REVIEWED
By Celena Shrum at 9:37 am, May 16, 2024

5/13/2024

Worklist: 6815

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
C2024-0724	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0775	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0783	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0800	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0805	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0827	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0829	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0831	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0831	2	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0831	3	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0831	4	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0840	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0843	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ
C2024-0853	1	BCK	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QQQ

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

Extraction Date: 05/08/24
Plate lot#: 231215
Mobile phase A: 5mM Amm Form + 0.01% FA
Blank Blood Lot: 24C52042
Column: Agilent 120 EC-C18 (2.1x 100-2.7um)

Analyst: Anne Nord
Plate Retest Date: 06/15/2024
Mobile phase B: 0.01% Formic Acid in MeOH
Blank Urine Lot: Blood only run
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.

Analytic:

☒ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
☒ 2. Urine Hydrolysis: In blank well, add 250µL urine, 40µL BG Turbo, and 100µL Instant Buffer I. Place on plate shaker for 5 minutes.
☒ 3. Using a calibrated pipette, pipette **250µL blood and urine** (if applicable) into wells of analytical (standards) plate. **Pipette ID: P31168J**
☒ 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 **200-450µL of blood+base and urine+base (if applicable)** mixture to corresponding wells of SLE+ plate. Amount transferred: *300*
☒ 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. Place on SPE Dry and evaporate to dryness at approx. 35°C. ☒ If run contains urine or at the analyst's discretion, add 50µL 1% HCl in MeOH to wells and place plate cover on plate before drying (optional).
☒ 16. Reconstitute in **100µL 20% LC MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

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*

Compounds evaluated	limitations
7-aminoclonazepam	
alprazolam	
amphetamine	5-250 cal 7 and 8 dropped due to accuracy
benzoylecgonine	25-500 cal 1 and 2 dropped due to poor peak shape cal 8 dropped due to accuracy
buprenorphine	
citalopram	

clonazepam	25-1000 cal 1 and 2 dropped due to poor peak shape
codeine	
diphenhydramine	
duloxetine	25-1000 cal 1 and 2 dropped due to poor peak shape
hydrocodone	
ketamine	
lorazepam	10-1000 cal 1 dropped due to poor peak shape
methamphetamine	5-500 cal 8 dropped due to accuracy
mitragynine	
morphine	
norbuprenorphine	2.5-100 cal 1 and 2 dropped due to poor peak shape
norhydrocodone	Not evaluated due to ratios being out
o-desmethylvenlafaxine	
pseudoephedrine/ephedrine	
quetiapine	
trazodone	
venlafaxine	

5/16/24

After most of the calibrators were run the data indicated some of the samples ~~did~~ were not fully dried before reconstituting. I requested a deviation to repeat the drying and reconstitution steps. That was performed and run was started over.

The instrument then had an issue with the pressure maxing out. I changed the heat exchanger and started the run.

5/9/24 buprenorphine and codeine did not come out in the acquisition window for the samples injected 5/8/24. I adjusted the acquisition method; the calibrators, controls, and samples: C2024-0800-1, C2024-0831-1 and C2024-0831-2, were run with the updated acquisition method, these injections only included buprenorphine and codeine in the evaluation and acquisition.

Idaho State Police
Forensic Services

Request for Departure from an Analytical Method or Quality Standard

Deviation Number (assigned by QM): ISP Dev TOX-24-03

Date of Request: **05/08/2024**

Requestor/Discipline: Anne Nord Toxicology

Analytical Method/Quality Standard, Revision #: Toxicology method 28 Revision 18, Section 4.1.12

Temporary or Permanent Deviation: Temporary

Scope of Deviation (record specific information, e.g. affected programs, evidence types, expected end date; etc):
4.1.12 Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approximately 35ºC. Optional step: add 50 µl of 1% HCl in MeOH to all wells in the run and place ACT cover on top of plate prior to drying. The samples may also be dried in another type of heated nitrogen dryer (the temperature should be set at approximately 30-40ºC). Temperatures for this step are not critical and it is appropriate to use the equipment temperature readings. The temperatures do not need to be monitored or verified with a traceable thermometer. If this option is chosen, the samples will all be transferred to 10 mL glass centrifuge tubes and dried down in the dryer. The reconstitution step (below) will take place in the glass tubes and the samples will then be transferred back to the plate and sealed. 4.1.13 Reconstitute in 100 µL 20% LCMS grade methanol in LCMS Water and heat seal plate with foil.

Deviation Request (Describe detailed instructions of the changes being made; include reference to specific section number(s) in the method manual):

On 05/08/24 I did an extraction. Some of the compounds in some of the calibrators had low responses, retention time shifts, wider peaks, and split peaks. I believe (through troubleshooting) that the eluate was not completely dry in the samples that this was observed. I am requesting to repeat the steps listed above. (The optional step with the 1% HCL in MeOH will not be performed)

Technical Justification for Analytical Method Deviations:

The controls, calibrators and internal standards will be used to evaluate if the run worked as expected.

Technical Review

☒ Departure approved
Comments:

☐ Departure Not Approved
Comments:

Approver: Celena Shrum Date: 05/09/2024
Title: Toxicology Discipline Lead

Quality Review

Quality Approver:
Title: Lab Improvement Manager
Date: 5/9/2024

	1	2	3	4	5	6	7	8	9	10	11	12
A	IS + Cal. 1	IS + QC_1	0829-1	0831-3								
B	IS + Cal. 2	IS + QC_2	0775-1	0831-2								
C	IS + Cal. 3	IS + QC 3	0840-1	0831-4								
D	IS + Cal. 4	IS + QC_4	0800-1	0853-1								
E	IS + Cal. 5		0843-1									
F	IS + Cal. 6	negative blood	0805-1									
G	IS + Cal. 7	0783-1	0827-1									
H	IS + Cal. 8	0724-1	0831-1									

blank in front

plate position 2

c2024-____-_

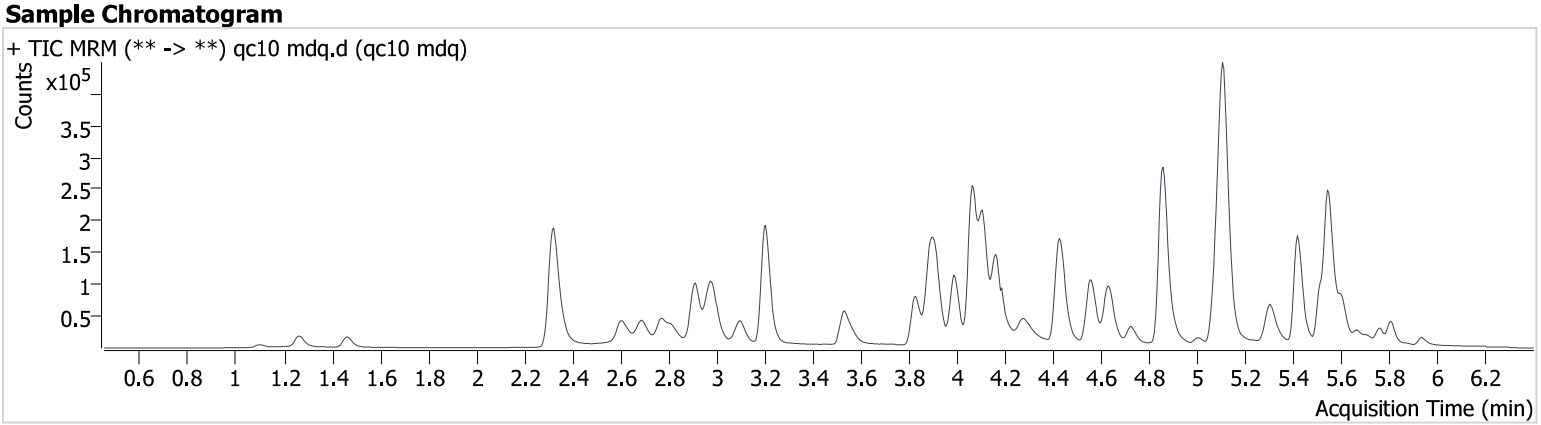
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type QC
Acq. Method mdqp1 121523.m
Sample Position P2-A2
Injection Volume 2
Acq. Date-Time 5/8/2024 5:53:02 PM
Sample Info.

Data File qc10 mdq.d
Sample qc10 mdq
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.003	4826	466.5	123.29		1346.5	28540	10.675	ng/ml
Alprazolam	5.769	7645	1761.2	99.84		522.0	33396	9.331	ng/ml
Amphetamine	2.772	33341	610.1	248.77		3185.3	86512	9.908	ng/ml
Benzoylecgonine	3.890	1045	118.3	20.67	Low	22.2	2478	5.500	ng/ml
Citalopram	5.075	35611	2411.7	45.95		2056.7	166394	9.144	ng/ml
Clonazepam	5.617	1260	1429.0	41.51		225.2	2379	9.473	ng/ml
Diphenhydramine	5.118	123504	2169.5	33.49		31803.6	591302	8.455	ng/ml
Duloxetine	5.545	4584	341.9	6.31	Low	59.4	15539	6.234	ng/ml
Hydrocodone	2.841	13149	∞	40.36		∞	74422	9.665	ng/ml
Ketamine	3.841	37013	2399.7	36.34		1451.5	166909	9.971	ng/ml
Lorazepam	5.752	1019	∞	29.79		20.7	6119	11.849	ng/ml
Methamphetamine	2.986	98477	∞	35.07		∞	289626	10.405	ng/ml
Mitragynine	5.007	21500	1474.1	32.64		23886.1	74422	9.158	ng/ml
Morphine	1.106	1859	359.0	20.19		72.2	2730	9.303	ng/ml
Norbuprenorphine	4.831	379	656.2	60.68	Low	408.2	3707	1.593	ng/ml
Norhydrocodone	2.907	1383	∞	18.60	Low	∞	16845	8.222	ng/ml
O-Desmethylvenlafaxine	3.917	27048	112.6	597.96		3897.5	9512	9.952	ng/ml
Pseudoephedrine	2.330	98778	5809.4	17.37		2325.7	415464	9.770	ng/ml
Quetiapine	5.307	55700	19269.0	69.69		5966.8	88928	9.538	ng/ml
Trazodone	4.636	40323	3355.9	121.68		∞	174015	10.178	ng/ml
Venlafaxine	4.859	66917	11424.7	36.44		5183.4	477999	9.475	ng/ml

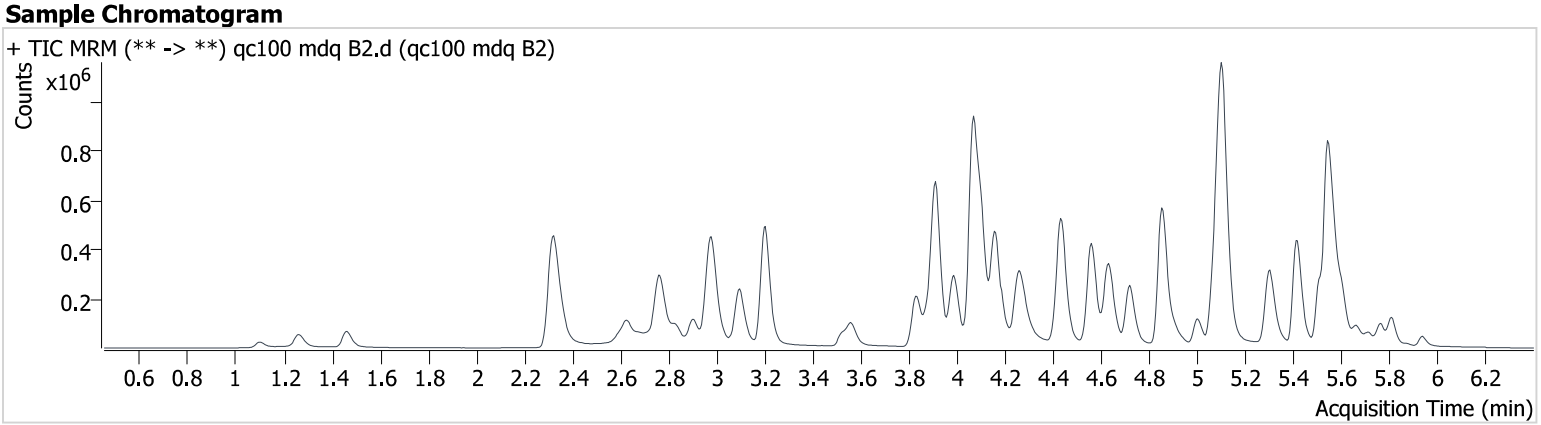
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type Sample
Acq. Method mdqp1 121523.m
Sample Position P2-B2
Injection Volume 2
Acq. Date-Time 5/8/2024 8:29:17 PM
Sample Info.

Data File qc100 mdq B2.d
Sample qc100 mdq B2
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.003	39482	1615.0	114.71	7053.6	23071	112.518	ng/ml
Alprazolam	5.769	69268	1747.3	98.06	∞	31053	93.422	ng/ml
Amphetamine	2.767	254915	5066.5	246.23	27940.5	80163	92.249	ng/ml
Benzoylecgonine	3.885	5931	924.9	38.94	301.3	2171	112.972	ng/ml
Citalopram	5.065	290691	22366.4	47.10	468428.9	137661	91.667	ng/ml
Clonazepam	5.617	10939	2576.0	30.85	458.5	1915	107.301	ng/ml
Diphenhydramine	5.113	1038951	122219.8	32.87	72609.5	501346	81.809	ng/ml
Duloxetine	5.545	32952	1723.0	9.33	59.8	11103	102.093	ng/ml
Hydrocodone	2.830	131252	∞	38.65	∞	74838	97.663	ng/ml
Ketamine	3.836	314613	47880.4	38.44	42047.3	146485	102.685	ng/ml
Lorazepam	5.747	8498	136232.6	34.11	75.9	5841	95.986	ng/ml
Methamphetamine	2.976	696808	∞	35.81	∞	284492	103.011	ng/ml
Mitragynine	5.002	217308	5495.8	33.12	8281.1	74838	92.573	ng/ml
Morphine	1.101	19781	1760.9	19.41	638.7	2954	95.934	ng/ml
Norbuprenorphine	4.826	1794	18009.8	105.66	7635.8	3837	9.182	ng/ml
Norhydrocodone	2.902	18089	∞	26.16	∞	17714	82.875	ng/ml
O-Desmethylvenlafaxine	3.911	229674	1913.8	583.19	61492.9	8021	99.777	ng/ml
Pseudoephedrine	2.325	856492	265355.1	17.32	6764.4	367664	105.837	ng/ml
Quetiapine	5.302	489399	66870.3	66.70	∞	79951	95.067	ng/ml
Trazodone	4.631	343409	176938.7	127.16	∞	160949	96.984	ng/ml
Venlafaxine	4.854	639871	86279.7	36.24	12557.3	431695	95.237	ng/ml

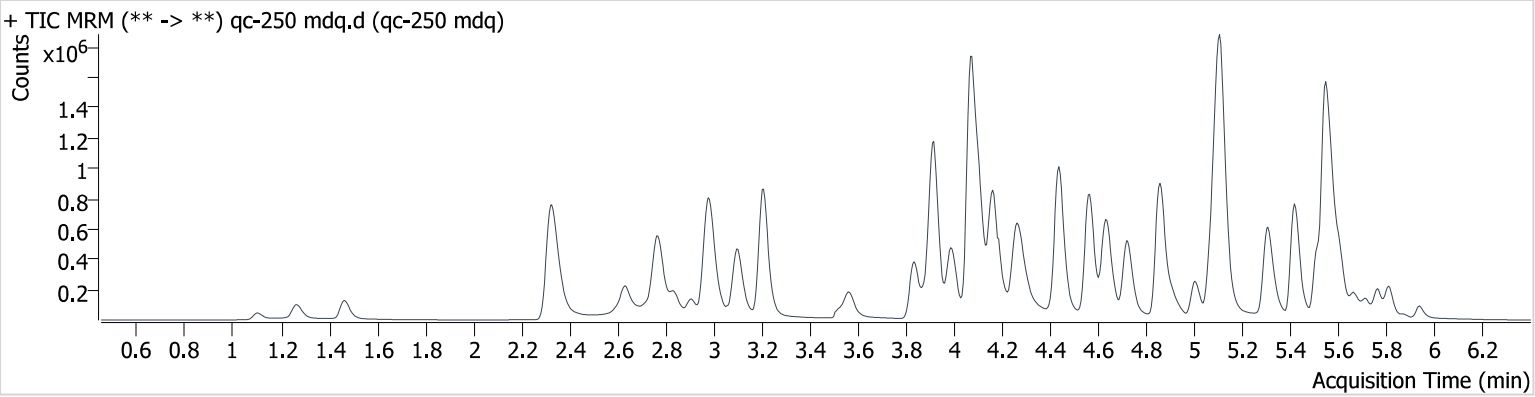
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type QC
Acq. Method mdqp1 121523.m
Sample Position P2-C2
Injection Volume 2
Acq. Date-Time 5/8/2024 6:01:44 PM
Sample Info.

Data File qc-250 mdq.d
Sample qc-250 mdq
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.003	71047	5203.7	113.22	4615.1	19062	245.643	ng/ml
Alprazolam	5.769	161724	∞	94.77	∞	28637	236.964	ng/ml
Amphetamine	2.772	499154	21388.0	243.83	35863.7	72796	200.587	ng/ml
Benzoylecgonine	3.885	11271	2412.0	39.70	688.9	2083	237.615	ng/ml
Citalopram	5.070	561751	12908.7	47.85	381307.7	102196	238.878	ng/ml
Clonazepam	5.617	23494	23012.1	32.97	1062.3	1865	237.366	ng/ml
Diphenhydramine	5.118	2090339	32171.5	33.16	391643.1	401153	205.354	ng/ml
Duloxetine	5.545	57841	619.0	8.61	1673.4	8978	226.698	ng/ml
Hydrocodone	2.835	287006	∞	42.20	∞	69586	229.938	ng/ml
Ketamine	3.836	652989	155334.0	38.87	29117.7	131277	238.742	ng/ml
Lorazepam	5.747	21217	3666.1	33.30	312.7	5976	232.836	ng/ml
Methamphetamine	2.976	1438539	∞	35.80	∞	287847	214.890	ng/ml
Mitragynine	5.002	494458	26861.8	33.33	2648.7	69586	226.621	ng/ml
Morphine	1.106	43026	3584.4	19.62	3385.6	2609	236.986	ng/ml
Norbuprenorphine	4.826	4366	5958.5	100.91	22428.7	3435	25.887	ng/ml
Norhydrocodone	2.907	48707	1036.3	26.82	∞	16702	233.525	ng/ml
O-Desmethylvenlafaxine	3.917	440057	7306.4	572.58	148156.9	6212	246.773	ng/ml
Pseudoephedrine	2.325	1774588	∞	17.25	∞	313366	258.929	ng/ml
Quetiapine	5.307	1023353	148002.5	65.24	73869.6	69448	229.153	ng/ml
Trazodone	4.636	731957	708897.7	129.88	307845.8	141098	236.370	ng/ml
Venlafaxine	4.859	1367359	49775.1	37.01	92136.3	362634	241.453	ng/ml

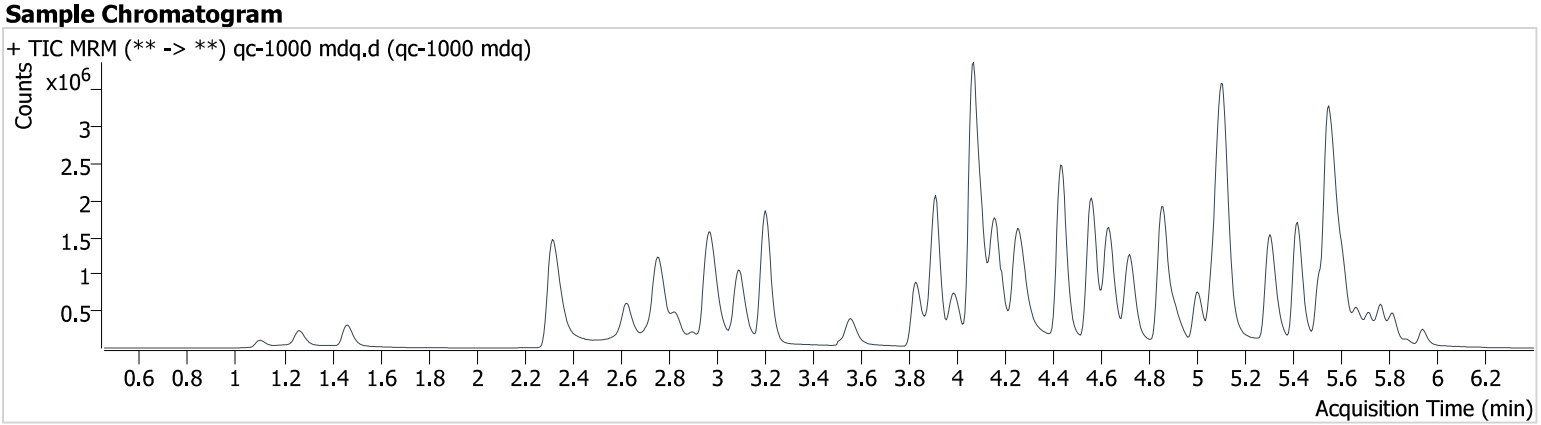
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type QC
Acq. Method mdqp1 121523.m
Sample Position P2-D2
Injection Volume 2
Acq. Date-Time 5/8/2024 6:10:24 PM
Sample Info.

Data File qc-1000 mdq.d
Sample qc-1000 mdq
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



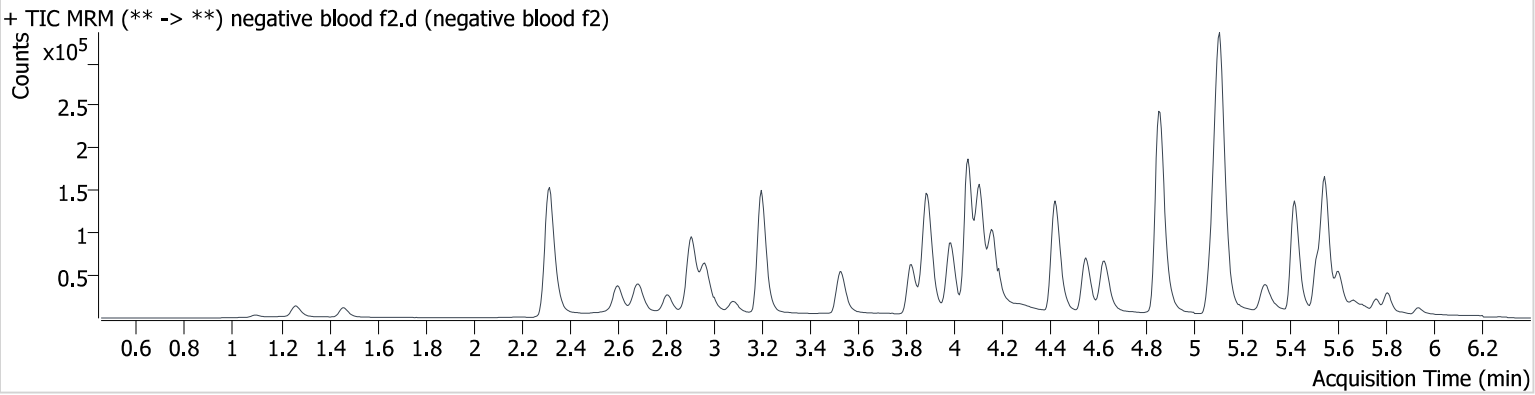
Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.008	132754	11854.7	110.27		8531.2	7947	1102.695	ng/ml
Alprazolam	5.769	511185	5595.2	90.53		6366.1	22433	957.021	ng/ml
Amphetamine	2.762	1161557	18043.2	242.90		86954.1	56775	601.359	ng/ml
Benzoylecgonine	3.880	18306	3493.3	41.47		949.2	1378	603.920	ng/ml
Citalopram	5.060	1130675	112784.7	47.32		9193074.0	56558	869.214	ng/ml
Clonazepam	5.617	66466	722420.1	35.57		12593.8	1553	807.467	ng/ml
Diphenhydramine	5.118	4538272	860958.6	32.61		139189.6	222370	803.606	ng/ml
Duloxetine	5.545	90276	1324.1	8.98		3846.1	3512	917.468	ng/ml
Hydrocodone	2.830	868462	∞	42.55		∞	59852	809.420	ng/ml
Ketamine	3.831	1716668	338177.3	38.81		108105.5	96867	852.405	ng/ml
Lorazepam	5.747	78567	∞	40.31		2187.3	6176	831.826	ng/ml
Methamphetamine	2.971	3476979	∞	36.02		∞	253969	596.543	ng/ml
Mitragynine	5.002	1547251	91909.4	35.92		44196.3	59852	824.621	ng/ml
Morphine	1.101	113291	4618.3	19.52		1984.3	1871	871.300	ng/ml
Norbuprenorphine	4.821	12812	5238.2	104.43		∞	2807	94.325	ng/ml
Norhydrocodone	2.897	163226	3579.4	28.55	High	3801981046610300.0	13713	947.919	ng/ml
O-Desmethylvenlafaxine	3.911	765215	1778.5	578.53		122941.6	2919	913.084	ng/ml
Pseudoephedrine	2.320	4155509	991.1	17.04		48304.7	201979	943.729	ng/ml
Quetiapine	5.302	2799386	113191.6	64.19		∞	46759	931.668	ng/ml
Trazodone	4.631	1942719	2123125.7	130.87		2463276.1	98074	903.696	ng/ml
Venlafaxine	4.854	3771343	94949.9	36.72		36430.7	237921	1013.337	ng/ml

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

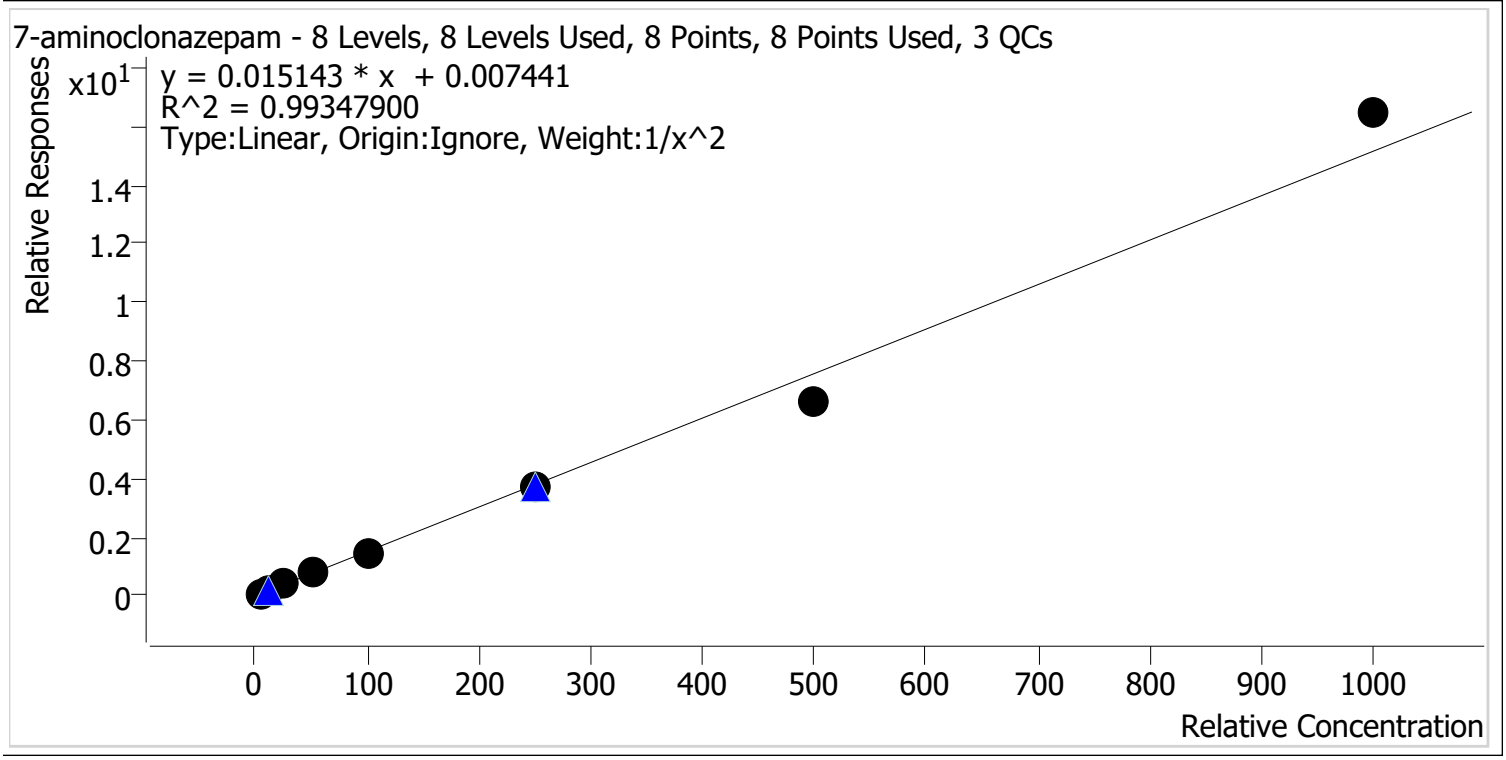
Instrument	69679	**Data File**	negative blood f2.d
Type	Sample	**Sample**	negative blood f2
Acq. Method	mdqp1 121523.m	**Operator**	Anne Nord
Sample Position	P2-F2	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/8/2024 6:19:08 PM		
Sample Info.			

Sample Chromatogram



Compound Calibration Report

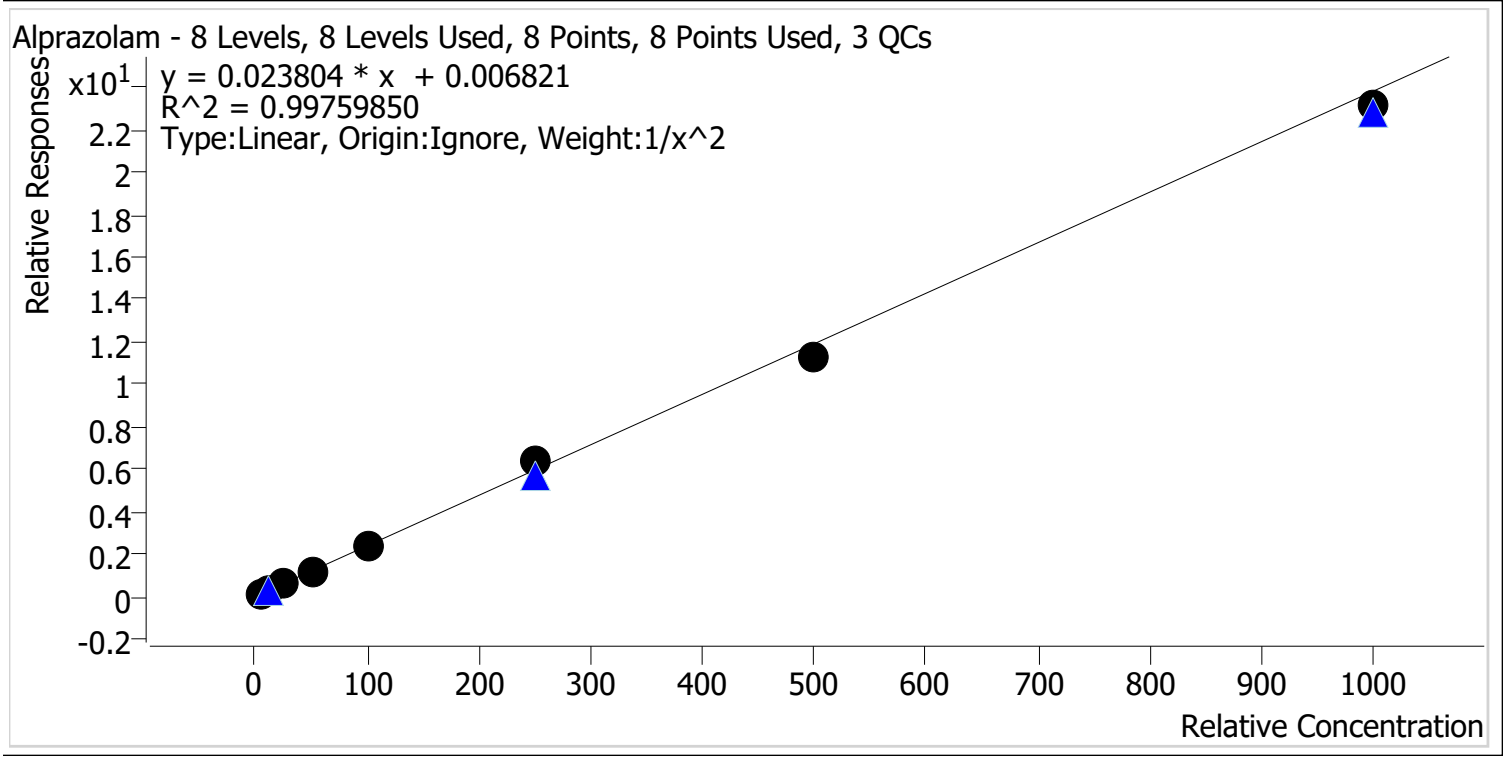
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	7-aminoclonazepam
Internal Standard	7-Aminoclonazepam-D4



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	4.9	98.6
cal 2 mdq	2	✔	10.0	9.9	99.4
cal 3 mdq	3	✔	25.0	27.1	108.3
cal 4 mdq	4	✔	50.0	51.6	103.2
cal 5 mdq	5	✔	100.0	97.8	97.8
cal 6 mdq	6	✔	250.0	242.6	97.0
cal 7 mdq	7	✔	500.0	434.4	86.9
cal 8 mdq	8	✔	1000.0	1088.2	108.8

Compound Calibration Report

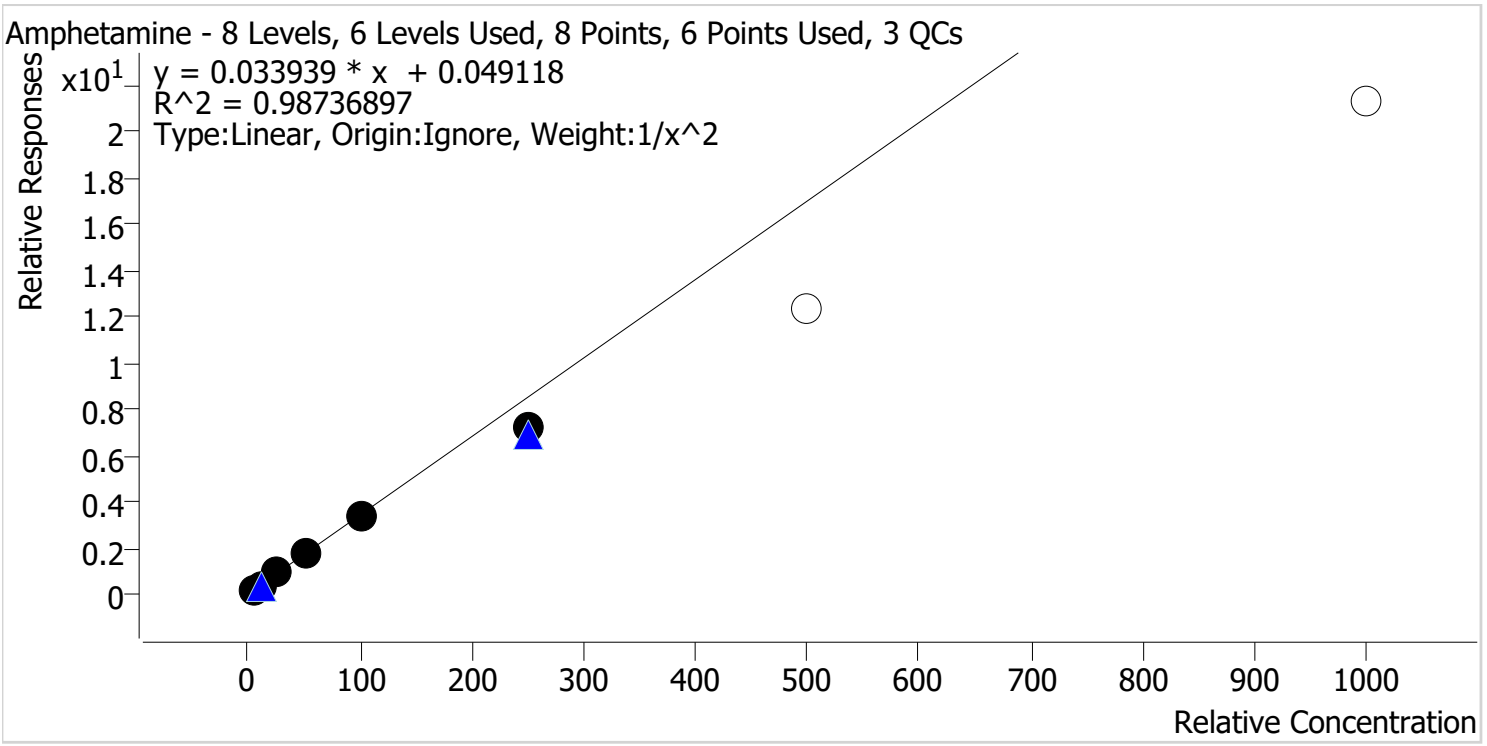
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Alprazolam
Internal Standard	Alprazolam-D5



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	5.1	102.1
cal 2 mdq	2	✔	10.0	9.4	94.0
cal 3 mdq	3	✔	25.0	25.7	102.9
cal 4 mdq	4	✔	50.0	50.8	101.7
cal 5 mdq	5	✔	100.0	101.3	101.3
cal 6 mdq	6	✔	250.0	265.4	106.2
cal 7 mdq	7	✔	500.0	473.4	94.7
cal 8 mdq	8	✔	1000.0	971.5	97.2

Compound Calibration Report

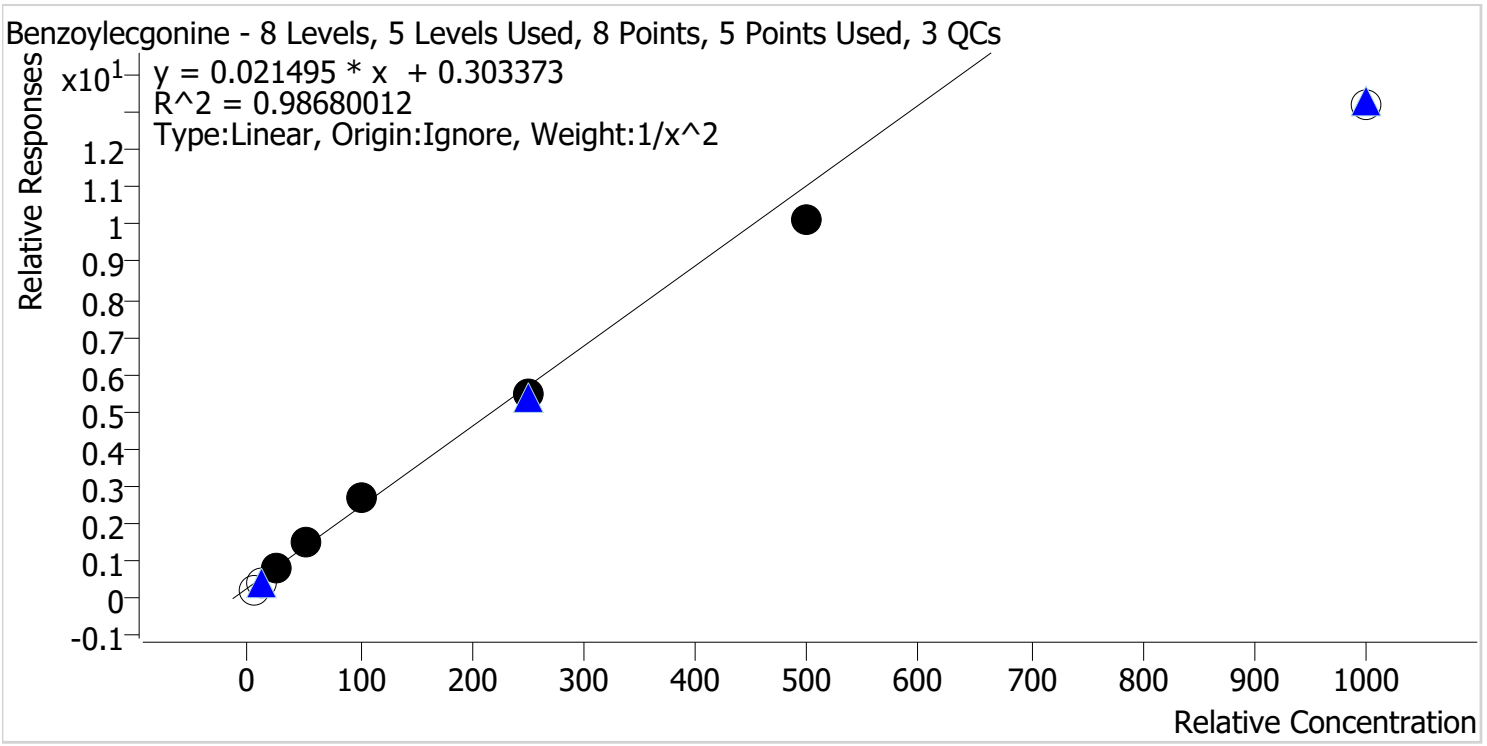
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Amphetamine
Internal Standard	Amphetamine-D11



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	4.7	94.2
cal 2 mdq	2	✔	10.0	10.8	107.8
cal 3 mdq	3	✔	25.0	27.3	109.0
cal 4 mdq	4	✔	50.0	52.3	104.6
cal 5 mdq	5	✔	100.0	99.5	99.5
cal 6 mdq	6	✔	250.0	212.3	84.9
cal 7 mdq	7	✗	500.0	364.7	72.9
cal 8 mdq	8	✗	1000.0	626.6	62.7

Compound Calibration Report

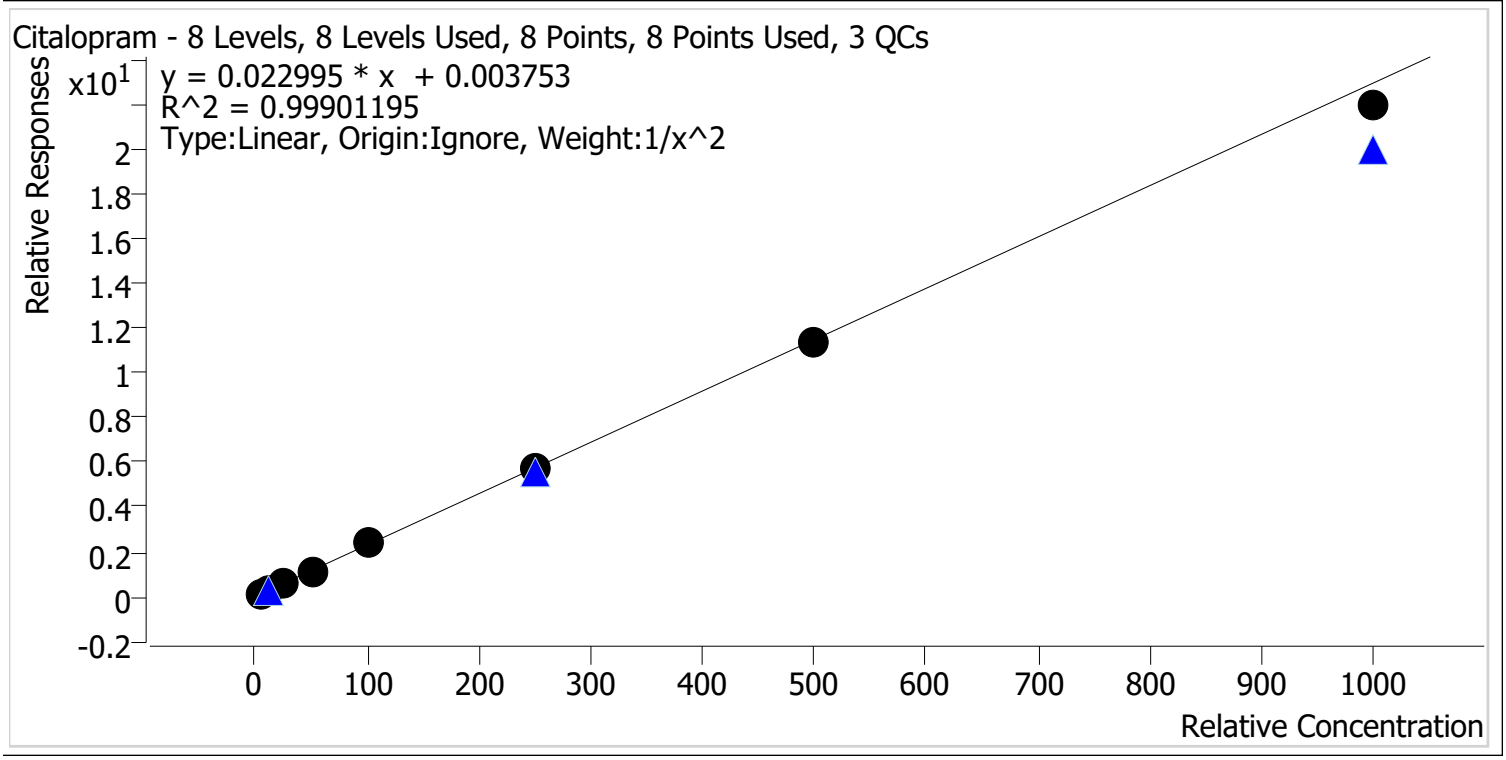
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Benzoylecgonine
Internal Standard	Benzoylecgonine-d8



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✗	5.0	0.0	0.0
cal 2 mdq	2	✗	10.0	7.2	71.8
cal 3 mdq	3	✔	25.0	23.5	93.8
cal 4 mdq	4	✔	50.0	54.6	109.2
cal 5 mdq	5	✔	100.0	109.7	109.7
cal 6 mdq	6	✔	250.0	238.4	95.4
cal 7 mdq	7	✔	500.0	459.5	91.9
cal 8 mdq	8	✗	1000.0	599.3	59.9

Compound Calibration Report

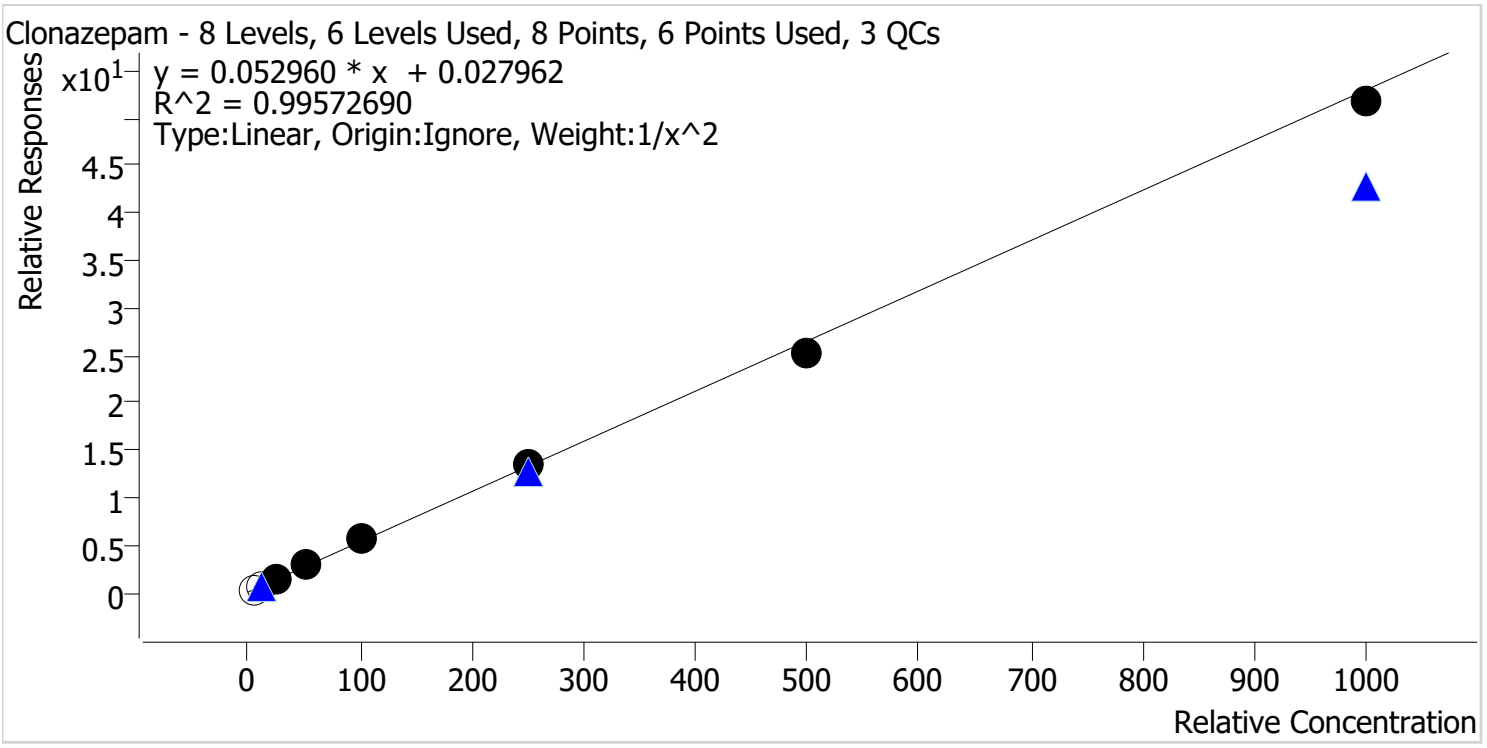
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Citalopram
Internal Standard	Citalopram-D6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	5.0	99.4
cal 2 mdq	2	✔	10.0	9.9	98.9
cal 3 mdq	3	✔	25.0	26.2	104.9
cal 4 mdq	4	✔	50.0	50.4	100.7
cal 5 mdq	5	✔	100.0	102.2	102.2
cal 6 mdq	6	✔	250.0	246.9	98.8
cal 7 mdq	7	✔	500.0	497.0	99.4
cal 8 mdq	8	✔	1000.0	956.1	95.6

Compound Calibration Report

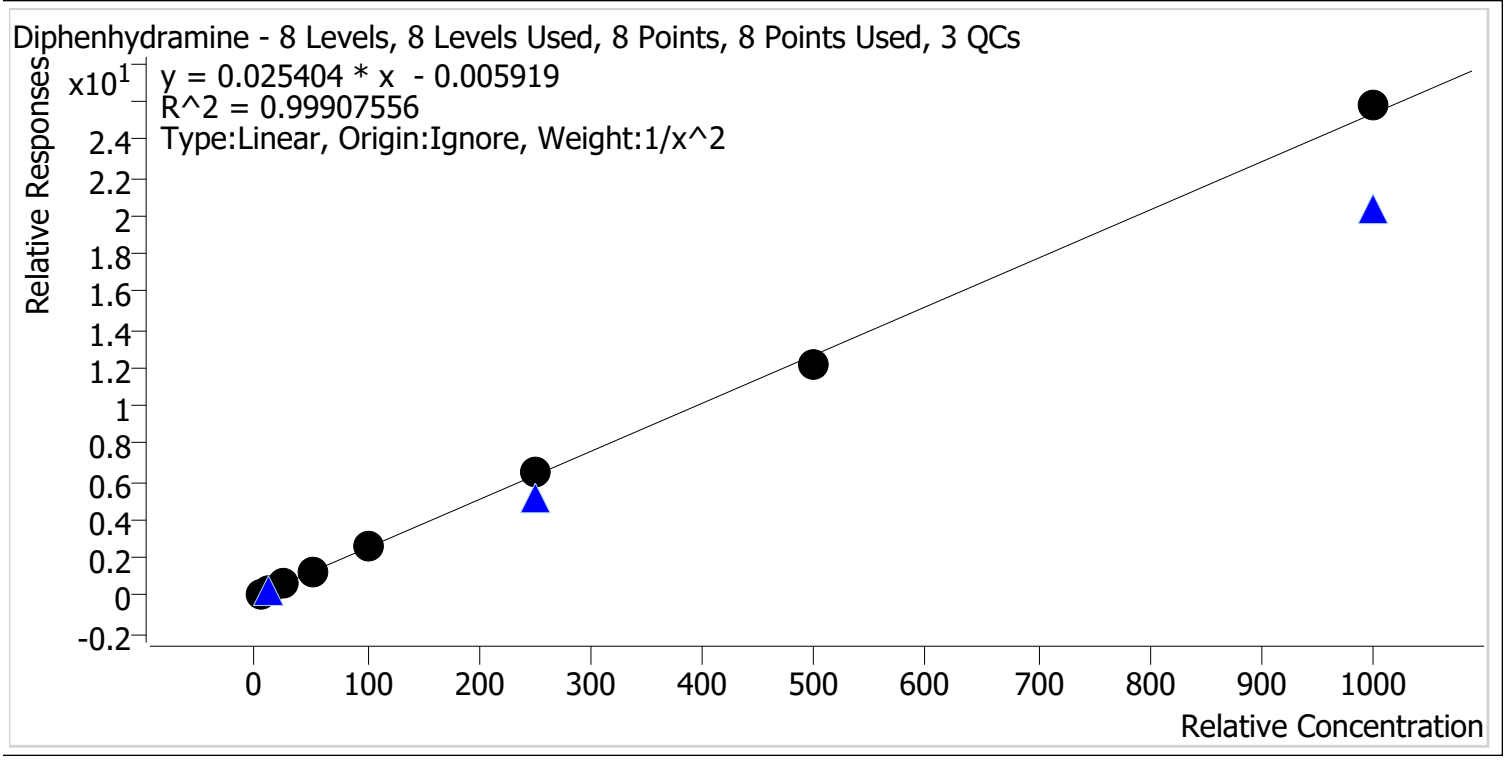
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Clonazepam
Internal Standard	Clonazepam-D4



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✗	5.0	4.4	88.8
cal 2 mdq	2	✗	10.0	10.7	107.2
cal 3 mdq	3	✔	25.0	23.8	95.3
cal 4 mdq	4	✔	50.0	54.0	108.0
cal 5 mdq	5	✔	100.0	104.0	104.0
cal 6 mdq	6	✔	250.0	251.2	100.5
cal 7 mdq	7	✔	500.0	472.9	94.6
cal 8 mdq	8	✔	1000.0	976.7	97.7

Compound Calibration Report

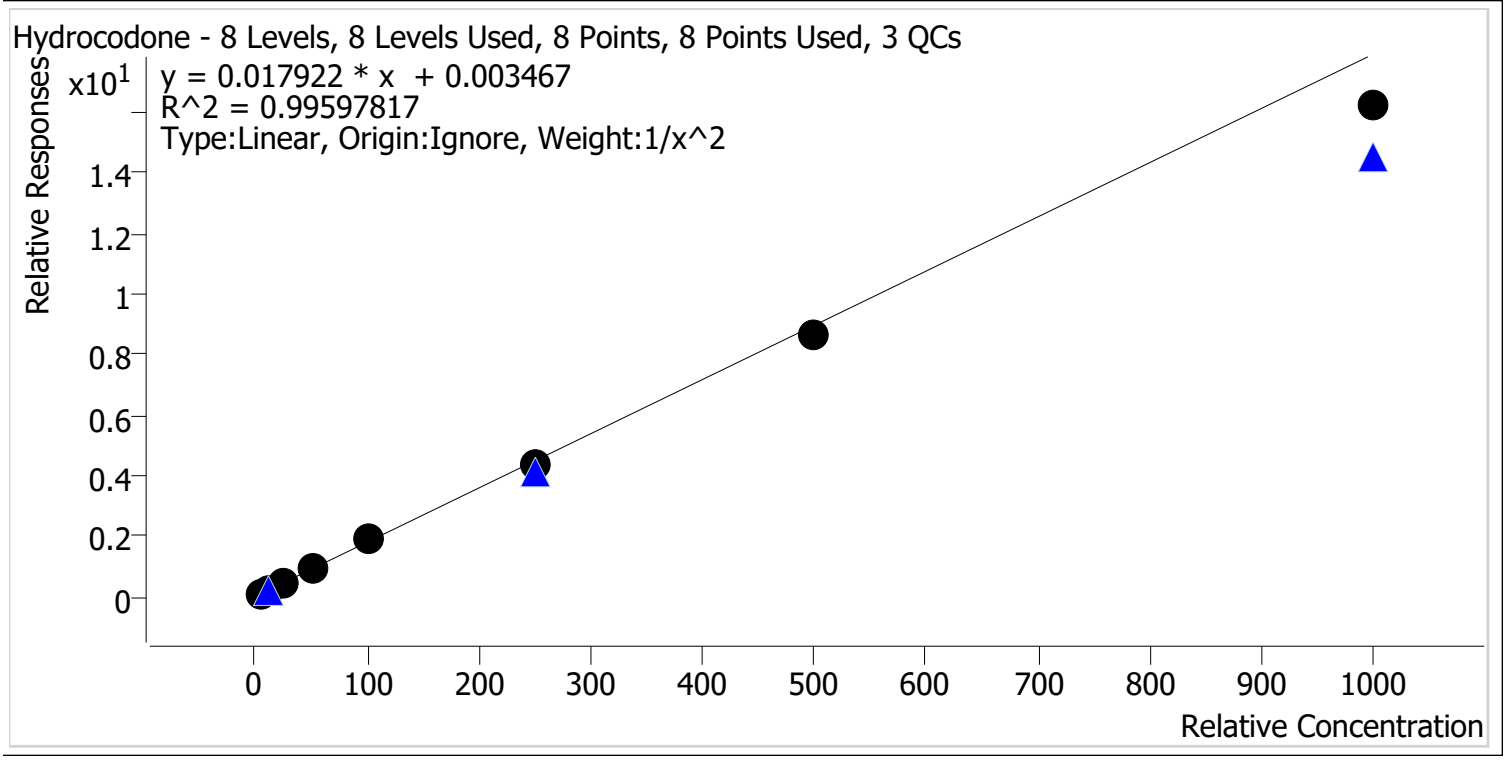
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Diphenhydramine
Internal Standard	Diphenhydramine-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	5.0	100.8
cal 2 mdq	2	✔	10.0	9.9	99.1
cal 3 mdq	3	✔	25.0	24.3	97.2
cal 4 mdq	4	✔	50.0	50.0	100.1
cal 5 mdq	5	✔	100.0	102.6	102.6
cal 6 mdq	6	✔	250.0	257.6	103.0
cal 7 mdq	7	✔	500.0	477.2	95.4
cal 8 mdq	8	✔	1000.0	1016.6	101.7

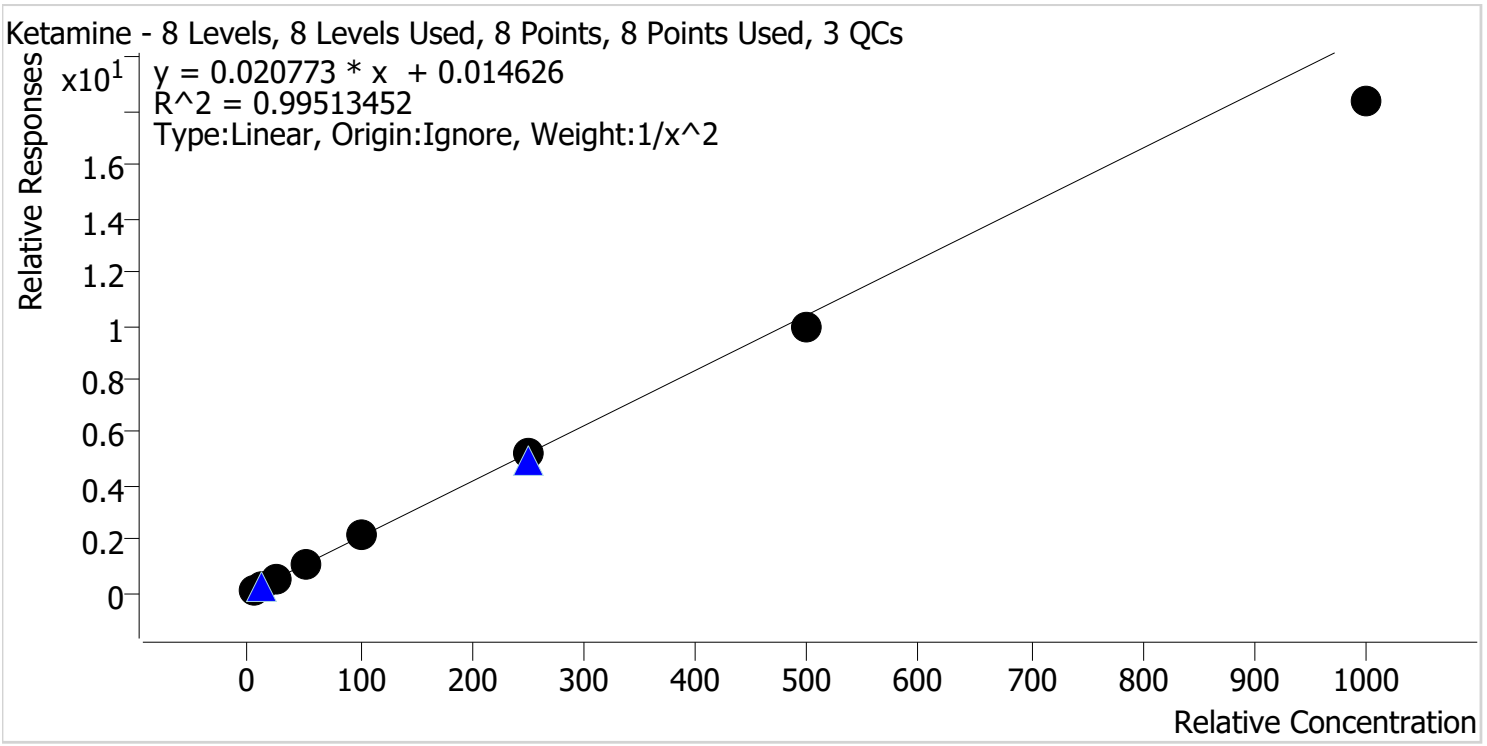
Compound Calibration Report

Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Hydrocodone
Internal Standard	Hydrocodone-D6



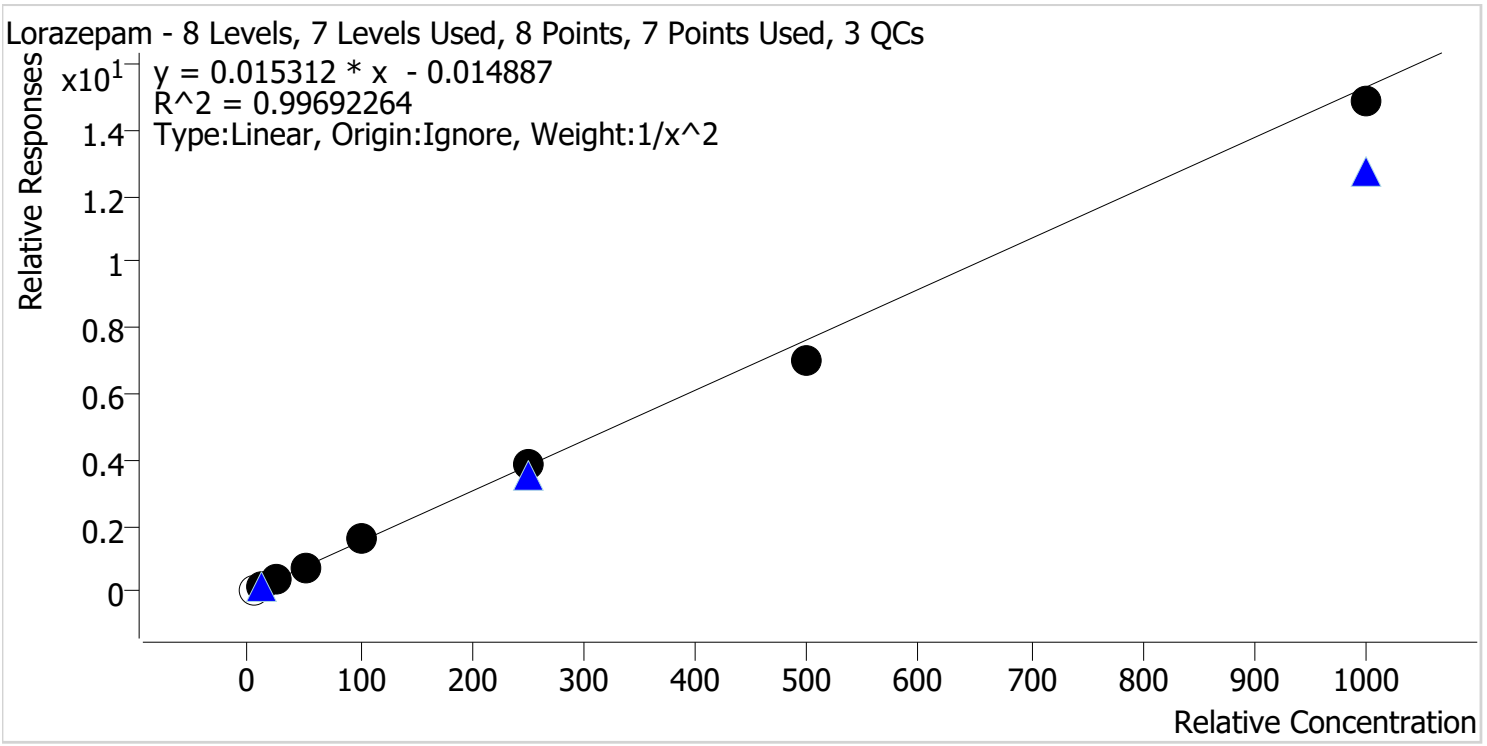
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	4.9	97.2
cal 2 mdq	2	✔	10.0	10.3	102.6
cal 3 mdq	3	✔	25.0	25.8	103.2
cal 4 mdq	4	✔	50.0	53.9	107.7
cal 5 mdq	5	✔	100.0	104.7	104.7
cal 6 mdq	6	✔	250.0	242.7	97.1
cal 7 mdq	7	✔	500.0	485.3	97.1
cal 8 mdq	8	✔	1000.0	905.3	90.5

Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Ketamine
Internal Standard	Ketamine-D4



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	4.9	97.2
cal 2 mdq	2	✔	10.0	10.2	101.5
cal 3 mdq	3	✔	25.0	26.6	106.4
cal 4 mdq	4	✔	50.0	53.5	107.1
cal 5 mdq	5	✔	100.0	102.1	102.1
cal 6 mdq	6	✔	250.0	253.3	101.3
cal 7 mdq	7	✔	500.0	479.8	96.0
cal 8 mdq	8	✔	1000.0	884.0	88.4

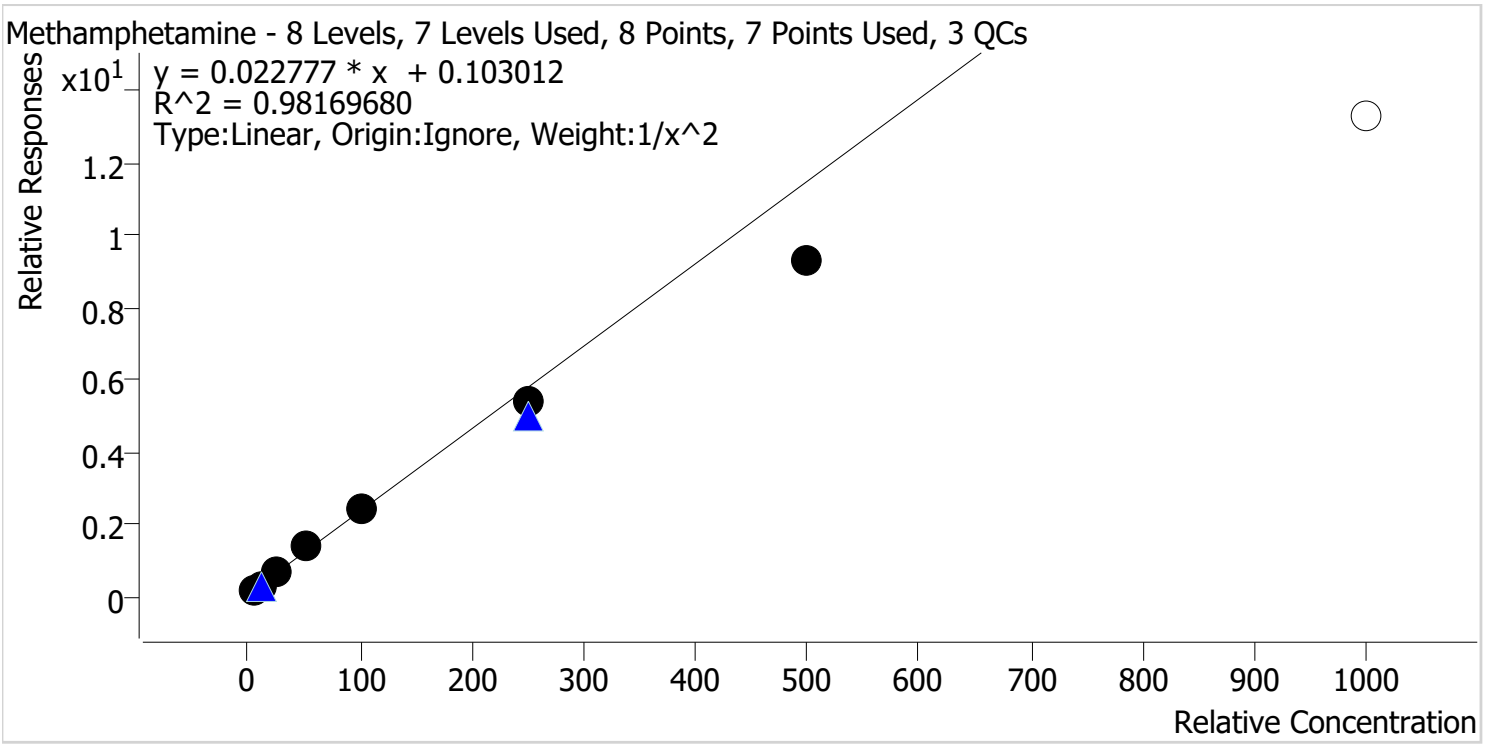
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Lorazepam
Internal Standard	Oxazepam-D5



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✗	5.0	4.8	97.0
cal 2 mdq	2	✔	10.0	9.8	98.4
cal 3 mdq	3	✔	25.0	25.3	101.3
cal 4 mdq	4	✔	50.0	51.3	102.5
cal 5 mdq	5	✔	100.0	107.7	107.7
cal 6 mdq	6	✔	250.0	251.4	100.5
cal 7 mdq	7	✔	500.0	462.1	92.4
cal 8 mdq	8	✔	1000.0	971.2	97.1

Compound Calibration Report

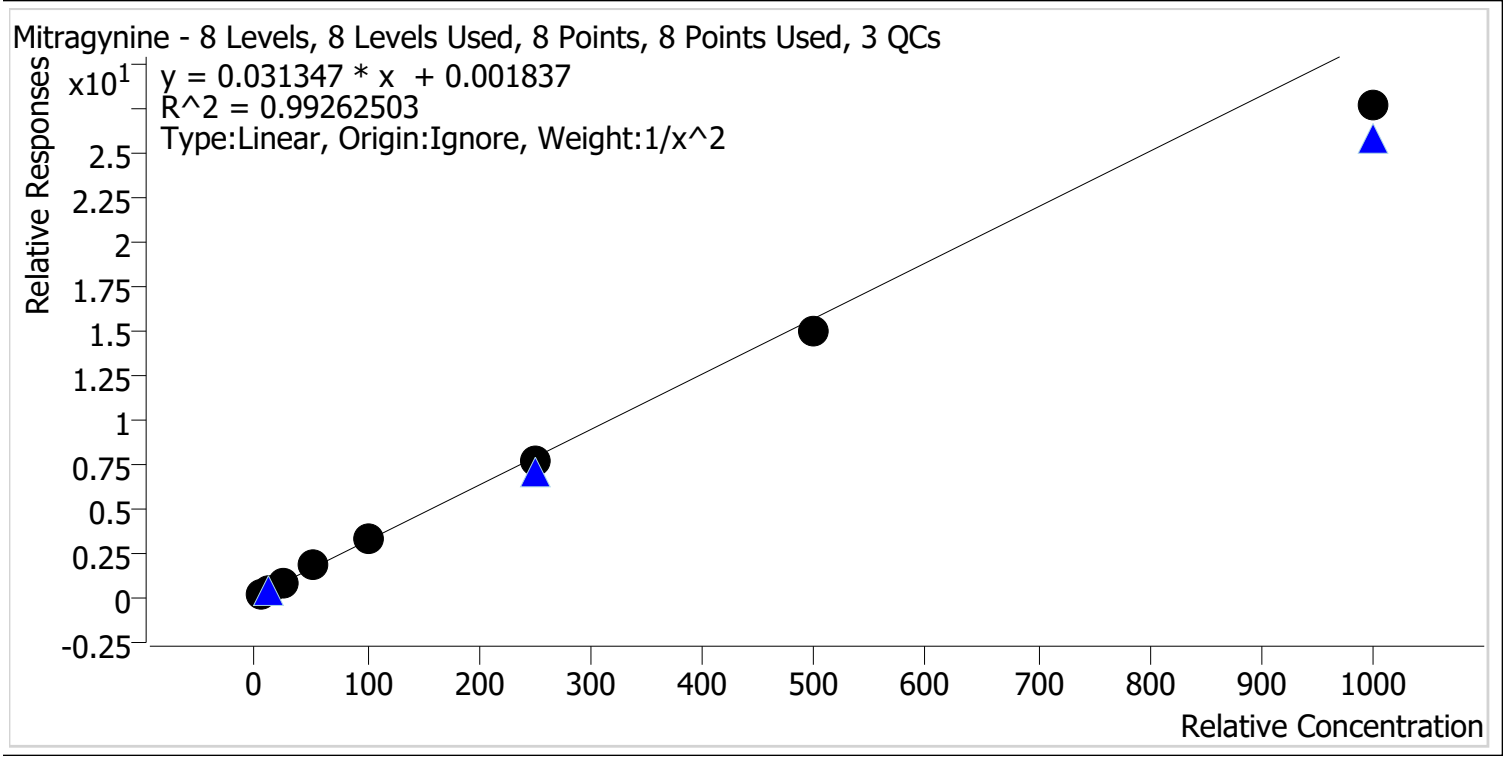
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Methamphetamine
Internal Standard	Methamphetamine-D11



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	4.7	94.6
cal 2 mdq	2	✔	10.0	10.4	103.5
cal 3 mdq	3	✔	25.0	28.2	112.6
cal 4 mdq	4	✔	50.0	56.2	112.5
cal 5 mdq	5	✔	100.0	103.5	103.5
cal 6 mdq	6	✔	250.0	231.9	92.7
cal 7 mdq	7	✔	500.0	402.7	80.5
cal 8 mdq	8	✗	1000.0	580.4	58.0

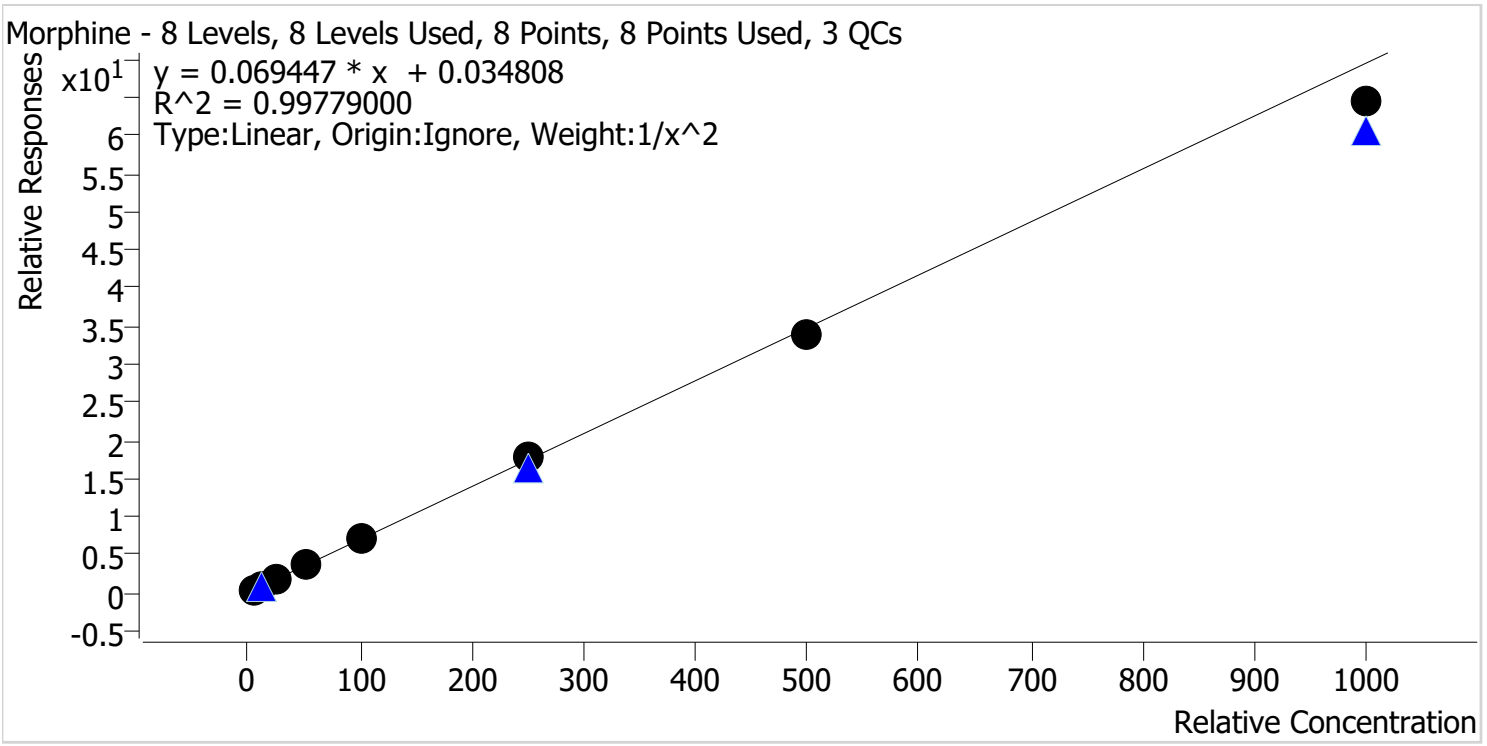
Compound Calibration Report

Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Mitragynine
Internal Standard	Hydrocodone-D6



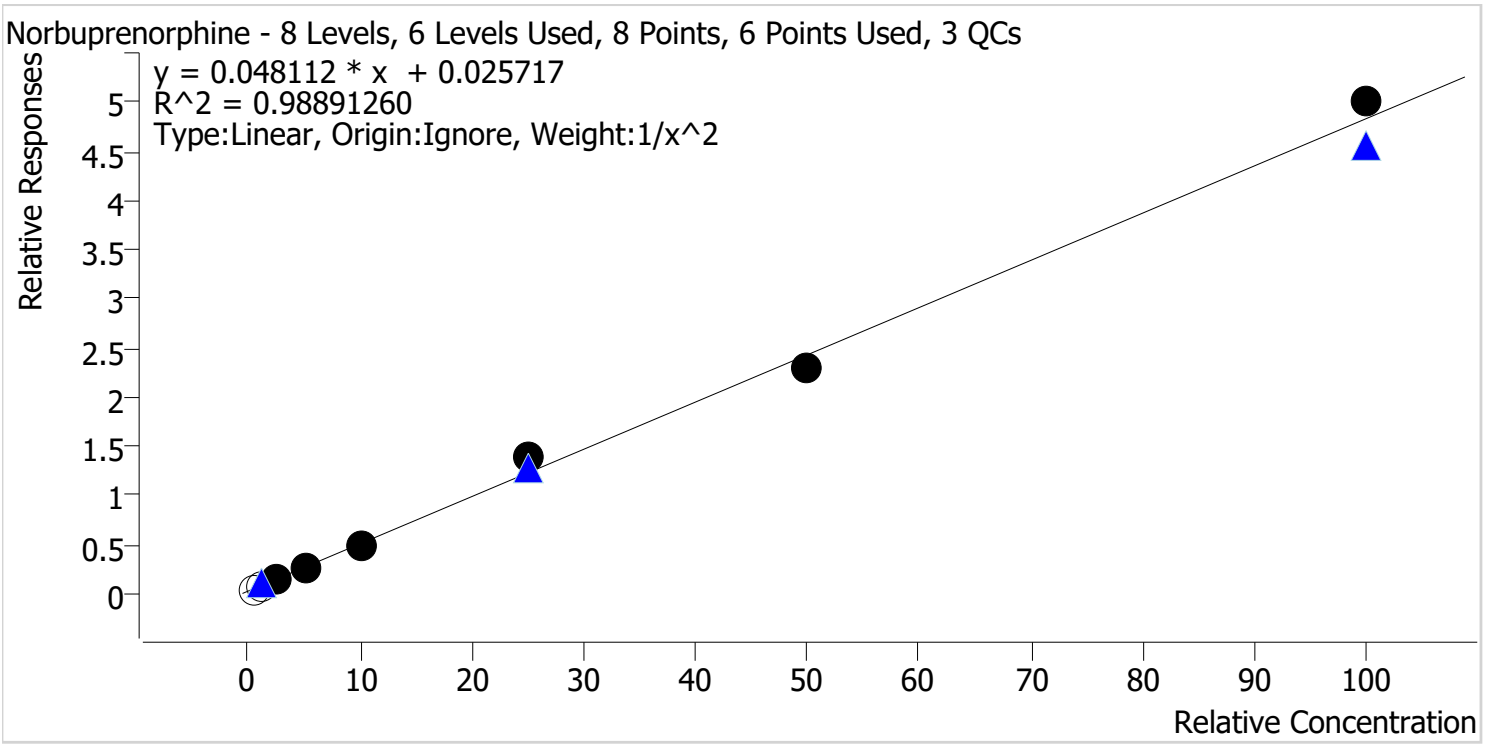
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	4.9	97.3
cal 2 mdq	2	✔	10.0	10.1	100.7
cal 3 mdq	3	✔	25.0	26.4	105.4
cal 4 mdq	4	✔	50.0	56.5	113.0
cal 5 mdq	5	✔	100.0	103.6	103.6
cal 6 mdq	6	✔	250.0	241.8	96.7
cal 7 mdq	7	✔	500.0	475.4	95.1
cal 8 mdq	8	✔	1000.0	882.3	88.2

Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Morphine
Internal Standard	Morphine-D6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	5.0	100.4
cal 2 mdq	2	✔	10.0	9.7	96.7
cal 3 mdq	3	✔	25.0	26.0	103.8
cal 4 mdq	4	✔	50.0	52.1	104.3
cal 5 mdq	5	✔	100.0	101.7	101.7
cal 6 mdq	6	✔	250.0	257.9	103.1
cal 7 mdq	7	✔	500.0	486.4	97.3
cal 8 mdq	8	✔	1000.0	927.3	92.7

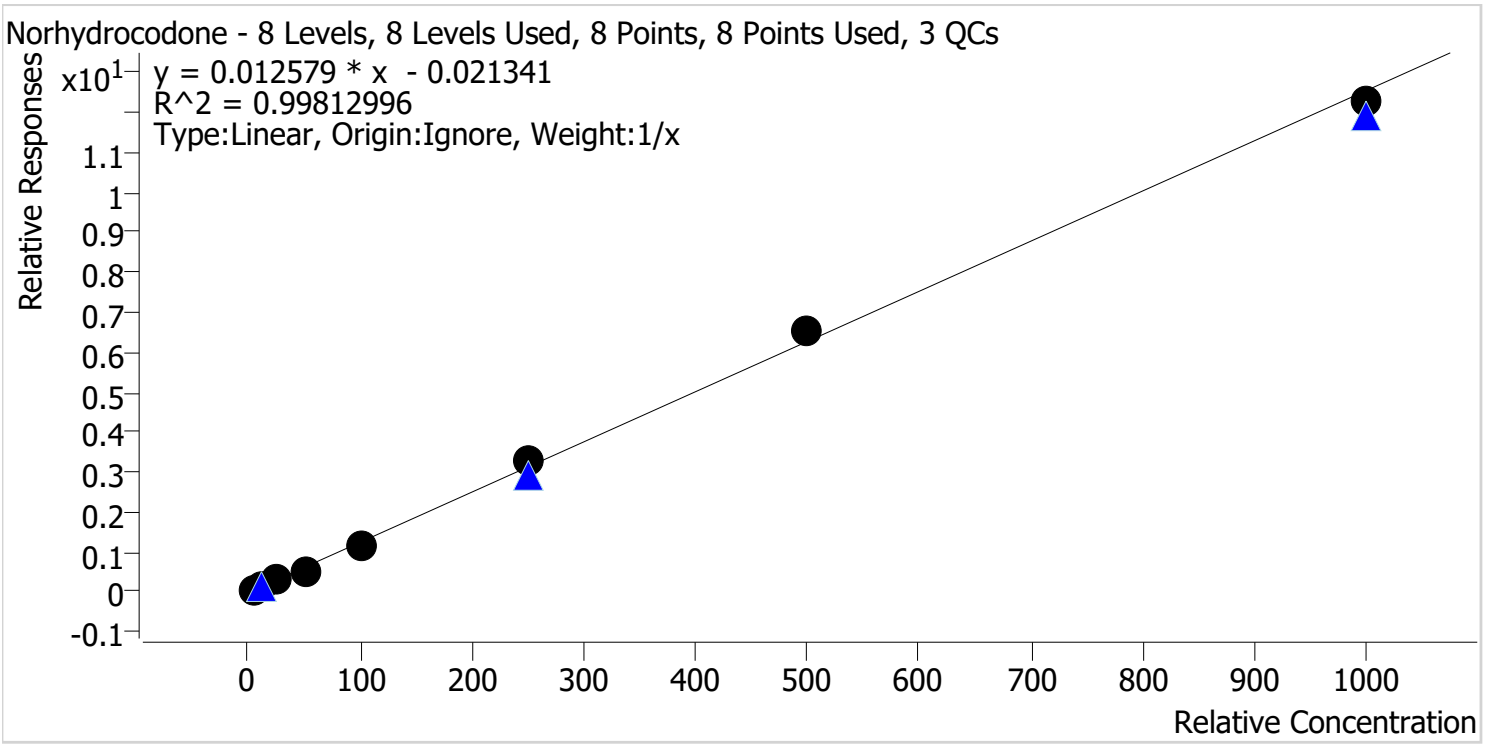
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Norbuprenorphine
Internal Standard	Norbuprenorphine-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✗	0.5	0.3	53.0
cal 2 mdq	2	✗	1.0	0.6	63.0
cal 3 mdq	3	✔	2.5	2.6	105.5
cal 4 mdq	4	✔	5.0	4.5	89.6
cal 5 mdq	5	✔	10.0	9.5	94.9
cal 6 mdq	6	✔	25.0	28.0	112.2
cal 7 mdq	7	✔	50.0	47.1	94.2
cal 8 mdq	8	✔	100.0	103.6	103.6

Compound Calibration Report

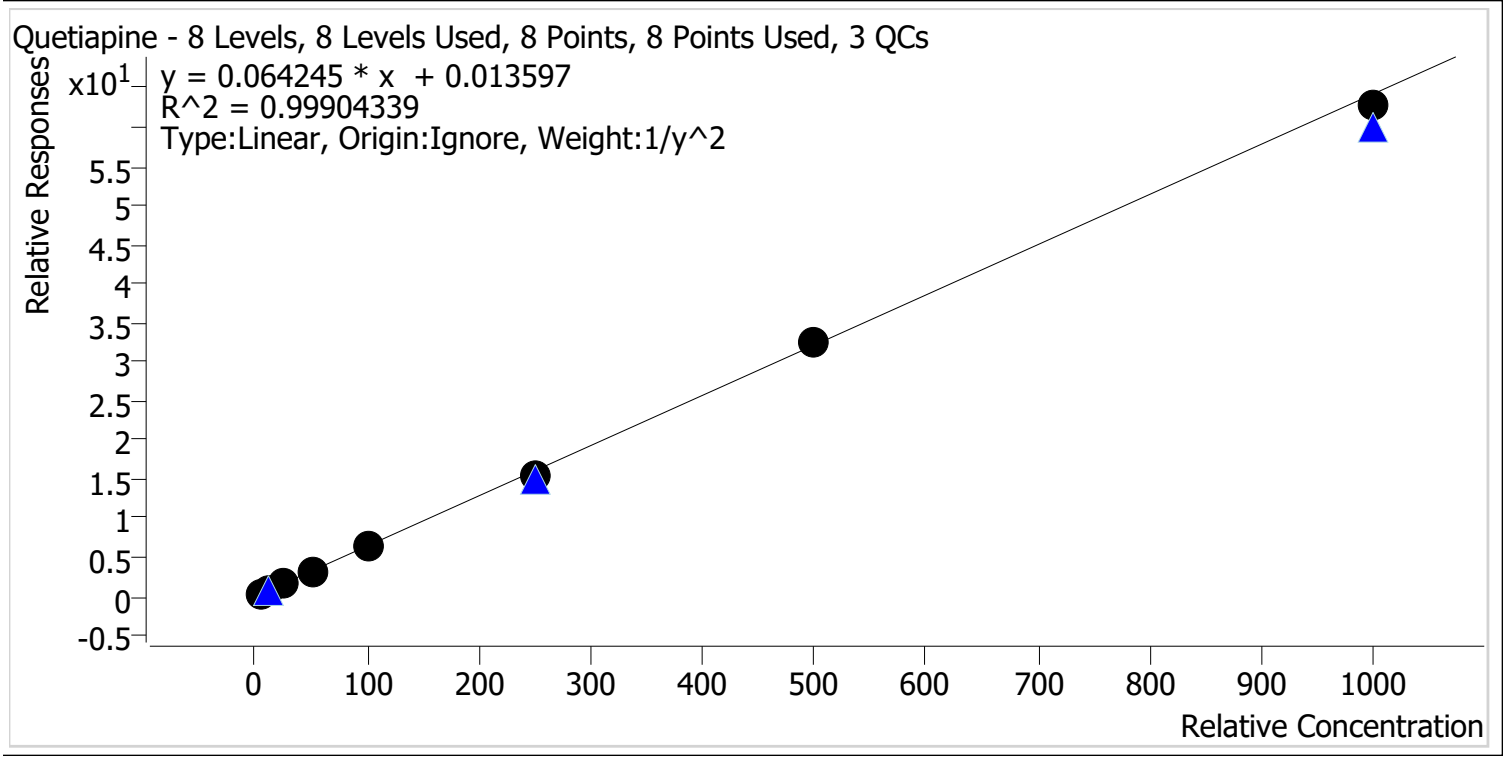
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Norhydrocodone
Internal Standard	Norhydrocodone-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	5.4	108.9
cal 2 mdq	2	✔	10.0	9.9	99.0
cal 3 mdq	3	✔	25.0	26.0	103.9
cal 4 mdq	4	✔	50.0	43.1	86.3
cal 5 mdq	5	✔	100.0	94.6	94.6
cal 6 mdq	6	✔	250.0	264.8	105.9
cal 7 mdq	7	✔	500.0	518.0	103.6
cal 8 mdq	8	✔	1000.0	978.1	97.8

Compound Calibration Report

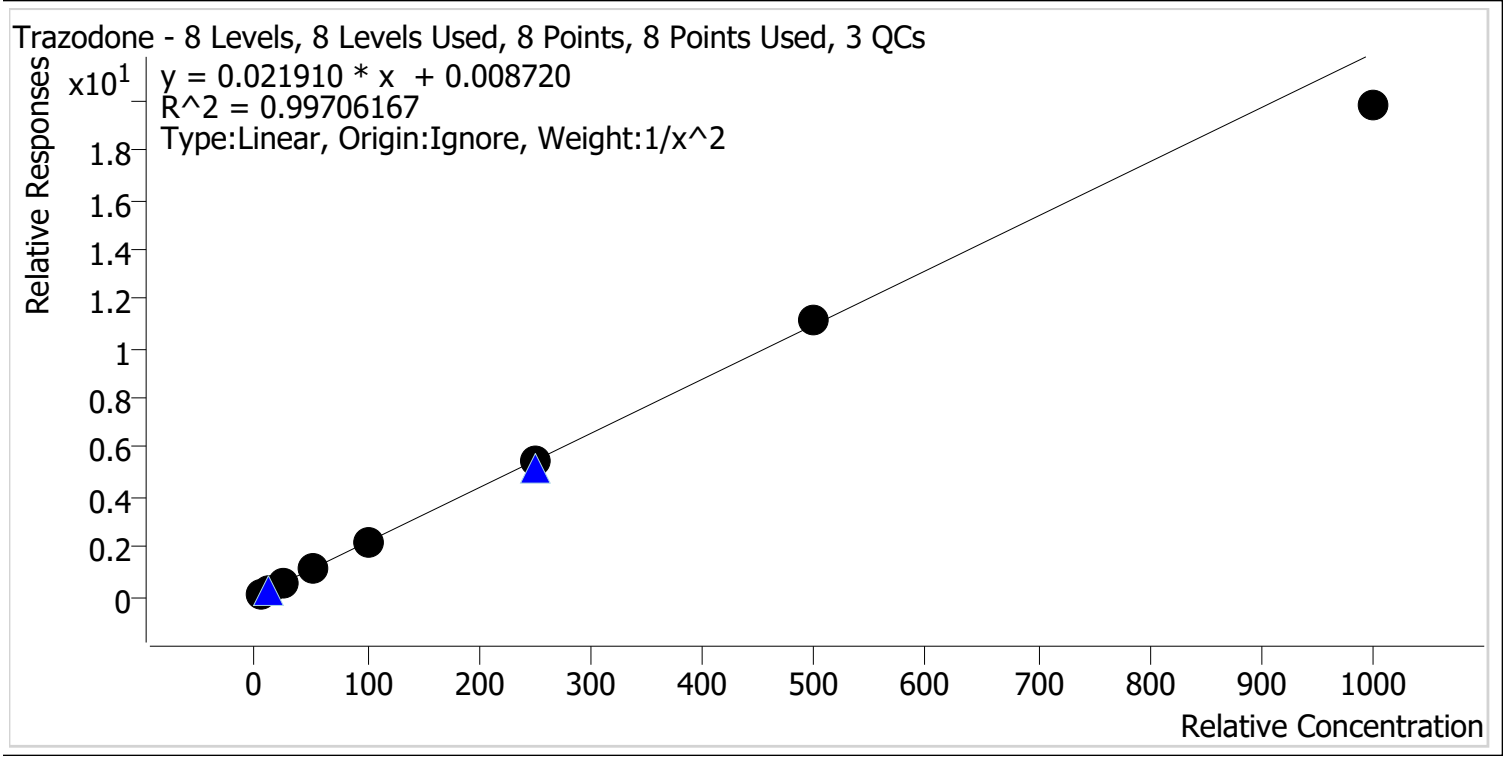
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Quetiapine
Internal Standard	Quetiapine-D8



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	5.0	100.9
cal 2 mdq	2	✔	10.0	9.7	96.9
cal 3 mdq	3	✔	25.0	25.6	102.5
cal 4 mdq	4	✔	50.0	51.0	101.9
cal 5 mdq	5	✔	100.0	103.2	103.2
cal 6 mdq	6	✔	250.0	241.3	96.5
cal 7 mdq	7	✔	500.0	506.7	101.3
cal 8 mdq	8	✔	1000.0	976.9	97.7

Compound Calibration Report

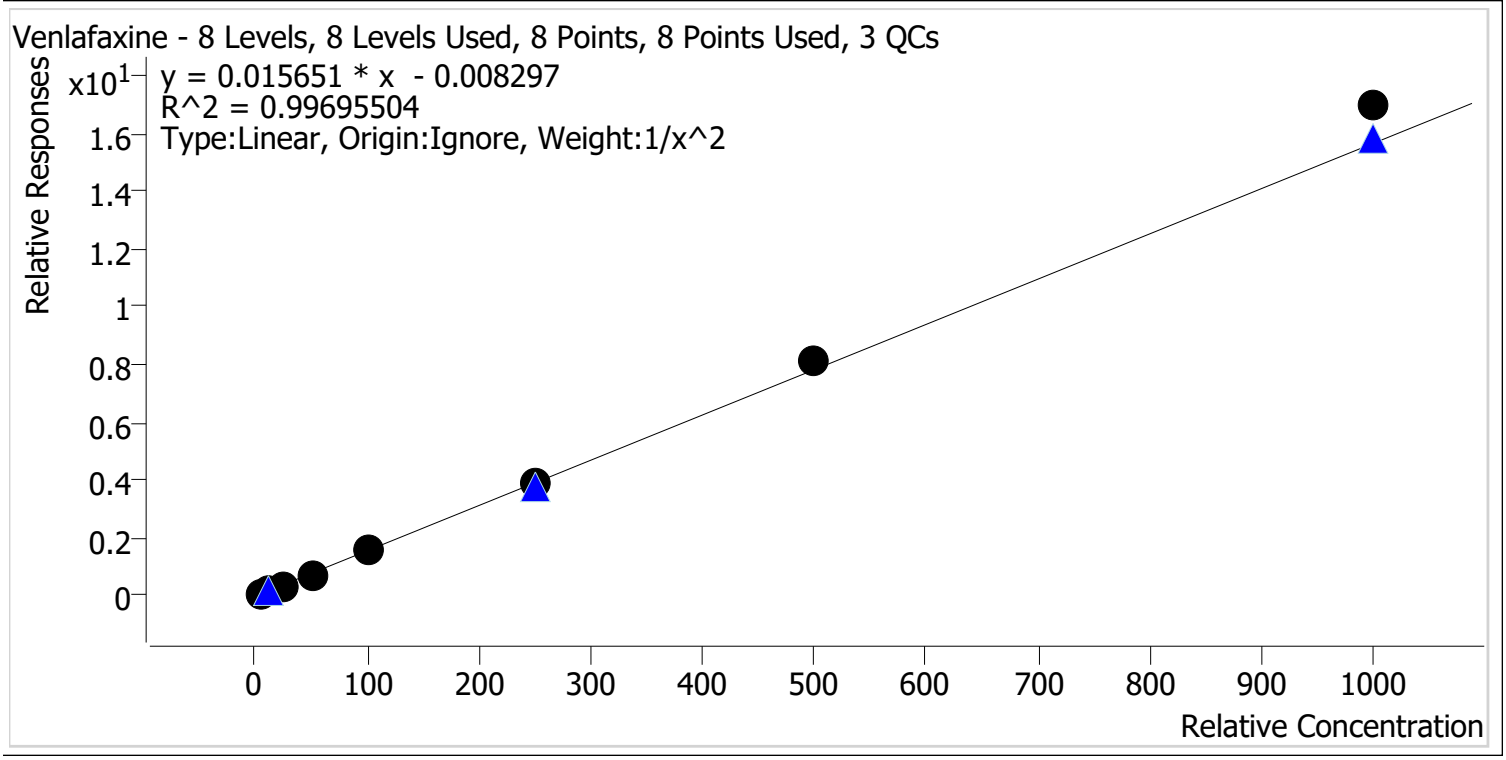
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Trazodone
Internal Standard	Trazodone-D6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	4.9	97.3
cal 2 mdq	2	✔	10.0	10.3	102.8
cal 3 mdq	3	✔	25.0	26.0	103.9
cal 4 mdq	4	✔	50.0	52.5	105.1
cal 5 mdq	5	✔	100.0	100.5	100.5
cal 6 mdq	6	✔	250.0	246.6	98.6
cal 7 mdq	7	✔	500.0	507.3	101.5
cal 8 mdq	8	✔	1000.0	902.4	90.2

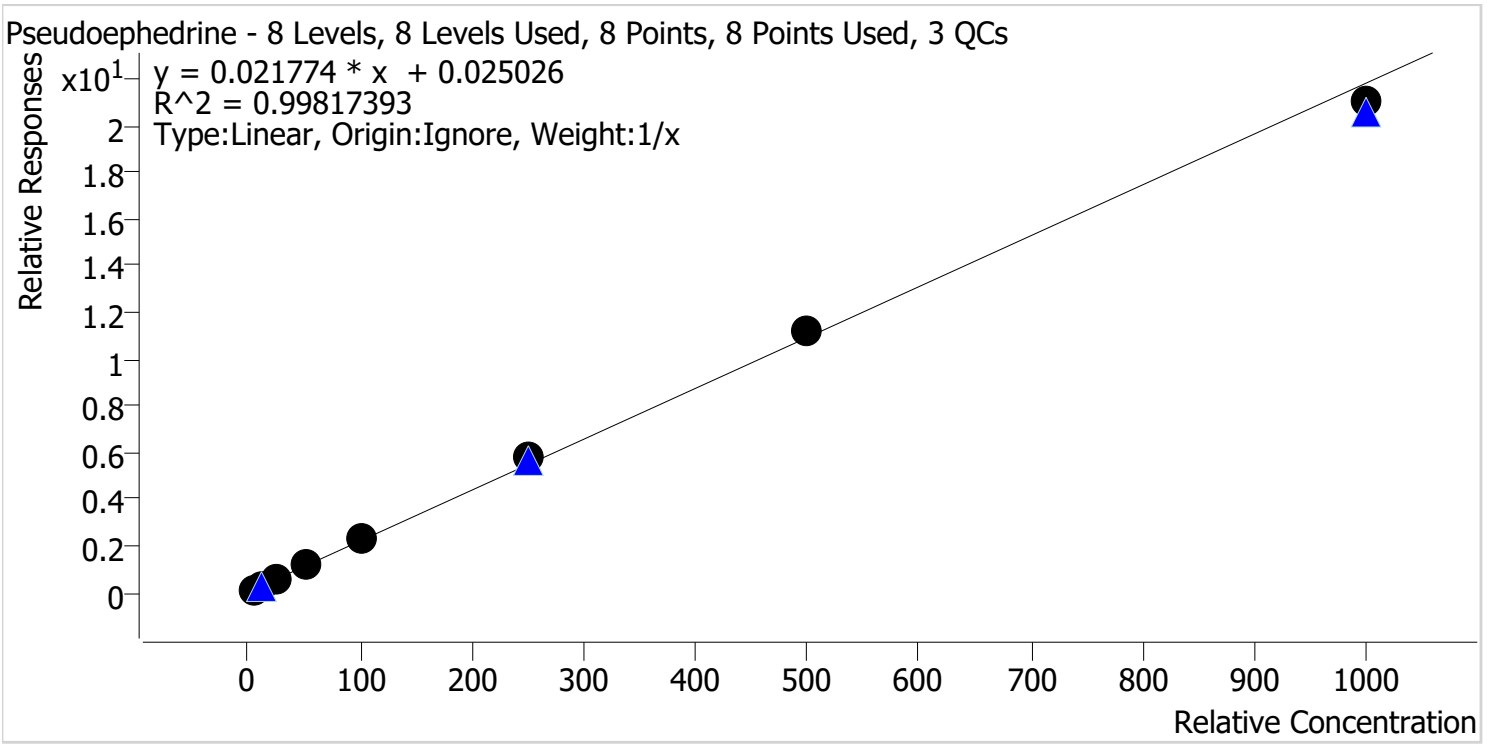
Compound Calibration Report

Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Venlafaxine
Internal Standard	Venlafaxine-D6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	5.1	101.7
cal 2 mdq	2	✔	10.0	10.0	100.1
cal 3 mdq	3	✔	25.0	23.5	93.9
cal 4 mdq	4	✔	50.0	47.3	94.6
cal 5 mdq	5	✔	100.0	98.1	98.1
cal 6 mdq	6	✔	250.0	247.9	99.1
cal 7 mdq	7	✔	500.0	520.6	104.1
cal 8 mdq	8	✔	1000.0	1083.5	108.3

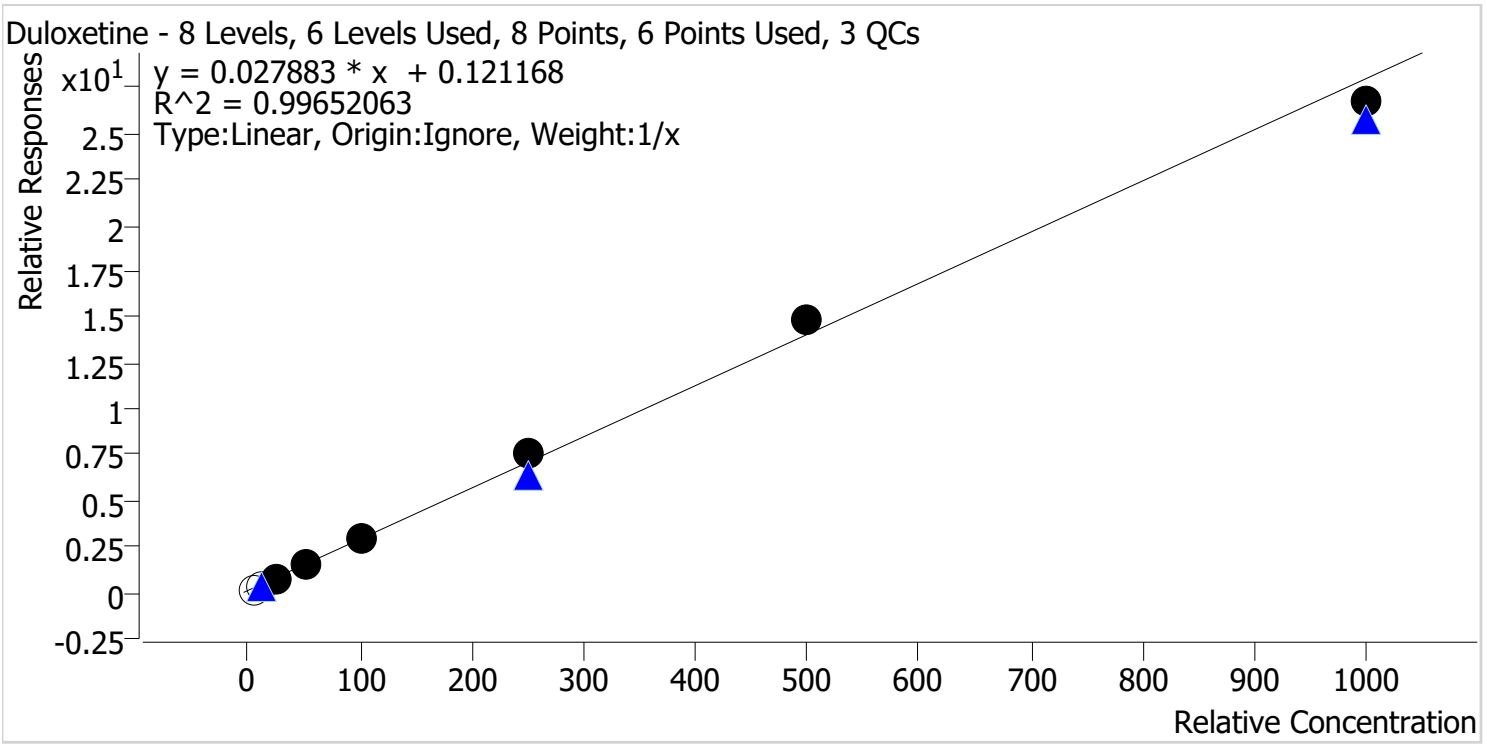
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Pseudoephedrine
Internal Standard	Pseudoephedrine-D3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	4.2	84.0
cal 2 mdq	2	✔	10.0	9.6	95.5
cal 3 mdq	3	✔	25.0	25.6	102.5
cal 4 mdq	4	✔	50.0	53.4	106.7
cal 5 mdq	5	✔	100.0	106.9	106.9
cal 6 mdq	6	✔	250.0	263.0	105.2
cal 7 mdq	7	✔	500.0	513.7	102.7
cal 8 mdq	8	✔	1000.0	963.7	96.4

Compound Calibration Report

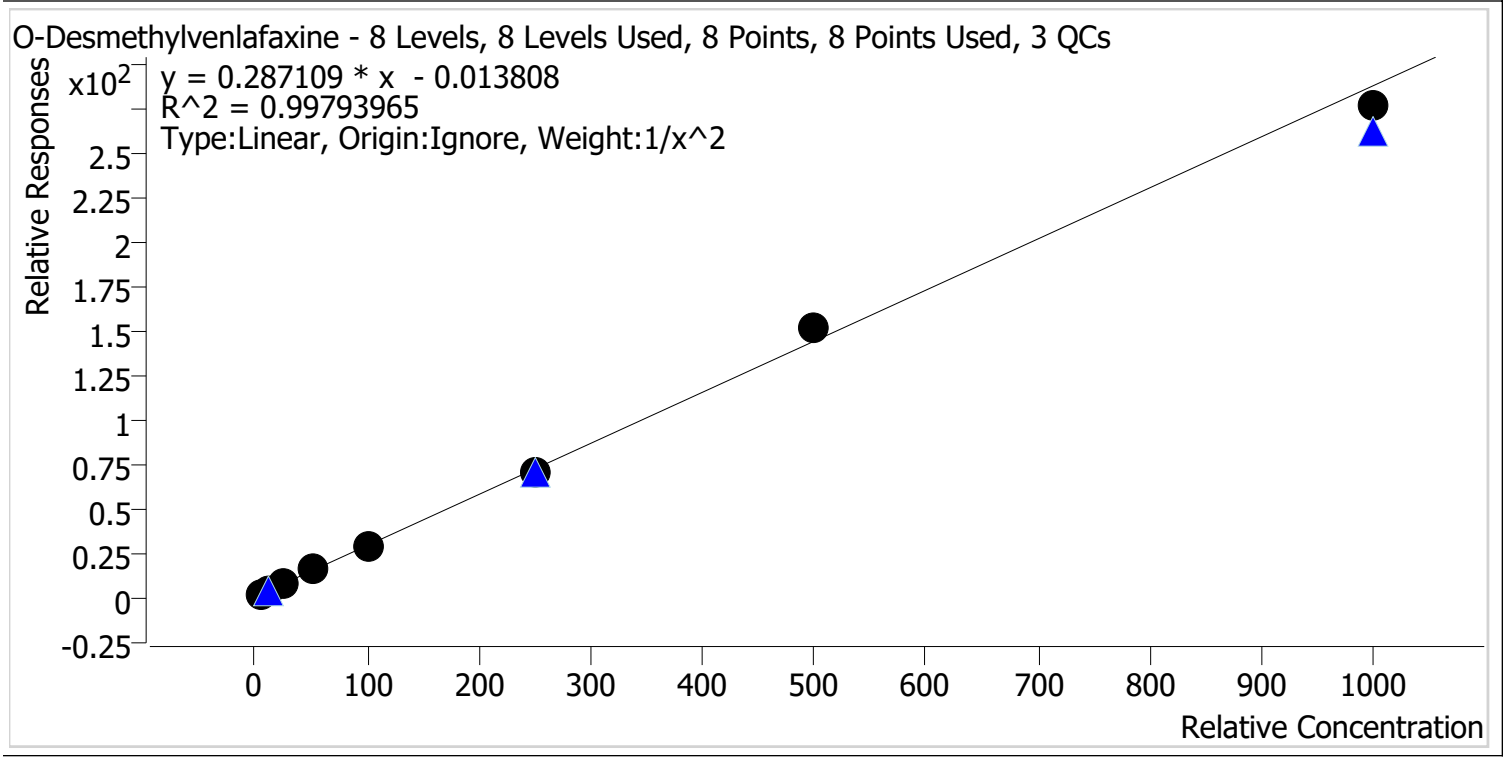
Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	Duloxetine
Internal Standard	Duloxetine-d3



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✗	5.0	1.0	20.3
cal 2 mdq	2	✗	10.0	5.4	53.5
cal 3 mdq	3	✔	25.0	23.3	93.3
cal 4 mdq	4	✔	50.0	48.6	97.1
cal 5 mdq	5	✔	100.0	101.6	101.6
cal 6 mdq	6	✔	250.0	265.9	106.4
cal 7 mdq	7	✔	500.0	530.6	106.1
cal 8 mdq	8	✔	1000.0	955.0	95.5

Compound Calibration Report

Batch results	D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Last Cal. Update	5/13/2024 9:45 AM
Analyst Name	ISP\datastor
Analyte	O-Desmethylvenlafaxine
Internal Standard	O-Desmethylvenlafaxine-d6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	5.0	99.5
cal 2 mdq	2	✔	10.0	10.0	100.4
cal 3 mdq	3	✔	25.0	25.0	100.1
cal 4 mdq	4	✔	50.0	52.8	105.6
cal 5 mdq	5	✔	100.0	95.3	95.3
cal 6 mdq	6	✔	250.0	243.4	97.4
cal 7 mdq	7	✔	500.0	528.6	105.7
cal 8 mdq	8	✔	1000.0	960.5	96.0

AM #28 Multi-Drug Quant. Results

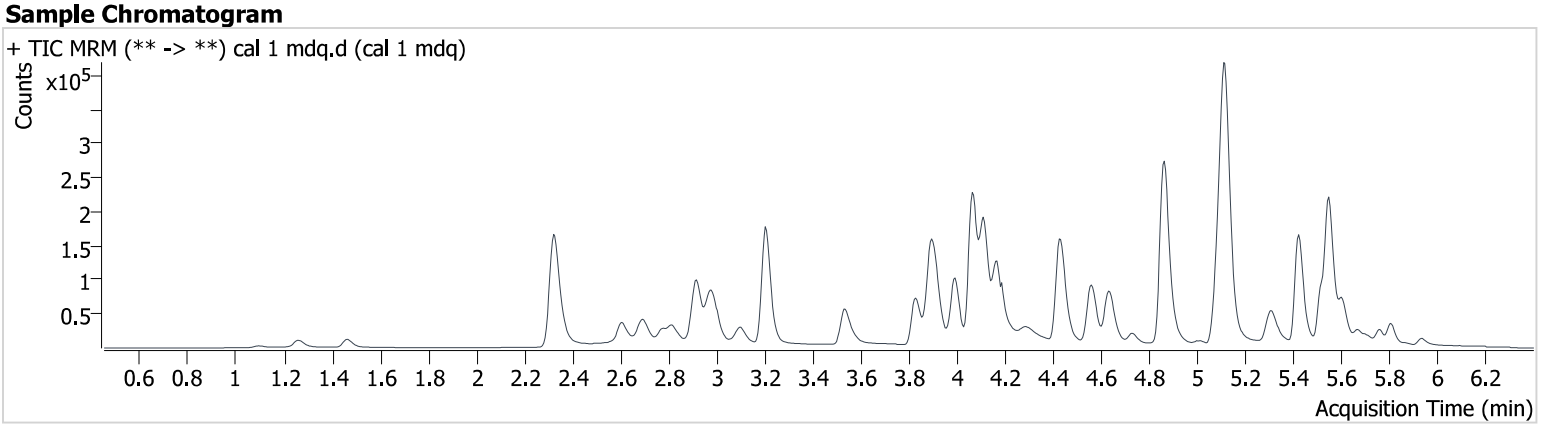
Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type Cal
Acq. Method mdqp1 121523.m
Sample Position P2-A1
Injection Volume 2
Acq. Date-Time 5/8/2024 4:26:00 PM
Sample Info.

Data File cal 1 mdq.d
Sample cal 1 mdq
Operator Anne Nord
Comment

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.003	2404	8155.4	116.59	20202.2	29286	4.929	ng/ml
Alprazolam	5.769	4185	509.5	95.68	23062.0	32602	5.106	ng/ml
Amphetamine	2.778	18009	517.0	240.12	∞	86197	4.709	ng/ml
Citalopram	5.080	20046	6993.9	43.91	120294.4	169755	4.972	ng/ml
Clonazepam	5.623	630	7303.6	40.00	172.2	2397	4.438	ng/ml
Diphenhydramine	5.124	74780	2222.1	33.87	6220.9	612080	5.042	ng/ml
Duloxetine	5.551	2559	35.4	6.58	89.6	17129	1.013	ng/ml
Hydrocodone	2.846	6579	2472.4	41.41	825.2	72653	4.859	ng/ml
Ketamine	3.841	19181	4212.3	35.83	388.7	165921	4.861	ng/ml
Lorazepam	5.747	368	115.0	37.77	6.0 **Low**	6200	4.849	ng/ml
Methamphetamine	2.992	62214	∞	36.00	1067.8	295144	4.732	ng/ml
Mitragynine	5.012	11209	14290.1	33.95	10895.5	72653	4.863	ng/ml
Morphine	1.101	736	241.5	16.10	8.2 **Low**	1919	5.018	ng/ml
Norbuprenorphine	4.831	149	129.7	126.11 **High**	549.8	3873	0.265	ng/ml
Norhydrocodone	2.907	756	∞	19.04	320.0	16045	5.443	ng/ml
O-Desmethylvenlafaxine	3.917	13734	221.8	608.01	5019.9	9713	4.973	ng/ml
Pseudoephedrine	2.335	47315	4718.8	17.46	1377.9	406147	4.201	ng/ml
Quetiapine	5.312	30395	5228.9	65.40	4443.7	89966	5.047	ng/ml
Trazodone	4.642	19975	859.3	128.23	5556.1	173143	4.867	ng/ml
Venlafaxine	4.870	35125	1102404.1	39.25	766.0	492589	5.086	ng/ml

AM #28 Multi-Drug Quant. Results

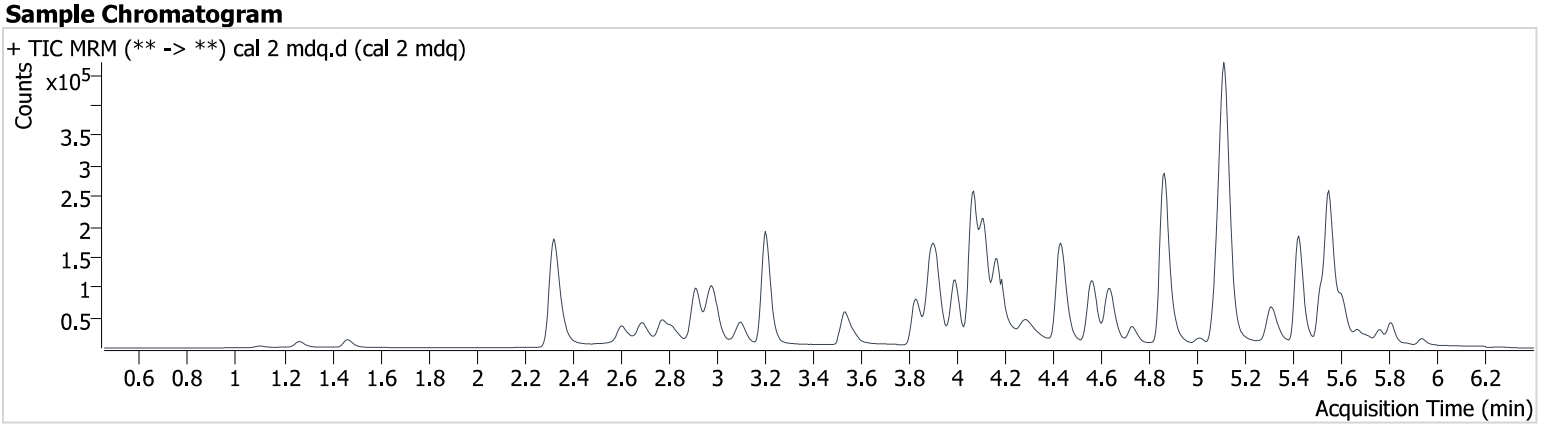
Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type Cal
Acq. Method mdqp1 121523.m
Sample Position P2-B1
Injection Volume 2
Acq. Date-Time 5/8/2024 4:34:50 PM
Sample Info.

Data File cal 2 mdq.d
Sample cal 2 mdq
Operator Anne Nord
Comment

Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	3.998	4670	8369.8	120.98	7276.6	29565	9.939	ng/ml
Alprazolam	5.769	7493	226.5	96.76	294.2	32480	9.405	ng/ml
Amphetamine	2.778	34141	890.1	237.47	1965.3	82285	10.778	ng/ml
Benzoylecgonine	3.890	959	107.1	32.64	39.3	2095	7.182	ng/ml
Citalopram	5.080	37881	5118.7	46.52	73343.1	163880	9.889	ng/ml
Clonazepam	5.617	1199	427.3	21.76 **Low**	111.5	2013	10.719	ng/ml
Diphenhydramine	5.124	148327	17151.1	34.24	9155.7	603444	9.909	ng/ml
Duloxetine	5.551	4420	182.8	8.47	322.6	16348	5.352	ng/ml
Hydrocodone	2.846	13337	2151.5	41.19	∞	71162	10.264	ng/ml
Ketamine	3.841	37219	10827.0	37.42	422.2	165019	10.153	ng/ml
Lorazepam	5.752	849	∞	27.95	20.6	6254	9.836	ng/ml
Methamphetamine	2.986	94694	∞	38.13	∞	279508	10.351	ng/ml
Mitragynine	5.012	22595	33593.3	33.78	74592.5	71162	10.070	ng/ml
Morphine	1.106	1187	283.9	18.17	52.9	1680	9.671	ng/ml
Norbuprenorphine	4.831	229	418.9	110.65	485.0	4087	0.630	ng/ml
Norhydrocodone	2.902	1590	∞	19.18	30168.9	15398	9.903	ng/ml
O-Desmethylvenlafaxine	3.917	26821	312.7	600.61	8296.4	9346	10.043	ng/ml
Pseudoephedrine	2.335	93076	6605.8	17.66	22160.8	399470	9.551	ng/ml
Quetiapine	5.312	56449	2192.1	64.74	4308.9	88737	9.690	ng/ml
Trazodone	4.642	41341	38792.3	122.35	7590.1	176708	10.280	ng/ml
Venlafaxine	4.865	69795	4229.5	38.26	1386.4	470177	10.015	ng/ml

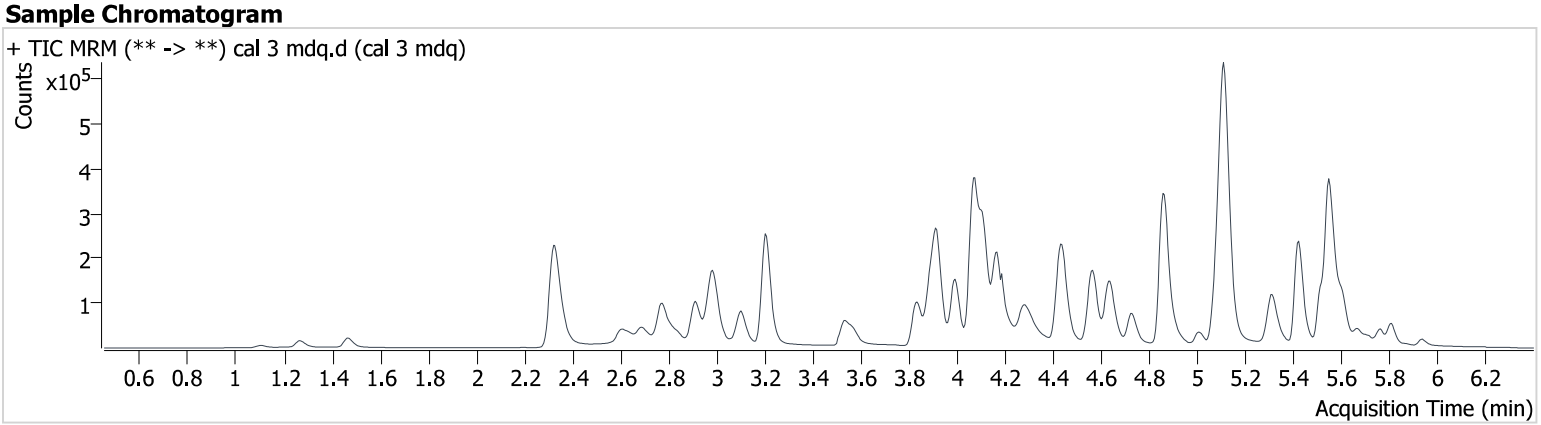
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type Cal
Acq. Method mdqp1 121523.m
Sample Position P2-C1
Injection Volume 2
Acq. Date-Time 5/8/2024 4:43:32 PM
Sample Info.

Data File cal 3 mdq.d
Sample cal 3 mdq
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.003	11886	∞	113.42	4994.5	28464	27.085	ng/ml
Alprazolam	5.769	19051	1239.8	88.43	∞	30777	25.718	ng/ml
Amphetamine	2.778	80379	2204.2	246.31	5125.0	82518	27.253	ng/ml
Benzoylecgonine	3.890	1946	161.2	35.33	46.5	2410	23.460	ng/ml
Citalopram	5.075	95869	6699.7	48.08	∞	157994	26.224	ng/ml
Clonazepam	5.617	2414	609.4	39.89	542.4	1872	23.818	ng/ml
Diphenhydramine	5.118	362549	4176.2	34.09	33349.4	592780	24.309	ng/ml
Duloxetine	5.551	12319	797.9	7.93	943.3	15962	23.333	ng/ml
Hydrocodone	2.840	33910	2725.8	41.12	∞	72808	25.794	ng/ml
Ketamine	3.841	89782	6266.1	38.41	1672.7	158346	26.590	ng/ml
Lorazepam	5.747	2222	691.6	32.19	53.7	5958	25.330	ng/ml
Methamphetamine	2.986	213148	∞	35.23	∞	286385	28.154	ng/ml
Mitragynine	5.007	60282	7673.1	33.00	26050.9	72808	26.354	ng/ml
Morphine	1.106	3540	715.8	19.08	104.0	1927	25.959	ng/ml
Norbuprenorphine	4.837	607	2320.0	81.92	639.4	3981	2.637	ng/ml
Norhydrocodone	2.907	4208	∞	20.11	∞	13782	25.969	ng/ml
O-Desmethylvenlafaxine	3.917	68766	1035.4	593.42	31424.3	9591	25.020	ng/ml
Pseudoephedrine	2.335	234201	15311.3	17.47	22157.9	401640	25.631	ng/ml
Quetiapine	5.312	148151	18602.7	64.73	∞	89251	25.626	ng/ml
Trazodone	4.636	101421	6405.6	126.43	60280.8	175528	25.974	ng/ml
Venlafaxine	4.865	174036	15958.7	39.17	4086.1	484827	23.466	ng/ml

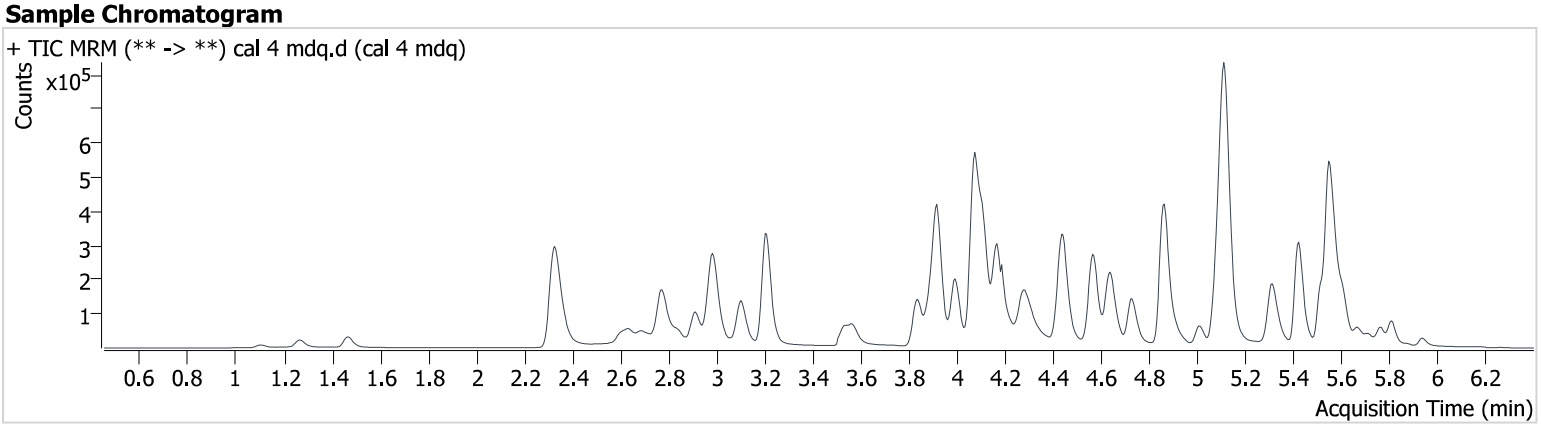
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type Cal
Acq. Method mdqp1 121523.m
Sample Position P2-D1
Injection Volume 2
Acq. Date-Time 5/8/2024 4:52:15 PM
Sample Info.

Data File cal 4 mdq.d
Sample cal 4 mdq
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.003	22276	∞	117.12	2877.6	28239	51.603	ng/ml
Alprazolam	5.769	36439	9482.6	96.36	1136.1	29950	50.827	ng/ml
Amphetamine	2.772	146725	10309.3	242.63	19943.5	80458	52.285	ng/ml
Benzoylecgonine	3.885	3091	334.8	39.46	130.3	2093	54.600	ng/ml
Citalopram	5.075	173476	159511.8	47.69	186246.7	149288	50.370	ng/ml
Clonazepam	5.617	5549	1229.1	34.98	682.9	1921	54.019	ng/ml
Diphenhydramine	5.124	674957	26396.7	34.27	32067.6	533348	50.049	ng/ml
Duloxetine	5.551	21319	383.4	9.23	182.6	14454	48.552	ng/ml
Hydrocodone	2.840	63881	∞	41.37	2316622349 30803.0	65952	53.851	ng/ml
Ketamine	3.841	172668	6791.3	37.99	2270.8	153234	53.540	ng/ml
Lorazepam	5.752	4266	1697.6	33.27	79.2	5541	51.259	ng/ml
Methamphetamine	2.986	393879	∞	35.97	∞	284564	56.247	ng/ml
Mitragynine	5.007	116885	17838.4	33.58	88889.8	65952	56.478	ng/ml
Morphine	1.106	6625	966.9	19.49	206.0	1813	52.127	ng/ml
Norbuprenorphine	4.831	1060	681.0	103.08	1112.9	4397	4.478	ng/ml
Norhydrocodone	2.907	8409	∞	24.08	1634.4	16133	43.133	ng/ml
O-Desmethylvenlafaxine	3.917	129326	1250.0	588.11	119645.2	8540	52.791	ng/ml
Pseudoephedrine	2.330	445925	17972.3	17.36	31122.1	375607	53.374	ng/ml
Quetiapine	5.312	271536	∞	66.57	24220.2	82605	50.954	ng/ml
Trazodone	4.642	191868	42200.8	126.67	50498.6	165416	52.542	ng/ml
Venlafaxine	4.865	338143	48650.3	37.86	7292.9	461996	47.296	ng/ml

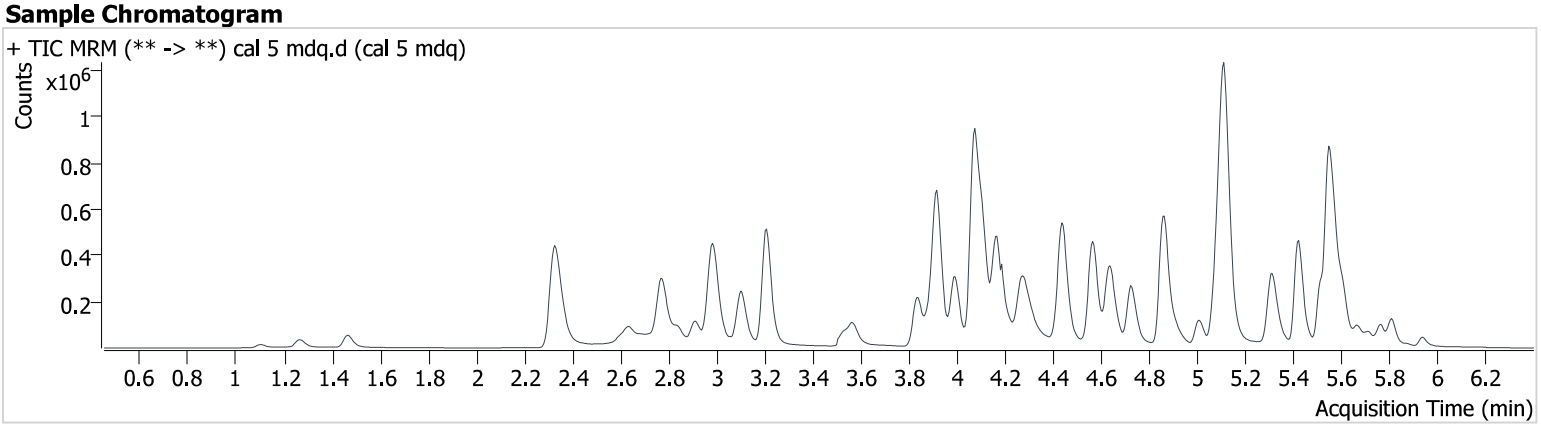
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type Cal
Acq. Method mdqp1 121523.m
Sample Position P2-E1
Injection Volume 2
Acq. Date-Time 5/8/2024 5:00:55 PM
Sample Info.

Data File cal 5 mdq.d
Sample cal 5 mdq
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.003	39354	2343.2	117.13	3866.2	26448	97.770	ng/ml
Alprazolam	5.769	71754	322.3	96.83	∞	29666	101.324	ng/ml
Amphetamine	2.772	270271	10669.6	236.64	14580.5	78852	99.545	ng/ml
Benzoylecgonine	3.885	5323	583.1	46.70	403.7	2000	109.718	ng/ml
Citalopram	5.075	313859	46095.4	47.72	1426318.9	133299	102.230	ng/ml
Clonazepam	5.617	11141	5957.6	33.33	758.1	2013	103.956	ng/ml
Diphenhydramine	5.118	1281358	165539.8	31.58	19464.1	492636	102.621	ng/ml
Duloxetine	5.545	36215	658.7	7.44	231.6	12262	101.575	ng/ml
Hydrocodone	2.841	130001	∞	40.75	13549.0	69185	104.650	ng/ml
Ketamine	3.841	323374	53805.4	39.66	9022.5	151375	102.131	ng/ml
Lorazepam	5.747	8899	1408.1	31.22	1094.1	5445	107.712	ng/ml
Methamphetamine	2.981	721981	∞	35.67	∞	293568	103.451	ng/ml
Mitragynine	5.007	224873	28500.4	34.54	3387.6	69185	103.629	ng/ml
Morphine	1.106	12707	2278.8	20.16	358.3	1791	101.689	ng/ml
Norbuprenorphine	4.831	1922	3828.4	101.92	17664.3	3985	9.493	ng/ml
Norhydrocodone	2.907	19029	4599.5	23.39	∞	16279	94.621	ng/ml
O-Desmethylvenlafaxine	3.917	236657	3567.3	580.12	115956.9	8652	95.322	ng/ml
Pseudoephedrine	2.330	845964	198360.6	17.35	395516.2	359583	106.897	ng/ml
Quetiapine	5.312	512857	662349.8	65.33	34550.7	77186	103.212	ng/ml
Trazodone	4.636	359840	161373.9	126.85	55141.3	162732	100.526	ng/ml
Venlafaxine	4.865	661883	66927.2	37.36	58049.0	433636	98.056	ng/ml

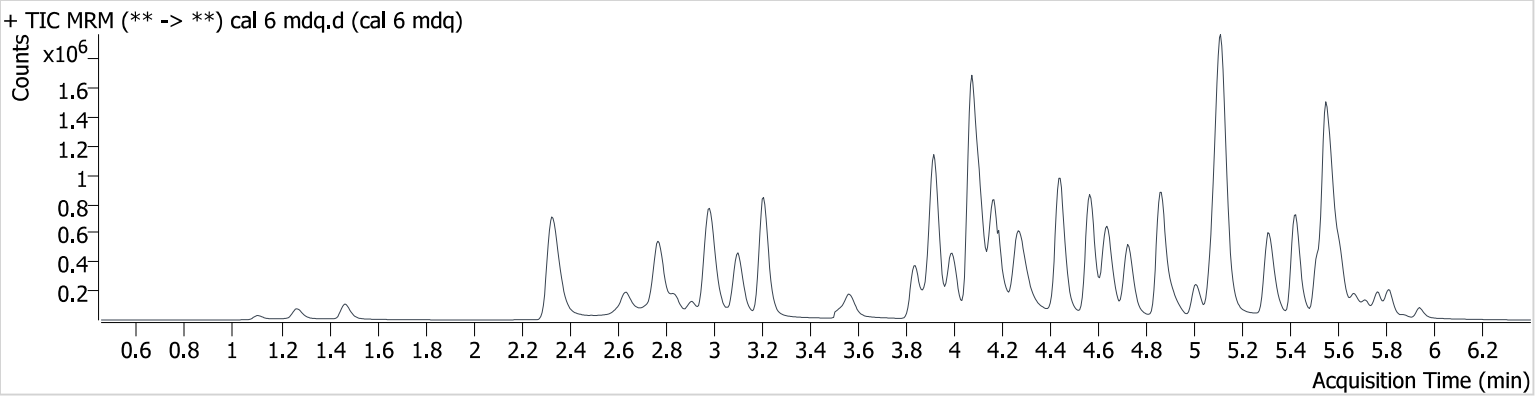
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type Cal
Acq. Method mdqp1 121523.m
Sample Position P2-F1
Injection Volume 2
Acq. Date-Time 5/8/2024 5:09:37 PM
Sample Info.

Data File cal 6 mdq.d
Sample cal 6 mdq
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.003	68626	9823.2	114.31	3678.6	18644	242.579	ng/ml
Alprazolam	5.769	153566	∞	95.27	∞	24282	265.392	ng/ml
Amphetamine	2.772	486762	11940.3	246.13	10954.7	67100	212.295	ng/ml
Benzoylecgonine	3.885	10697	412.3	40.97	433.7	1971	238.375	ng/ml
Citalopram	5.070	569662	102002.7	47.51	887853.1	100251	246.949	ng/ml
Clonazepam	5.617	22473	7673.6	35.75	5778.9	1686	251.181	ng/ml
Diphenhydramine	5.118	2405479	334224.0	32.94	193453.2	367989	257.551	ng/ml
Duloxetine	5.551	60168	795.9	7.99	1725.6	7985	265.906	ng/ml
Hydrocodone	2.840	274099	∞	41.75	∞	62968	242.690	ng/ml
Ketamine	3.841	658950	89909.1	37.76	8151.9	124891	253.284	ng/ml
Lorazepam	5.747	18798	15954.9	38.83	924.1	4903	251.375	ng/ml
Methamphetamine	2.981	1399453	∞	35.70	∞	259922	231.860	ng/ml
Mitragynine	5.007	477400	535376.6	34.28	84596.5	62968	241.804	ng/ml
Morphine	1.106	29582	1687.9	19.55	574.1	1649	257.859	ng/ml
Norbuprenorphine	4.831	4232	1879.2	104.20	3596.4	3078	28.046	ng/ml
Norhydrocodone	2.907	45983	6697.1	25.74	∞	13893	264.812	ng/ml
O-Desmethylvenlafaxine	3.917	427472	11897.6	575.47	126153.0	6118	243.396	ng/ml
Pseudoephedrine	2.330	1660992	75976.5	17.20	6046.2	288804	262.983	ng/ml
Quetiapine	5.307	998103	36329.3	65.87	1168888.7	64335	241.271	ng/ml
Trazodone	4.636	719220	447464.5	128.26	122249.2	132894	246.612	ng/ml
Venlafaxine	4.859	1349511	35505.3	37.26	12790.2	348612	247.872	ng/ml

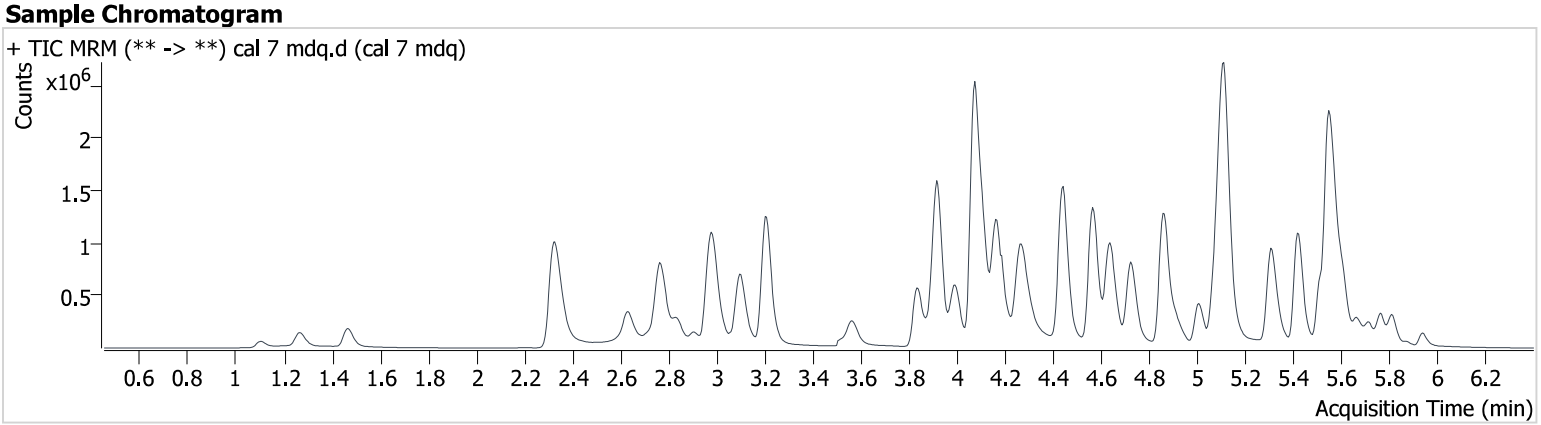
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type Cal
Acq. Method mdqp1 121523.m
Sample Position P2-G1
Injection Volume 2
Acq. Date-Time 5/8/2024 5:18:17 PM
Sample Info.

Data File cal 7 mdq.d
Sample cal 7 mdq
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.008	94947	4751.1	115.14	3821.0	14419	434.353	ng/ml
Alprazolam	5.769	275146	∞	94.24	4645.3	24401	473.412	ng/ml
Amphetamine	2.767	749777	15434.9	242.89	286578.6	60339	364.682	ng/ml
Benzoylecgonine	3.885	16338	1717.1	38.93	3264.0	1605	459.456	ng/ml
Citalopram	5.070	818358	∞	46.68	3531050.7	71577	497.043	ng/ml
Clonazepam	5.617	35501	9530.9	37.25	7306.1	1416	472.931	ng/ml
Diphenhydramine	5.118	3322104	18450.6	35.52	5328.1	274190	477.174	ng/ml
Duloxetine	5.545	74898	834.9	8.66	700.7	5021	530.620	ng/ml
Hydrocodone	2.835	485816	∞	40.55	∞	55838	485.263	ng/ml
Ketamine	3.836	1062236	124082.2	38.52	60988.9	106413	479.823	ng/ml
Lorazepam	5.747	37506	10802.5	38.53	947.3	5312	462.102	ng/ml
Methamphetamine	2.976	2201865	∞	36.06	∞	237374	402.724	ng/ml
Mitragynine	5.007	832189	6996.5	34.73	307532.9	55838	475.383	ng/ml
Morphine	1.106	60862	6274.0	20.44	1510.7	1800	486.351	ng/ml
Norbuprenorphine	4.831	7047	∞	106.51	15983.0	3073	47.124	ng/ml
Norhydrocodone	2.907	85084	25397.1	26.36	∞	13100	518.017	ng/ml
O-Desmethylvenlafaxine	3.917	618980	4547.4	571.07	192337.8	4079	528.603	ng/ml
Pseudoephedrine	2.325	2606807	∞	16.92	21835.3	232529	513.710	ng/ml
Quetiapine	5.307	1702271	102673.1	60.01	183716.8	52271	506.698	ng/ml
Trazodone	4.636	1195738	2479912.0	128.71	∞	107490	507.323	ng/ml
Venlafaxine	4.859	2255609	106004.8	36.85	20274.2	277127	520.584	ng/ml

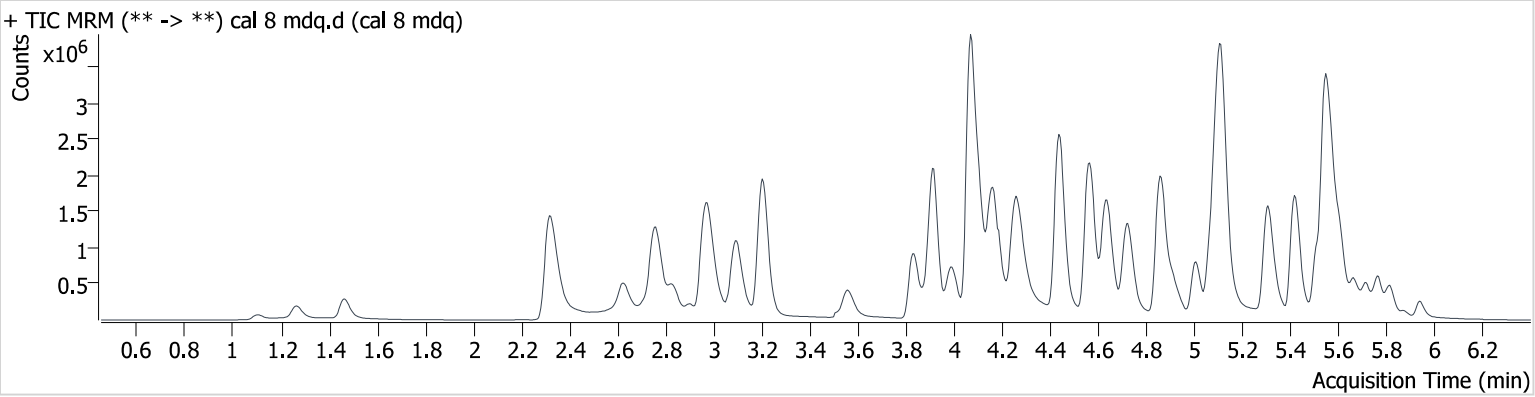
AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824r\QuantResults\am 28 p1.batch.bin
Calibration Last Update 5/13/2024 9:45:56 AM

Instrument 69679
Type Cal
Acq. Method mdqp1 121523.m
Sample Position P2-H1
Injection Volume 2
Acq. Date-Time 5/8/2024 5:35:39 PM
Sample Info.

Data File cal 8 mdq.d
Sample cal 8 mdq
Operator Anne Nord
Comment Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.

Sample Chromatogram



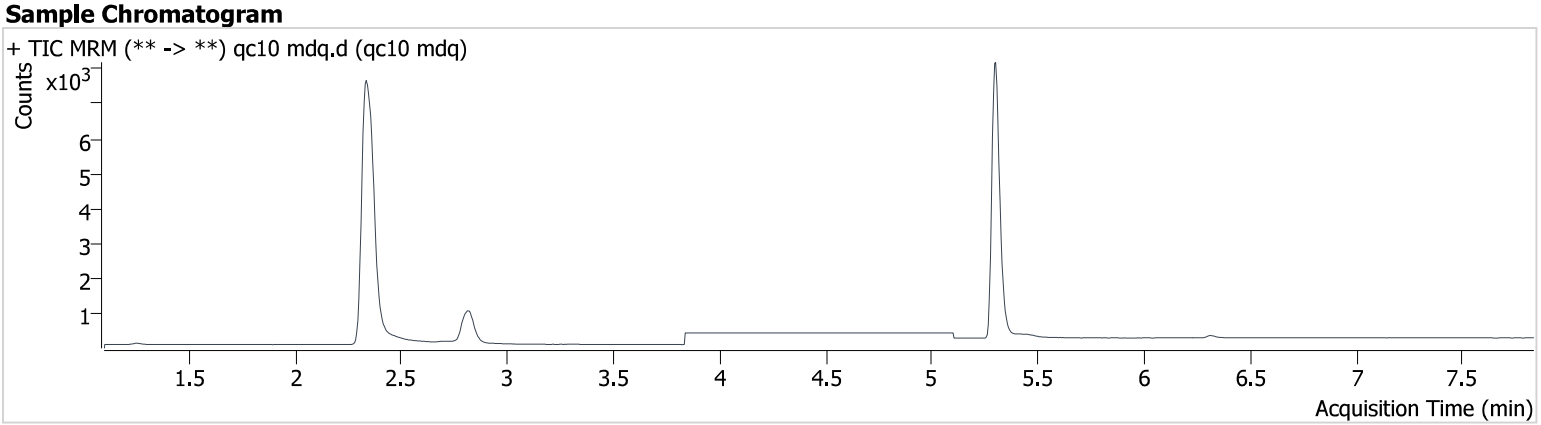
Name	RT	Resp.	S/N	Ratio		S/N	ISTD Resp.	Final Conc.	
7-aminoclonazepam	4.013	124136	∞	112.53		72895.3	7530	1088.152	ng/ml
Alprazolam	5.769	500437	∞	93.76		3801.4	21634	971.505	ng/ml
Amphetamine	2.762	1228111	146316.7	242.75		252247.2	57613	626.630	ng/ml
Benzoylecgonine	3.880	17537	2553.8	42.75		1495.3	1330	599.314	ng/ml
Citalopram	5.065	1142073	∞	48.08		9713402.6	51937	956.116	ng/ml
Clonazepam	5.623	62980	9266.6	34.59		10322.5	1217	976.743	ng/ml
Diphenhydramine	5.118	5296405	527796.3	32.61		590640.5	205133	1016.593	ng/ml
Duloxetine	5.545	90531	2805.1	8.85		250.8	3384	955.014	ng/ml
Hydrocodone	2.830	958350	∞	39.89		∞	59056	905.271	ng/ml
Ketamine	3.836	1835594	309582.8	37.88		37215.4	99880	883.983	ng/ml
Lorazepam	5.747	88889	∞	35.83		8320.9	5983	971.234	ng/ml
Methamphetamine	2.971	3568907	∞	37.04		∞	267881	580.395	ng/ml
Mitragynine	5.007	1633515	99475.5	36.45		134899.7	59056	882.346	ng/ml
Morphine	1.106	81216	254696.0	19.23		3497.0	1261	927.279	ng/ml
Norbuprenorphine	4.826	13342	∞	98.01		∞	2663	103.613	ng/ml
Norhydrocodone	2.897	164998	10340.5	29.51	**High**	∞	13434	978.102	ng/ml
O-Desmethylvenlafaxine	3.917	791574	2147.3	577.56		170811.2	2871	960.460	ng/ml
Pseudoephedrine	2.320	4128144	26686.2	16.92		22624.8	196505	963.652	ng/ml
Quetiapine	5.307	2856296	271630.8	63.58		405296.7	45502	976.871	ng/ml
Trazodone	4.636	1952934	461809.2	132.08		421242.9	98732	902.394	ng/ml
Venlafaxine	4.859	3958757	309013.9	36.73		80486.1	233567	1083.490	ng/ml

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	qc10 mdq.d
Type	QC	**Sample**	qc10 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-A2	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 11:16:40 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.307	1334	199.7	15.46	54.8	18818	1.010	ng/ml
Codeine	2.361	5293	5633.3	93.78	11129.4	20877	9.893	ng/ml

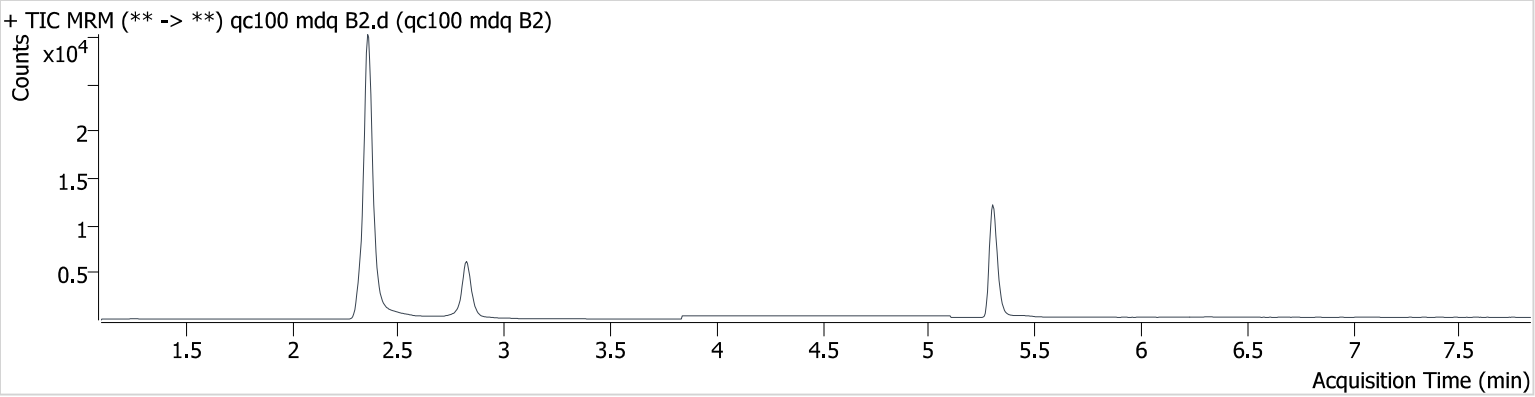
Buprenorphine and Codeine only acquired and evaluated in this injection.

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	qc100 mdq B2.d
Type	Sample	**Sample**	qc100 mdq B2
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-B2	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 12:17:18 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.307	12874	2632.9	14.56	193.1	17228	9.980	ng/ml
Codeine	2.361	43713	65280.4	96.00	∞	16545	90.932	ng/ml

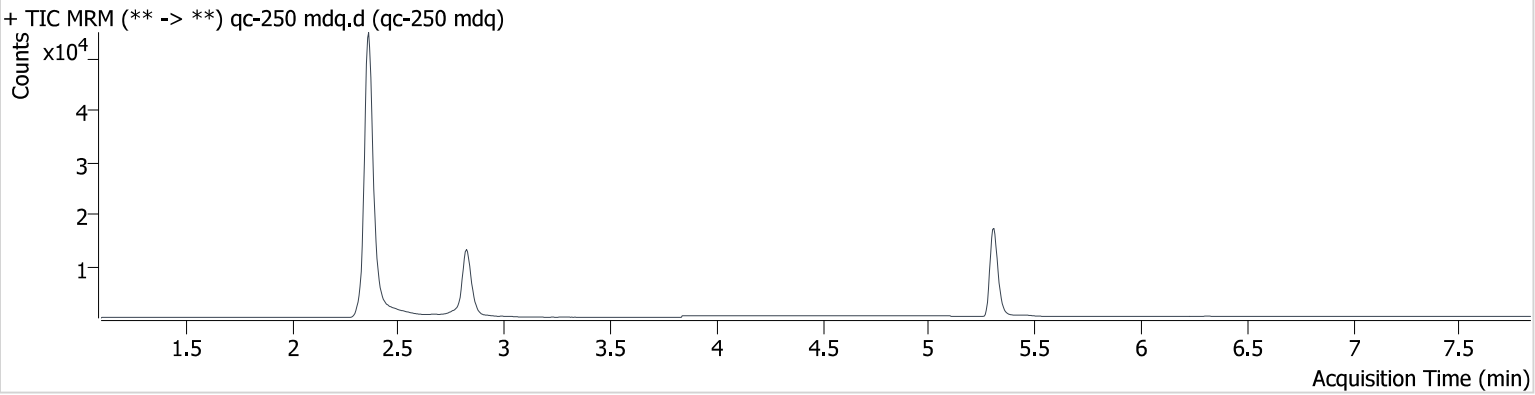
Buprenorphine and Codeine only acquired and evaluated in this injection.

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	qc-250 mdq.d
Type	QC	**Sample**	qc-250 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-C2	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 11:25:20 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.307	26804	1509.3	15.14	405.4	15151	23.530	ng/ml
Codeine	2.361	84708	307530.5	96.23	114542.4	11995	240.886	ng/ml

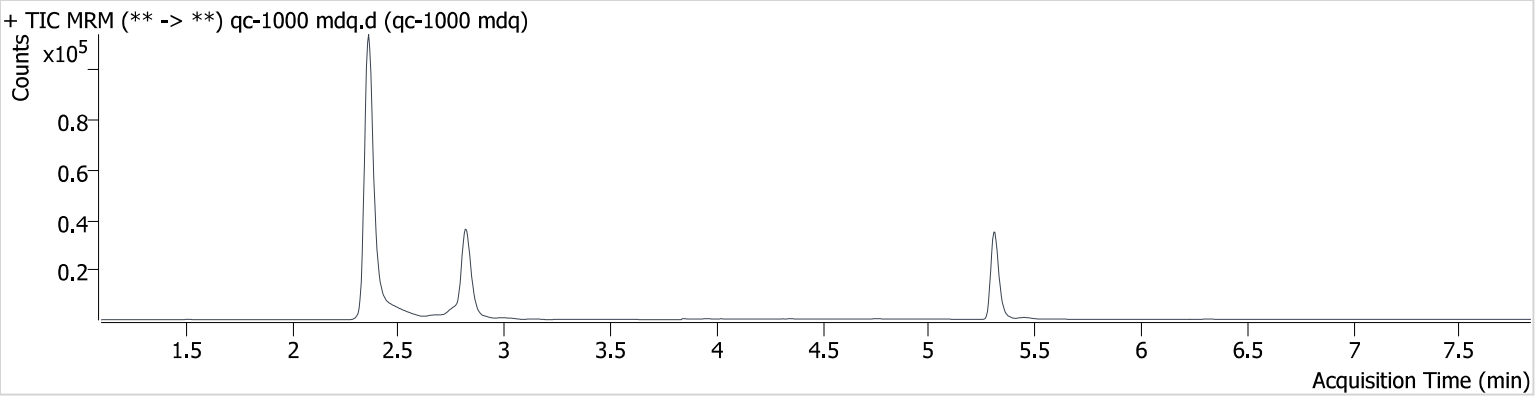
Buprenorphine and Codeine only acquired and evaluated in this injection.

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	qc-1000 mdq.d
Type	QC	**Sample**	qc-1000 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-D2	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 11:34:01 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.312	72690	28551.5	15.35	2061.8	9053	106.546	ng/ml
Codeine	2.361	196958	∞	95.55	∞	6145	1088.741	ng/ml

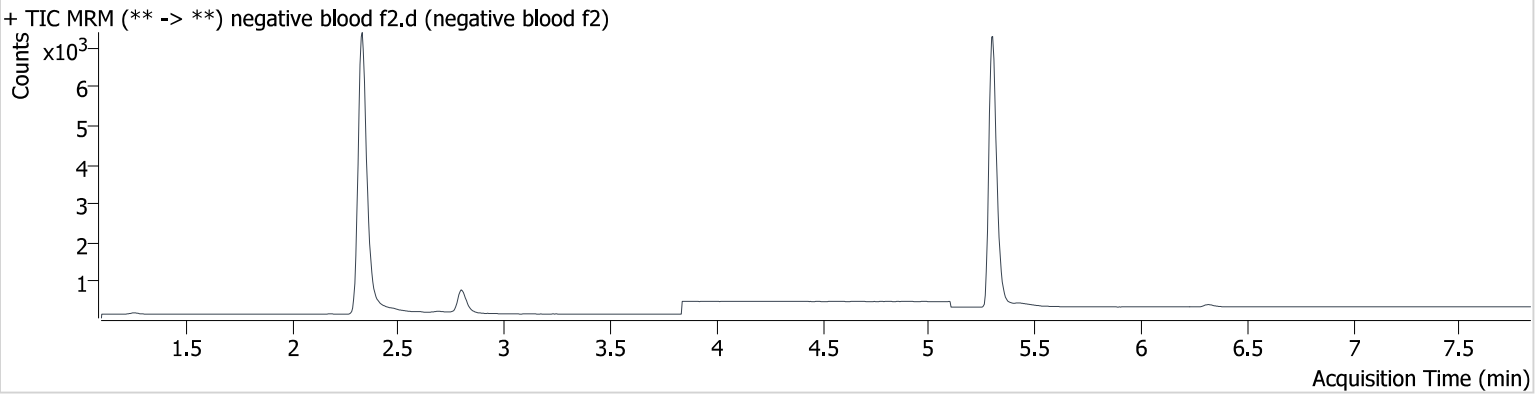
Buprenorphine and Codeine only acquired and evaluated in this injection.

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	negative blood f2.d
Type	Sample	**Sample**	negative blood f2
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-F2	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 11:42:41 AM		
Sample Info.			

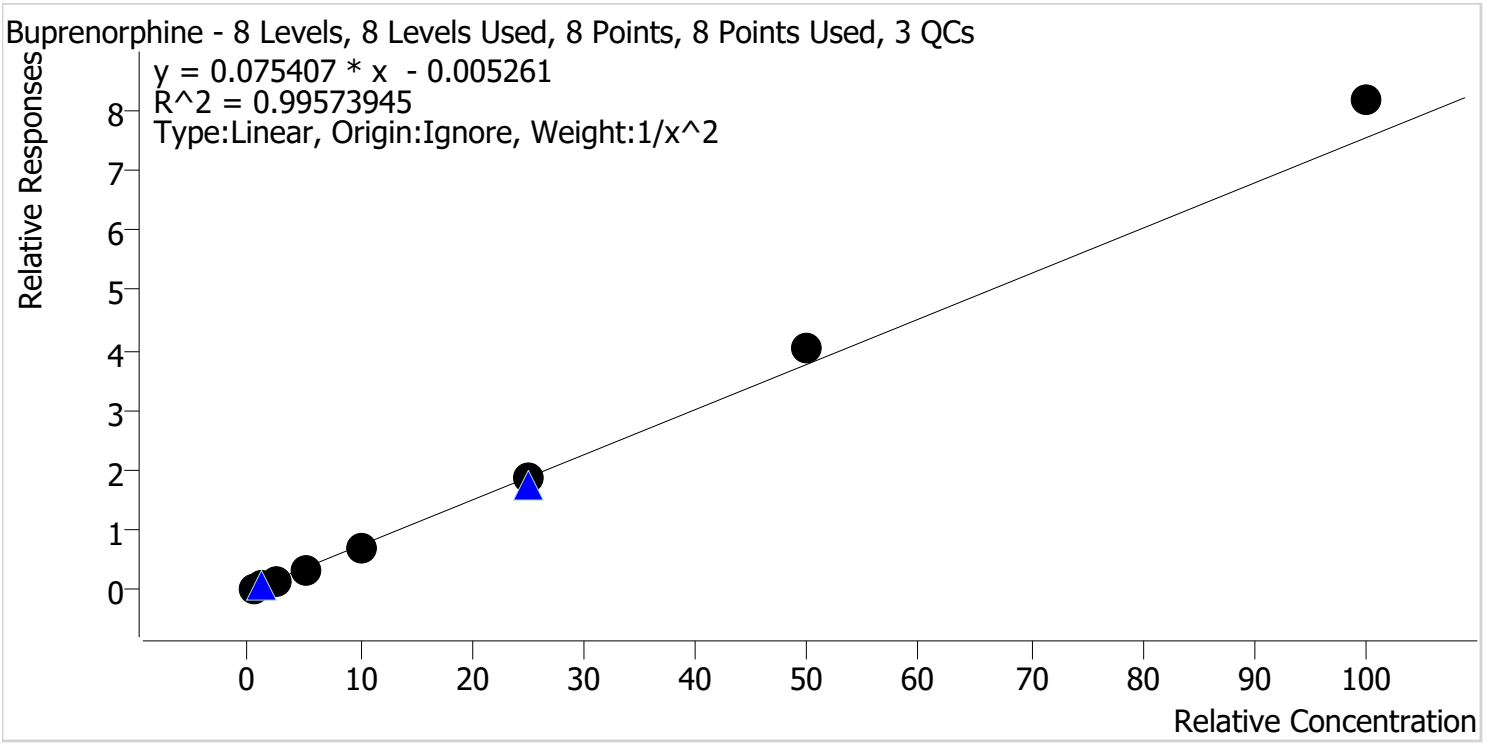
Sample Chromatogram



Buprenorphine and Codeine only acquired and evaluated in this injection.

Compound Calibration Report

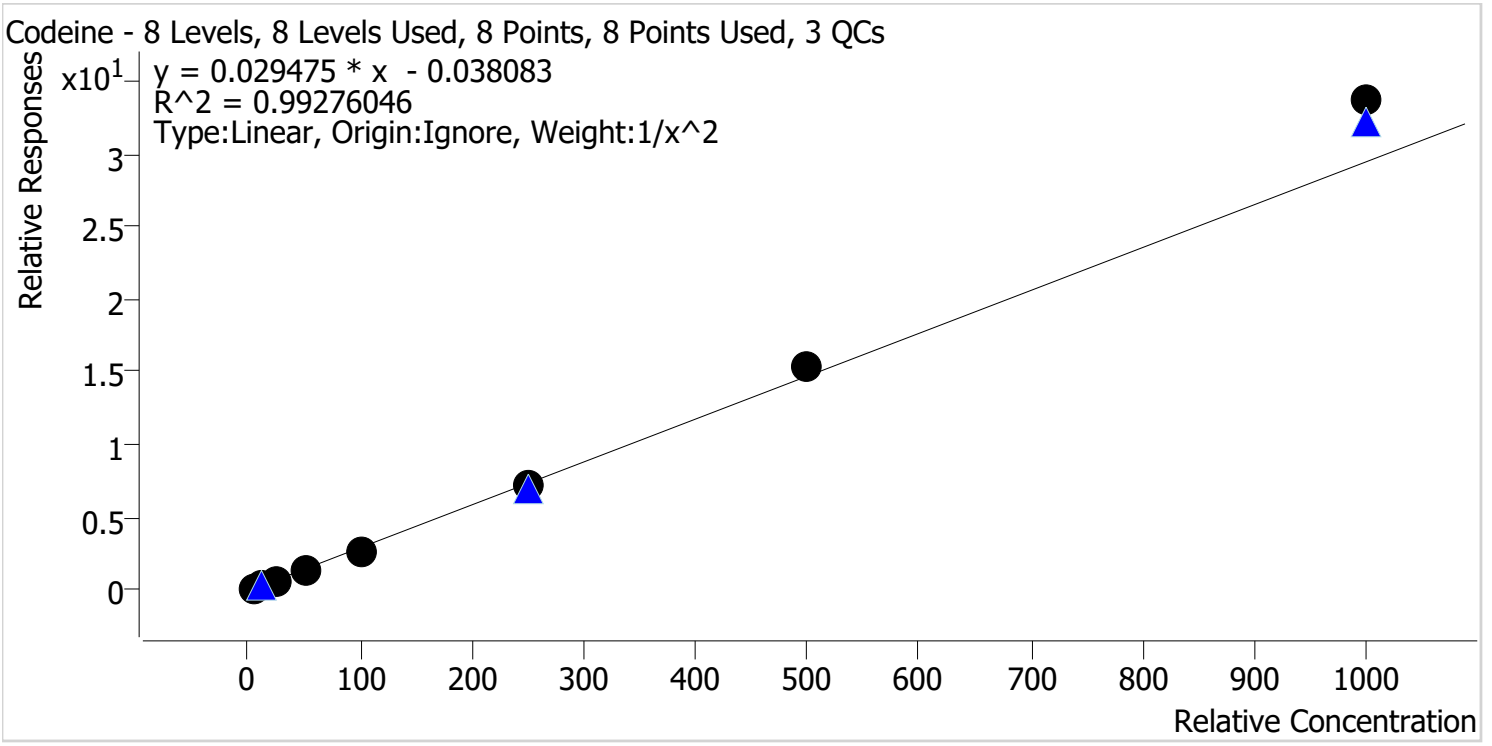
Batch results	D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Last Cal. Update	5/10/2024 8:28 AM
Analyst Name	ISP\datastor
Analyte	Buprenorphine
Internal Standard	Buprenorphine-D4



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	0.5	0.5	104.1
cal 2 mdq	2	✔	1.0	1.0	95.5
cal 3 mdq	3	✔	2.5	2.3	93.4
cal 4 mdq	4	✔	5.0	4.8	95.4
cal 5 mdq	5	✔	10.0	9.7	96.8
cal 6 mdq	6	✔	25.0	24.9	99.8
cal 7 mdq	7	✔	50.0	53.4	106.8
cal 8 mdq	8	✔	100.0	108.3	108.3

Compound Calibration Report

Batch results	D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Last Cal. Update	5/10/2024 8:28 AM
Analyst Name	ISP\datastor
Analyte	Codeine
Internal Standard	Codeine-D6



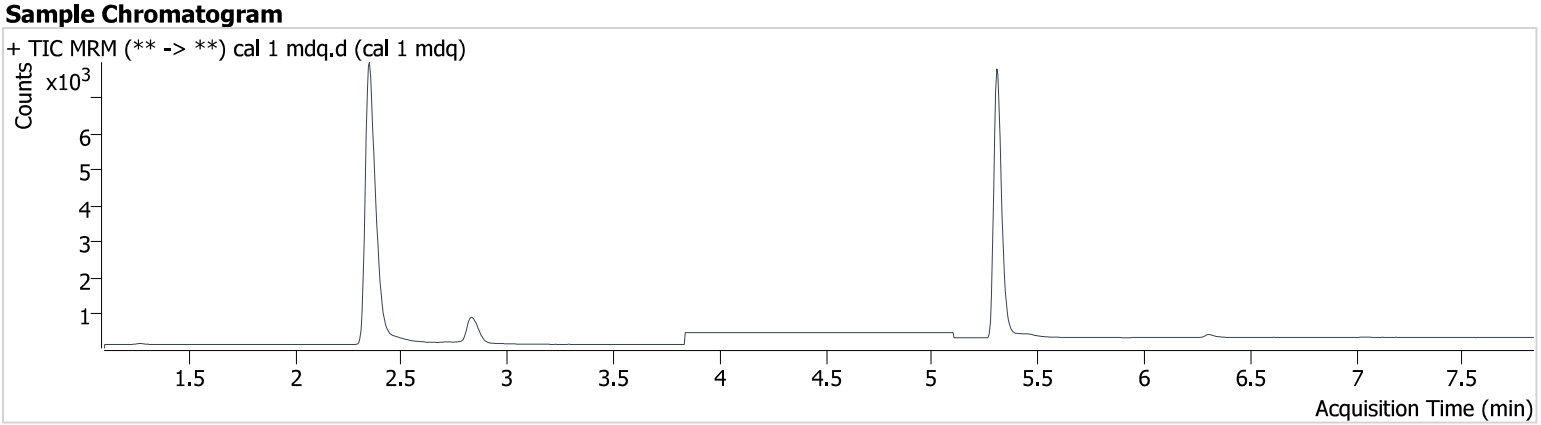
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1 mdq	1	✔	5.0	5.2	104.3
cal 2 mdq	2	✔	10.0	9.6	95.6
cal 3 mdq	3	✔	25.0	23.4	93.5
cal 4 mdq	4	✔	50.0	46.9	93.7
cal 5 mdq	5	✔	100.0	94.2	94.2
cal 6 mdq	6	✔	250.0	248.3	99.3
cal 7 mdq	7	✔	500.0	525.0	105.0
cal 8 mdq	8	✔	1000.0	1143.5	114.3

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	cal 1 mdq.d
Type	Cal	**Sample**	cal 1 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-A1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 10:07:21 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.317	651	197.1	14.66	36.7	19160	0.520	ng/ml
Codeine	2.381	2627	∞	94.28	4799.6	22713	5.216	ng/ml

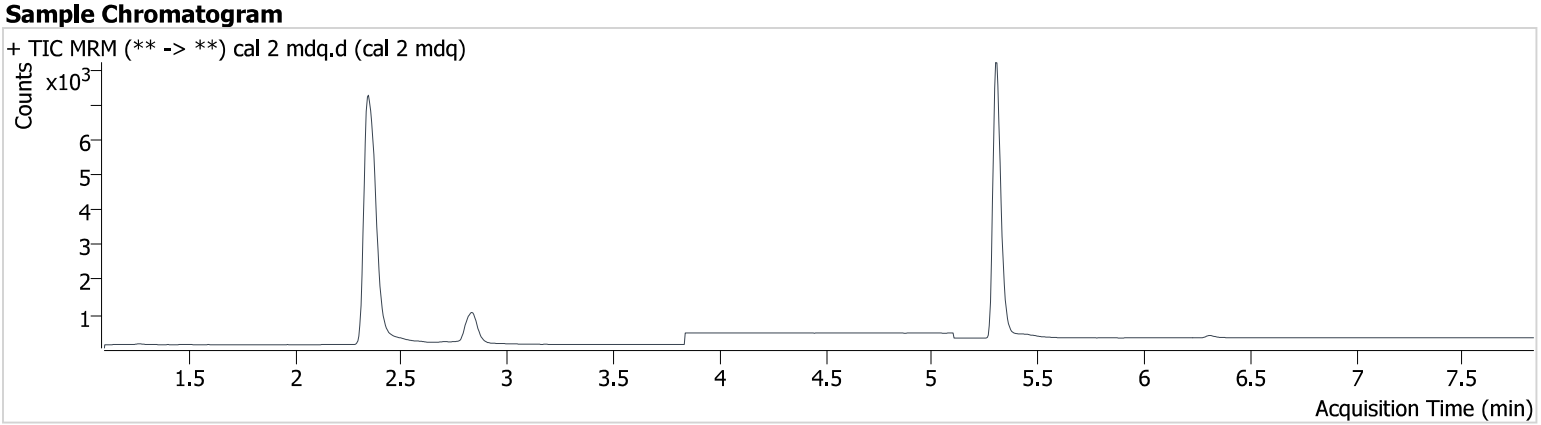
Buprenorphine and Codeine only acquired and evaluated in this injection.

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	cal 2 mdq.d
Type	Cal	**Sample**	cal 2 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-B1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 10:16:10 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.312	1316	427.6	15.55	144.3	19710	0.955	ng/ml
Codeine	2.371	4778	26151.7	95.47	11189.5	19616	9.556	ng/ml

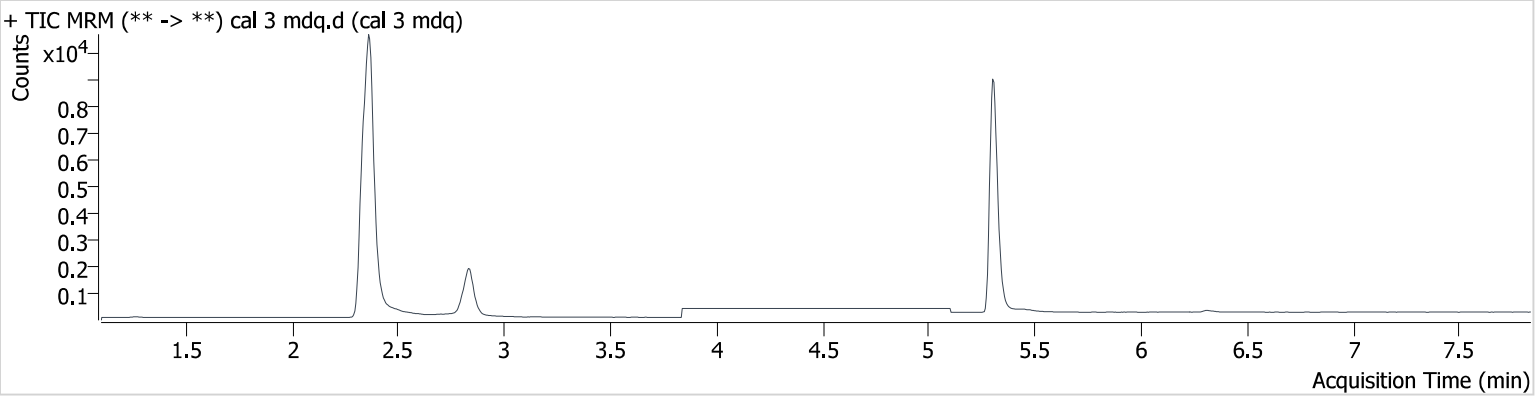
Buprenorphine and Codeine only acquired and evaluated in this injection

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	cal 3 mdq.d
Type	Cal	**Sample**	cal 3 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-C1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 10:24:48 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.312	3348	435.7	15.38	216.1	19604	2.334	ng/ml
Codeine	2.366	12322	60584.6	94.92	30876.6	18921	23.386	ng/ml

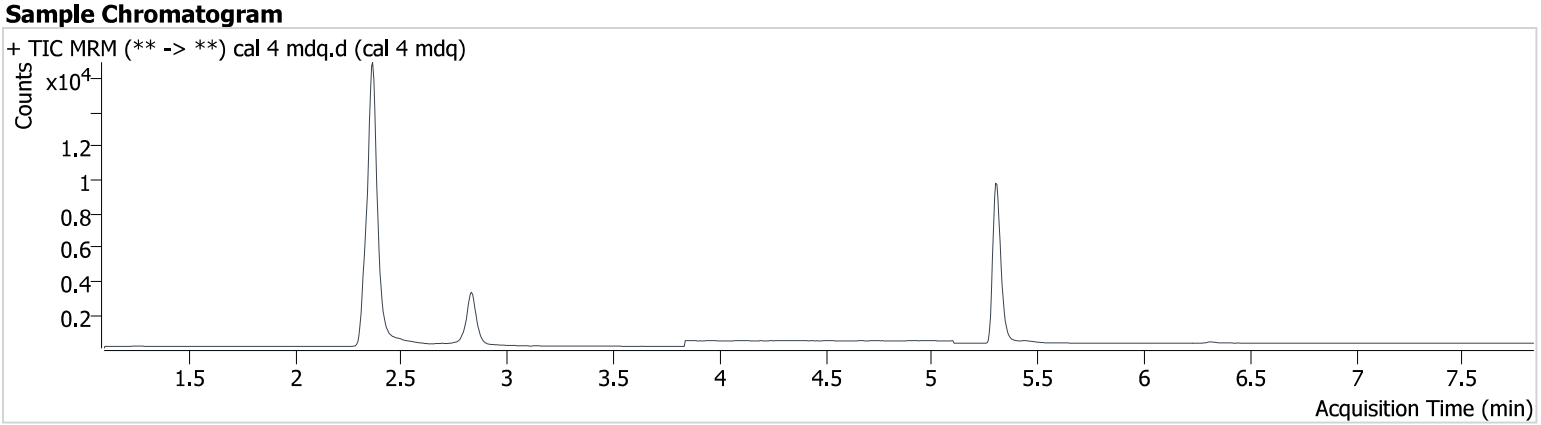
Buprenorphine and Codeine only acquired and evaluated in this injection

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	cal 4 mdq.d
Type	Cal	**Sample**	cal 4 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-D1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 10:33:27 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.312	6259	1011.0	15.94	526.6	17657	4.770	ng/ml
Codeine	2.366	22251	320467.0	96.47	∞	16564	46.867	ng/ml

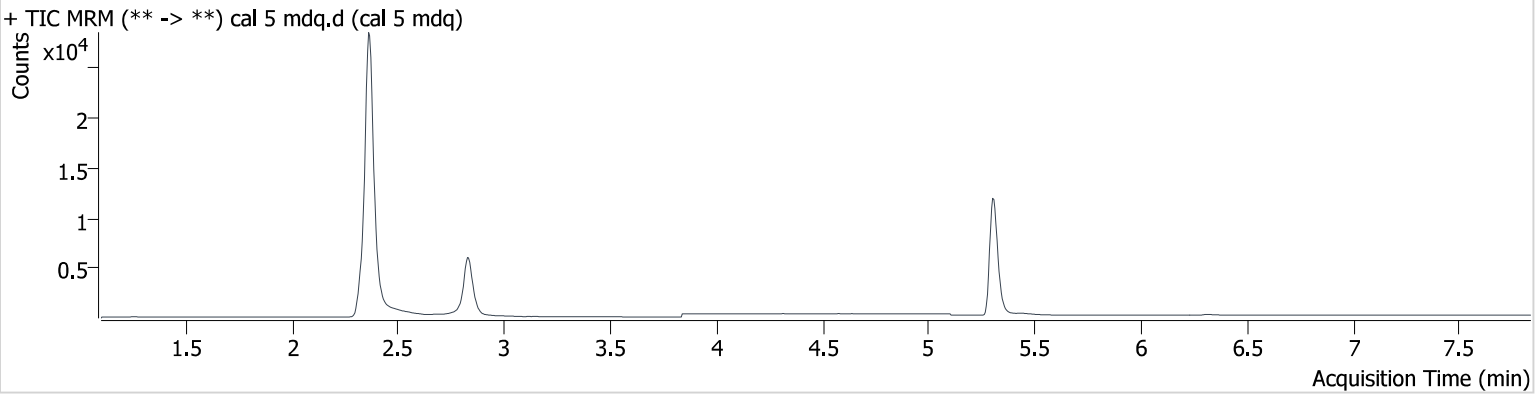
Buprenorphine and Codeine only acquired and evaluated in this injection

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	cal 5 mdq.d
Type	Cal	**Sample**	cal 5 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-E1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 10:42:06 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.307	12222	1411.2	15.30	504.4	16860	9.684	ng/ml
Codeine	2.366	40653	45084.9	98.61	43670.4	14850	94.171	ng/ml

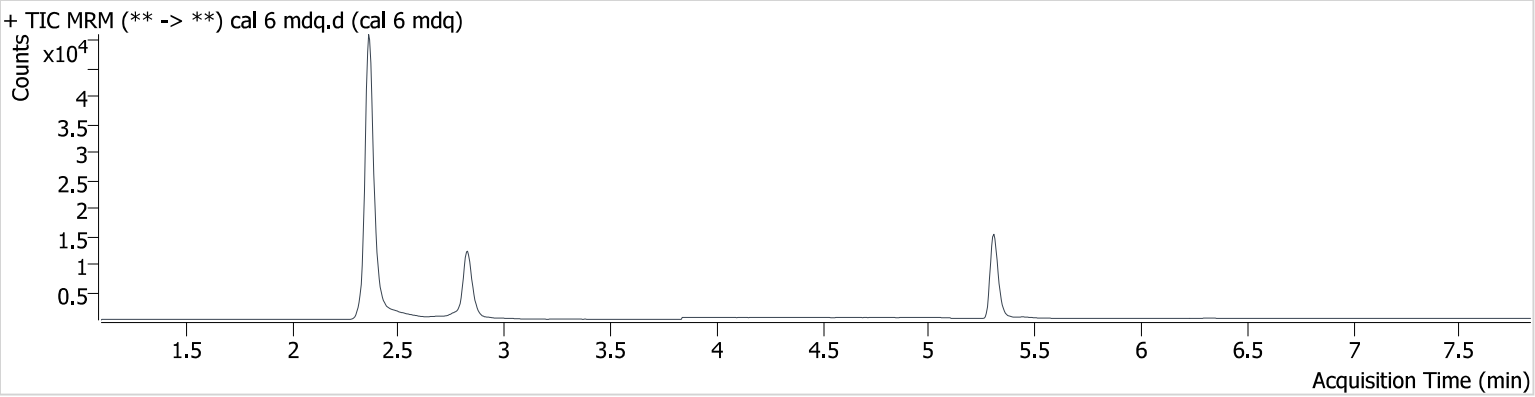
Buprenorphine and Codeine only acquired and evaluated in this injection.

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	cal 6 mdq.d
Type	Cal	**Sample**	cal 6 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-F1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 10:50:44 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.307	23989	4781.2	15.73	804.5	12793	24.938	ng/ml
Codeine	2.366	77705	∞	96.53	44554.2	10672	248.312	ng/ml

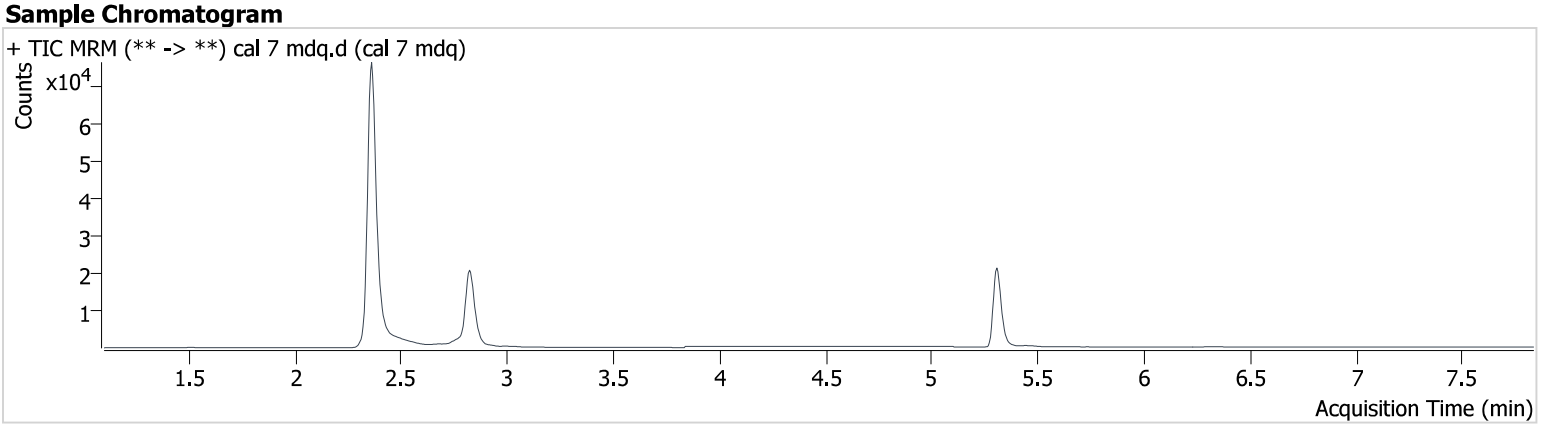
Buprenorphine and Codeine only acquired and evaluated in this injection.

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	cal 7 mdq.d
Type	Cal	**Sample**	cal 7 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-G1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 10:59:23 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.307	41236	3875.9	14.69	539.6	10257	53.383	ng/ml
Codeine	2.361	120880	83391.9	97.11	∞	7831	524.978	ng/ml

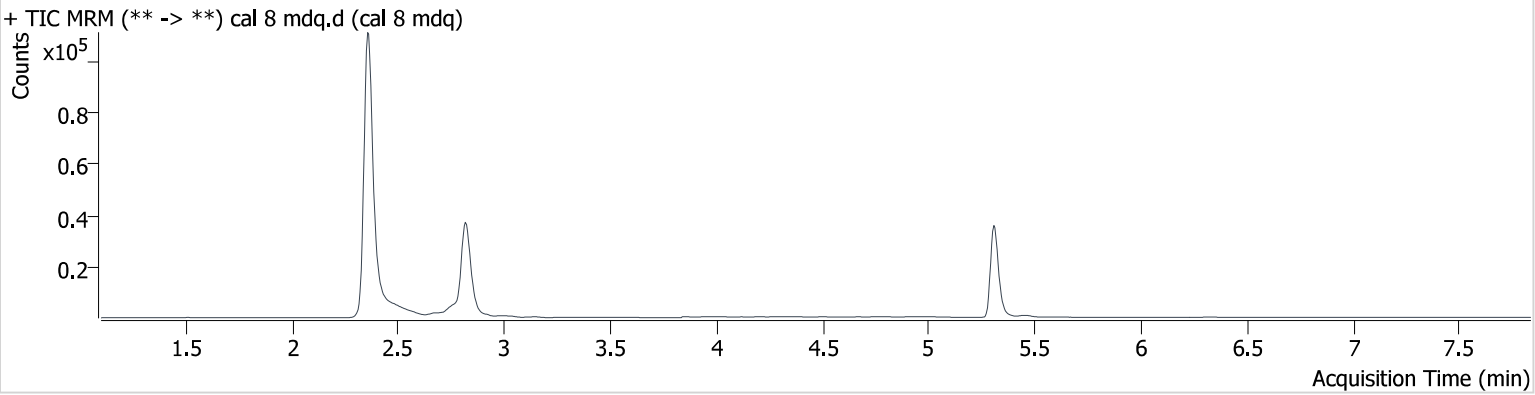
Buprenorphine and Codeine only acquired and evaluated in this injection.

AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\2024\am 27-28\050824 bup and cod\QuantResults\am 28 bup and cod.batch.bin
Calibration Last Update 5/10/2024 8:28:13 AM

Instrument	69679	**Data File**	cal 8 mdq.d
Type	Cal	**Sample**	cal 8 mdq
Acq. Method	am 28 bup and cod.m	**Operator**	Anne Nord
Sample Position	P2-H1	**Comment**	Only drugs and concentrations listed on the laboratory report itself are appropriate to be used for interpretation purposes. Any drugs or values in the notes but not included on the report are used by laboratory personnel to make determinations/reach conclusions within the confines of the methods.
Injection Volume	2		
Acq. Date-Time	5/9/2024 11:08:01 AM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Buprenorphine	5.307	73496	4445.8	15.30	1911.1	9009	108.261	ng/ml
Codeine	2.361	188214	74520.2	99.31	∞	5591	1143.477	ng/ml

Buprenorphine and Codeine only acquired and evaluated in this injection.