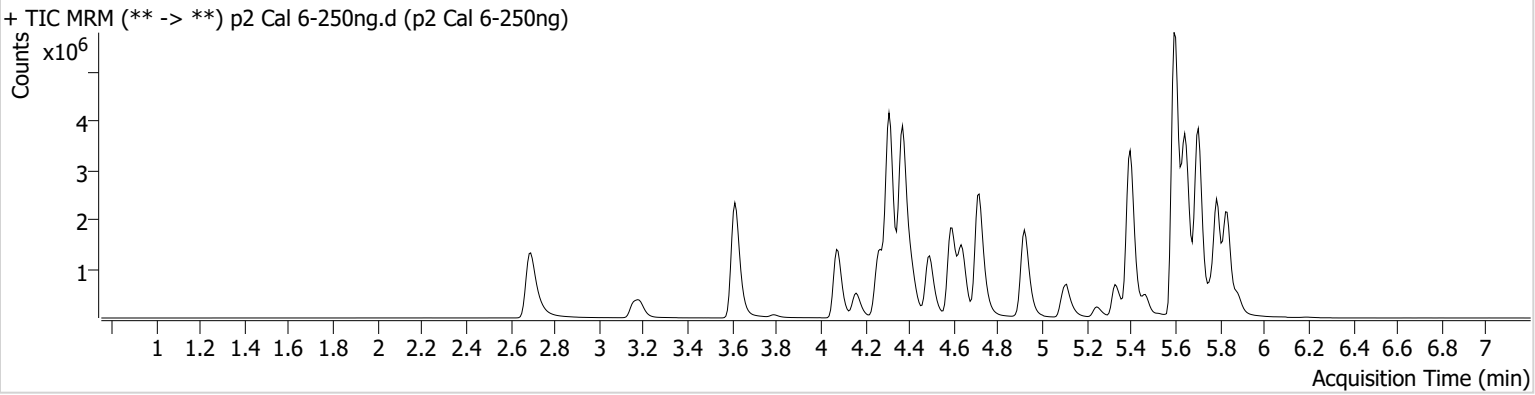
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 Cal 6-250ng.d
Type	Cal	**Sample**	p2 Cal 6-250ng
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-F5	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 2:31:04 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	4551541	88446.08	54.8	4970.46	293206	276.9929 ng/ml
Doxepin	5.356	197809	712.53	46.3	640.79	34642	253.6572 ng/ml
Methylphenidate	4.310	7802050	34685.54	21.3	381.21	1108556	260.5633 ng/ml
Midazolam	5.764	510075	2170.48	94.1	6921.07	293206	245.8879 ng/ml
Norketamine	4.075	715189	1802.89	433.5	22105.25	840018	238.8052 ng/ml

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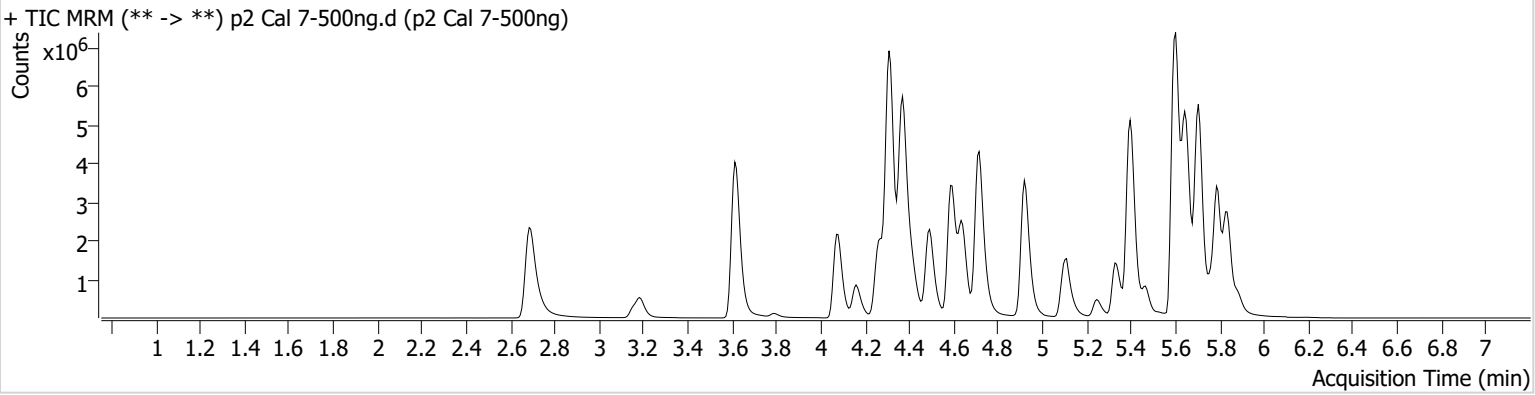
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 Cal 7-500ng.d
Type	Cal	**Sample**	p2 Cal 7-500ng
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-G5	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 2:41:39 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Cocaethylene	4.714	7945780	290653.64	54.4	223575.30	268870	526.7205 ng/ml
Doxepin	5.356	383130	949.16	47.0	615.30	33663	505.1448 ng/ml
Methylphenidate	4.310	14195405	234990.21	21.5	94725.41	1021940	514.1821 ng/ml
Midazolam	5.764	960035	1118.88	90.6	2560.00	268870	504.4848 ng/ml
Norketamine	4.075	1178635	13051.77	433.6	7964.29	762124	434.5428 ng/ml

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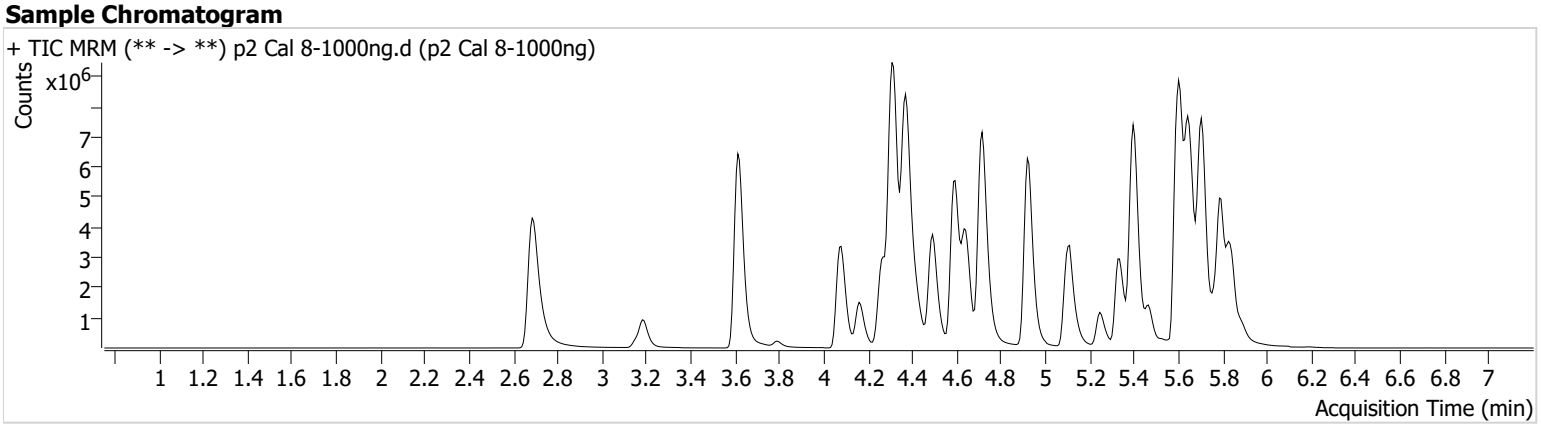
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2021\AM 27-28\04152021 AM 28 AG\QuantResults\Evaluated AM 28 P2 AG.batch.bin
Calibration Last Update 4/20/2021 3:29:03 PM

Instrument	Instrument 1	**Data File**	p2 Cal 8-1000ng.d
Type	Cal	**Sample**	p2 Cal 8-1000ng
Acq. Method	AM 28 MDQ P2.m	**Operator**	Tamara Salazar
Sample Position	P6-H5	**Comment**	
Injection Volume	2		
Acq. Date-Time	4/15/2021 2:52:15 PM		
Sample Info.			

Sample Chromatogram



	Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
	Cocaethylene	4.714	13696990	260566.77	54.3	10282.69	235279	1036.9481 ng/ml
	Doxepin	5.356	901704	1381.71	49.3	259.23	40033	999.2500 ng/ml
	Methylphenidate	4.317	21153577	190027.97	24.3	142961.66	851567	919.4522 ng/ml
	Midazolam	5.764	1627485	2726.57	93.0	3264.15	235279	977.1421 ng/ml
*	~~Norketamine~~	~~4.081~~	~~1915102~~	~~7918.79~~	~~443.2~~	~~213788.10~~	~~777069~~	~~693.0441 ng/ml~~

*Outside curve range