

Worklist: 3387

<u>LAB_CASE</u>	<u>ITEM</u>	<u>TASK_ID</u>	<u>DESCRIPTION</u>	
M2018-6230	1	151532	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
M2019-1529	1	151551	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
M2019-1530	1	151533	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
M2019-1579	1	151534	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-0890	1	151535	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1025	1	151536	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1054	1	151537	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1062	1	151538	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1109	1	151539	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1176	1	151540	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1179	1	151541	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1180	1	151542	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1185	1	151543	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1187	1	151544	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1215	1	151545	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1220	2	151546	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1264	3	151547	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1266	1	151548	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1269	1	151549	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
P2019-1310	1	151550	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	

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

Extraction Date: 5/14/19 Analyst: Sarah Pickle
Plate lot#: 190124 Item #: IDP-111 Plate Expiration: 07/24/19

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

Blank Blood Lot: 445283-1 **Column:** ~~Agilent 120 EC-C18 (2.1x 100-4um) Φ~~

LCMS-QQQ ID: 069901 Agilent 120 EC-C18 (2.1 x 100-2.7um) 10/2/19

Pre-Analytic:

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

Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Pipette **250µL blood (calibrated pipette) Pipette ID: #3** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 067105*
- 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** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).
(Load at 85-100 PSI- Selector to the right) Manifold ID: 067104
- 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.
SPE Dry ID: 067103
- 16. Reconstitute in **100µL 20% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Create batch and process data.
Worklist path: *D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP* Batch Name: *MDQ*
- 2. Make necessary changes to integration limits
- 3. Integration linear and R² values ≥ 0.98 for each analyte.
- 4. For unknown samples and controls: response ratio within 20% of average of controls and standards, RT within +/- 5% (tramadol RT +/-2%), S/N for primary transition >10 and secondary transitions >5.
- 5. Did all QCs pass for each analyte? Y / N _____ Add Control data to QC tracking spreadsheet.
- 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS: **Curve Range Limited:** 7-aminoclonazepam 5-500, amphetamine 5-500, benzoylecgonine 10-1000, clonazepam 5-500, dihydrocodeine 5-500, EDDP 10-1000, fentanyl 1-100, lamotrigine 5-500, lorazepam 5-100, mirtazapine 5-100, norhydrocodone 5-100, phentermine 10-500, buprenorphine 1-100, norbuprenorphine 1-100
QC 10 for buprenorphine not evaluated due to peak cutting off



Idaho State Police Forensic Services

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AM #28 Blood Multi-Drug Confirmatory Analysis by LCMS-QQQ---Panel 1

Methanol External Control Solution (Lot: 121218)

100 ul each 1 mg/mL stock solution in 9600 ul MeOH

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	Fisher	177145	
Fluoxetine	Cerilliant	FN06281603	07/31/2021
O-desmethyl Tramadol	Cerilliant	FN01241702	04/30/2022
Amphetamine	Cerilliant	FE04061701	06/30/2022
Alprazolam	Cerilliant	FE07061604	07/31/2021
Prepared:	12/12/18		
Prepared By:	Sarah Pickle		
Expires:	12/12/19		

Blood External Control Solution (Lot: WS121218)

50 ul of methanol external control solution was added to 9950 ul of blood.

Approximately 50ng/mL of each compound.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Blood	Hemostat	445283-1
Methanol External Control Solution		121218
Prepared:	12/12/18	
Prepared by:	Sarah Pickle	
Expires:	12/12/19	

AM #28 Multi-Drug Quant. Results

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Batch results

D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin

Calibration Last Update

5/17/2019 8:16:31 AM

Instrument

FALCO-LCMS (Property ID 069901)

Data File

p1 External Control.d

Type

Sample

Sample

p1 External Control

Acq. Method

MDQ P1 Combined 011619.m

Operator

Comment

Sample Position

P1-F2

Injection Volume

1

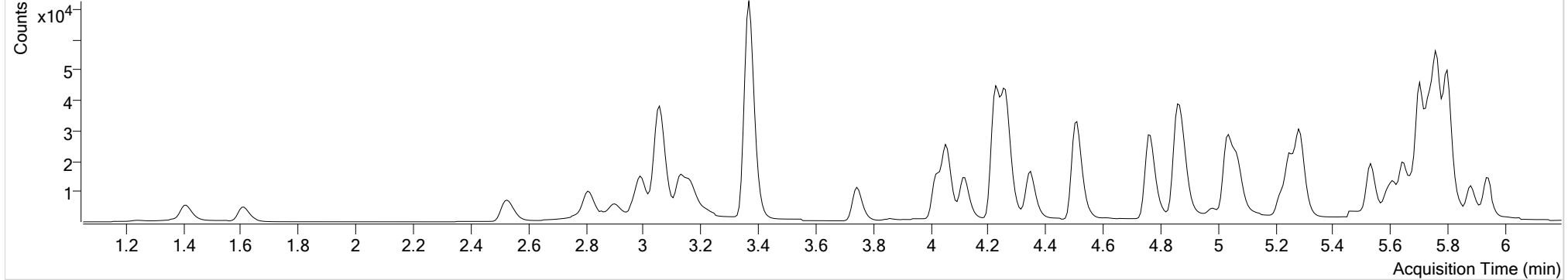
Acq. Date-Time

5/14/2019 3:40:11 PM

Sample Info.

Sample Chromatogram

+ TIC MRM (** -> **) p1 External Control.d (p1 External Control)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Alprazolam	5.766	32238	1208.72	106.5	1961.41	21776	48.0174 ng/ml
Amphetamine	3.062	48565	3880.21	57.9	3293.37	15487	46.9693 ng/ml
Fluoxetine	5.704	15695	3964.36	9.8	542.62	16903	35.1171 ng/ml
O-desmethyl-tramadol	3.373	84034	32752.65	6.6	642.67	88137	44.4049 ng/ml

AM #28 Multi-Drug Quant. Results



Batch results

D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin

Calibration Last Update

5/17/2019 8:16:31 AM

Instrument

FALCO-LCMS (Property ID 069901)

Data File

p1 Negative.d

Type

Sample

Sample

p1 Negative

Acq. Method

MDQ P1 Combined 011619.m

Operator

Comment

Sample Position

P1-E2

Injection Volume

1

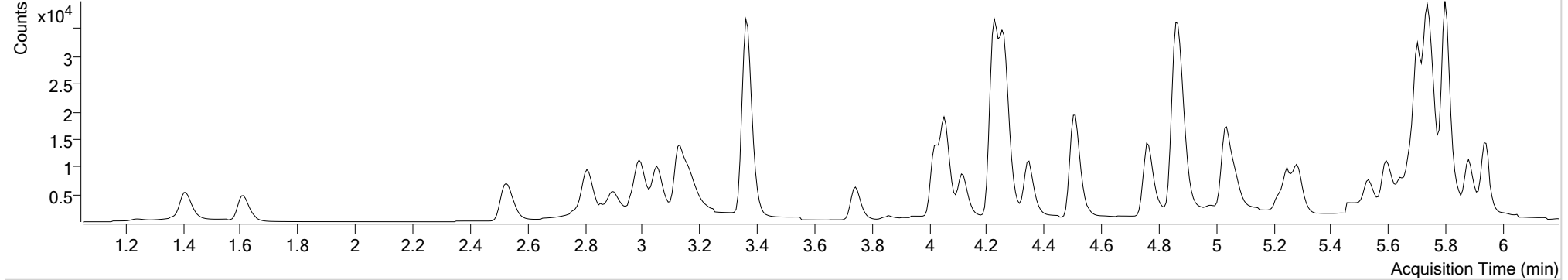
Acq. Date-Time

5/14/2019 3:19:16 PM

Sample Info.

Sample Chromatogram

+ TIC MRM (** -> **) p1 Negative.d (p1 Negative)



AM #28 Multi-Drug Quant. Results



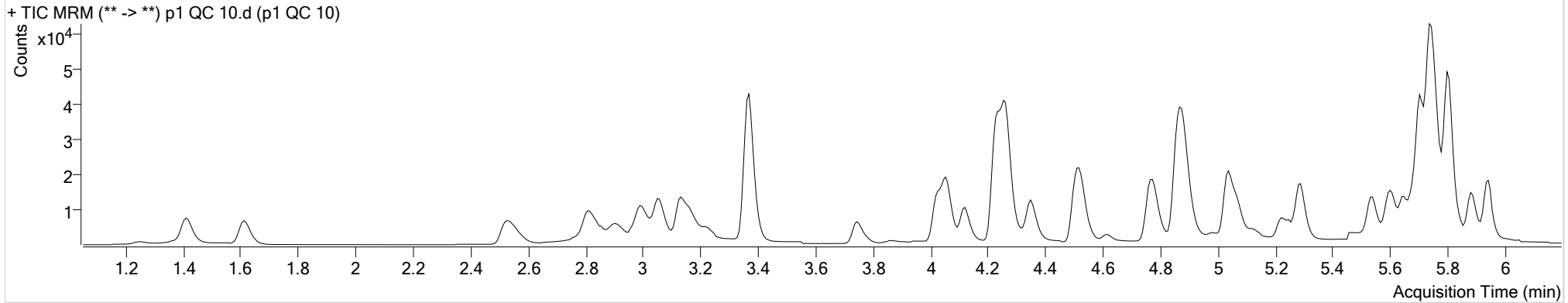
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
5/17/2019 8:16:31 AM

Instrument FALCO-LCMS (Property ID 069901)
Type QC
Acq. Method MDQ P1 Combined 011619.m
Sample Position P1-A2
Injection Volume 1
Acq. Date-Time 5/14/2019 1:24:10 PM
Sample Info.

Data File p1 QC 10.d
Sample p1 QC 10
Operator
Comment

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
6-MAM	3.144	722	374.41	74.0	1773.32	24916	0.9226 ng/ml	
7-aminoclonazepam	4.253	3933	∞	82.6	2536.73	16141	10.5632 ng/ml	
a-hydroxyalprazolam	5.689	3932	363.73	62.3	125.30	17714	10.8794 ng/ml	
alpha-PVP	4.360	4583	2318.32	52.7	241.85	20394	9.9948 ng/ml	
Alprazolam	5.766	7665	443.24	105.2	∞	22920	10.0239 ng/ml	
Amphetamine	3.062	6125	∞	57.8	347.49	8220	10.0030 ng/ml	
Benzoylcegonine	3.876	406	141.28	8.0	333.43	1222	10.5938 ng/ml	
Buprenorphine	5.817	267	77.39	8.2 Low	13.67	9239	1.1693 ng/ml	Not evaluated due to cut off peak
Bupropion	4.782	10792	1836.99	59.7	1790.74	33586	10.4174 ng/ml	
Carisoprodol	5.714	9588	702.12	57.6	369.09	48873	10.1504 ng/ml	
Citalopram	5.222	2202	209.98	40.4	279.85	8781	10.3182 ng/ml	
Clonazepam	5.602	5434	∞	34.5	1533.37	8400	10.6502 ng/ml	
Cocaine	4.259	5919	3765.91	44.2	1044.49	55853	9.9604 ng/ml	
Codeine	2.583	1207	1120.41	103.5	977.58	5407	9.9591 ng/ml	
Cyclobenzaprine	5.618	1776	728.83	11.3	229.06	6678	10.6044 ng/ml	
Dextromethorphan	5.265	1152	441.06	78.4	383.63	5325	10.1751 ng/ml	
Dextrorphan	4.122	1573	1825.17	201.0	1399.57	16554	10.7624 ng/ml	
Diazepam	5.945	4871	3595.96	89.5	568.74	21380	10.5948 ng/ml	

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AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.555	2867	5576.27	67.8	3565.19	15280	10.2221 ng/ml
Diphenhydramine	5.292	5821	2131.64	34.5	332.35	27917	10.8940 ng/ml
Doxylamine	4.529	10300	2986.09	98.8	346.81	45518	9.8079 ng/ml
EDDP	5.257	228	14.99	44.9	30.68	909	13.8096 ng/ml
Fentanyl	5.086	172	32.21	66.1	864.89	7660	1.0801 ng/ml
Fluoxetine	5.704	2064	344.54	10.3	90.42	7061	10.7432 ng/ml
Hydrocodone	3.025	3116	307.45	40.8	68.41	17419	10.9713 ng/ml
Hydromorphone	1.621	3617	602.76	74.9	1679.52	12878	10.0809 ng/ml
Ketamine	4.042	5935	1078.63	37.2	316.60	27352	10.3089 ng/ml
Lamotrigine	4.290	860	582.68	72.5	664.44	27352	9.5041 ng/ml
Lorazepam	5.737	14099	447.41	54.5	342.97	8400	10.6577 ng/ml
Meprobamate	4.906	6145	11852.22	27.6	1208.42	26139	10.5836 ng/ml
Methadone	5.650	3184	124.89	53.2	175.40	14050	10.7182 ng/ml
Methamphetamine	3.231	4226	254.39	41.5	31.11	15079	7.2713 ng/ml
Metoprolol	4.322	1318	1459.12	93.1	768.95	62509	9.0303 ng/ml
Mirtazapine	4.617	3137	2778.47	48.9	1336.58	20394	6.0696 ng/ml
Mitragynine	5.221	459	209.81	37.2	85.70	14050	7.9489 ng/ml
Morphine	1.253	757	2406.38	23.1	51.35	891	9.4498 ng/ml
Norbuprenorphine	4.988	78	12.04	95.9	70.87	2364	1.0410 ng/ml
Nordiazepam	5.891	4892	773.92	58.9	3468.77	15708	9.5826 ng/ml
Norfentanyl	4.084	782	657.15	39.2	33.12	32882	0.9998 ng/ml
Norhydrocodone	3.073	545	121.18	41.9	112.59	17830	8.7695 ng/ml
Noroxycodone	2.921	3145	98.79	48.1	123.34	10938	10.2323 ng/ml
O-desmethyl-tramadol	3.373	18873	5234.72	6.5	163.03	83958	10.2306 ng/ml
Oxazepam	5.747	15183	∞	68.7	93.90	57314	10.4586 ng/ml
Oxycodone	2.840	6585	167.02	30.9	81.20	27038	10.5201 ng/ml
Oxymorphone	1.417	4638	341.78	47.2	222.01	16003	10.4049 ng/ml
Phentermine	3.781	1589	189.70	4.0	15.32	15368	9.5316 ng/ml
Promethazine	5.535	3474	1030.33	27.5	78.97	12660	10.8837 ng/ml
Quetiapine	5.545	2828	582.68	61.5	3328.50	3627	11.0983 ng/ml
Sertraline	5.780	1188	92.66	91.5	340.07	4309	11.2651 ng/ml
Temazepam	5.808	14764	1768.96	31.1	21.90	65235	10.2745 ng/ml
Tramadol	4.242	13008	831.75	3.5	55.25	62509	10.6376 ng/ml
Trazodone	5.126	2372	123.62	79.0	18686.22	9191	10.1900 ng/ml
Venlafaxine	5.040	7341	5903.07	36.0	97.98	34568	10.2274 ng/ml
Zolpidem	4.883	14838	1157.37	31.4	1343.76	70407	10.4392 ng/ml

AM #28 Multi-Drug Quant. Results



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Batch results

D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin

Calibration Last Update

5/17/2019 8:16:31 AM

Instrument

FALCO-LCMS (Property ID 069901)

Data File

p1 QC 100.d

Type

QC

Sample

p1 QC 100

Acq. Method

MDQ P1 Combined 011619.m

Operator

Comment

Sample Position

P1-B2

Injection Volume

1

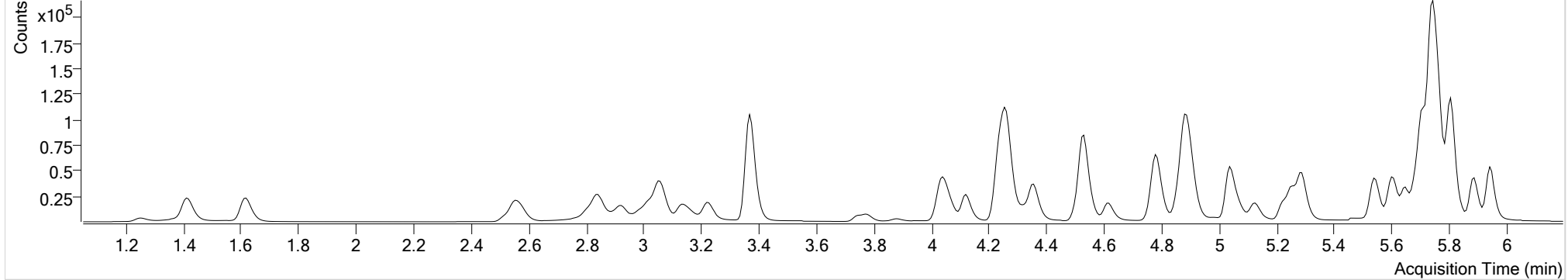
Acq. Date-Time

5/14/2019 1:45:05 PM

Sample Info.

Sample Chromatogram

+ TIC MRM (** -> **) p1 QC 100.d (p1 QC 100)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.138	7029	∞	71.7	287.33	23483	9.4688 ng/ml
7-aminoclonazepam	4.253	32506	10923.04	80.9	283.34	13758	107.4350 ng/ml
a-hydroxyalprazolam	5.689	34242	1283.71	64.1	1643.51	16469	108.4129 ng/ml
alpha-PVP	4.360	42226	7117.17	51.7	790.51	19397	100.4939 ng/ml
Alprazolam	5.766	68913	2666.32	103.2	2936.12	20676	109.4355 ng/ml
Amphetamine	3.062	47177	1986.39	57.1	2329.54	6674	107.7883 ng/ml
Benzoylcegonine	3.876	3082	7409.78	7.8	∞	1187	102.4723 ng/ml
Buprenorphine	5.817	1817	303.89	19.3	61.90	7913	9.4053 ng/ml
Bupropion	4.782	91001	1856.07	59.1	2093.27	30507	109.0546 ng/ml
Carisoprodol	5.714	83189	1449.19	55.7	900.66	44029	98.4562 ng/ml
Citalopram	5.229	19100	3331.46	42.8	2171.08	8215	102.7177 ng/ml
Clonazepam	5.602	45687	11624.21	34.7	23581.67	7482	106.0613 ng/ml
Cocaine	4.259	53838	74164.95	44.0	4684.24	53381	100.1087 ng/ml
Codeine	2.577	10664	28275.35	102.5	1411.34	4974	107.7163 ng/ml
Cyclobenzaprine	5.618	15763	22310.83	11.2	536.62	6472	97.9312 ng/ml
Dextromethorphan	5.265	10167	19636.89	78.7	73146.60	5115	97.2872 ng/ml
Dextrorphan	4.122	13943	10488.45	205.7	19794.21	15469	105.6539 ng/ml
Diazepam	5.945	44008	4026.42	86.6	11051.92	19636	106.4874 ng/ml

AM #28 Multi-Drug Quant. Results

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Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.555	26143	22823.67	68.7	∞	14553	102.7513 ng/ml
Diphenhydramine	5.292	50326	329.32	34.7	5316.48	25803	103.1154 ng/ml
Doxylamine	4.529	97029	32518.11	98.3	49010.55	44410	107.6880 ng/ml
EDDP	5.257	22913	9718.92	42.1	3493.84	12656	94.2522 ng/ml
Fentanyl	5.086	1388	894.13	72.2	∞	7320	9.3388 ng/ml
Fluoxetine	5.704	16764	∞	9.8	878.97	6812	93.8205 ng/ml
Hydrocodone	3.018	28267	∞	39.3	256.92	16764	110.6829 ng/ml
Hydromorphone	1.621	31432	562.32	76.3	908.77	11716	99.6717 ng/ml
Ketamine	4.042	54450	22234.22	37.3	2561.01	26429	102.3529 ng/ml
Lamotrigine	4.290	7601	9538.76	79.3	4322.45	26429	106.6648 ng/ml
Lorazepam	5.737	98648	3179.98	55.6	362.30	7482	97.9904 ng/ml
Meprobamate	4.912	48732	59653.43	28.0	1783.68	23562	100.6675 ng/ml
Methadone	5.650	28155	3246.66	51.4	2877.29	13073	105.5269 ng/ml
Methamphetamine	3.224	30969	1611.56	40.8	598.43	13747	98.1174 ng/ml
Metoprolol	4.322	11389	2550.09	93.2	∞	58660	89.6907 ng/ml
Mirtazapine	4.617	28218	32569.31	48.0	17954.14	19397	44.9322 ng/ml
Mitragynine	5.221	4113	5099.73	39.6	12487.30	13073	74.4613 ng/ml
Morphine	1.253	6776	53194.35	23.8	1382.13	822	95.5831 ng/ml
Norbuprenorphine	4.988	535	225.58	99.7	132.76	2399	9.6514 ng/ml
Nordiazepam	5.891	43541	∞	57.4	17236.98	14121	99.9002 ng/ml
Norfentanyl	4.084	7608	2464.26	36.9	235.61	32801	9.4399 ng/ml
Norhydrocodone	3.073	7065	361.63	42.0	330.47	16340	82.7854 ng/ml
Noroxycodone	2.921	25887	954.29	49.7	1015.59	9593	102.7083 ng/ml
O-desmethyl-tramadol	3.373	171459	37798.95	6.6	4715.29	77338	103.6661 ng/ml
Oxazepam	5.747	112854	3178.49	69.4	1699.11	44948	104.9535 ng/ml
Oxycodone	2.840	57604	2024.55	31.4	346.48	25153	107.6117 ng/ml
Oxymorphone	1.410	40546	667.20	46.9	486.77	14501	103.2822 ng/ml
Phentermine	3.781	13679	1193.60	3.9	98.21	14050	104.8982 ng/ml
Promethazine	5.535	29838	1418.04	27.9	526.94	12184	101.4480 ng/ml
Quetiapine	5.545	27153	122955.67	58.6	19919.69	3722	111.5789 ng/ml
Sertraline	5.780	9508	4573.16	92.7	666.00	3967	97.3625 ng/ml
Temazepam	5.808	128141	1156.99	30.4	681.15	61069	96.3749 ng/ml
Tramadol	4.242	116084	50193.36	3.5	581.14	58660	108.3379 ng/ml
Trazodone	5.126	21570	27254.43	78.7	∞	9059	106.2486 ng/ml
Venlafaxine	5.040	66655	45116.50	37.9	1192.69	32635	101.4604 ng/ml
Zolpidem	4.883	140653	79587.65	32.0	38460.65	70090	103.6842 ng/ml

AM #28 Multi-Drug Quant. Results



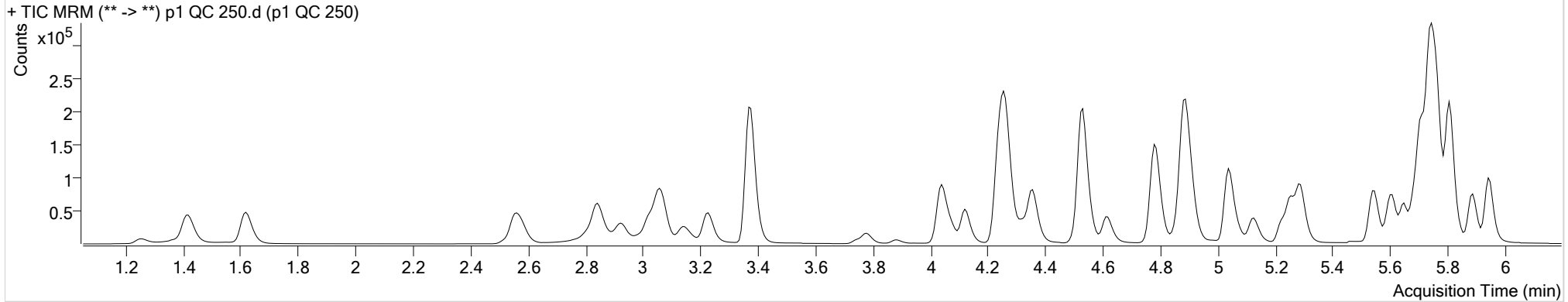
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
5/17/2019 8:16:31 AM

Instrument FALCO-LCMS (Property ID 069901)
Type QC
Acq. Method MDQ P1 Combined 011619.m
Sample Position P1-C2
Injection Volume 1
Acq. Date-Time 5/14/2019 2:05:59 PM
Sample Info.

Data File p1 QC 250.d
Sample p1 QC 250
Operator
Comment

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.144	18021	22536.50	69.9	1469.02	24653	23.1163 ng/ml
7-aminoclonazepam	4.253	77312	2712.07	79.1	2499.24	13920	253.3246 ng/ml
a-hydroxyalprazolam	5.689	71659	2444.14	63.4	1807.21	14506	258.6587 ng/ml
alpha-PVP	4.360	109429	18922.04	51.5	14258.64	20277	249.7512 ng/ml
Alprazolam	5.766	153142	1585.47	102.1	6563.35	18798	269.0238 ng/ml
Amphetamine	3.062	109908	67.60	57.5	4928.25	6832	247.2344 ng/ml
Benzoylcegonine	3.883	7463	1103.24	7.6	595.76	1170	256.1272 ng/ml
Buprenorphine	5.817	4140	495.32	16.6	71.18	6985	24.3125 ng/ml
Bupropion	4.782	229974	90904.38	58.7	3244.33	31112	272.4439 ng/ml
Carisoprodol	5.714	174574	∞	55.6	2821.89	36777	247.4756 ng/ml
Citalopram	5.229	41634	2685.68	41.7	16016.19	7396	249.9072 ng/ml
Clonazepam	5.602	91012	24747.17	35.2	55474.31	6443	246.1897 ng/ml
Cocaine	4.259	132541	167452.68	43.8	3462.81	52539	251.3419 ng/ml
Codeine	2.583	24737	1983.16	101.4	3021.76	4827	259.4549 ng/ml
Cyclobenzaprine	5.618	32332	56986.92	10.5	825.12	5291	245.8306 ng/ml
Dextromethorphan	5.265	21933	∞	78.9	15053.19	4436	242.6489 ng/ml
Dextrorphan	4.122	32942	34848.03	205.3	46763.76	14840	260.8183 ng/ml
Diazepam	5.945	97834	781.74	85.6	12637.86	18076	257.5210 ng/ml

AM #28 Multi-Drug Quant. Results

S



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Dihydrocodeine	2.555	63980	∞	68.8	75470.55	15332	239.4438 ng/ml	
Diphenhydramine	5.292	112521	49295.93	34.2	363.08	23523	253.1134 ng/ml	
Doxylamine	4.529	252175	41851.07	98.4	108028.02	47792	262.1976 ng/ml	
EDDP	5.257	63336	65631.25	41.9	22201.38	13961	234.9337 ng/ml	
Fentanyl	5.086	2855	621.54	76.6	1137.98	6175	22.8260 ng/ml	
Fluoxetine	5.704	34690	458.79	9.8	3470.38	5565	238.3353 ng/ml	
Hydrocodone	3.025	68900	525.88	40.6	∞	16811	270.2693 ng/ml	
Hydromorphone	1.621	73954	∞	75.6	1129.38	11169	246.5629 ng/ml	
Ketamine	4.042	133767	139610.15	37.5	1738.84	27228	244.8013 ng/ml	
Lamotrigine	4.290	17102	24979.22	78.7	17837.27	27228	235.8132 ng/ml	
Lorazepam	5.737	150973	1201.13	57.3	1325.01	6443	175.7506 ng/ml	outside curve range
Meprobamate	4.912	98690	122670.36	28.0	1022.01	20417	236.5739 ng/ml	
Methadone	5.650	62453	3950.40	51.6	9032.17	11804	259.8534 ng/ml	
Methamphetamine	3.231	84681	1582.53	41.3	∞	15510	245.8234 ng/ml	
Metoprolol	4.322	29463	55157.59	94.1	20965.69	62617	218.4890 ng/ml	
Mirtazapine	4.617	65208	34647.54	48.0	8364.86	20277	97.5398 ng/ml	outside curve range
Mitragynine	5.221	8989	6804.45	38.2	1828.76	11804	179.8552 ng/ml	
Morphine	1.253	15727	23940.45	23.6	550.75	795	229.8856 ng/ml	
Norbuprenorphine	4.988	1248	243.61	93.1	471.19	2016	27.5876 ng/ml	
Nordiazepam	5.891	89470	7025.30	58.1	3730.91	12479	233.0456 ng/ml	
Norfentanyl	4.084	21406	5703.80	37.2	1494.64	36555	23.7768 ng/ml	
Norhydrocodone	3.073	23658	825.13	42.0	297.06	16679	264.4292 ng/ml	outside curve range
Noroxycodone	2.921	59290	1463.83	49.1	448.00	9161	247.4499 ng/ml	
O-desmethyl-tramadol	3.379	419191	100635.85	6.7	∞	77810	252.3593 ng/ml	
Oxazepam	5.747	187120	7519.08	69.6	933.72	31296	250.8769 ng/ml	
Oxycodone	2.840	141368	975.24	32.3	189.94	26017	256.7454 ng/ml	
Oxymorphone	1.417	92741	2055.09	47.2	685.43	13791	248.8582 ng/ml	
Phentermine	3.781	34802	4636.63	3.9	274.74	14975	252.9014 ng/ml	
Promethazine	5.535	60405	7657.74	29.1	480.46	9972	251.7538 ng/ml	
Quetiapine	5.545	63867	25807.95	59.0	9514.76	3562	275.5968 ng/ml	
Sertraline	5.780	18160	935.47	88.1	860.07	2949	250.0125 ng/ml	
Temazepam	5.808	282269	1216.95	29.2	688.72	53887	240.7881 ng/ml	
Tramadol	4.242	293576	56463.45	3.5	1292.04	62617	257.8285 ng/ml	
Trazodone	5.126	50354	∞	79.6	3137.32	8493	266.7771 ng/ml	
Venlafaxine	5.040	172871	30354.55	37.8	2407.88	34528	249.2293 ng/ml	
Zolpidem	4.883	348421	170596.80	31.5	708.63	70193	257.2067 ng/ml	

AM #28 Multi-Drug Quant. Results

S



Batch results
Calibration Last Update

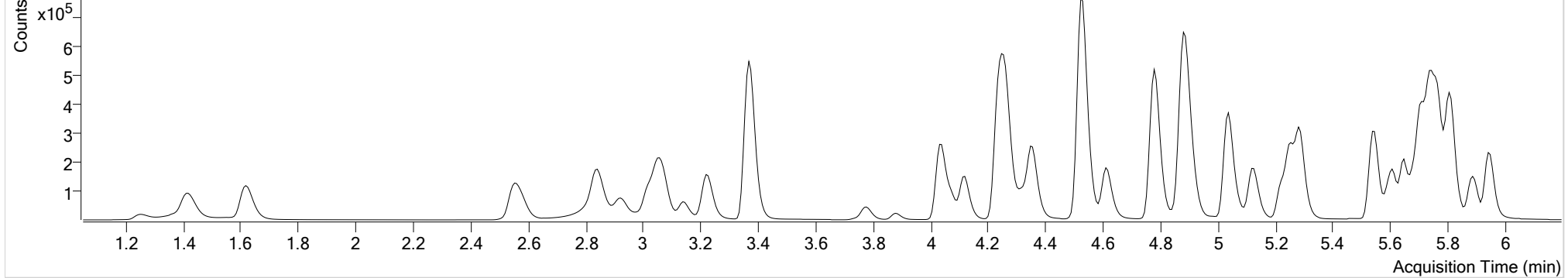
D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
5/17/2019 8:16:31 AM

Instrument FALCO-LCMS (Property ID 069901)
Type QC
Acq. Method MDQ P1 Combined 011619.m
Sample Position P1-D2
Injection Volume 1
Acq. Date-Time 5/14/2019 2:26:55 PM
Sample Info.

Data File p1 QC 1000.d
Sample p1 QC 1000
Operator
Comment

Sample Chromatogram

+ TIC MRM (** -> **) p1 QC 1000.d (p1 QC 1000)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
6-MAM	3.138	64723	12927.18	70.7	25528.34	22761	89.9104 ng/ml	
7-aminoclonazepam	4.253	174558	1173.19	81.9	12573.48	10319	772.6847 ng/ml	outside curve range
a-hydroxyalprazolam	5.682	171770	3721.95	63.4	1250.33	10601	850.1941 ng/ml	
alpha-PVP	4.360	378478	55876.34	51.2	162647.82	17760	987.4668 ng/ml	
Alprazolam	5.766	395039	∞	103.1	∞	12374	1057.3585 ng/ml	
Amphetamine	3.055	311850	∞	57.1	22699.08	5981	804.7545 ng/ml	outside curve range
Benzoylcegonine	3.876	30865	1064.24	7.6	1393.25	1194	1046.8102 ng/ml	
Buprenorphine	5.817	16143	1533.49	16.8	3772.24	6759	98.0200 ng/ml	
Bupropion	4.782	842702	2119.86	57.8	202959.35	29025	1074.4646 ng/ml	
Carisoprodol	5.714	399576	∞	56.7	∞	21929	950.1837 ng/ml	
Citalopram	5.222	168235	3607.74	41.7	∞	7575	988.5231 ng/ml	
Clonazepam	5.602	210751	20689.14	35.1	79624.26	4334	849.1668 ng/ml	outside curve range
Cocaine	4.259	421950	503882.27	44.3	251801.33	43087	977.4793 ng/ml	
Codeine	2.583	70340	891.20	102.0	∞	3630	984.7781 ng/ml	
Cyclobenzaprine	5.618	125687	266055.26	10.6	3511.47	5261	961.4268 ng/ml	
Dextromethorphan	5.265	80198	90454.59	80.3	92133.21	4239	929.8000 ng/ml	
Dextrorphan	4.122	109703	33774.19	205.8	70629.50	12399	1040.8644 ng/ml	
Diazepam	5.945	271600	8120.61	86.1	∞	13263	975.0666 ng/ml	

AM #28 Multi-Drug Quant. Results

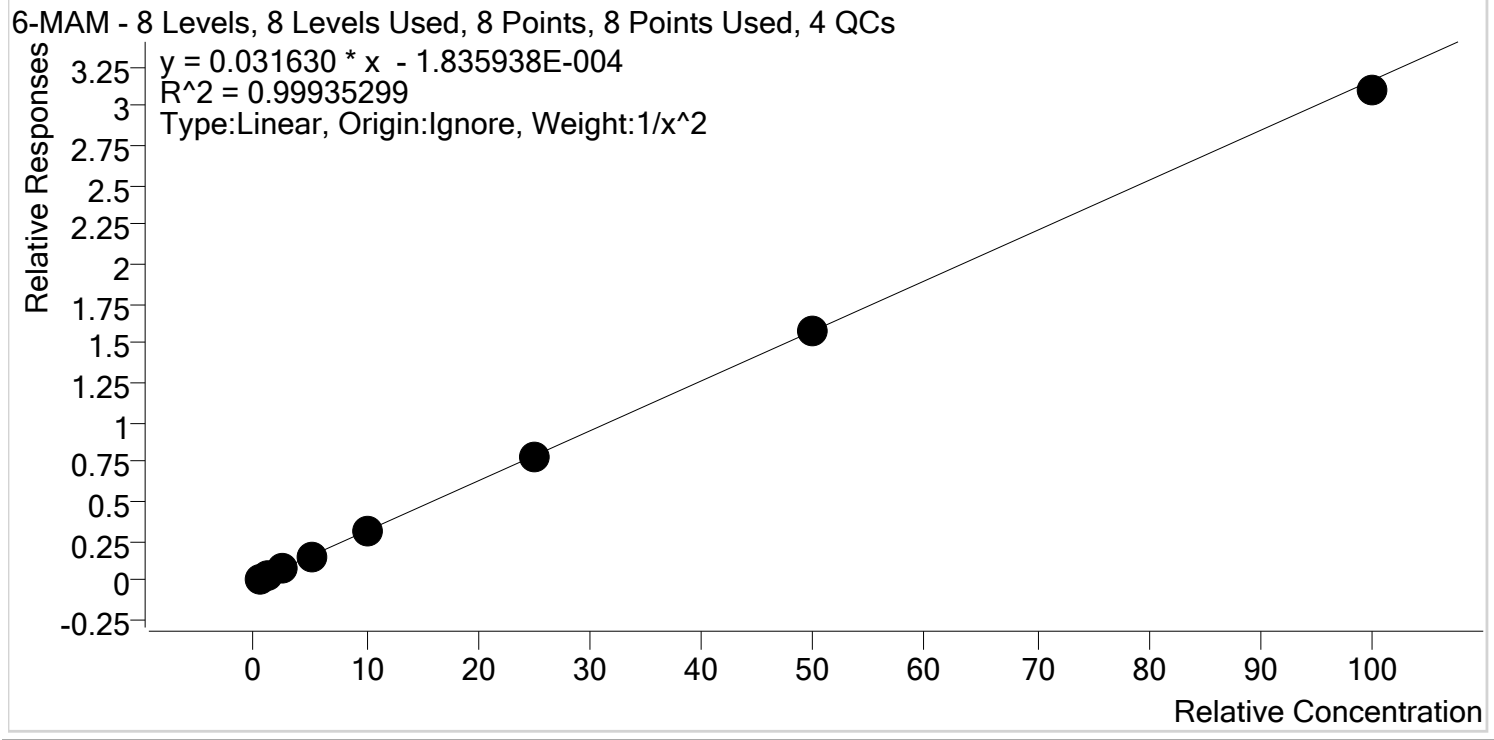


Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.	
Dihydrocodeine	2.555	196941	67334.59	70.1	113240.93	15164	746.4157 ng/ml	outside curve range
Diphenhydramine	5.292	440729	84530.97	33.9	90444.48	23217	1004.8801 ng/ml	
Doxylamine	4.522	1002303	257696.90	98.2	270680.65	50323	993.8851 ng/ml	
EDDP	5.257	276463	66095.08	42.7	978.89	15370	929.0049 ng/ml	
Fentanyl	5.086	12145	842.97	73.4	12942.09	6296	95.3399 ng/ml	
Fluoxetine	5.704	112397	18952.94	9.9	∞	4572	941.2046 ng/ml	
Hydrocodone	3.018	220034	∞	40.3	906.34	15620	931.0636 ng/ml	
Hydromorphone	1.621	220168	1342.80	74.0	670.68	8786	934.2714 ng/ml	
Ketamine	4.035	471035	132128.53	37.5	14320.26	25805	910.9672 ng/ml	
Lamotrigine	4.290	50644	36102.42	80.5	76488.41	25805	741.9474 ng/ml	outside curve range
Lorazepam	5.737	224823	10054.86	55.7	989.54	4334	391.6381 ng/ml	outside curve range
Meprobamate	4.912	210933	75139.79	27.6	10249.75	11775	879.3514 ng/ml	
Methadone	5.650	250011	13816.81	51.0	59303.60	12028	1022.1316 ng/ml	
Methamphetamine	3.224	302727	14229.10	41.4	17952.16	14623	947.8199 ng/ml	
Metoprolol	4.322	95655	20513.08	92.8	∞	55189	806.9654 ng/ml	
Mirtazapine	4.610	291582	481290.48	48.1	∞	17760	491.9093 ng/ml	outside curve range
Mitragynine	5.221	36930	27122.55	39.2	33794.15	12028	724.3853 ng/ml	
Morphine	1.253	47140	12083.02	23.4	5725.96	616	890.8313 ng/ml	
Norbuprenorphine	4.988	5022	4633.86	94.2	694.82	2205	102.7159 ng/ml	
Nordiazepam	5.891	212421	32288.54	58.5	19762.52	7850	881.0819 ng/ml	
Norfentanyl	4.084	92080	714621.71	37.3	4574.78	35313	105.7516 ng/ml	
Norhydrocodone	3.073	94120	∞	40.8	700.34	11990	1449.1158 ng/ml	outside curve range
Noroxycodone	2.921	157356	∞	49.0	337.30	6711	898.5914 ng/ml	
O-desmethyl-tramadol	3.373	1322968	213770.73	6.7	2422.83	62621	990.5366 ng/ml	
Oxazepam	5.740	233206	∞	70.9	1953.78	11661	840.7780 ng/ml	
Oxycodone	2.840	478645	1142.86	32.4	467.42	24568	923.2540 ng/ml	
Oxymorphone	1.417	269681	928.42	46.7	2090.95	10691	934.4787 ng/ml	
Phentermine	3.781	111644	3398.17	3.8	808.33	14032	870.1574 ng/ml	outside curve range
Promethazine	5.535	233425	1303.72	28.5	9215.14	9785	993.0650 ng/ml	
Quetiapine	5.545	284861	75043.17	59.7	540770.88	4163	1054.3961 ng/ml	
Sertraline	5.780	49703	5121.88	92.6	41025.39	1975	1021.5547 ng/ml	
Temazepam	5.808	697137	1041.96	29.3	27595.80	35852	894.2121 ng/ml	
Tramadol	4.235	925506	69895.79	3.6	18797.37	55189	924.3947 ng/ml	
Trazodone	5.126	251766	5116.74	79.1	∞	10886	1044.9672 ng/ml	
Venlafaxine	5.040	650489	174803.19	37.7	7544.95	32978	982.9501 ng/ml	
Zolpidem	4.883	1222906	354352.95	32.1	367483.37	73315	865.4988 ng/ml	



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte 6-MAM **Internal Standard** 6-MAM-D6

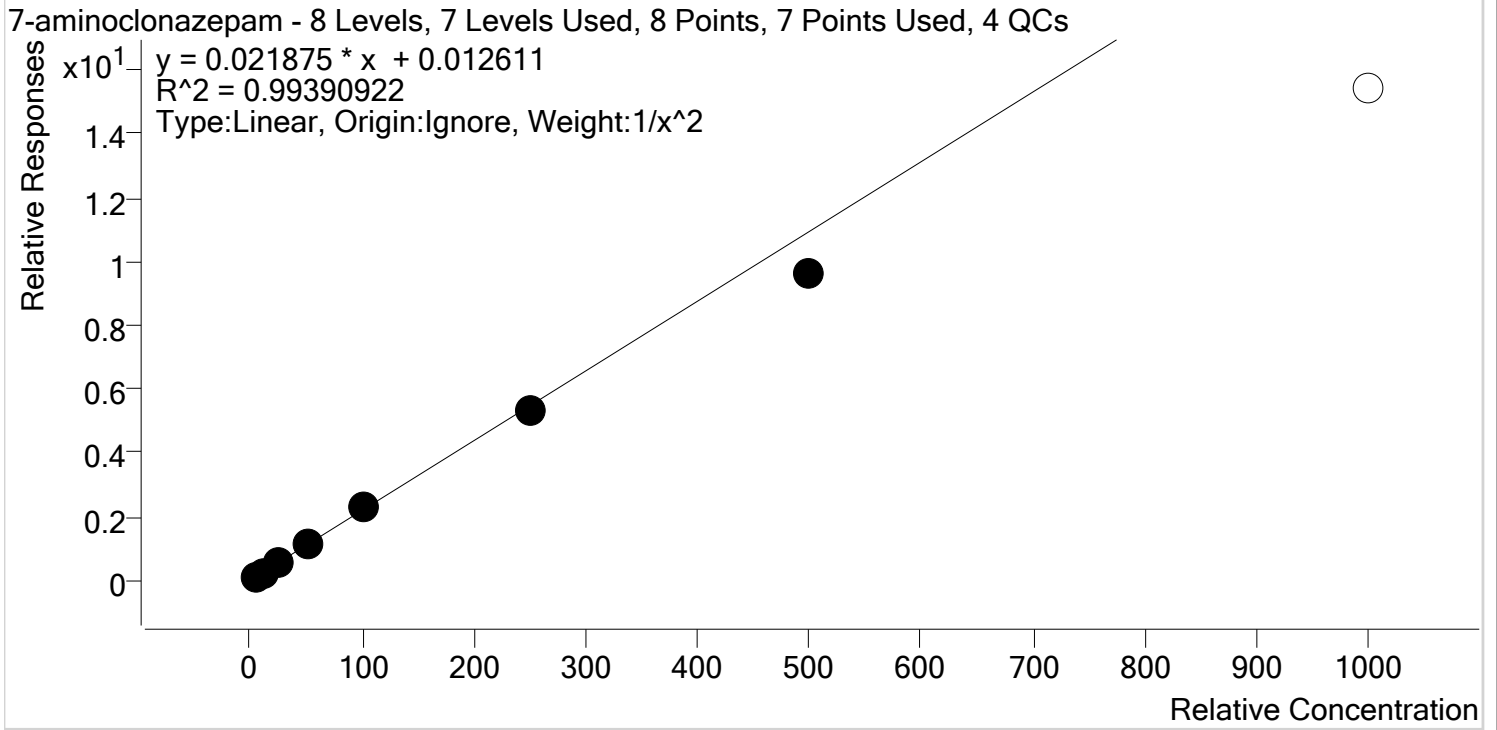


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	0.5	0.5	97.5
p1 Cal 2- 10ng	2	✓	1.0	1.0	104.2
p1 Cal 3 -25ng	3	✓	2.5	2.6	102.0
p1 Cal 4-50ng	4	✓	5.0	5.0	100.2
p1 Cal 5-100ng	5	✓	10.0	10.0	99.9
p1 Cal 6-250ng	6	✓	25.0	24.7	98.7
p1 Cal 7-500ng	7	✓	50.0	49.7	99.5
p1 Cal 8-1000ng	8	✓	100.0	97.9	97.9



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte 7-aminoclonazepam **Internal Standard** 7-Aminoclonazepam-D4

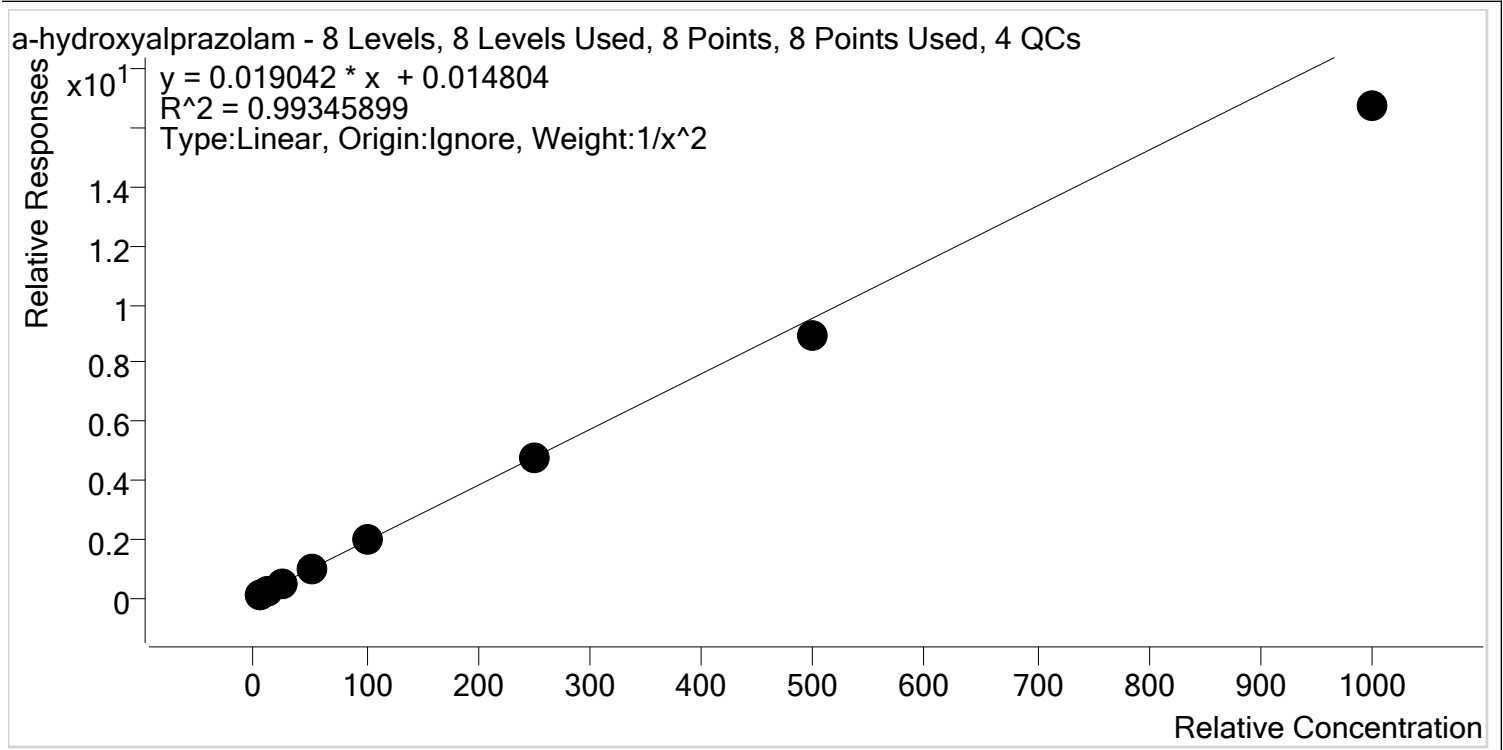


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	95.6
p1 Cal 2- 10ng	2	✓	10.0	10.6	106.4
p1 Cal 3 -25ng	3	✓	25.0	25.9	103.6
p1 Cal 4-50ng	4	✓	50.0	52.4	104.8
p1 Cal 5-100ng	5	✓	100.0	103.7	103.7
p1 Cal 6-250ng	6	✓	250.0	245.4	98.1
p1 Cal 7-500ng	7	✓	500.0	439.0	87.8
p1 Cal 8-1000ng	8	✗	1000.0	704.9	70.5



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte a-hydroxyalprazolam **Internal Standard** a-hydroxyalprazolam-D5



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	95.1
p1 Cal 2- 10ng	2	✓	10.0	10.6	106.5
p1 Cal 3 -25ng	3	✓	25.0	26.2	104.6
p1 Cal 4-50ng	4	✓	50.0	52.9	105.8
p1 Cal 5-100ng	5	✓	100.0	106.1	106.1
p1 Cal 6-250ng	6	✓	250.0	251.0	100.4
p1 Cal 7-500ng	7	✓	500.0	467.8	93.6
p1 Cal 8-1000ng	8	✓	1000.0	879.0	87.9

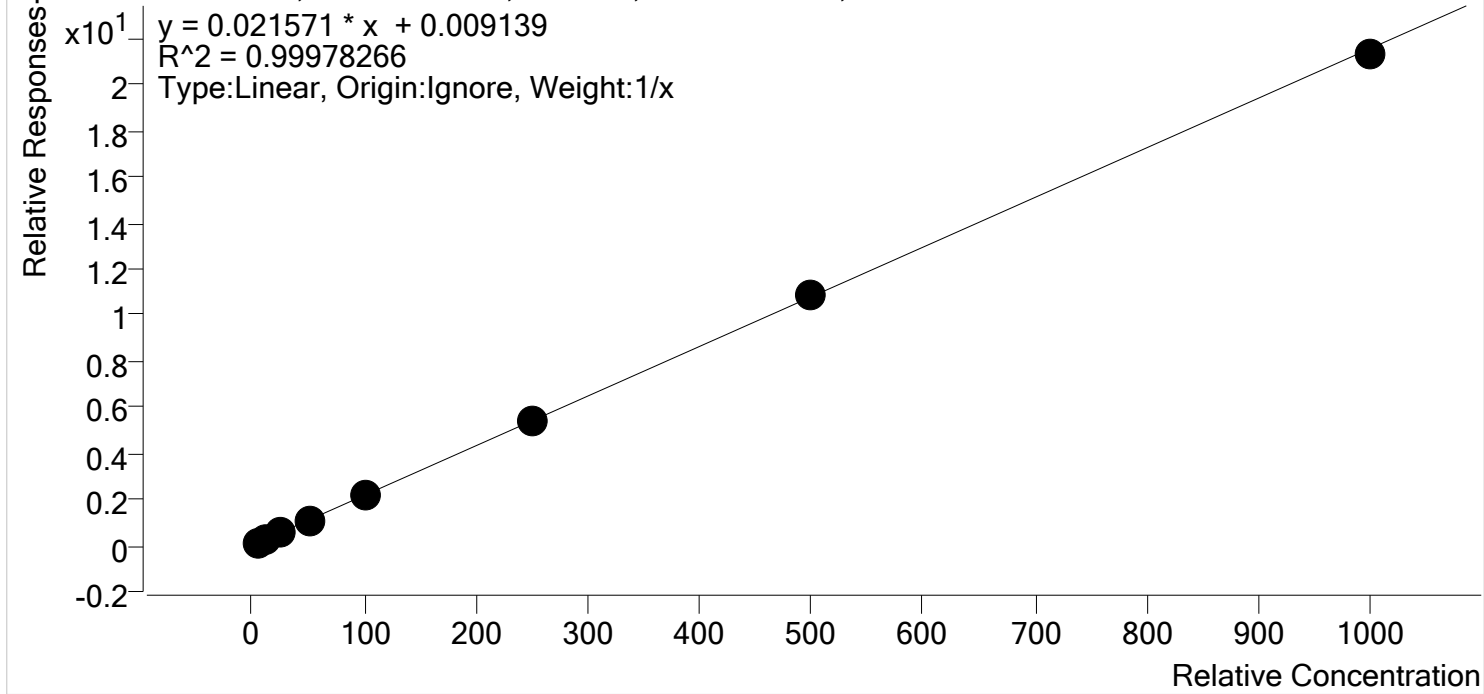
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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte alpha-PVP **Internal Standard** alpha-PVP-d8

alpha-PVP - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs

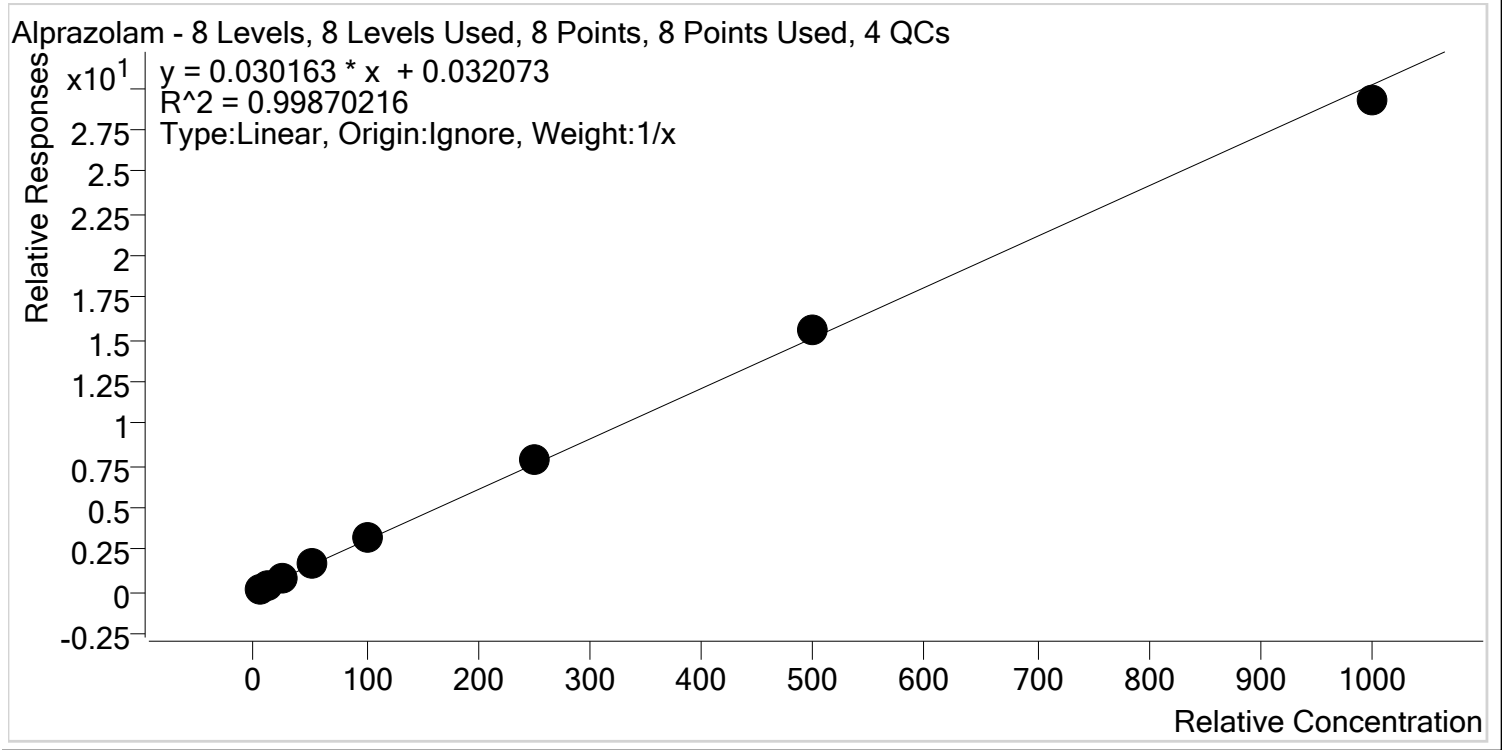


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.7	93.8
p1 Cal 2- 10ng	2	✓	10.0	10.1	101.0
p1 Cal 3 -25ng	3	✓	25.0	25.3	101.0
p1 Cal 4-50ng	4	✓	50.0	49.9	99.7
p1 Cal 5-100ng	5	✓	100.0	103.2	103.2
p1 Cal 6-250ng	6	✓	250.0	253.1	101.2
p1 Cal 7-500ng	7	✓	500.0	505.9	101.2
p1 Cal 8-1000ng	8	✓	1000.0	987.8	98.8



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Alprazolam **Internal Standard** Alprazolam-D5

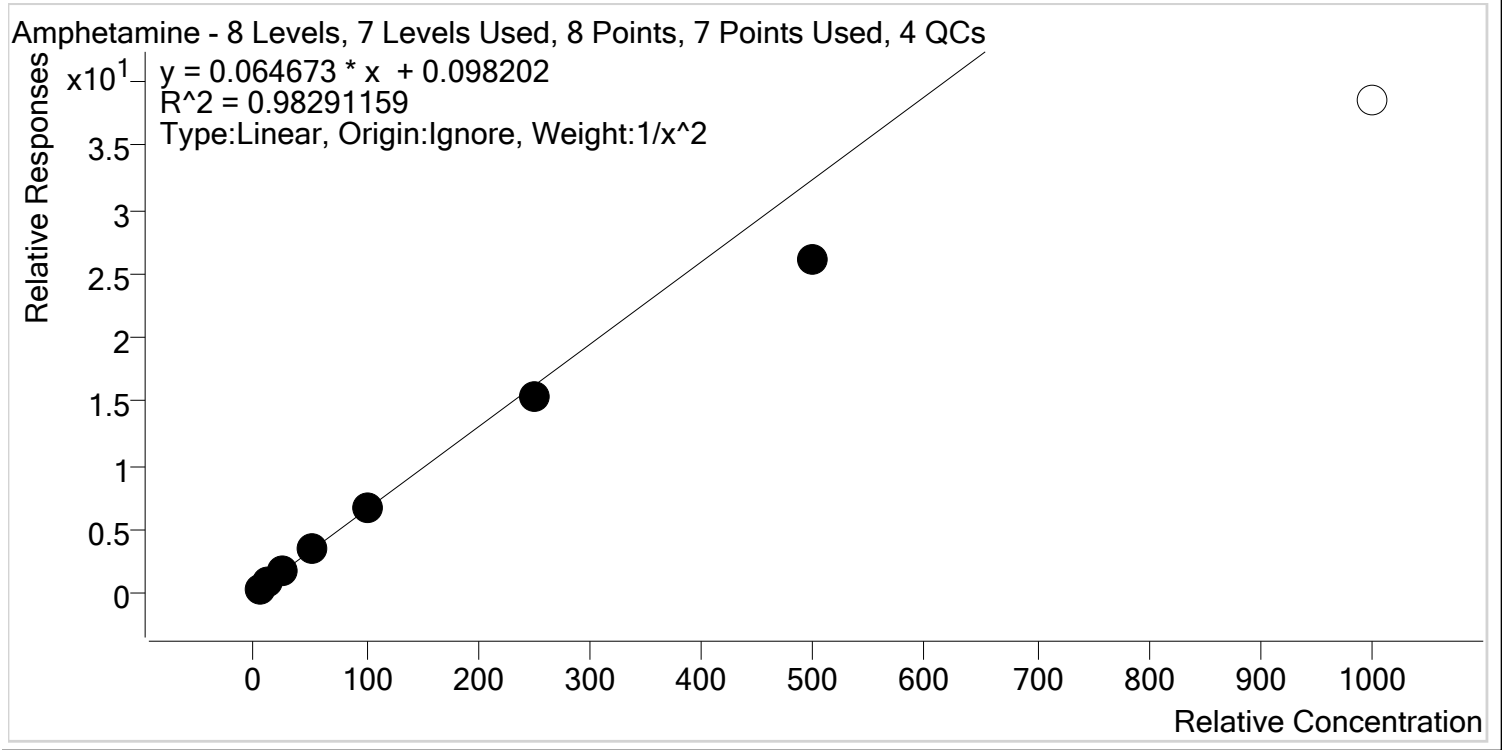


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.3	86.8
p1 Cal 2- 10ng	2	✓	10.0	9.7	97.1
p1 Cal 3 -25ng	3	✓	25.0	25.8	103.3
p1 Cal 4-50ng	4	✓	50.0	51.5	103.0
p1 Cal 5-100ng	5	✓	100.0	106.2	106.2
p1 Cal 6-250ng	6	✓	250.0	259.6	103.8
p1 Cal 7-500ng	7	✓	500.0	514.1	102.8
p1 Cal 8-1000ng	8	✓	1000.0	968.7	96.9



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Amphetamine **Internal Standard** Amphetamine-D11

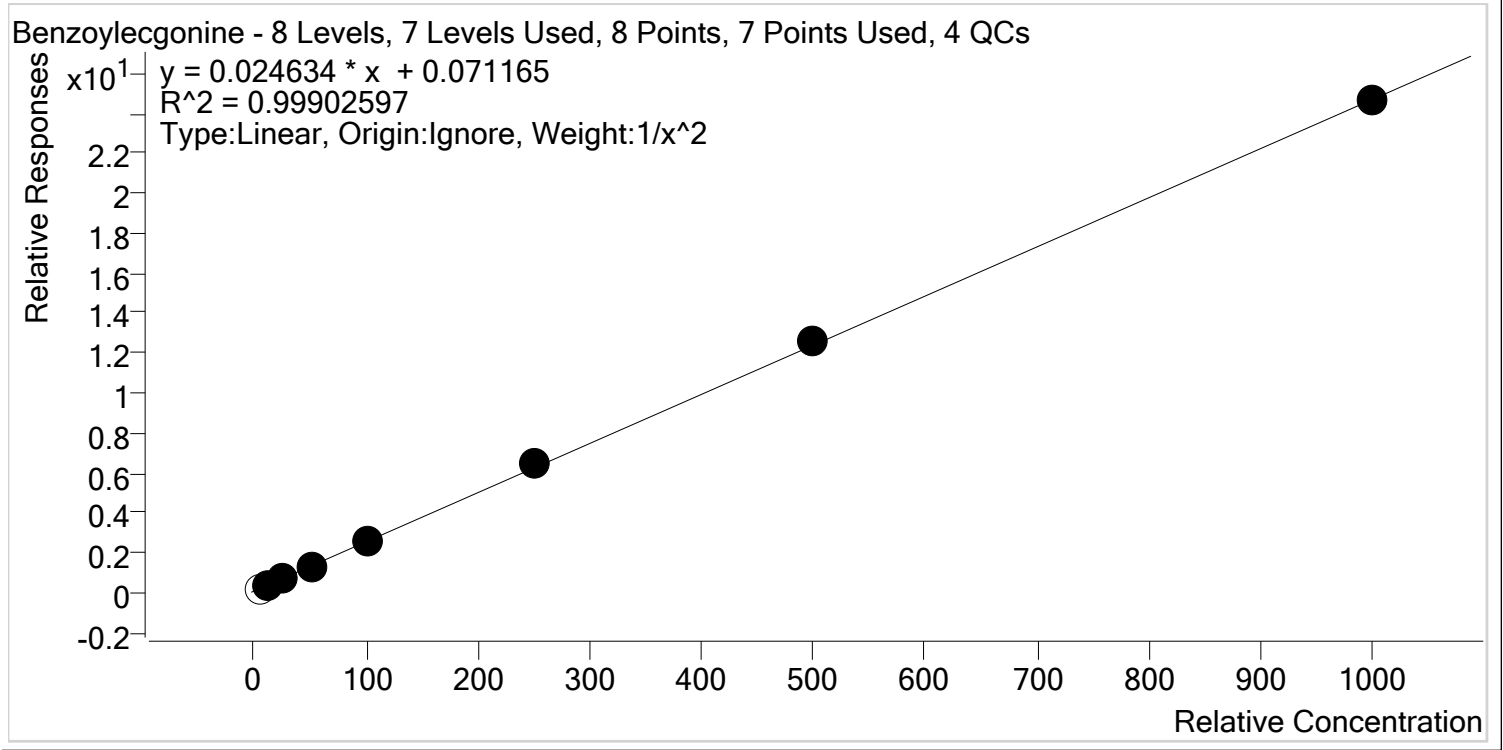


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.6	92.4
p1 Cal 2- 10ng	2	✓	10.0	10.9	109.4
p1 Cal 3 -25ng	3	✓	25.0	27.8	111.3
p1 Cal 4-50ng	4	✓	50.0	53.4	106.7
p1 Cal 5-100ng	5	✓	100.0	104.6	104.6
p1 Cal 6-250ng	6	✓	250.0	237.6	95.1
p1 Cal 7-500ng	7	✓	500.0	402.4	80.5
p1 Cal 8-1000ng	8	✗	1000.0	594.8	59.5



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Benzoylecgonine **Internal Standard** Benzoylecgonine-d8



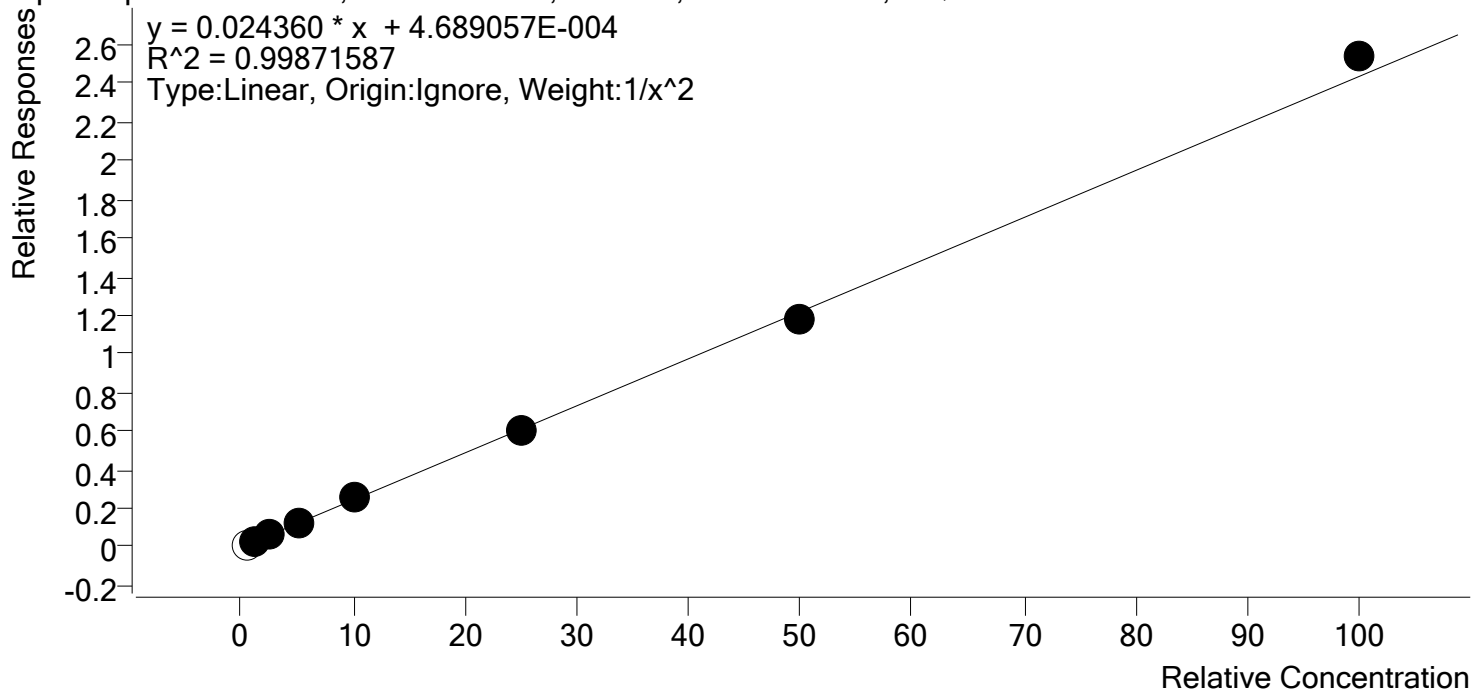
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	x	5.0	4.4	88.4
p1 Cal 2- 10ng	2	✓	10.0	10.2	101.7
p1 Cal 3 -25ng	3	✓	25.0	24.3	97.2
p1 Cal 4-50ng	4	✓	50.0	47.8	95.5
p1 Cal 5-100ng	5	✓	100.0	101.4	101.4
p1 Cal 6-250ng	6	✓	250.0	257.2	102.9
p1 Cal 7-500ng	7	✓	500.0	507.3	101.5
p1 Cal 8-1000ng	8	✓	1000.0	997.9	99.8



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Buprenorphine **Internal Standard** Buprenorphine-D4

Buprenorphine - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 4 QCs

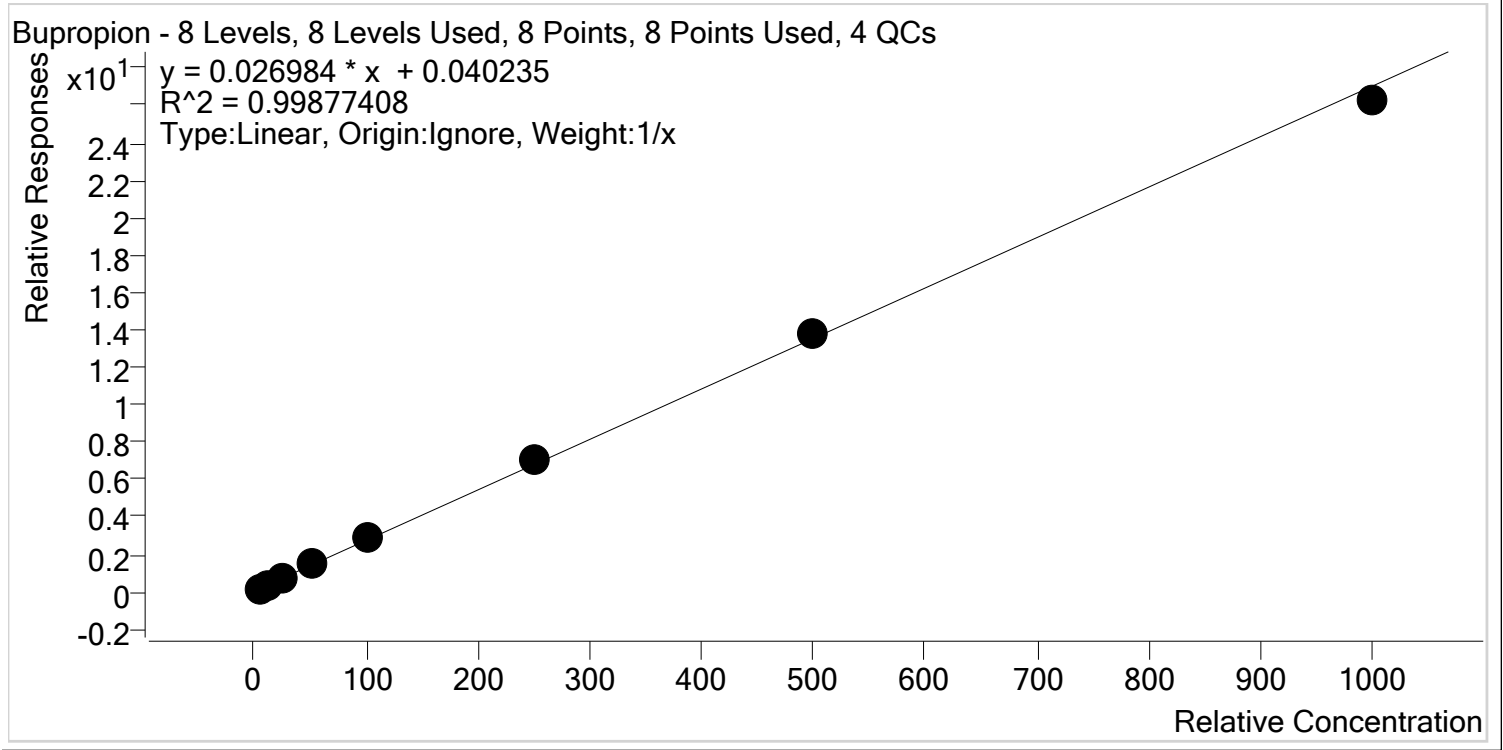


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	x	0.5	0.5	98.2
p1 Cal 2- 10ng	2	✓	1.0	1.0	101.6
p1 Cal 3 -25ng	3	✓	2.5	2.4	95.9
p1 Cal 4-50ng	4	✓	5.0	5.0	99.1
p1 Cal 5-100ng	5	✓	10.0	10.3	103.1
p1 Cal 6-250ng	6	✓	25.0	24.7	98.8
p1 Cal 7-500ng	7	✓	50.0	48.6	97.3
p1 Cal 8-1000ng	8	✓	100.0	104.2	104.2



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Bupropion **Internal Standard** Bupropion-D9

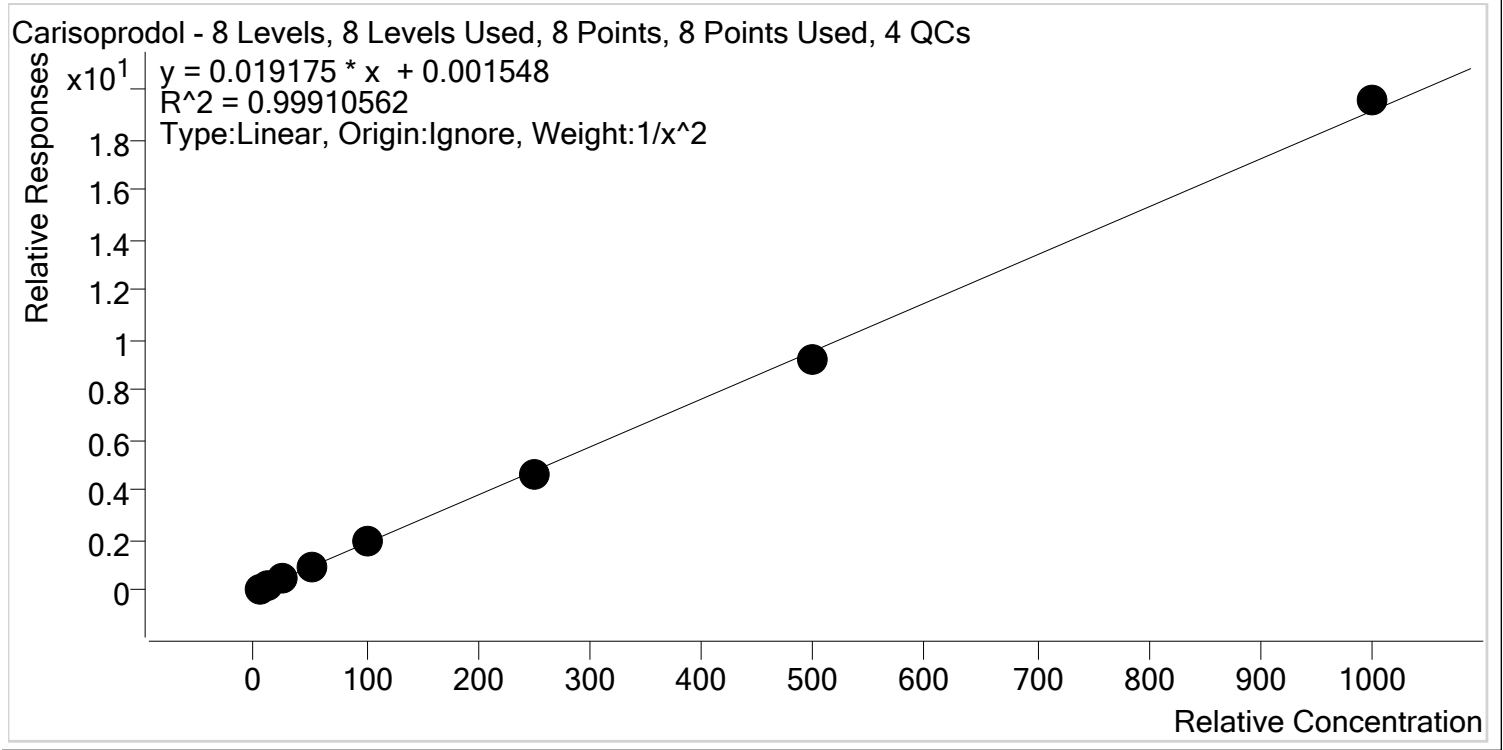


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.2	83.2
p1 Cal 2- 10ng	2	✓	10.0	10.0	100.3
p1 Cal 3 -25ng	3	✓	25.0	25.7	102.9
p1 Cal 4-50ng	4	✓	50.0	51.8	103.6
p1 Cal 5-100ng	5	✓	100.0	106.2	106.2
p1 Cal 6-250ng	6	✓	250.0	262.4	105.0
p1 Cal 7-500ng	7	✓	500.0	508.1	101.6
p1 Cal 8-1000ng	8	✓	1000.0	971.5	97.2



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Carisoprodol **Internal Standard** Carisoprodol-D7

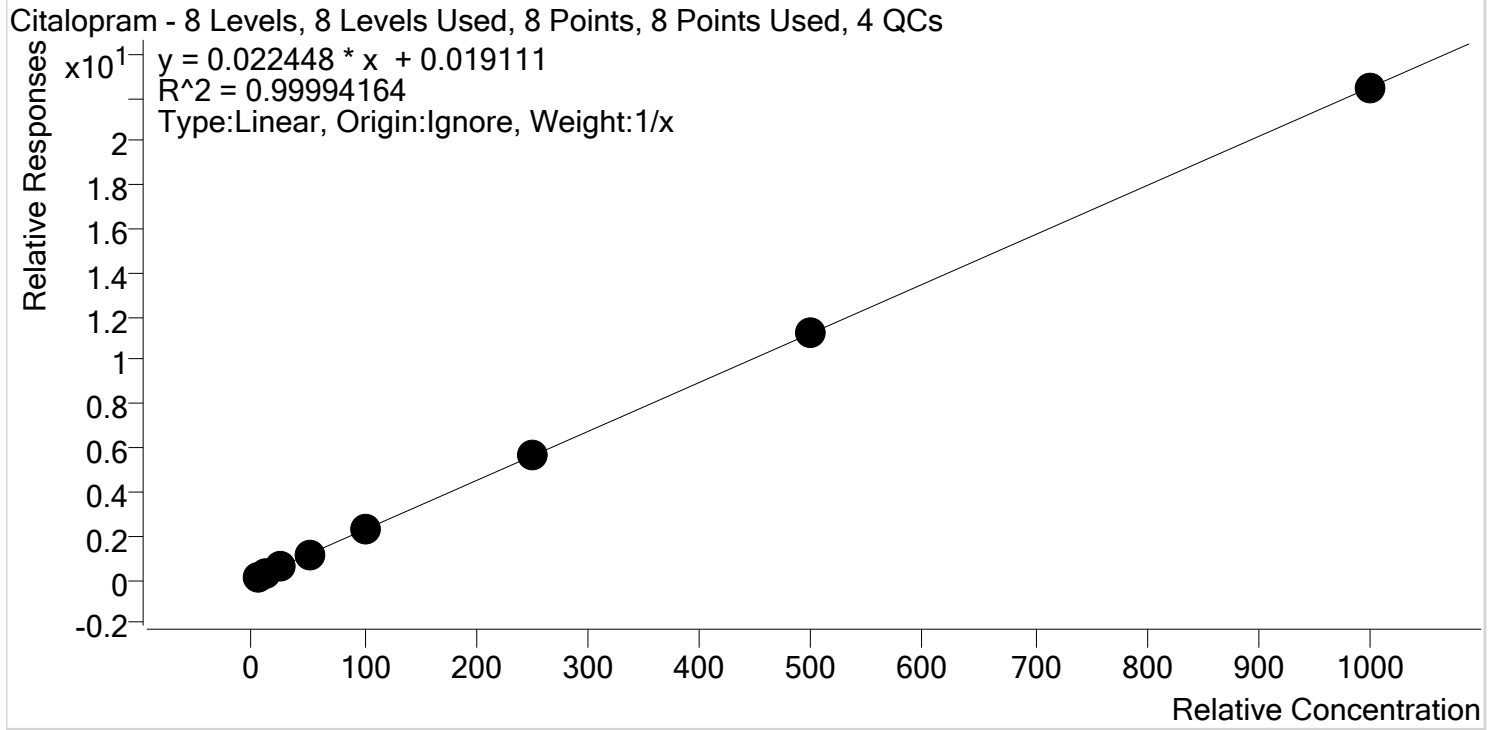


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	5.0	99.2
p1 Cal 2- 10ng	2	✓	10.0	10.0	100.1
p1 Cal 3 -25ng	3	✓	25.0	25.8	103.1
p1 Cal 4-50ng	4	✓	50.0	51.1	102.2
p1 Cal 5-100ng	5	✓	100.0	100.5	100.5
p1 Cal 6-250ng	6	✓	250.0	240.9	96.4
p1 Cal 7-500ng	7	✓	500.0	481.5	96.3
p1 Cal 8-1000ng	8	✓	1000.0	1021.6	102.2



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Citalopram **Internal Standard** Citalopram-D6



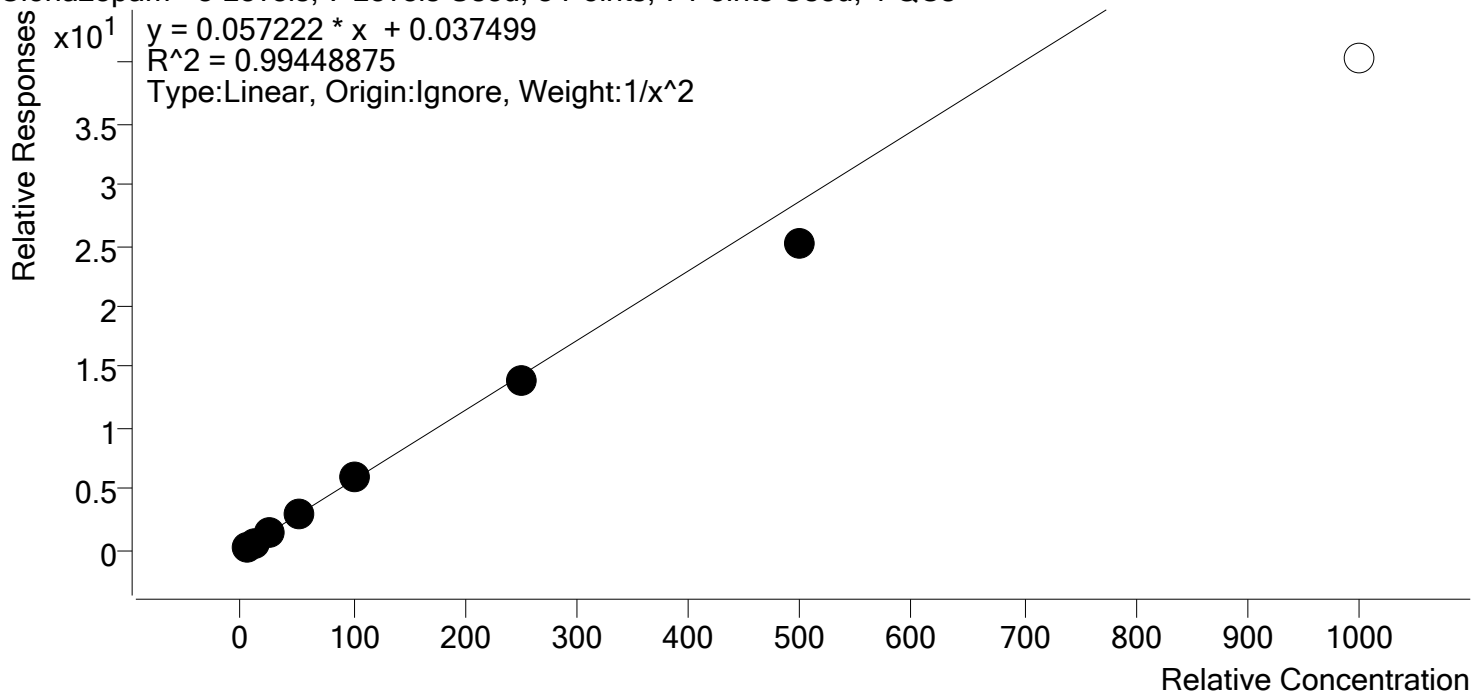
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	95.2
p1 Cal 2- 10ng	2	✓	10.0	10.2	101.6
p1 Cal 3 -25ng	3	✓	25.0	25.1	100.4
p1 Cal 4-50ng	4	✓	50.0	50.1	100.2
p1 Cal 5-100ng	5	✓	100.0	102.7	102.7
p1 Cal 6-250ng	6	✓	250.0	251.1	100.5
p1 Cal 7-500ng	7	✓	500.0	498.5	99.7
p1 Cal 8-1000ng	8	✓	1000.0	997.5	99.7



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Clonazepam **Internal Standard** Clonazepam-D4

Clonazepam - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 4 QCs

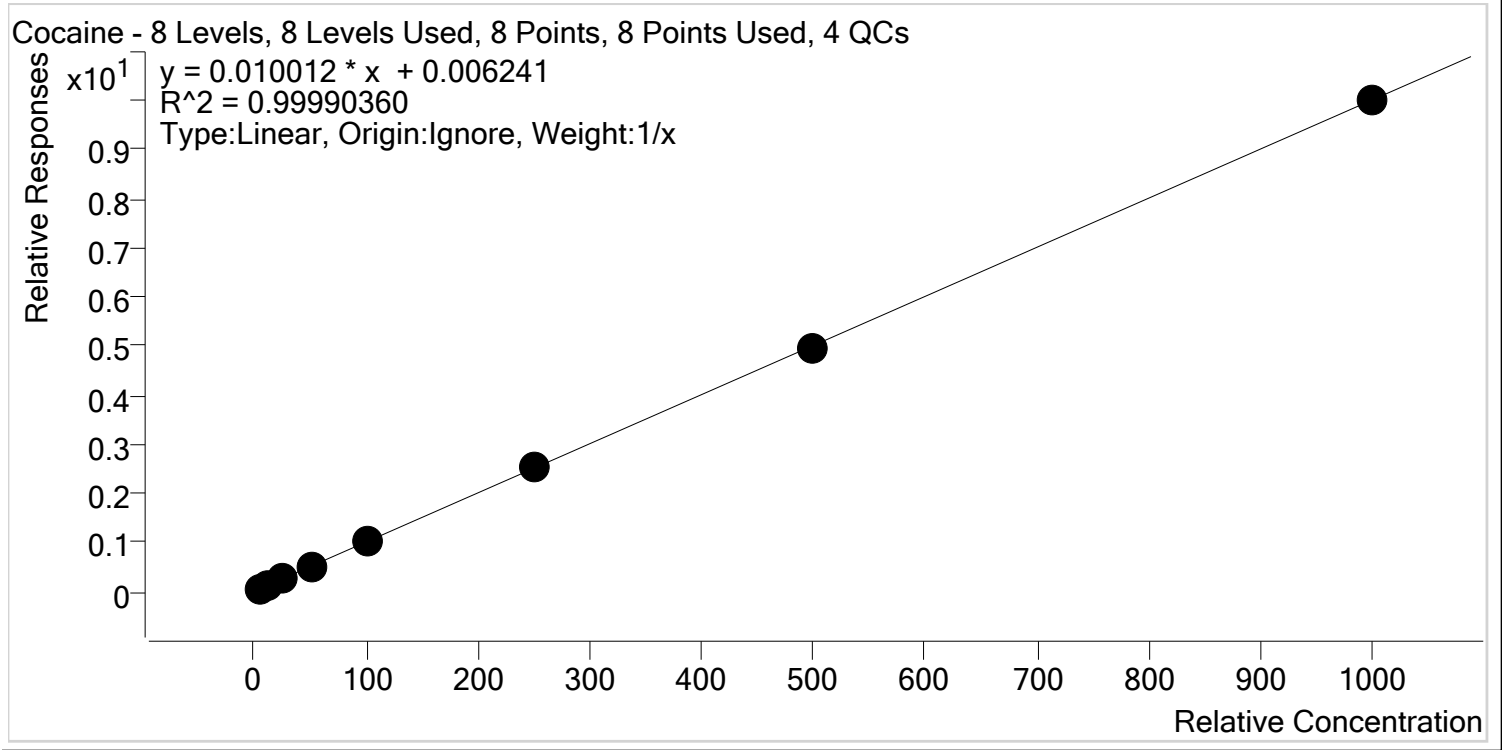


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.8
p1 Cal 2- 10ng	2	✓	10.0	10.3	103.1
p1 Cal 3 -25ng	3	✓	25.0	26.5	105.9
p1 Cal 4-50ng	4	✓	50.0	51.7	103.5
p1 Cal 5-100ng	5	✓	100.0	105.0	105.0
p1 Cal 6-250ng	6	✓	250.0	243.9	97.6
p1 Cal 7-500ng	7	✓	500.0	440.8	88.2
p1 Cal 8-1000ng	8	✗	1000.0	703.9	70.4



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Cocaine **Internal Standard** Cocaine-d3

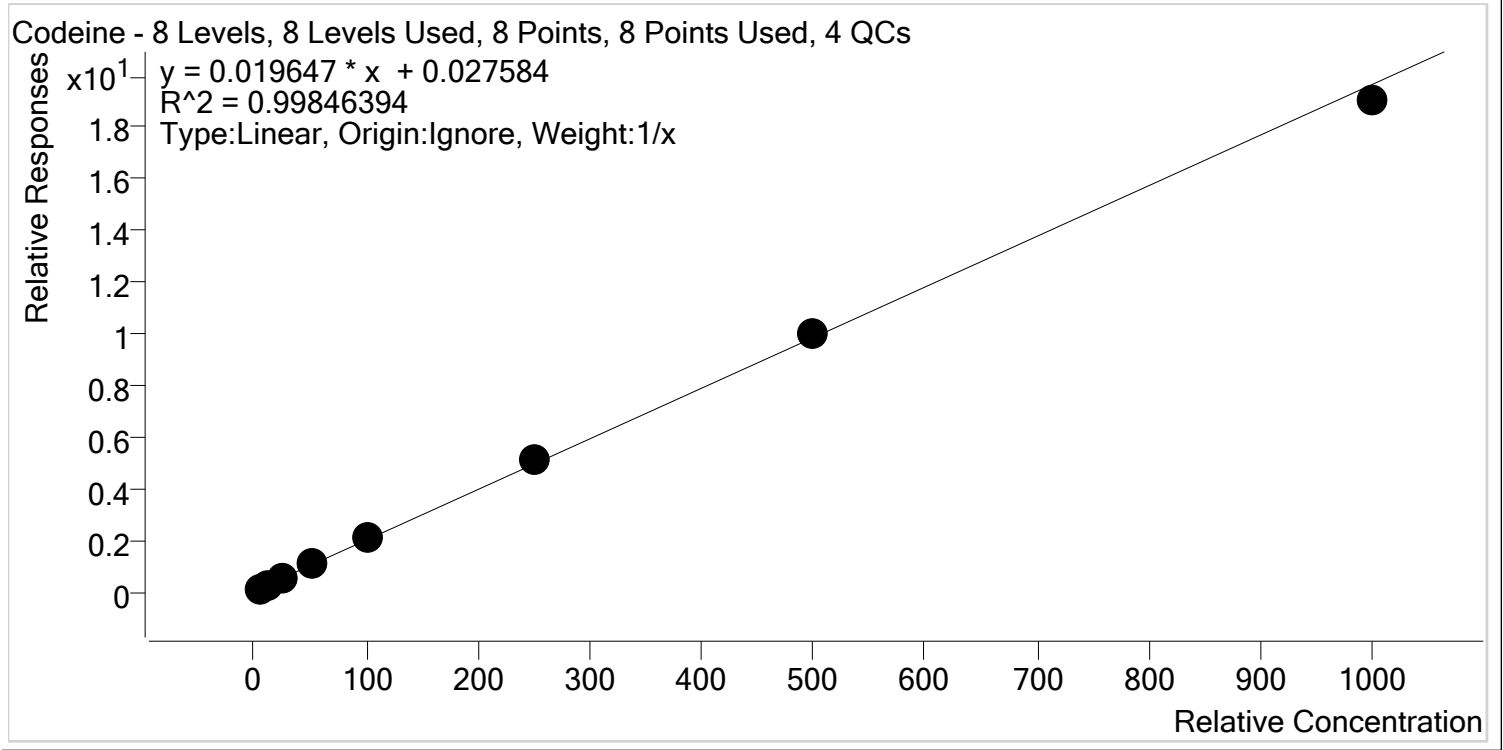


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	95.4
p1 Cal 2- 10ng	2	✓	10.0	10.1	101.0
p1 Cal 3 -25ng	3	✓	25.0	25.1	100.4
p1 Cal 4-50ng	4	✓	50.0	50.1	100.2
p1 Cal 5-100ng	5	✓	100.0	102.8	102.8
p1 Cal 6-250ng	6	✓	250.0	253.1	101.2
p1 Cal 7-500ng	7	✓	500.0	495.4	99.1
p1 Cal 8-1000ng	8	✓	1000.0	998.7	99.9



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Codeine **Internal Standard** Codeine-D6



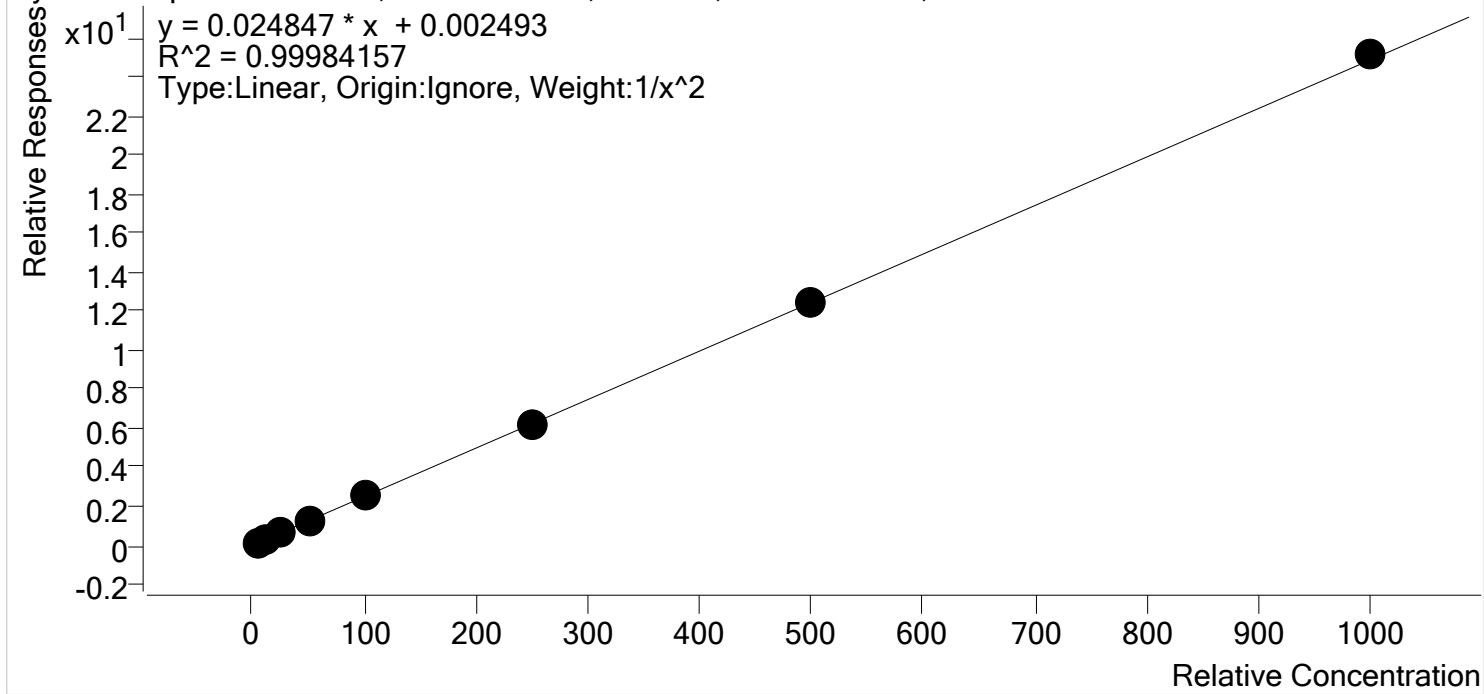
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.0	80.8
p1 Cal 2- 10ng	2	✓	10.0	10.1	100.6
p1 Cal 3 -25ng	3	✓	25.0	25.7	102.9
p1 Cal 4-50ng	4	✓	50.0	52.0	103.9
p1 Cal 5-100ng	5	✓	100.0	108.2	108.2
p1 Cal 6-250ng	6	✓	250.0	261.7	104.7
p1 Cal 7-500ng	7	✓	500.0	510.0	102.0
p1 Cal 8-1000ng	8	✓	1000.0	968.2	96.8



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Cyclobenzaprine **Internal Standard** Cyclobenzaprine-D3

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

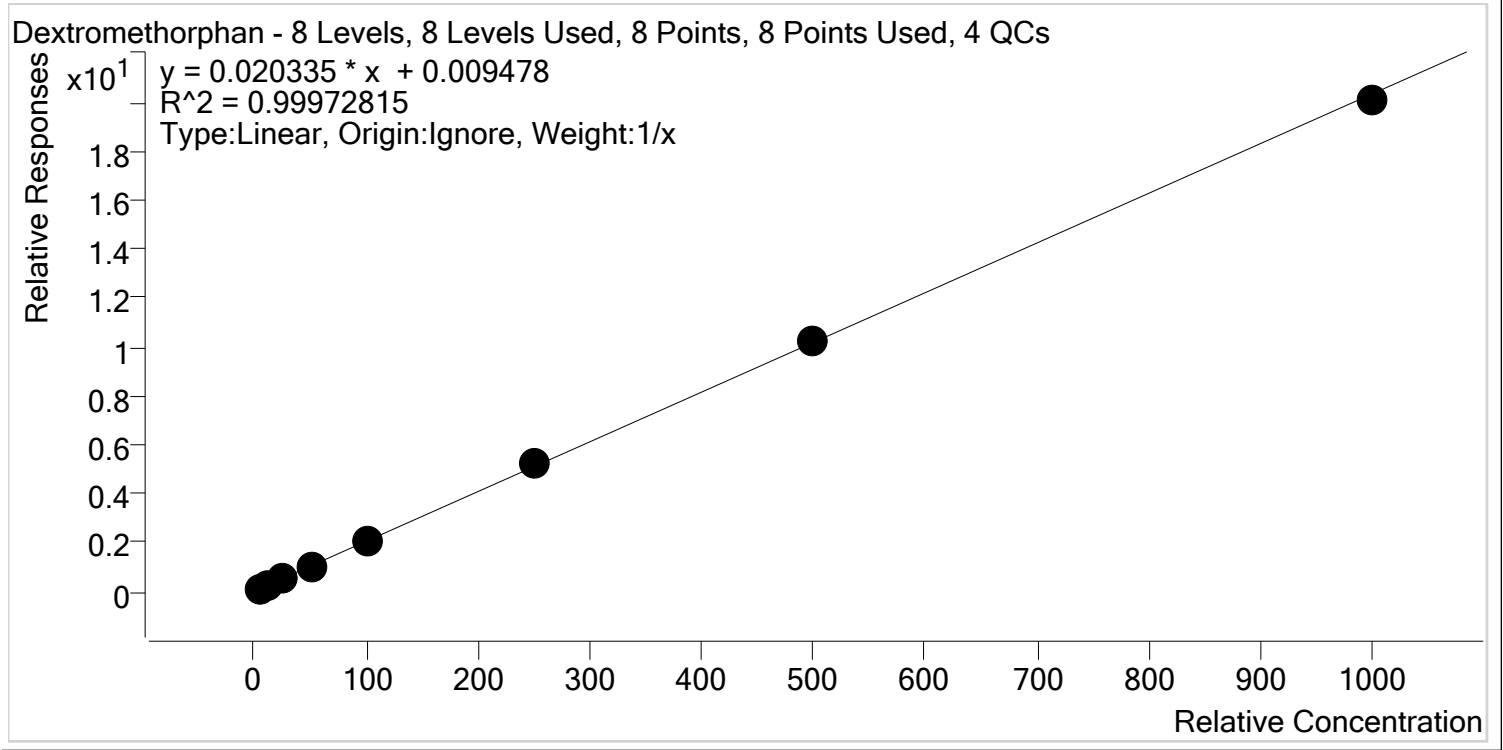


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	5.0	100.2
p1 Cal 2- 10ng	2	✓	10.0	10.0	100.4
p1 Cal 3 -25ng	3	✓	25.0	24.6	98.5
p1 Cal 4-50ng	4	✓	50.0	49.1	98.2
p1 Cal 5-100ng	5	✓	100.0	100.8	100.8
p1 Cal 6-250ng	6	✓	250.0	249.8	99.9
p1 Cal 7-500ng	7	✓	500.0	504.2	100.8
p1 Cal 8-1000ng	8	✓	1000.0	1011.2	101.1



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Dextromethorphan **Internal Standard** Dextromethorphan-D3



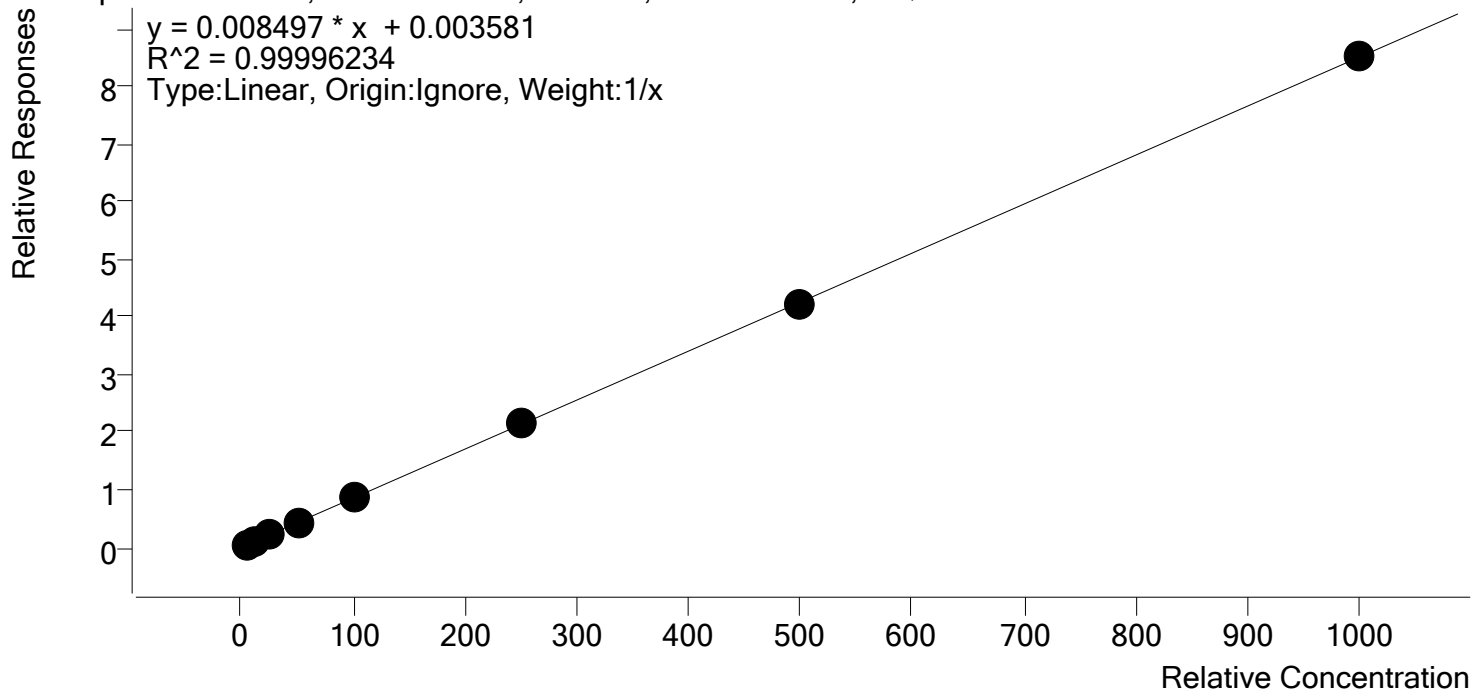
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.5	91.0
p1 Cal 2- 10ng	2	✓	10.0	10.4	104.3
p1 Cal 3 -25ng	3	✓	25.0	25.0	100.2
p1 Cal 4-50ng	4	✓	50.0	50.0	99.9
p1 Cal 5-100ng	5	✓	100.0	103.1	103.1
p1 Cal 6-250ng	6	✓	250.0	254.4	101.8
p1 Cal 7-500ng	7	✓	500.0	506.0	101.2
p1 Cal 8-1000ng	8	✓	1000.0	986.6	98.7



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Dextrorphan **Internal Standard** Dextrorphan-D3

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

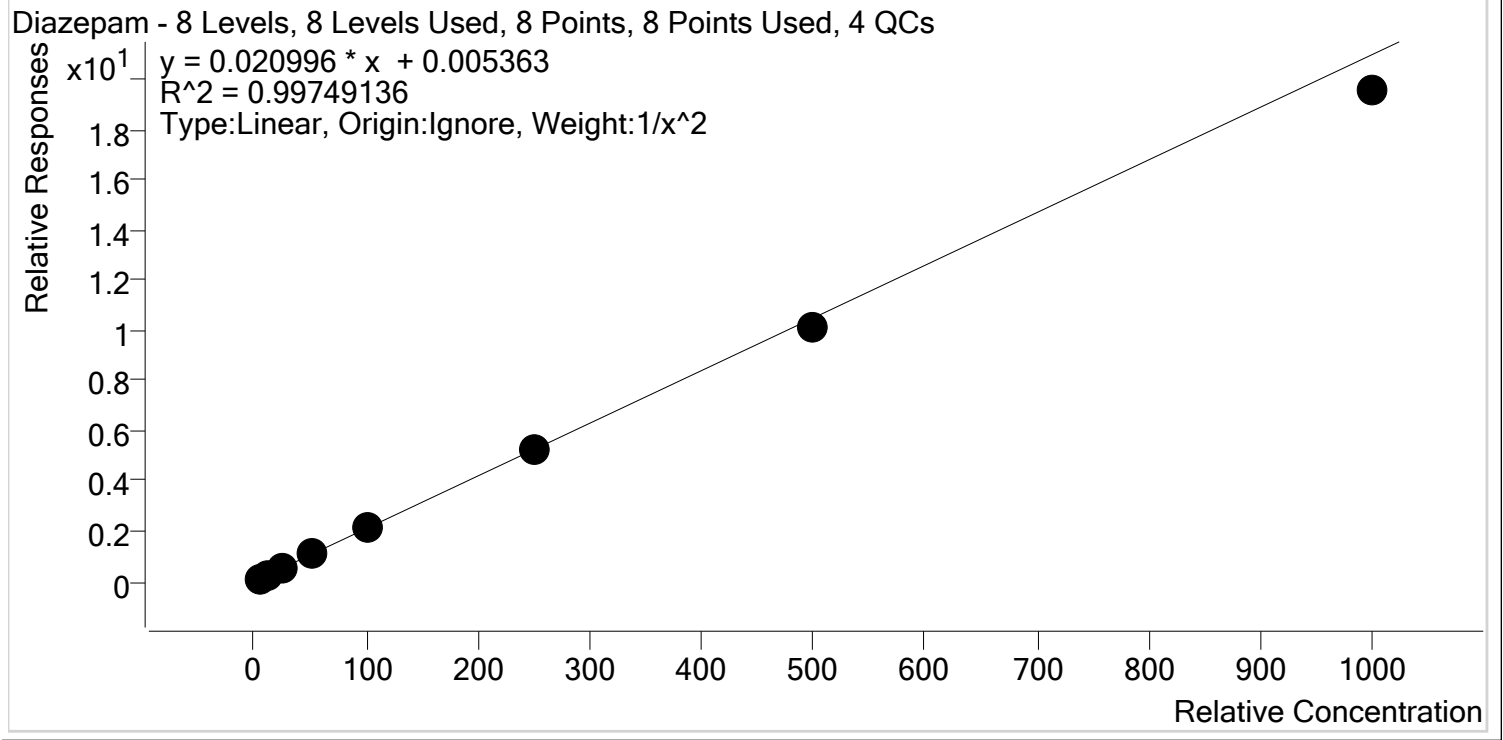


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.1
p1 Cal 2- 10ng	2	✓	10.0	10.1	101.3
p1 Cal 3 -25ng	3	✓	25.0	25.3	101.1
p1 Cal 4-50ng	4	✓	50.0	50.2	100.3
p1 Cal 5-100ng	5	✓	100.0	101.8	101.8
p1 Cal 6-250ng	6	✓	250.0	249.7	99.9
p1 Cal 7-500ng	7	✓	500.0	496.9	99.4
p1 Cal 8-1000ng	8	✓	1000.0	1001.2	100.1



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Diazepam **Internal Standard** Diazepam-D5



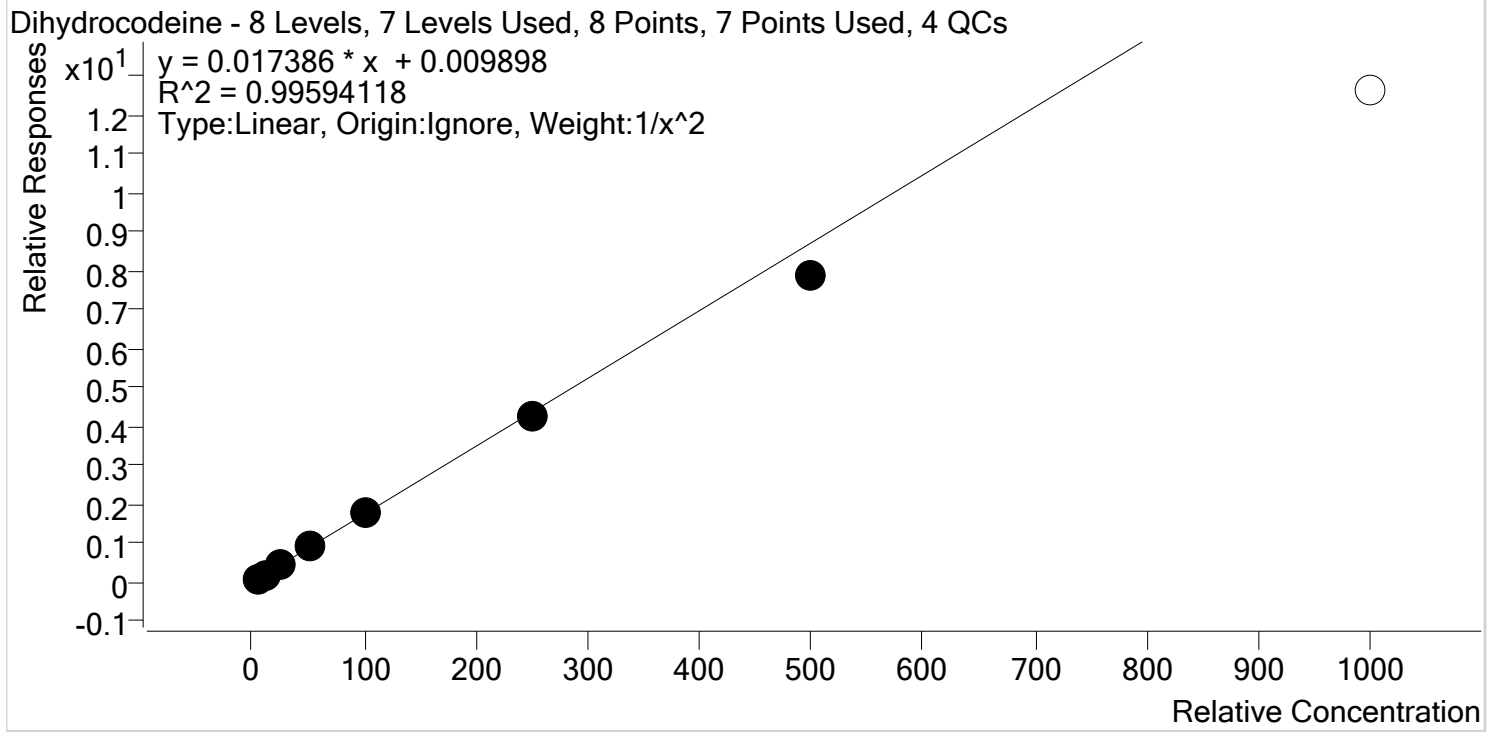
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.6
p1 Cal 2- 10ng	2	✓	10.0	10.5	105.3
p1 Cal 3 -25ng	3	✓	25.0	25.5	101.8
p1 Cal 4-50ng	4	✓	50.0	51.1	102.1
p1 Cal 5-100ng	5	✓	100.0	104.6	104.6
p1 Cal 6-250ng	6	✓	250.0	251.3	100.5
p1 Cal 7-500ng	7	✓	500.0	479.3	95.9
p1 Cal 8-1000ng	8	✓	1000.0	931.6	93.2

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Dihydrocodeine **Internal Standard** Dihydrocodeine-D6

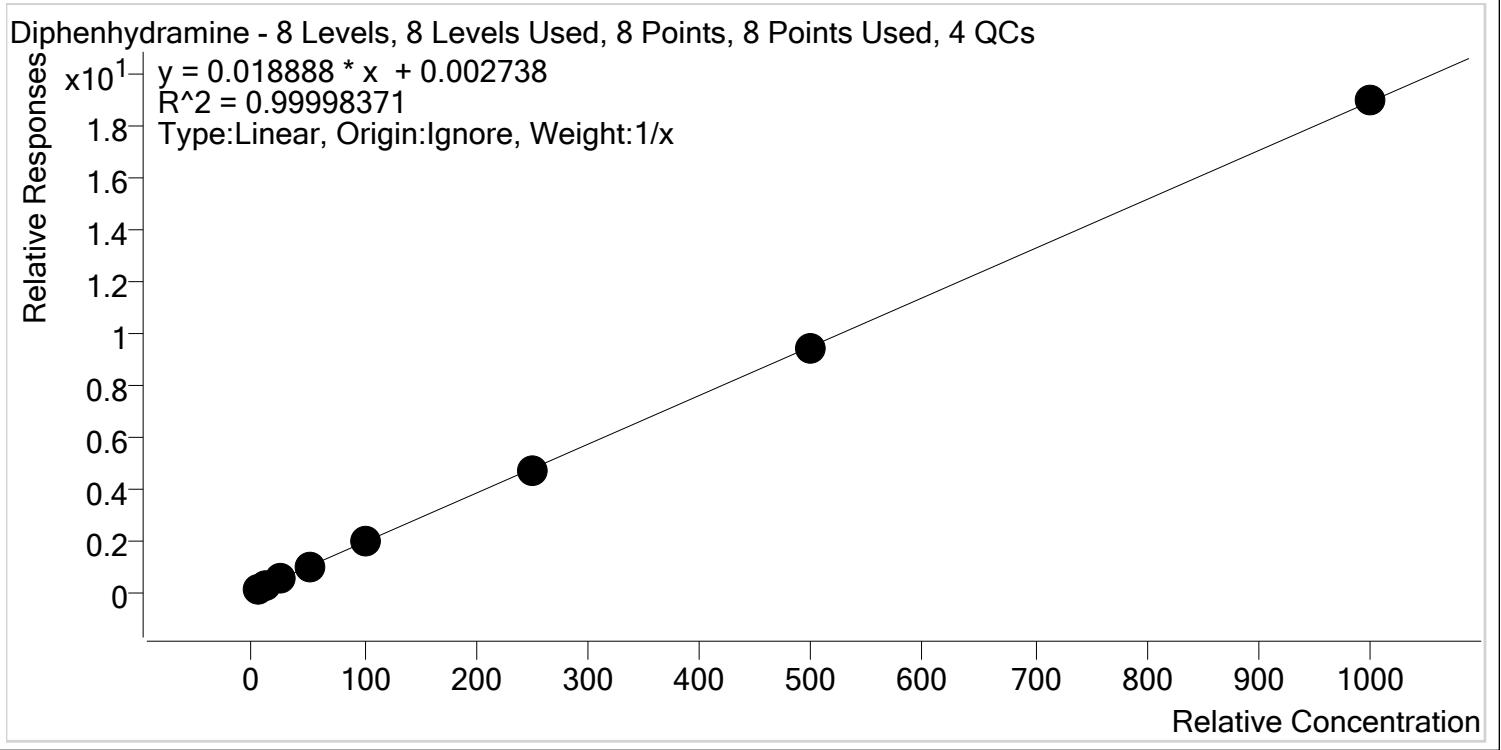


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.4
p1 Cal 2- 10ng	2	✓	10.0	10.5	104.9
p1 Cal 3 -25ng	3	✓	25.0	26.0	104.0
p1 Cal 4-50ng	4	✓	50.0	51.4	102.9
p1 Cal 5-100ng	5	✓	100.0	103.2	103.2
p1 Cal 6-250ng	6	✓	250.0	246.7	98.7
p1 Cal 7-500ng	7	✓	500.0	449.5	89.9
p1 Cal 8-1000ng	8	✗	1000.0	724.3	72.4



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Diphenhydramine **Internal Standard** Diphenhydramine-D3

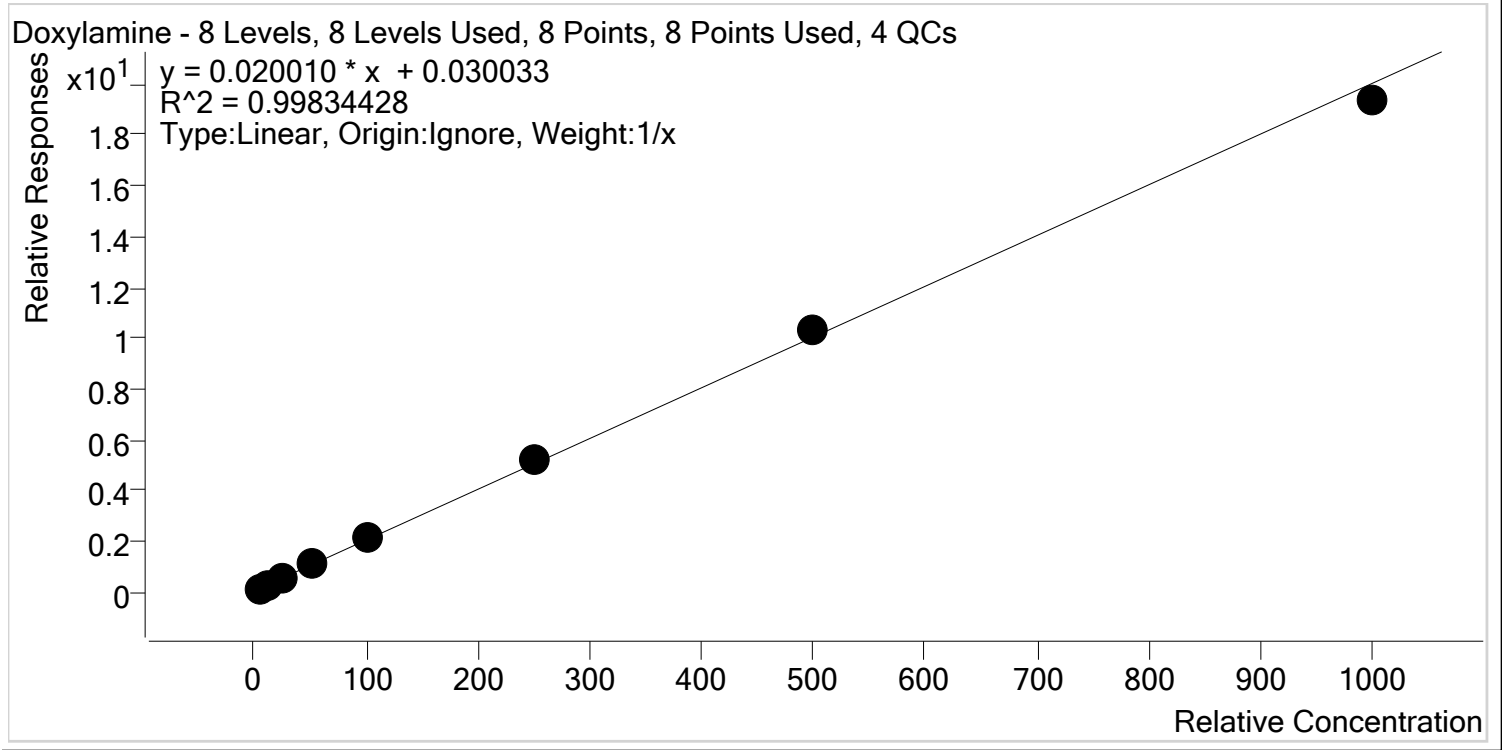


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	5.0	99.3
p1 Cal 2- 10ng	2	✓	10.0	10.0	99.8
p1 Cal 3 -25ng	3	✓	25.0	25.2	100.9
p1 Cal 4-50ng	4	✓	50.0	49.8	99.6
p1 Cal 5-100ng	5	✓	100.0	100.7	100.7
p1 Cal 6-250ng	6	✓	250.0	249.6	99.8
p1 Cal 7-500ng	7	✓	500.0	497.3	99.5
p1 Cal 8-1000ng	8	✓	1000.0	1002.3	100.2



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Doxylamine **Internal Standard** Doxylamine-D5



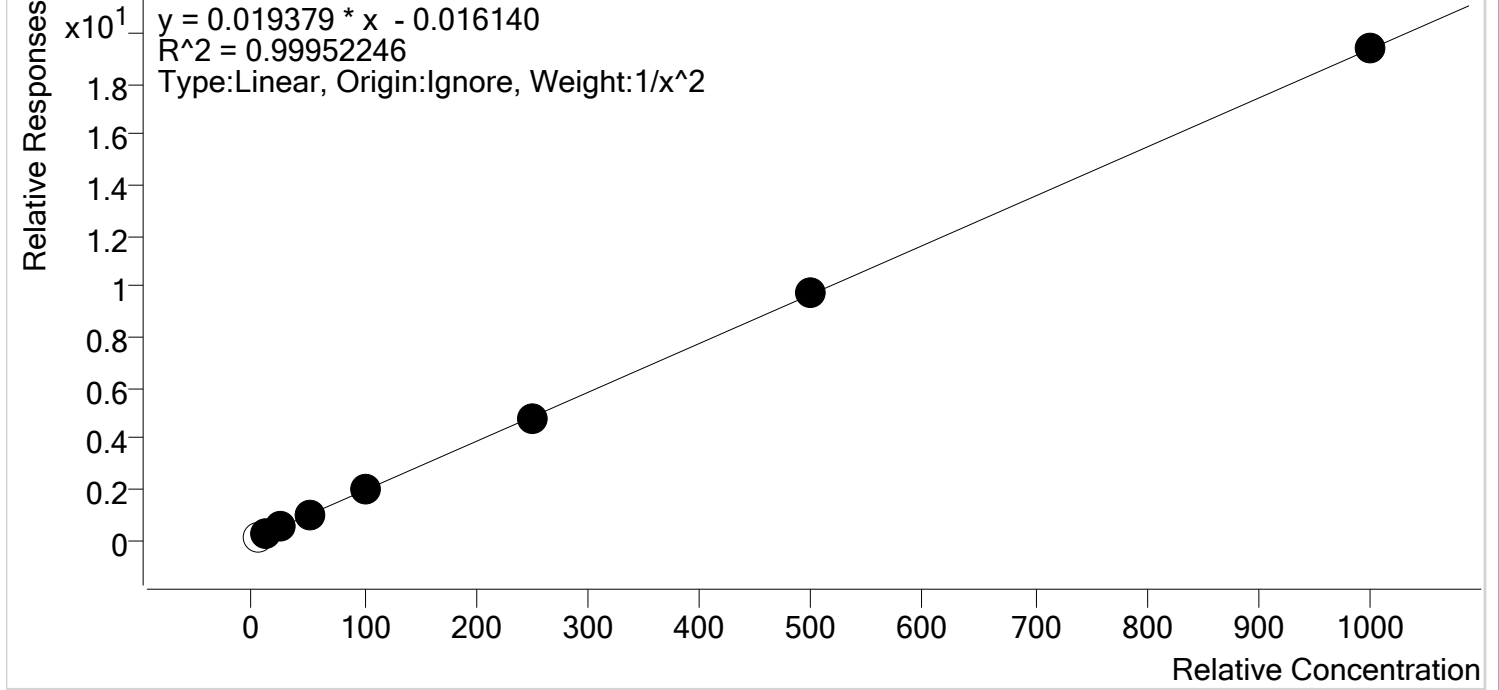
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.0	80.0
p1 Cal 2- 10ng	2	✓	10.0	9.9	99.2
p1 Cal 3 -25ng	3	✓	25.0	26.1	104.6
p1 Cal 4-50ng	4	✓	50.0	52.5	104.9
p1 Cal 5-100ng	5	✓	100.0	107.6	107.6
p1 Cal 6-250ng	6	✓	250.0	261.7	104.7
p1 Cal 7-500ng	7	✓	500.0	512.1	102.4
p1 Cal 8-1000ng	8	✓	1000.0	966.1	96.6



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte EDDP **Internal Standard** EDDP-D3

EDDP - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 4 QCs

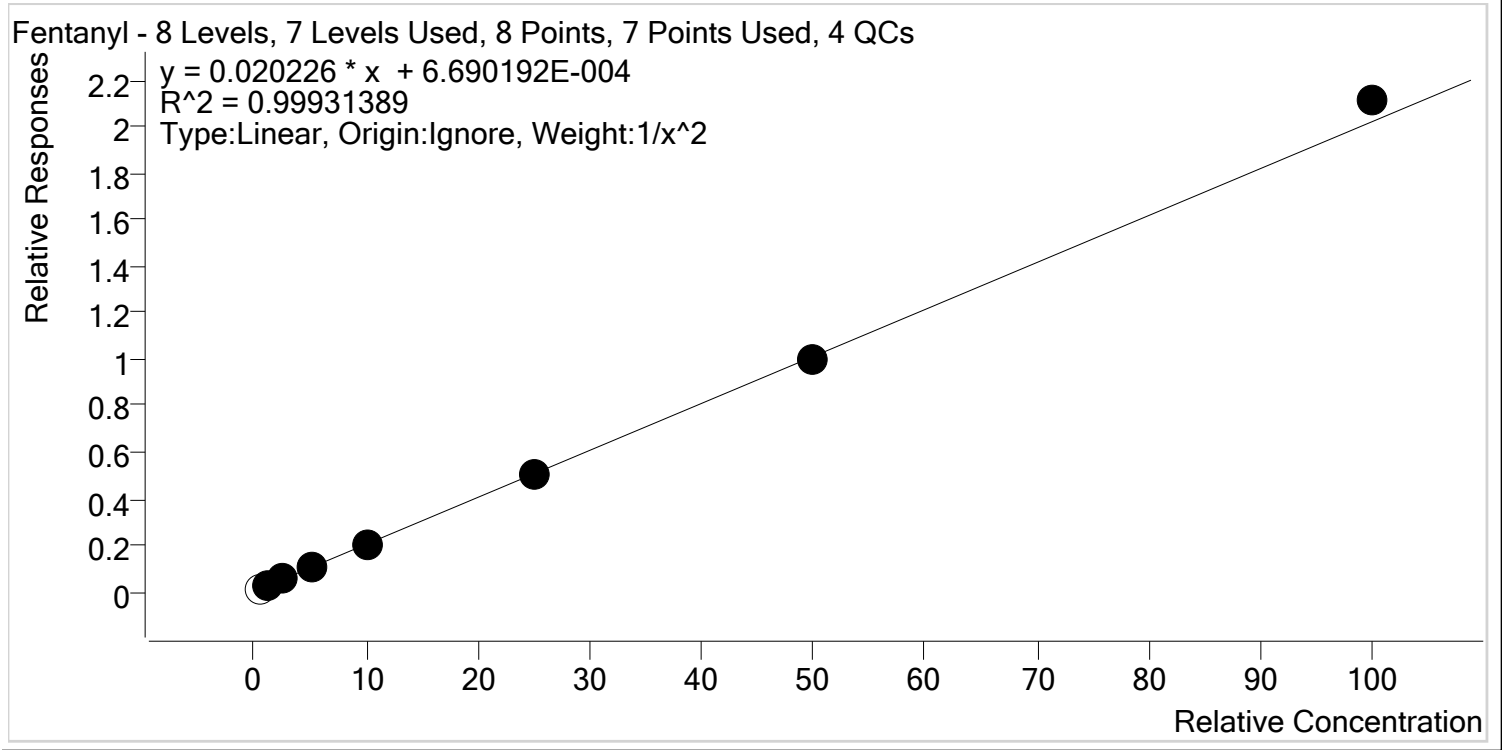


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	x	5.0	5.9	117.5
p1 Cal 2- 10ng	2	✓	10.0	10.0	100.1
p1 Cal 3 -25ng	3	✓	25.0	25.4	101.4
p1 Cal 4-50ng	4	✓	50.0	48.0	96.0
p1 Cal 5-100ng	5	✓	100.0	101.6	101.6
p1 Cal 6-250ng	6	✓	250.0	250.0	100.0
p1 Cal 7-500ng	7	✓	500.0	503.8	100.8
p1 Cal 8-1000ng	8	✓	1000.0	1001.1	100.1



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Fentanyl **Internal Standard** Fentanyl-D5



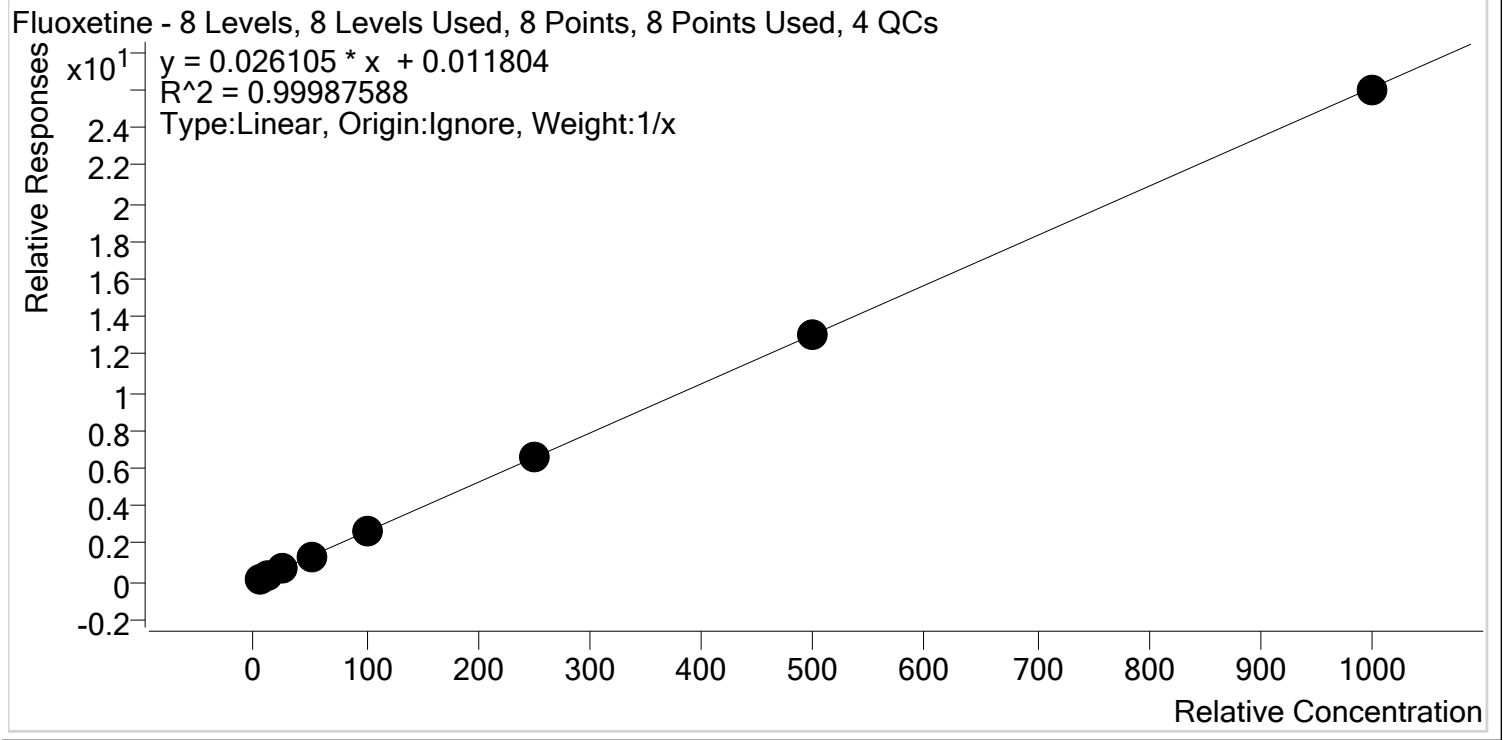
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	x	0.5	0.5	108.1
p1 Cal 2- 10ng	2	✓	1.0	1.0	100.3
p1 Cal 3 -25ng	3	✓	2.5	2.5	100.5
p1 Cal 4-50ng	4	✓	5.0	4.9	97.8
p1 Cal 5-100ng	5	✓	10.0	9.9	98.7
p1 Cal 6-250ng	6	✓	25.0	25.0	100.0
p1 Cal 7-500ng	7	✓	50.0	49.1	98.2
p1 Cal 8-1000ng	8	✓	100.0	104.5	104.5

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Fluoxetine **Internal Standard** Fluoxetine-D6



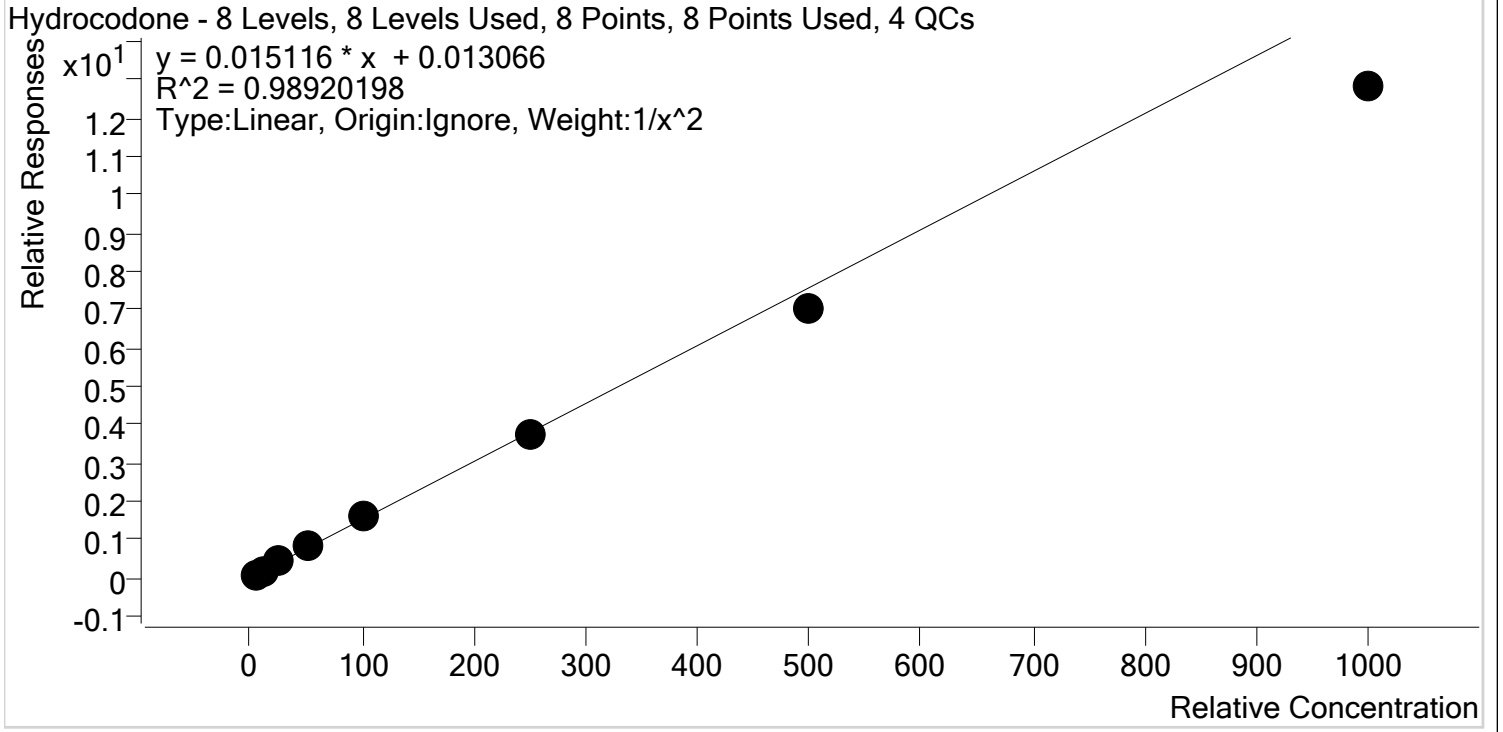
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.0
p1 Cal 2- 10ng	2	✓	10.0	9.8	97.8
p1 Cal 3 -25ng	3	✓	25.0	25.2	100.8
p1 Cal 4-50ng	4	✓	50.0	50.9	101.8
p1 Cal 5-100ng	5	✓	100.0	103.2	103.2
p1 Cal 6-250ng	6	✓	250.0	253.5	101.4
p1 Cal 7-500ng	7	✓	500.0	498.4	99.7
p1 Cal 8-1000ng	8	✓	1000.0	994.2	99.4



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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
 Last Cal. Update 5/17/2019 8:16 AM
 Analyst Name ISP\Datastor
 Analyte Hydrocodone Internal Standard Hydrocodone-D6

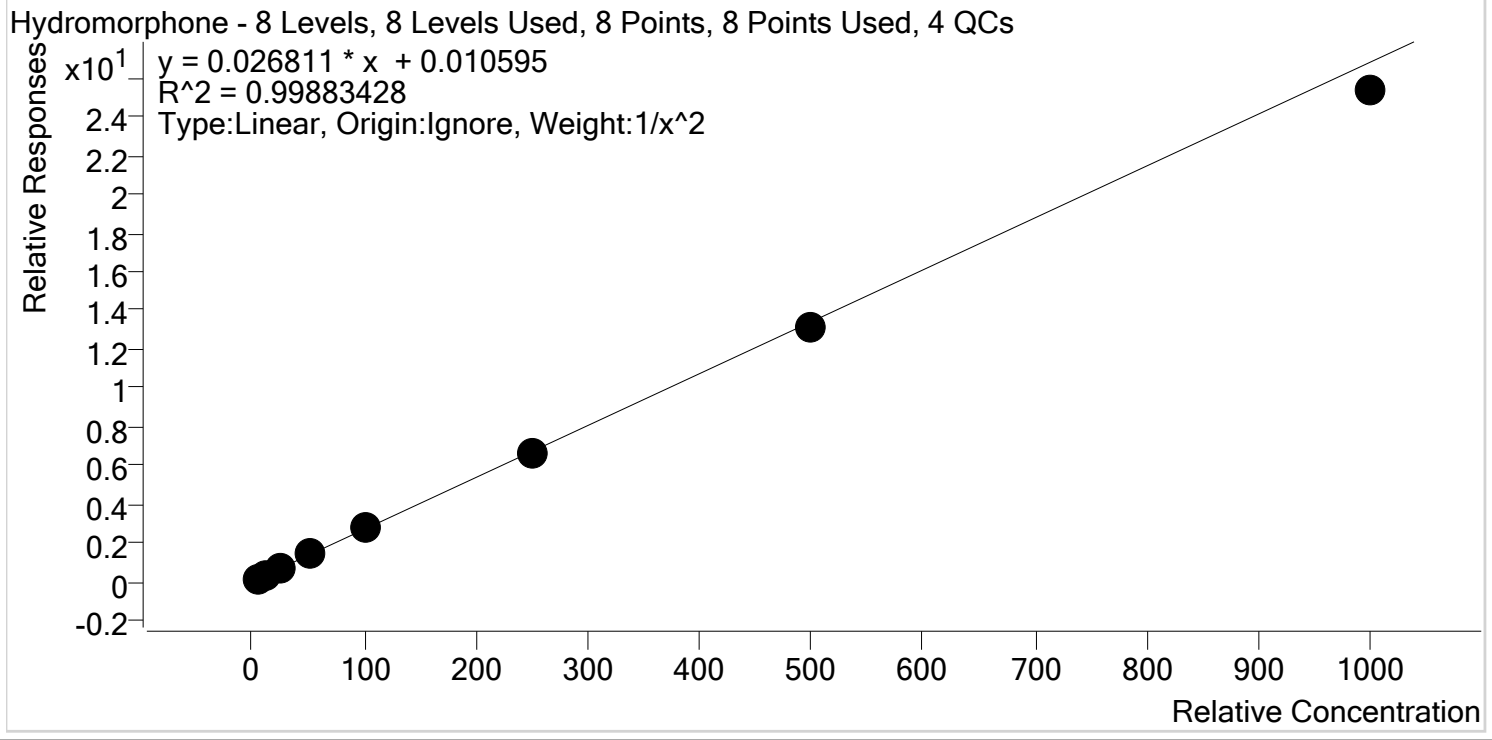


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.7	93.5
p1 Cal 2- 10ng	2	✓	10.0	10.9	108.6
p1 Cal 3 -25ng	3	✓	25.0	26.5	106.0
p1 Cal 4-50ng	4	✓	50.0	54.0	108.0
p1 Cal 5-100ng	5	✓	100.0	108.4	108.4
p1 Cal 6-250ng	6	✓	250.0	244.7	97.9
p1 Cal 7-500ng	7	✓	500.0	465.0	93.0
p1 Cal 8-1000ng	8	✓	1000.0	846.7	84.7



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Hydromorphone **Internal Standard** Hydromorphone-D6

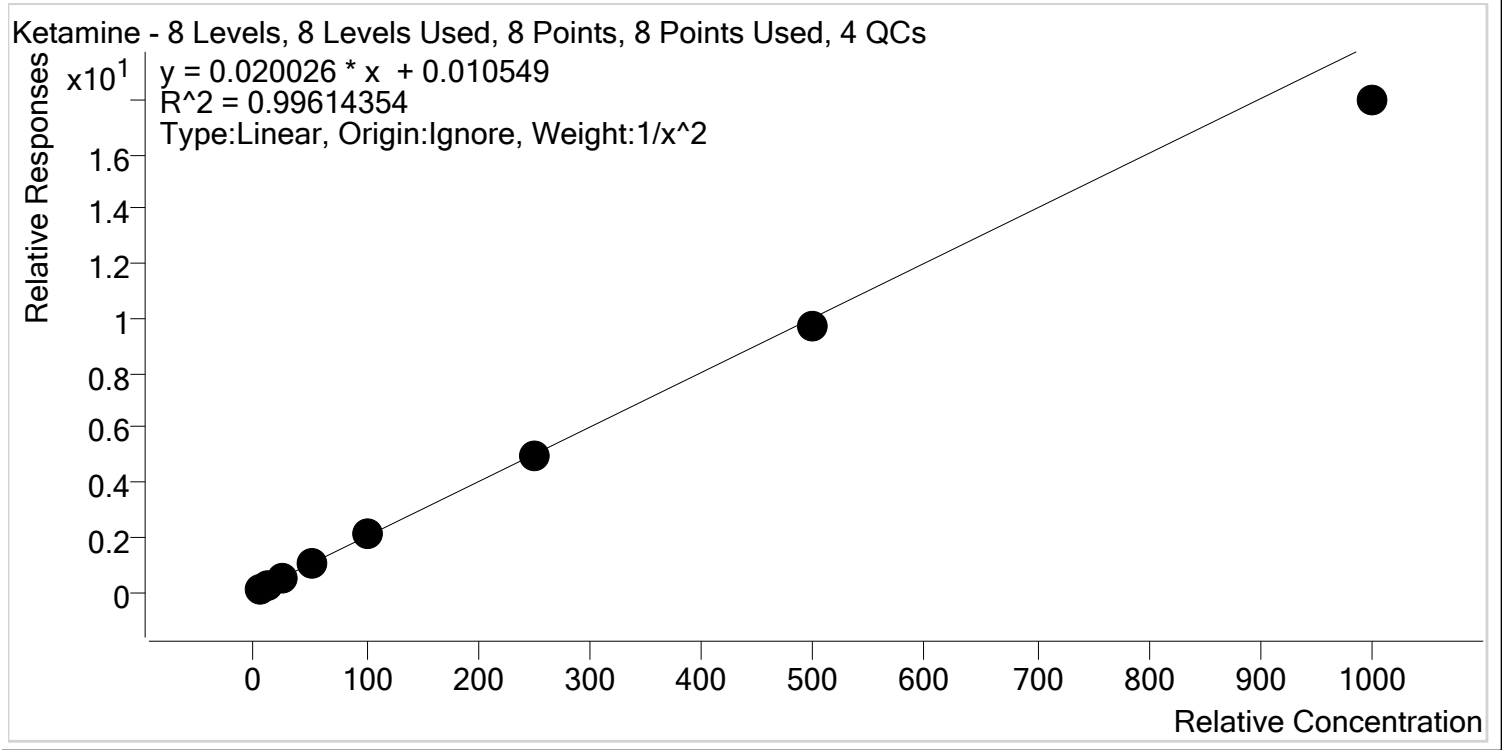


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.9	98.1
p1 Cal 2- 10ng	2	✓	10.0	10.3	102.5
p1 Cal 3 -25ng	3	✓	25.0	25.5	102.0
p1 Cal 4-50ng	4	✓	50.0	50.9	101.8
p1 Cal 5-100ng	5	✓	100.0	103.4	103.4
p1 Cal 6-250ng	6	✓	250.0	248.3	99.3
p1 Cal 7-500ng	7	✓	500.0	492.1	98.4
p1 Cal 8-1000ng	8	✓	1000.0	945.3	94.5



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Ketamine **Internal Standard** Ketamine-D4

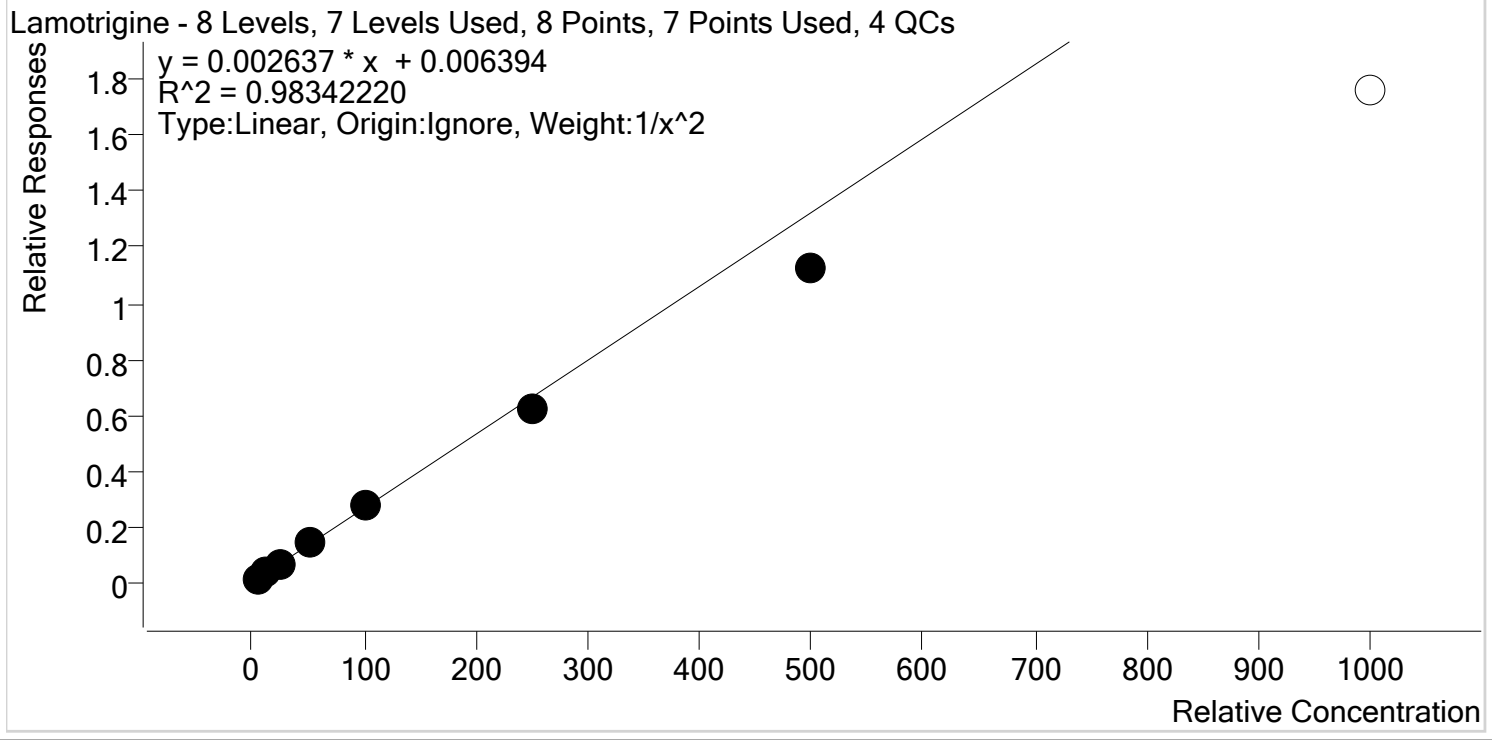


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.4
p1 Cal 2- 10ng	2	✓	10.0	10.4	104.5
p1 Cal 3 -25ng	3	✓	25.0	26.0	104.0
p1 Cal 4-50ng	4	✓	50.0	51.8	103.6
p1 Cal 5-100ng	5	✓	100.0	105.0	105.0
p1 Cal 6-250ng	6	✓	250.0	250.4	100.1
p1 Cal 7-500ng	7	✓	500.0	483.5	96.7
p1 Cal 8-1000ng	8	✓	1000.0	896.6	89.7



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Lamotrigine **Internal Standard** Ketamine-D4

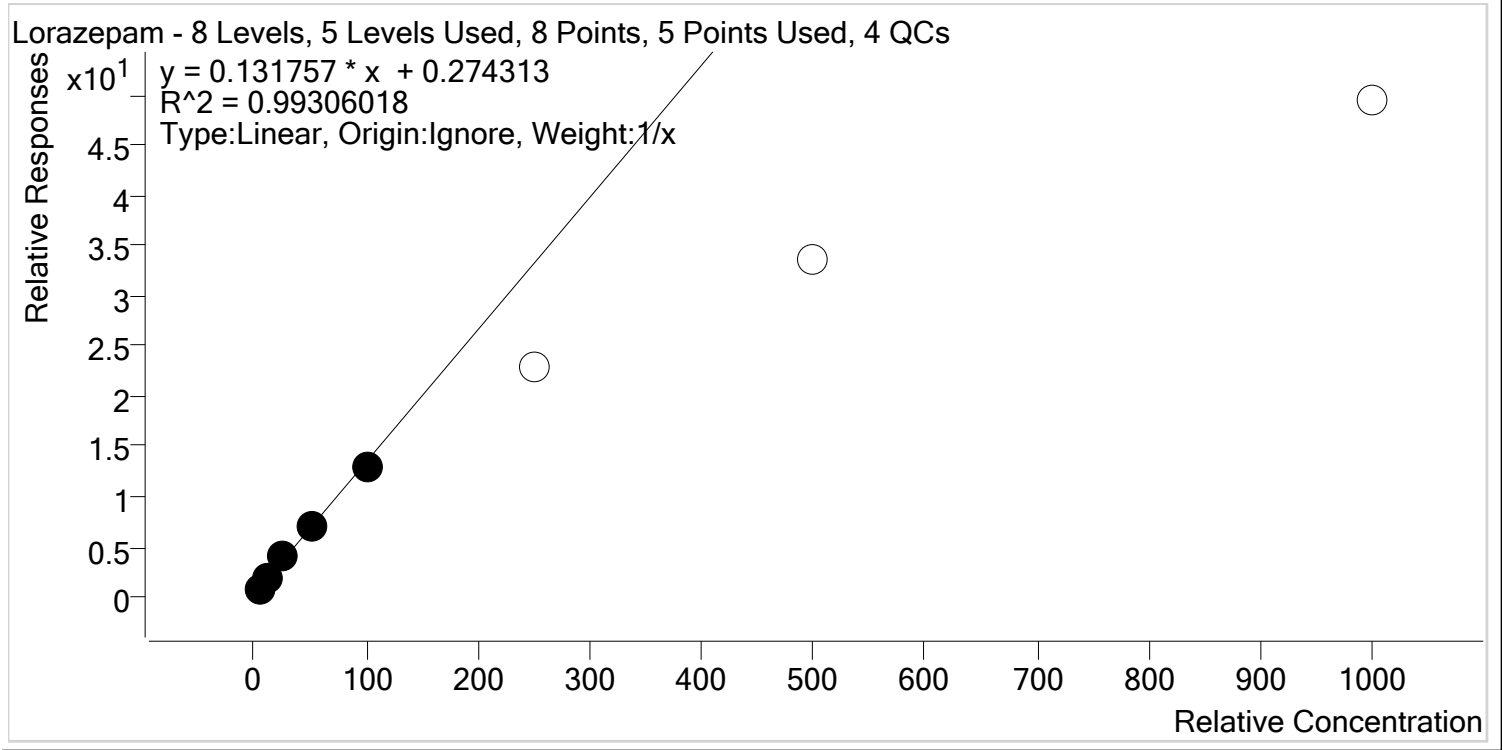


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.5	90.0
p1 Cal 2- 10ng	2	✓	10.0	11.7	117.3
p1 Cal 3 -25ng	3	✓	25.0	26.0	104.1
p1 Cal 4-50ng	4	✓	50.0	52.8	105.6
p1 Cal 5-100ng	5	✓	100.0	103.8	103.8
p1 Cal 6-250ng	6	✓	250.0	235.8	94.3
p1 Cal 7-500ng	7	✓	500.0	424.4	84.9
p1 Cal 8-1000ng	8	✗	1000.0	664.9	66.5



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Lorazepam **Internal Standard** Clonazepam-D4



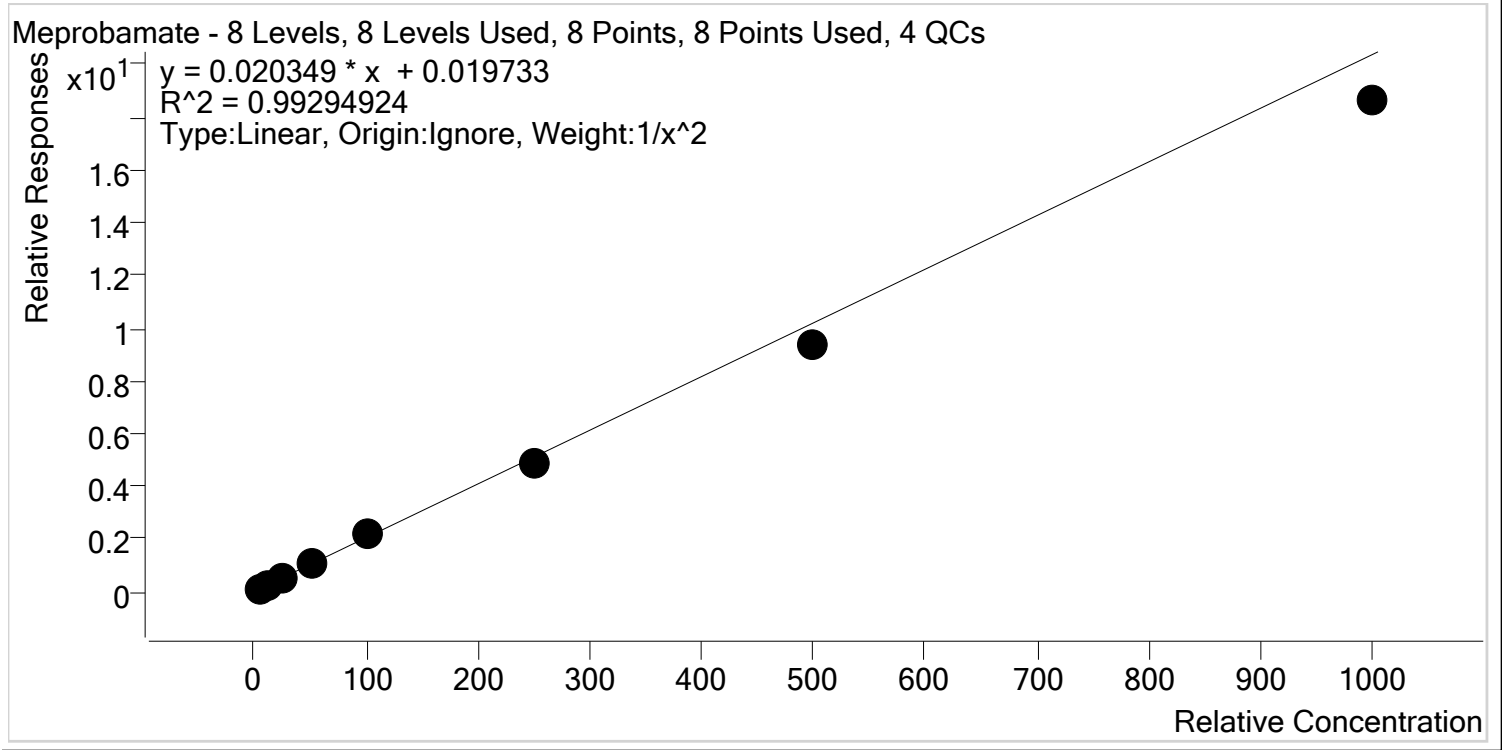
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.1	81.9
p1 Cal 2- 10ng	2	✓	10.0	10.8	108.0
p1 Cal 3 -25ng	3	✓	25.0	27.5	109.9
p1 Cal 4-50ng	4	✓	50.0	52.6	105.2
p1 Cal 5-100ng	5	✓	100.0	95.0	95.0
p1 Cal 6-250ng	6	✗	250.0	171.3	68.5
p1 Cal 7-500ng	7	✗	500.0	253.4	50.7
p1 Cal 8-1000ng	8	✗	1000.0	373.2	37.3

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Meprobamate **Internal Standard** Meprobamate-D7

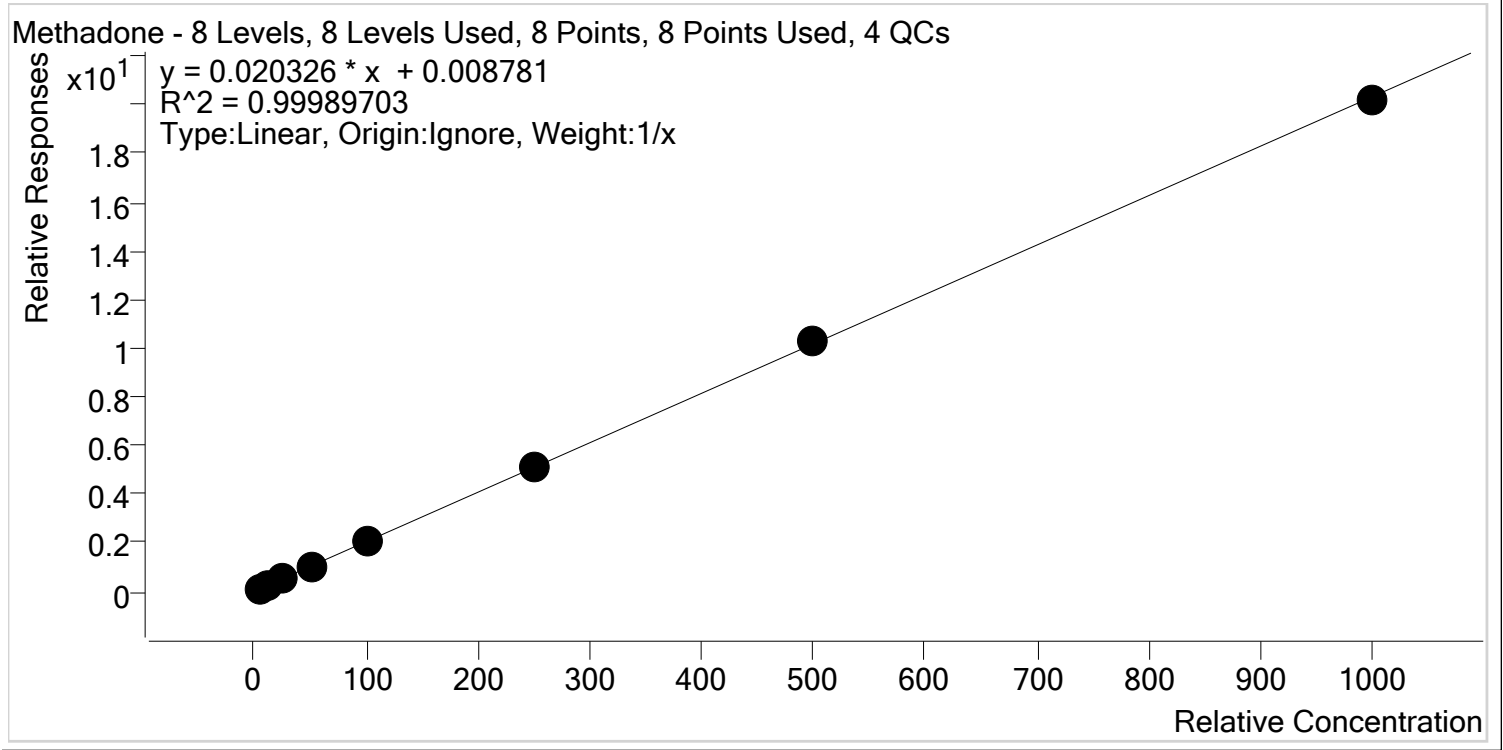


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.7	94.2
p1 Cal 2- 10ng	2	✓	10.0	10.8	107.5
p1 Cal 3 -25ng	3	✓	25.0	26.6	106.6
p1 Cal 4-50ng	4	✓	50.0	53.3	106.6
p1 Cal 5-100ng	5	✓	100.0	106.0	106.0
p1 Cal 6-250ng	6	✓	250.0	240.6	96.3
p1 Cal 7-500ng	7	✓	500.0	457.2	91.4
p1 Cal 8-1000ng	8	✓	1000.0	914.4	91.4



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Methadone **Internal Standard** Methadone-D9

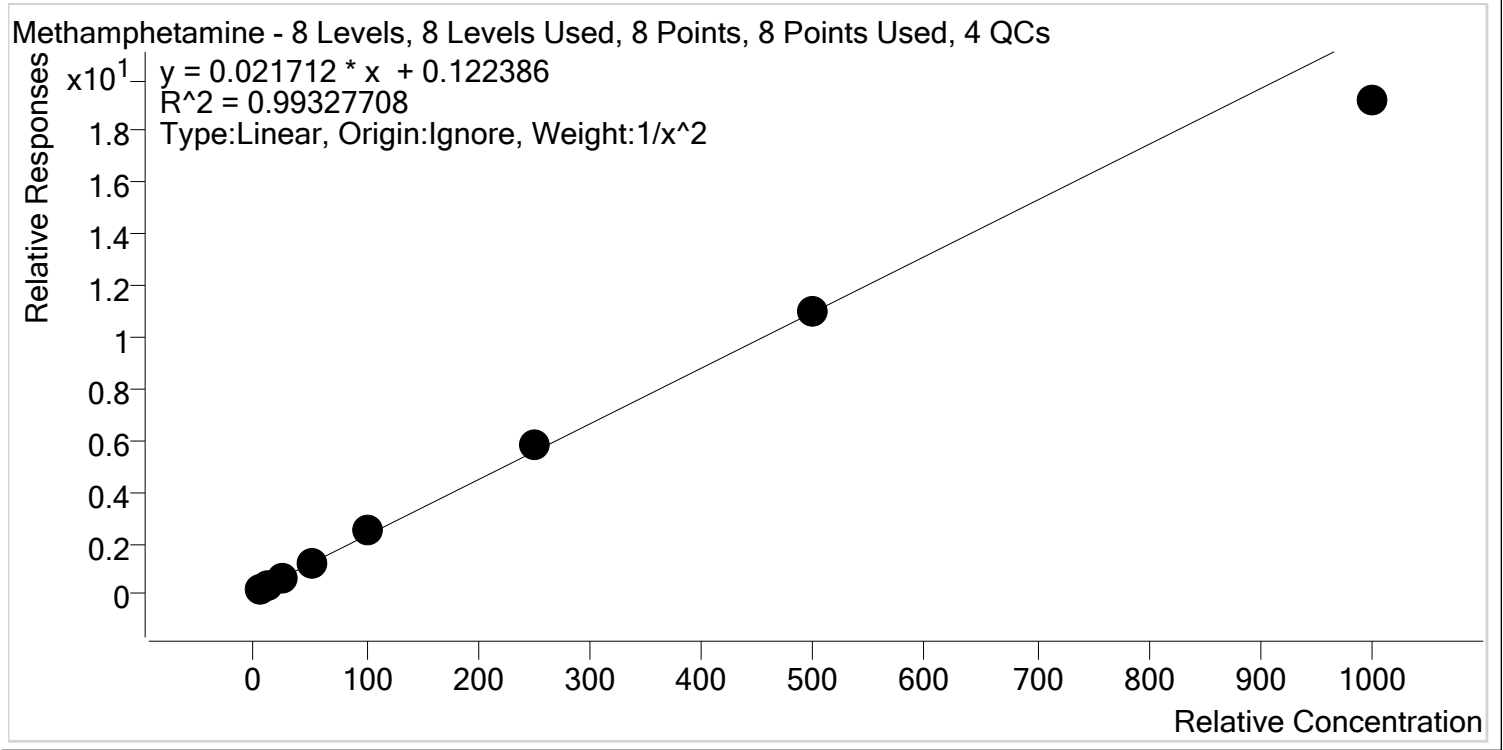


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.7	94.8
p1 Cal 2- 10ng	2	✓	10.0	10.0	100.4
p1 Cal 3 -25ng	3	✓	25.0	25.7	102.6
p1 Cal 4-50ng	4	✓	50.0	49.6	99.2
p1 Cal 5-100ng	5	✓	100.0	102.2	102.2
p1 Cal 6-250ng	6	✓	250.0	251.7	100.7
p1 Cal 7-500ng	7	✓	500.0	503.7	100.7
p1 Cal 8-1000ng	8	✓	1000.0	992.3	99.2



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Methamphetamine **Internal Standard** Methamphetamine-D11

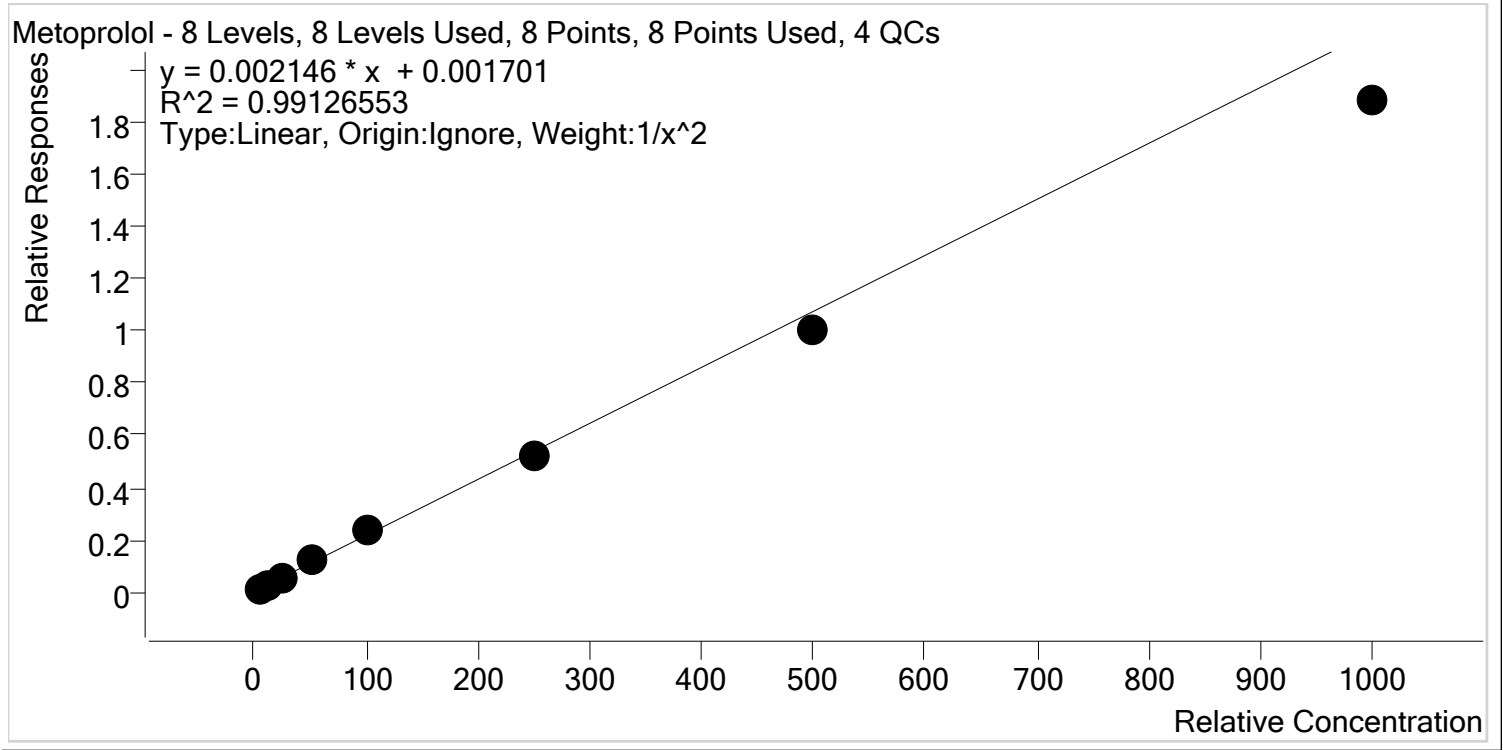


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	5.2	103.6
p1 Cal 2- 10ng	2	✓	10.0	9.2	92.3
p1 Cal 3 -25ng	3	✓	25.0	24.2	96.7
p1 Cal 4-50ng	4	✓	50.0	51.9	103.9
p1 Cal 5-100ng	5	✓	100.0	108.7	108.7
p1 Cal 6-250ng	6	✓	250.0	265.1	106.1
p1 Cal 7-500ng	7	✓	500.0	504.4	100.9
p1 Cal 8-1000ng	8	✓	1000.0	878.6	87.9



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Metoprolol **Internal Standard** Tramadol-13C-D3

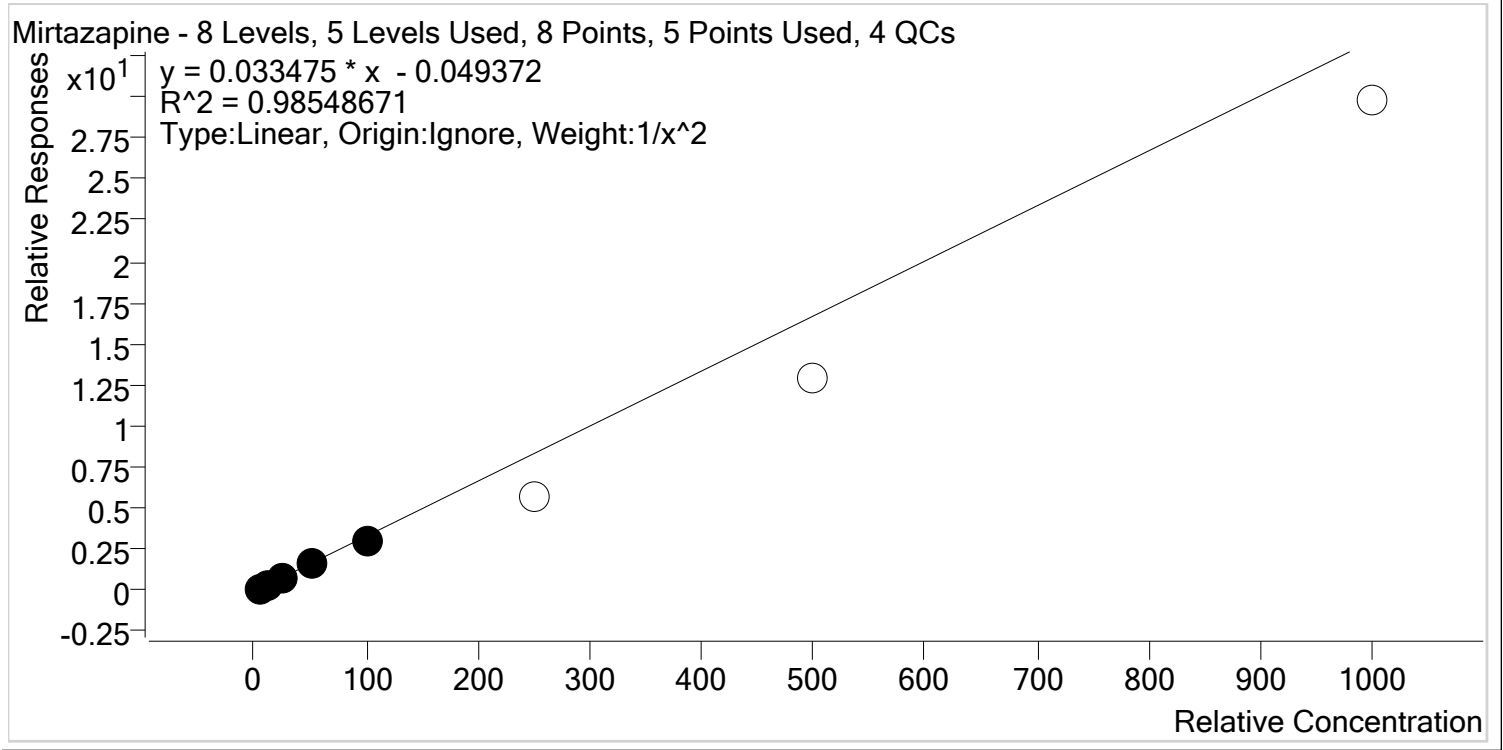


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.7	93.6
p1 Cal 2- 10ng	2	✓	10.0	10.9	109.0
p1 Cal 3 -25ng	3	✓	25.0	26.2	104.7
p1 Cal 4-50ng	4	✓	50.0	53.8	107.5
p1 Cal 5-100ng	5	✓	100.0	107.6	107.6
p1 Cal 6-250ng	6	✓	250.0	240.7	96.3
p1 Cal 7-500ng	7	✓	500.0	468.1	93.6
p1 Cal 8-1000ng	8	✓	1000.0	876.5	87.6



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Mirtazapine **Internal Standard** alpha-PVP-d8



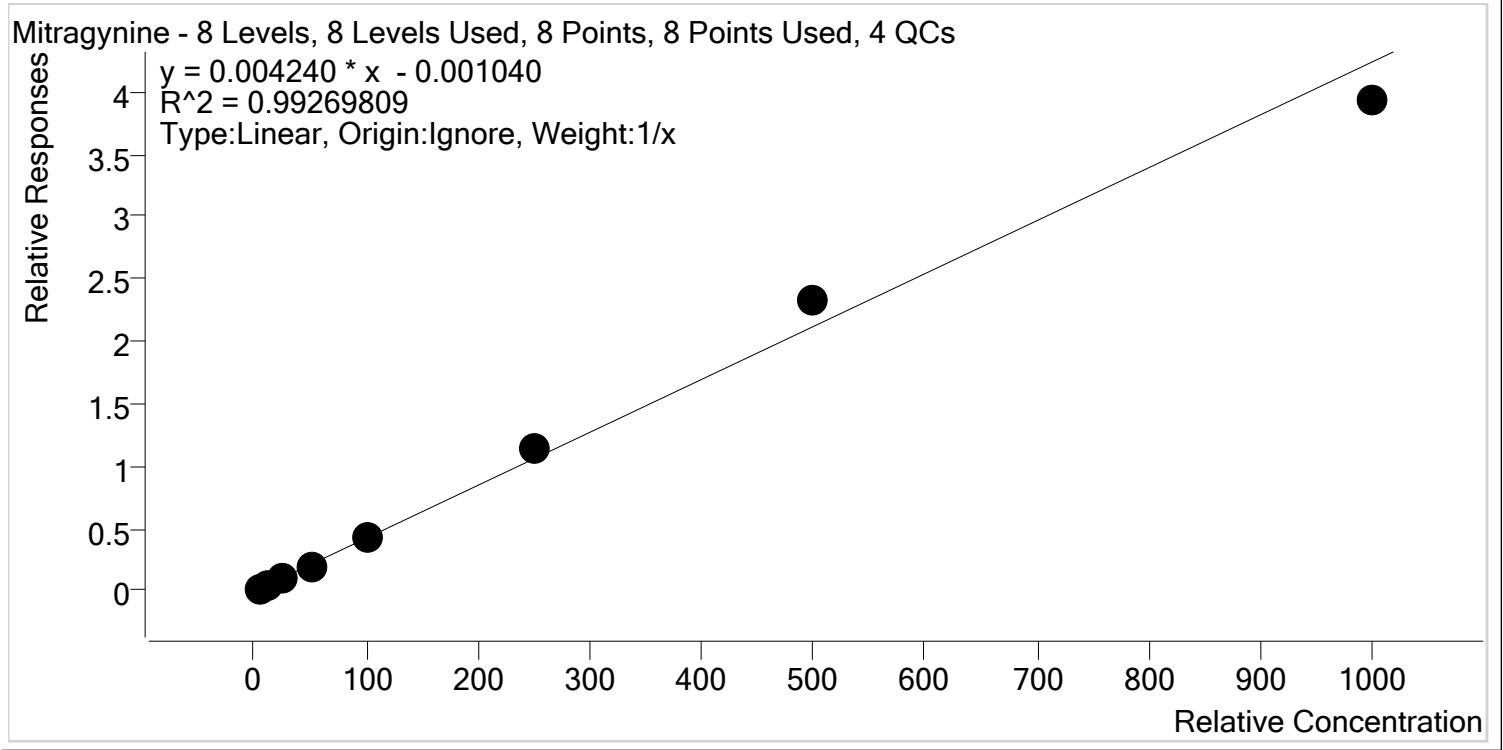
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.6	92.6
p1 Cal 2- 10ng	2	✓	10.0	11.5	115.0
p1 Cal 3 -25ng	3	✓	25.0	25.8	103.2
p1 Cal 4-50ng	4	✓	50.0	47.6	95.2
p1 Cal 5-100ng	5	✓	100.0	93.9	93.9
p1 Cal 6-250ng	6	✗	250.0	172.5	69.0
p1 Cal 7-500ng	7	✗	500.0	387.2	77.4
p1 Cal 8-1000ng	8	✗	1000.0	891.3	89.1

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Mitragynine **Internal Standard** Methadone-D9



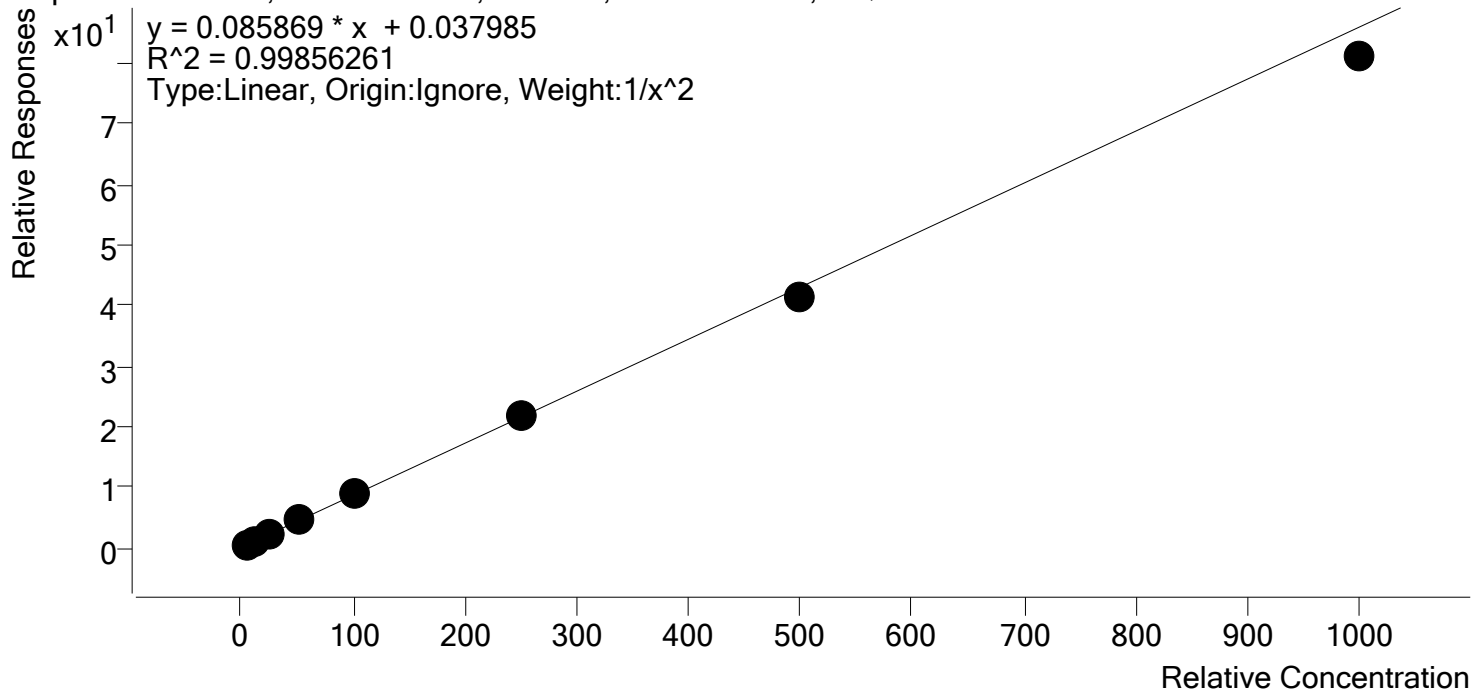
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.6	91.3
p1 Cal 2- 10ng	2	✓	10.0	10.0	99.8
p1 Cal 3 -25ng	3	✓	25.0	25.3	101.3
p1 Cal 4-50ng	4	✓	50.0	46.5	93.0
p1 Cal 5-100ng	5	✓	100.0	102.8	102.8
p1 Cal 6-250ng	6	✓	250.0	271.5	108.6
p1 Cal 7-500ng	7	✓	500.0	552.3	110.5
p1 Cal 8-1000ng	8	✓	1000.0	927.0	92.7



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Morphine **Internal Standard** Morphine-D6

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

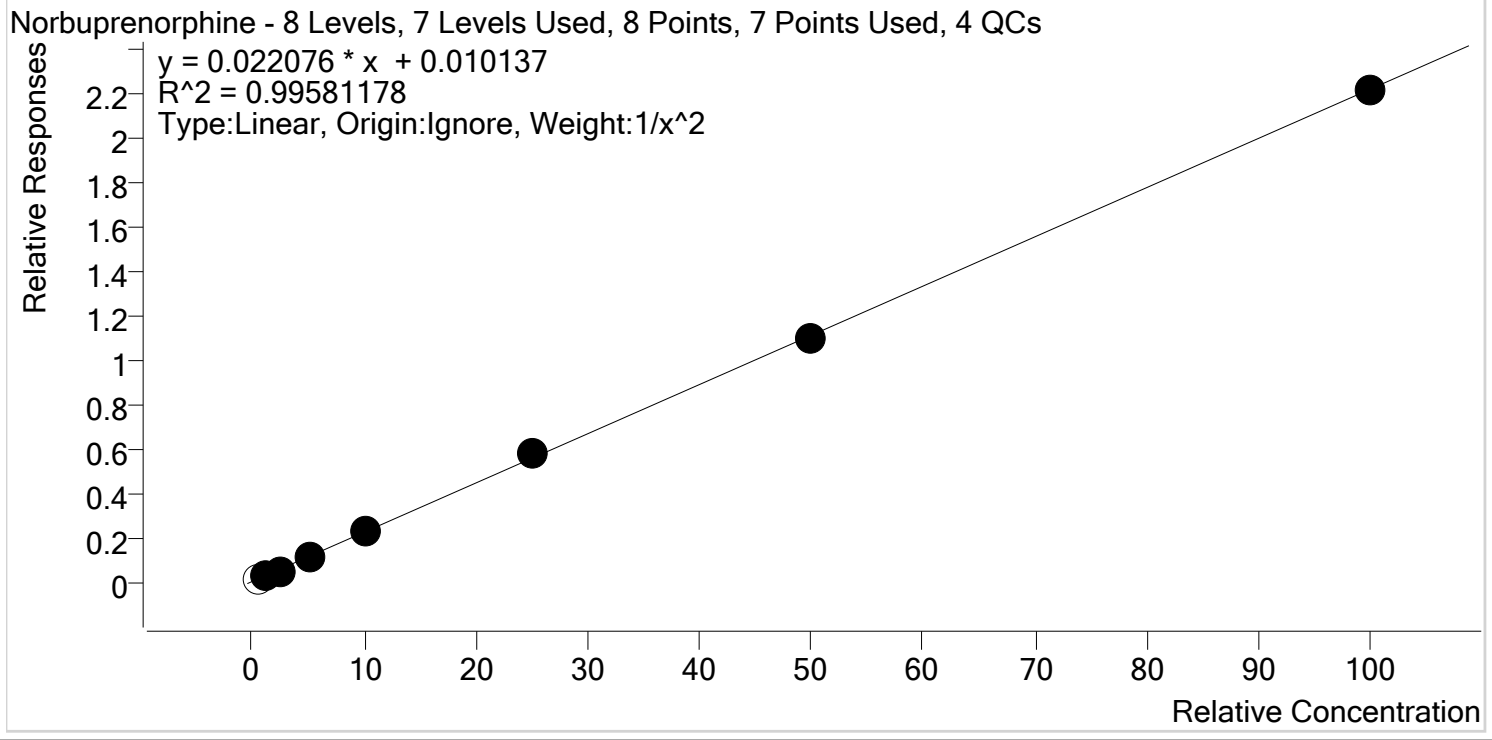


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.9	97.9
p1 Cal 2- 10ng	2	✓	10.0	10.3	102.5
p1 Cal 3 -25ng	3	✓	25.0	25.5	102.2
p1 Cal 4-50ng	4	✓	50.0	51.2	102.5
p1 Cal 5-100ng	5	✓	100.0	103.2	103.2
p1 Cal 6-250ng	6	✓	250.0	251.6	100.6
p1 Cal 7-500ng	7	✓	500.0	483.2	96.6
p1 Cal 8-1000ng	8	✓	1000.0	943.4	94.3



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Norbuprenorphine **Internal Standard** Norbuprenorphine-D3

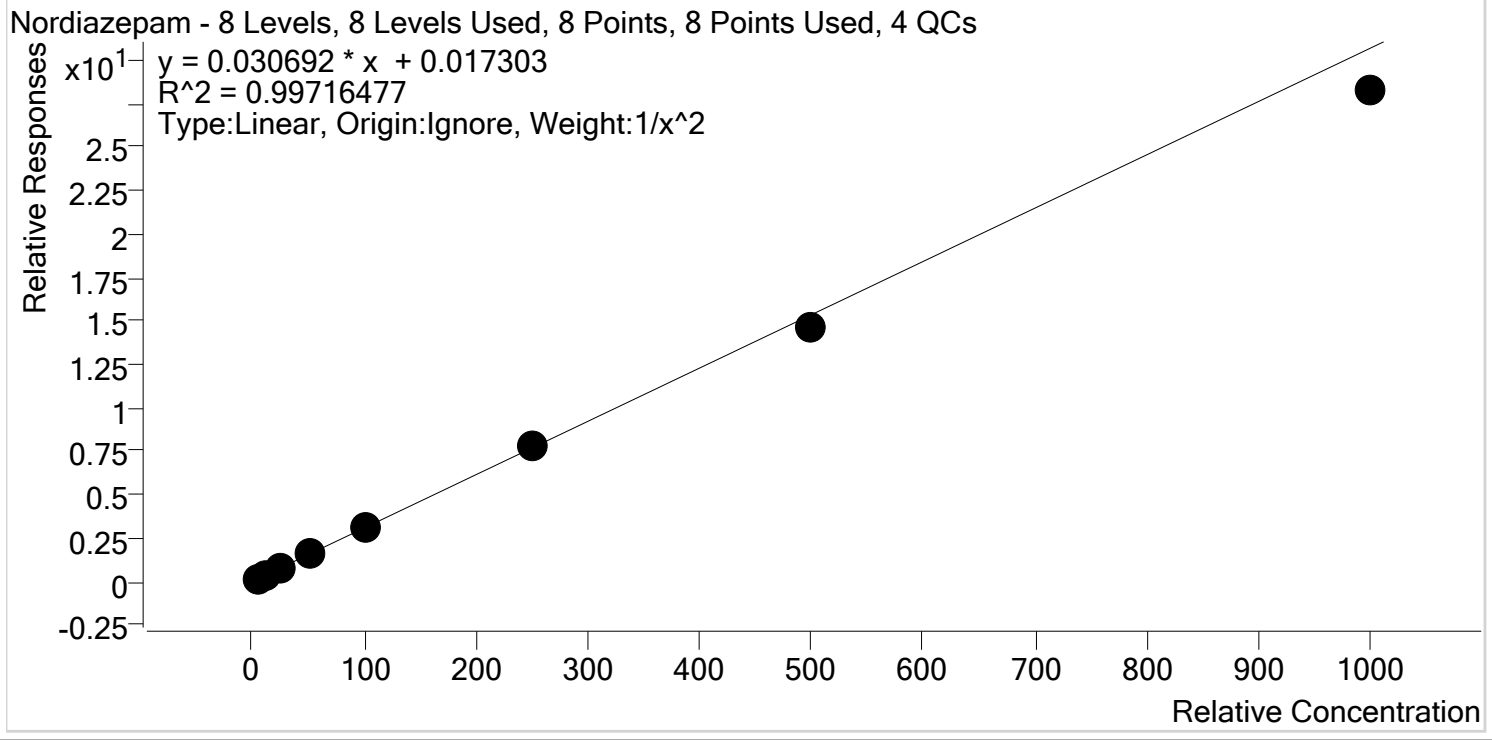


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	x	0.5	0.5	108.4
p1 Cal 2- 10ng	2	✓	1.0	1.0	103.7
p1 Cal 3 -25ng	3	✓	2.5	2.2	88.4
p1 Cal 4-50ng	4	✓	5.0	5.1	102.0
p1 Cal 5-100ng	5	✓	10.0	10.4	104.0
p1 Cal 6-250ng	6	✓	25.0	26.0	104.0
p1 Cal 7-500ng	7	✓	50.0	49.1	98.2
p1 Cal 8-1000ng	8	✓	100.0	99.7	99.7



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Nordiazepam **Internal Standard** Nordiazepam-D5

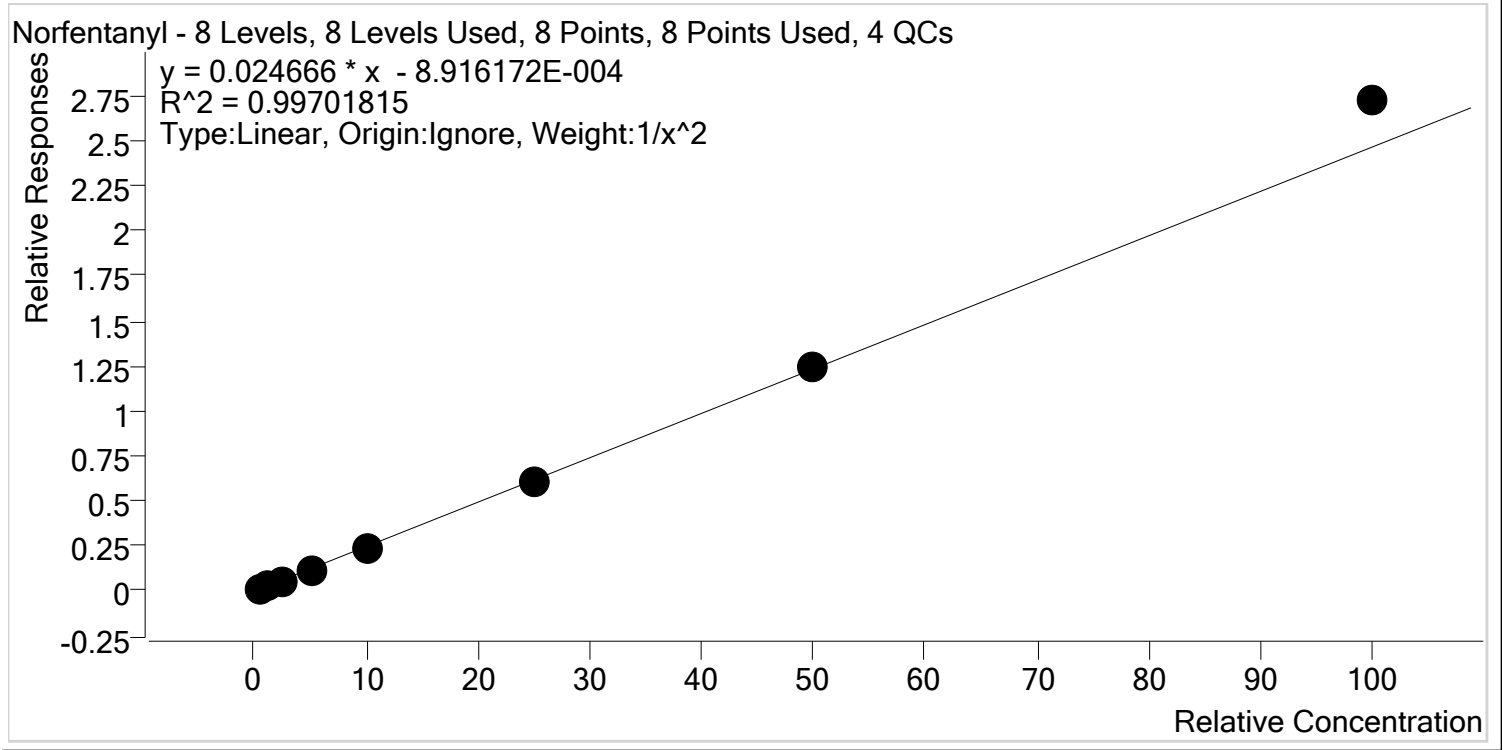


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.9	97.3
p1 Cal 2- 10ng	2	✓	10.0	10.3	102.6
p1 Cal 3 -25ng	3	✓	25.0	26.1	104.3
p1 Cal 4-50ng	4	✓	50.0	51.9	103.9
p1 Cal 5-100ng	5	✓	100.0	102.5	102.5
p1 Cal 6-250ng	6	✓	250.0	256.0	102.4
p1 Cal 7-500ng	7	✓	500.0	474.1	94.8
p1 Cal 8-1000ng	8	✓	1000.0	920.6	92.1



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Norfentanyl **Internal Standard** Norfentanyl-D5

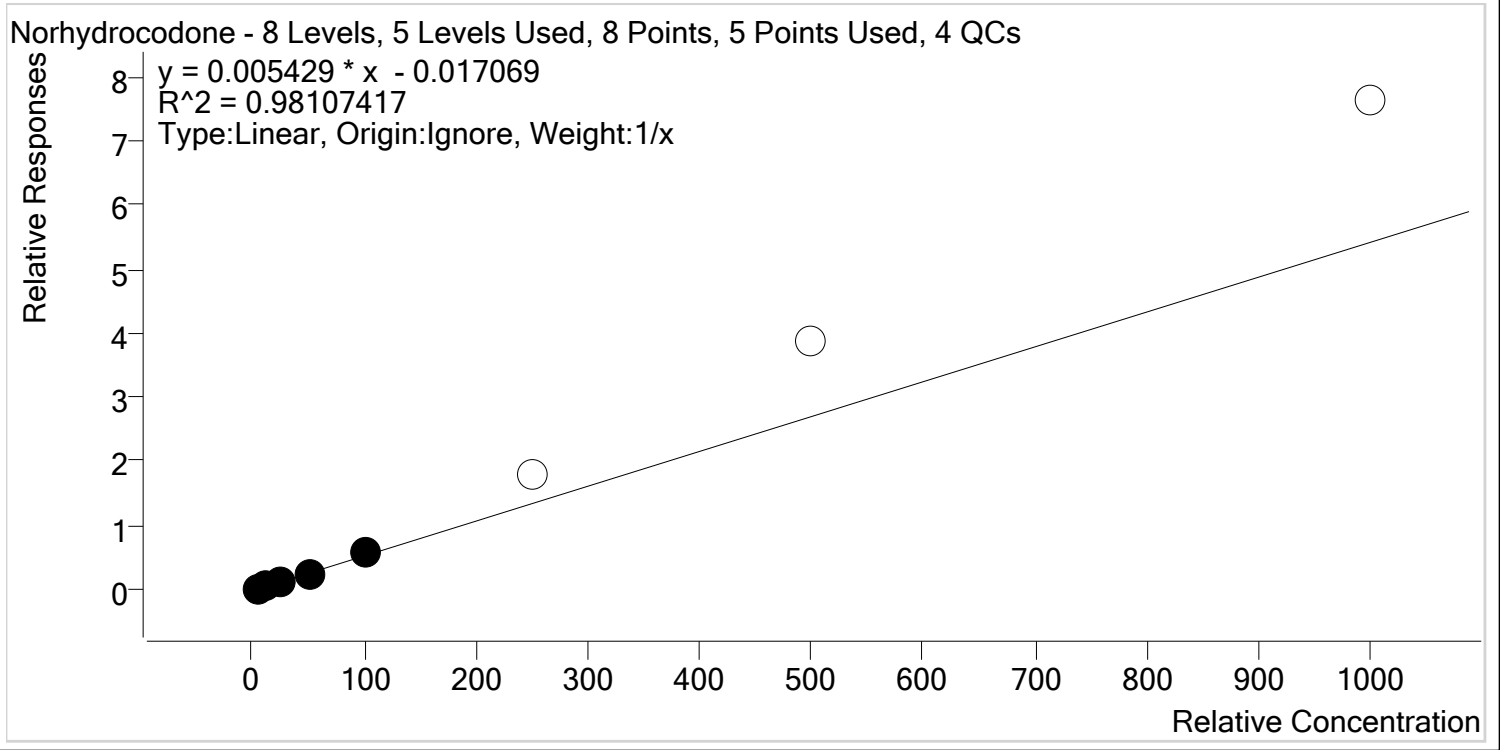


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	0.5	0.5	100.8
p1 Cal 2- 10ng	2	✓	1.0	1.0	101.1
p1 Cal 3 -25ng	3	✓	2.5	2.4	95.3
p1 Cal 4-50ng	4	✓	5.0	4.8	96.9
p1 Cal 5-100ng	5	✓	10.0	9.8	97.6
p1 Cal 6-250ng	6	✓	25.0	24.3	97.1
p1 Cal 7-500ng	7	✓	50.0	50.4	100.7
p1 Cal 8-1000ng	8	✓	100.0	110.5	110.5



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Norhydrocodone **Internal Standard** Norhydrocodone-D3

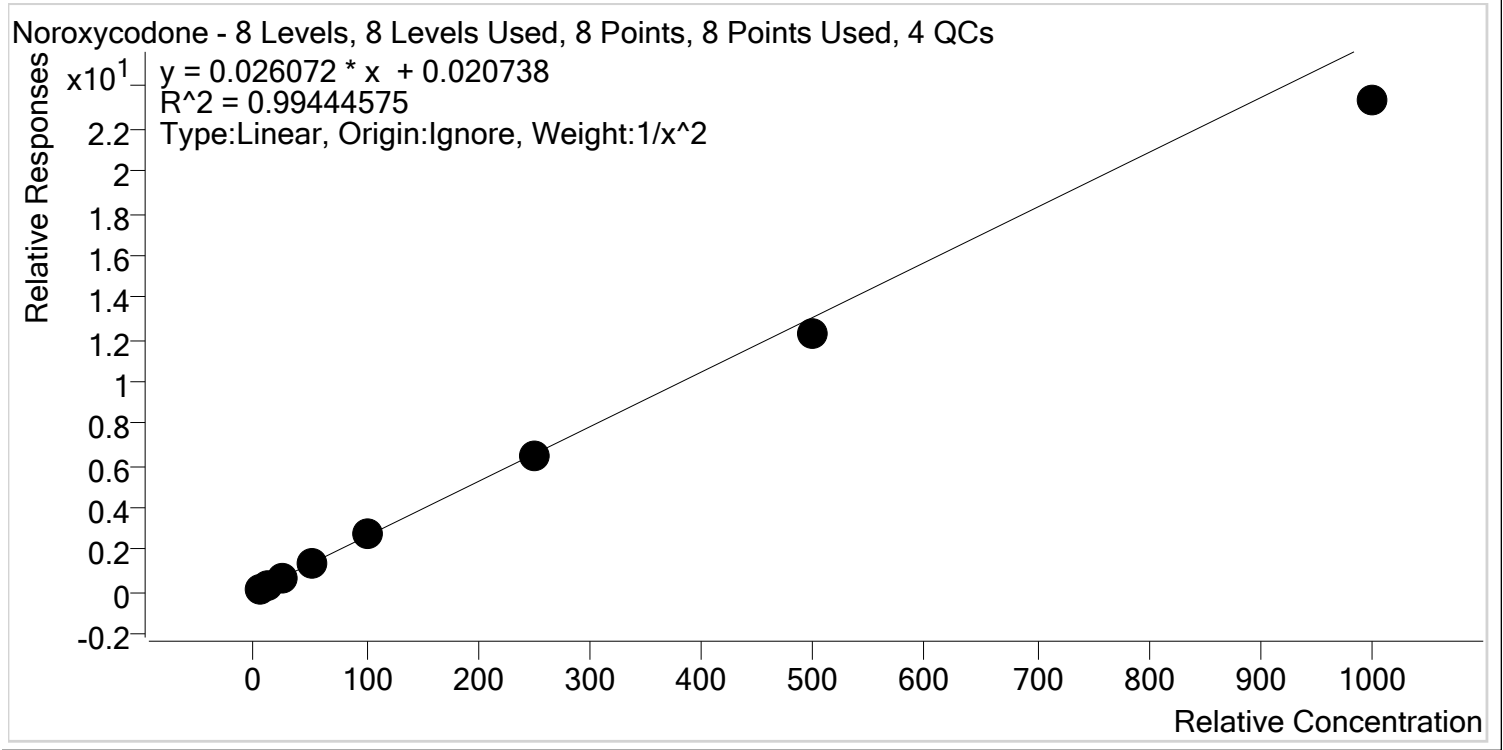


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	6.0	120.0
p1 Cal 2- 10ng	2	✓	10.0	9.8	98.5
p1 Cal 3 -25ng	3	✓	25.0	21.2	84.7
p1 Cal 4-50ng	4	✓	50.0	43.9	87.8
p1 Cal 5-100ng	5	✓	100.0	109.1	109.1
p1 Cal 6-250ng	6	x	250.0	334.3	133.7
p1 Cal 7-500ng	7	x	500.0	717.0	143.4
p1 Cal 8-1000ng	8	x	1000.0	1407.0	140.7



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Noroxycodone **Internal Standard** Noroxycodone-D3

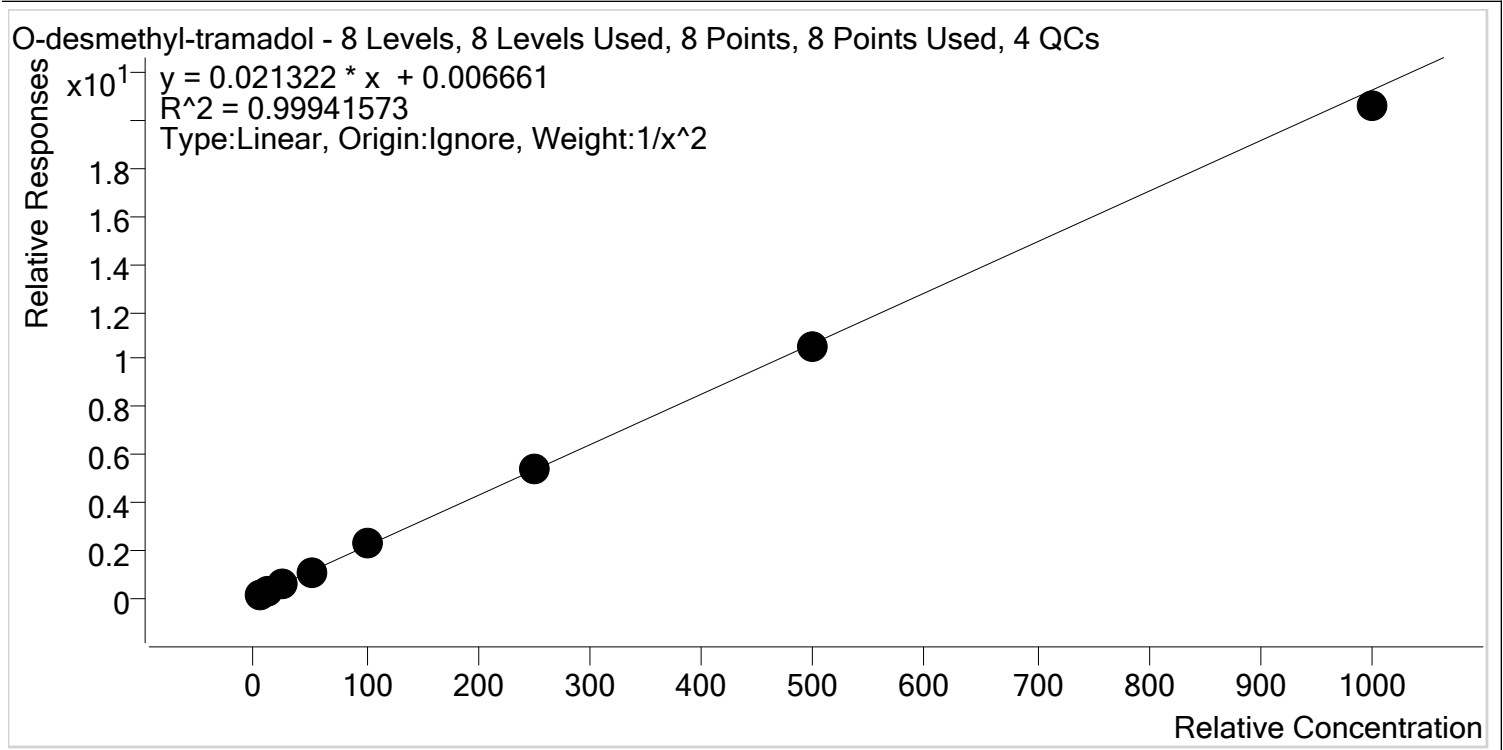


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	95.6
p1 Cal 2- 10ng	2	✓	10.0	10.5	104.8
p1 Cal 3 -25ng	3	✓	25.0	26.8	107.3
p1 Cal 4-50ng	4	✓	50.0	52.0	104.0
p1 Cal 5-100ng	5	✓	100.0	106.2	106.2
p1 Cal 6-250ng	6	✓	250.0	246.0	98.4
p1 Cal 7-500ng	7	✓	500.0	471.7	94.3
p1 Cal 8-1000ng	8	✓	1000.0	894.8	89.5



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte O-desmethyl-tramadol **Internal Standard** O-desmethyl-tramadol-D6



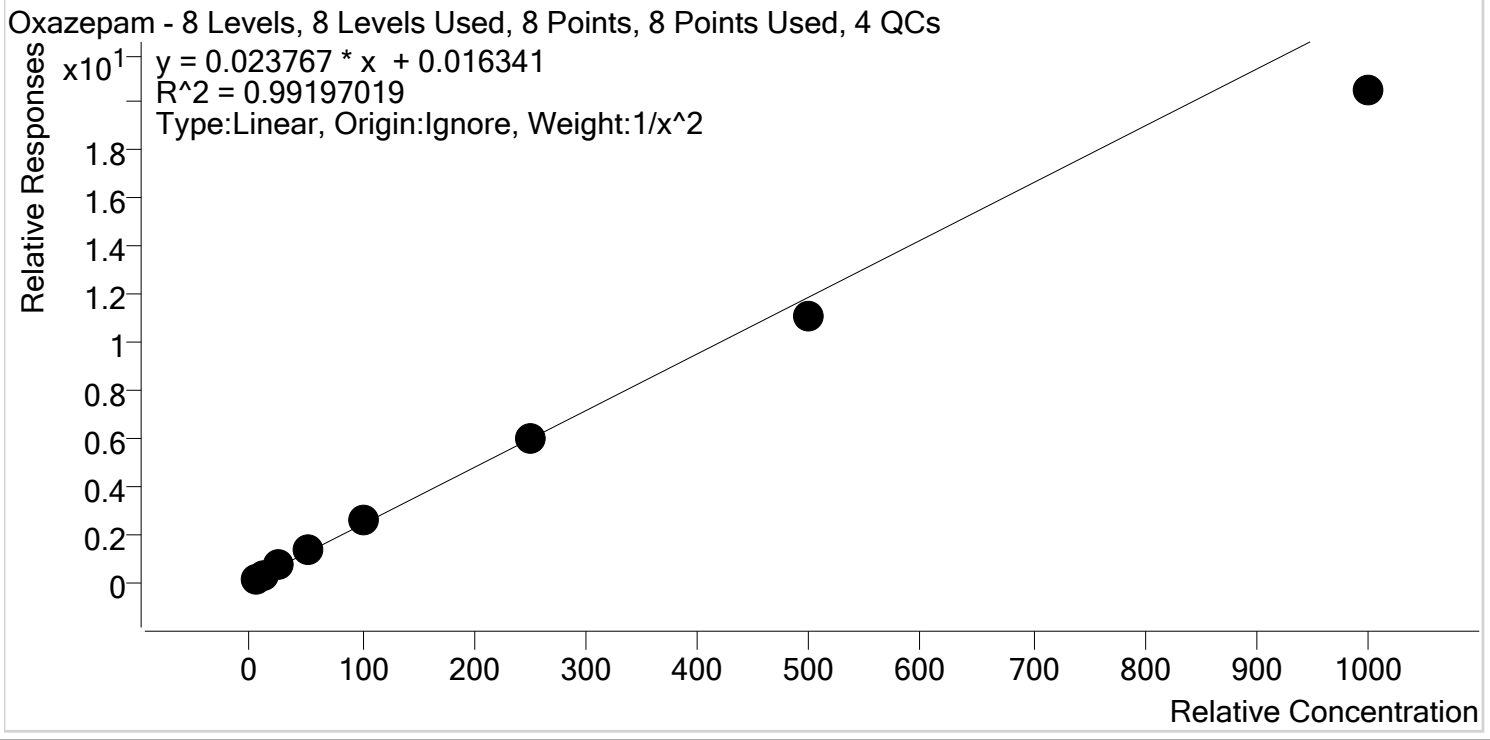
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.9	98.3
p1 Cal 2- 10ng	2	✓	10.0	10.3	103.2
p1 Cal 3 -25ng	3	✓	25.0	25.0	100.0
p1 Cal 4-50ng	4	✓	50.0	50.1	100.2
p1 Cal 5-100ng	5	✓	100.0	102.5	102.5
p1 Cal 6-250ng	6	✓	250.0	249.4	99.8
p1 Cal 7-500ng	7	✓	500.0	495.9	99.2
p1 Cal 8-1000ng	8	✓	1000.0	968.0	96.8

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Oxazepam **Internal Standard** Oxazepam-D5

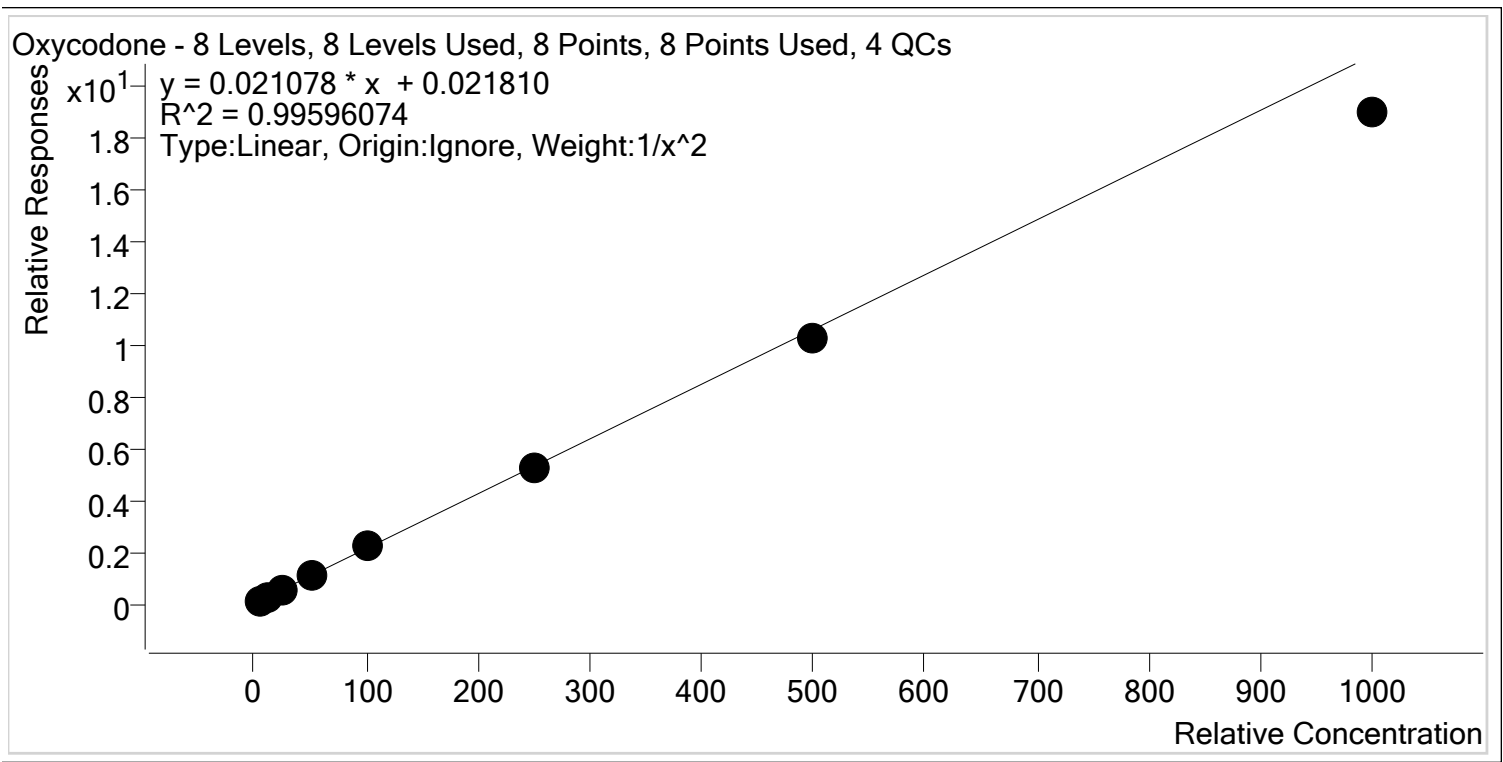


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.7	94.9
p1 Cal 2- 10ng	2	✓	10.0	10.5	105.4
p1 Cal 3 -25ng	3	✓	25.0	27.1	108.4
p1 Cal 4-50ng	4	✓	50.0	52.9	105.9
p1 Cal 5-100ng	5	✓	100.0	106.1	106.1
p1 Cal 6-250ng	6	✓	250.0	248.7	99.5
p1 Cal 7-500ng	7	✓	500.0	468.3	93.7
p1 Cal 8-1000ng	8	✓	1000.0	862.4	86.2



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Oxycodone **Internal Standard** Oxycodone-D6



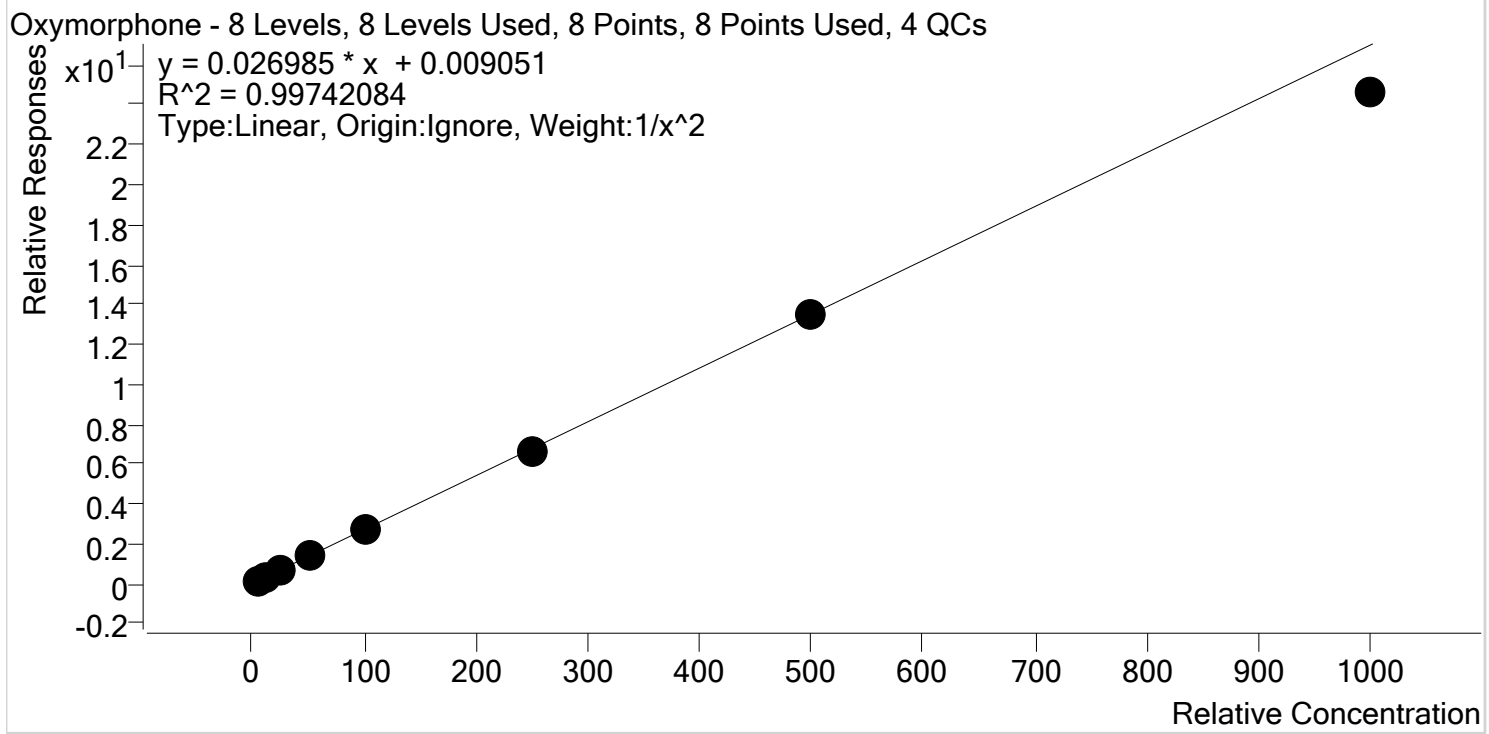
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.1
p1 Cal 2- 10ng	2	✓	10.0	10.5	105.2
p1 Cal 3 -25ng	3	✓	25.0	25.8	103.3
p1 Cal 4-50ng	4	✓	50.0	52.9	105.8
p1 Cal 5-100ng	5	✓	100.0	103.3	103.3
p1 Cal 6-250ng	6	✓	250.0	248.6	99.5
p1 Cal 7-500ng	7	✓	500.0	486.2	97.2
p1 Cal 8-1000ng	8	✓	1000.0	895.9	89.6

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AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Oxymorphone **Internal Standard** Oxymorphone-D3

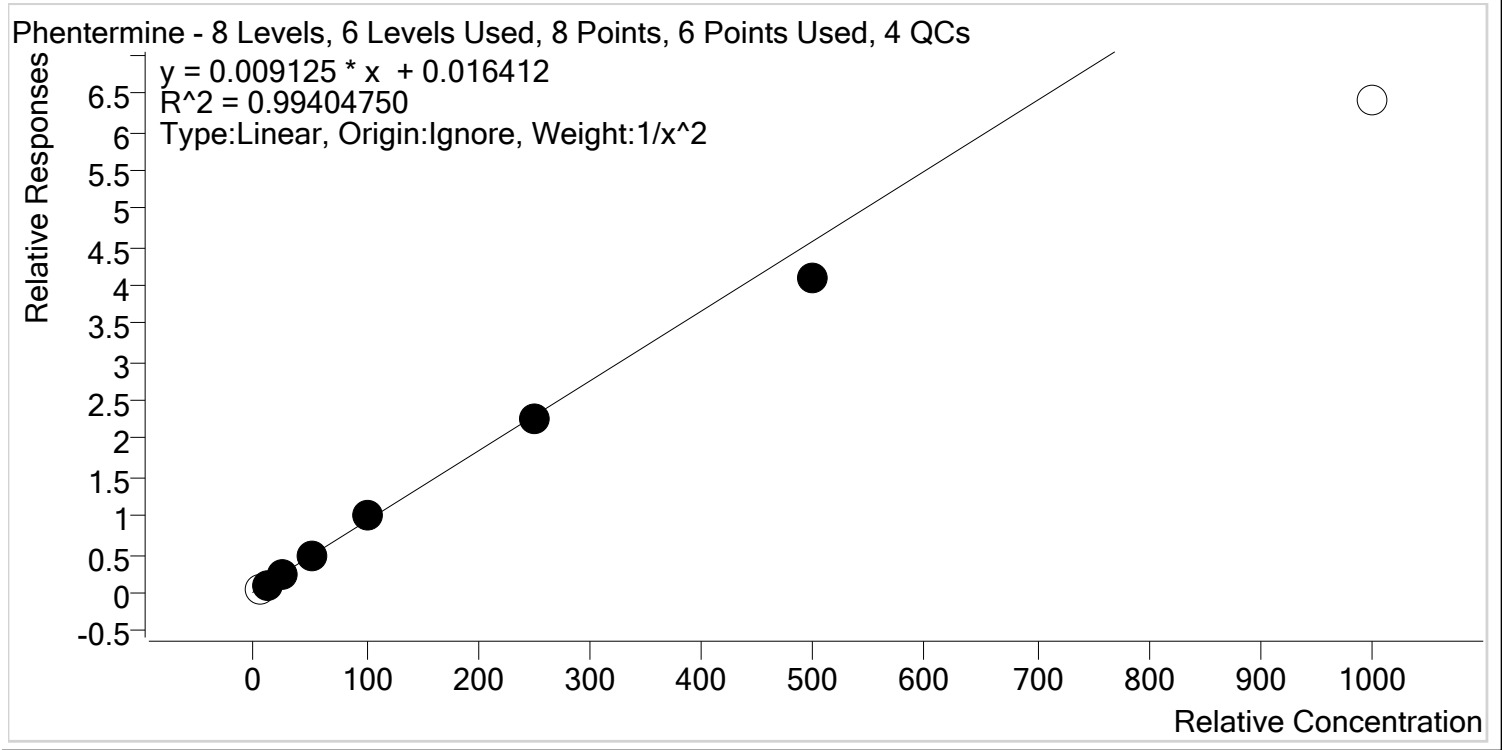


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.9
p1 Cal 2- 10ng	2	✓	10.0	10.4	104.1
p1 Cal 3 -25ng	3	✓	25.0	25.9	103.8
p1 Cal 4-50ng	4	✓	50.0	50.9	101.7
p1 Cal 5-100ng	5	✓	100.0	103.5	103.5
p1 Cal 6-250ng	6	✓	250.0	246.2	98.5
p1 Cal 7-500ng	7	✓	500.0	501.5	100.3
p1 Cal 8-1000ng	8	✓	1000.0	911.8	91.2



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Phentermine **Internal Standard** Phentermine-D5

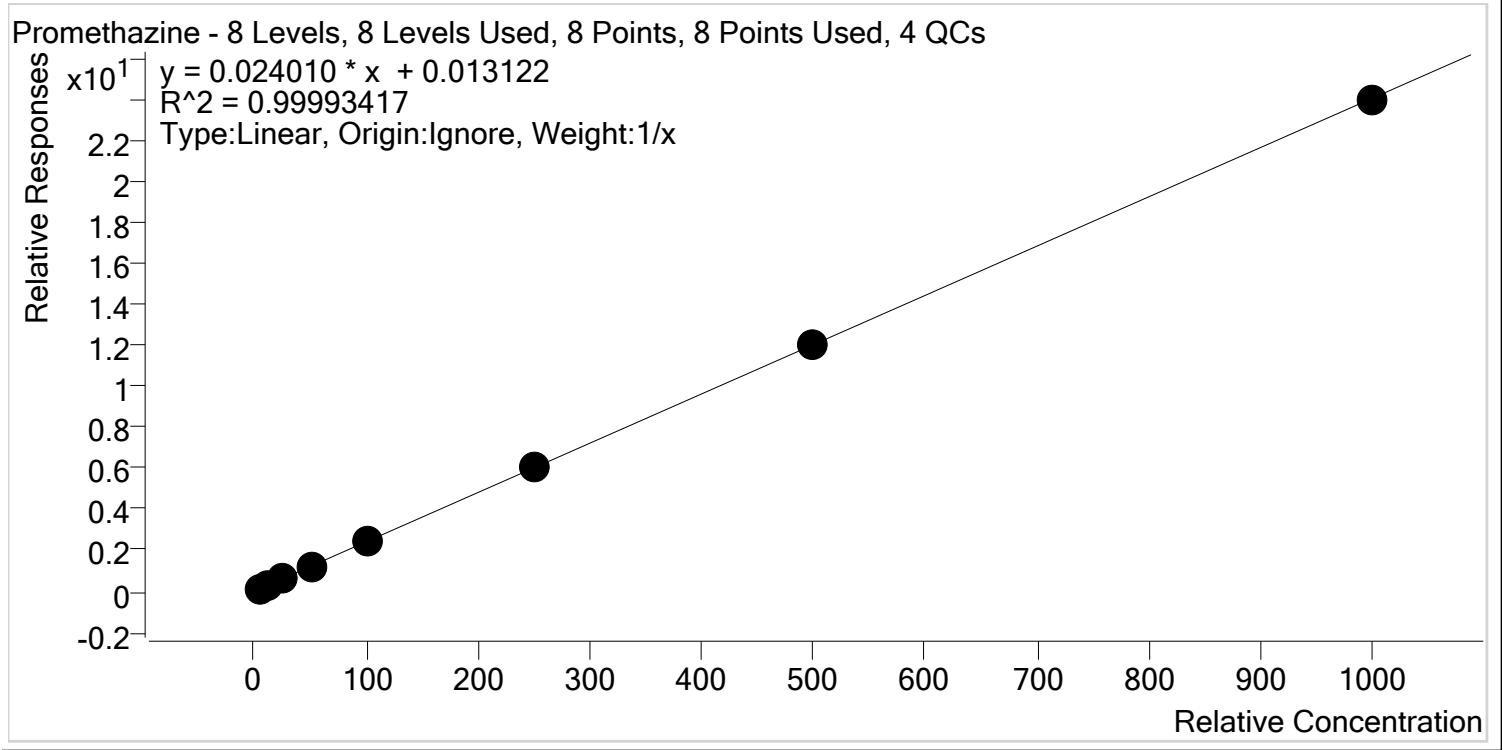


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	x	5.0	3.7	74.2
p1 Cal 2- 10ng	2	✓	10.0	9.7	97.3
p1 Cal 3 -25ng	3	✓	25.0	25.8	103.2
p1 Cal 4-50ng	4	✓	50.0	52.4	104.8
p1 Cal 5-100ng	5	✓	100.0	107.1	107.1
p1 Cal 6-250ng	6	✓	250.0	245.3	98.1
p1 Cal 7-500ng	7	✓	500.0	447.2	89.4
p1 Cal 8-1000ng	8	x	1000.0	700.1	70.0



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Promethazine **Internal Standard** Promethazine-D3



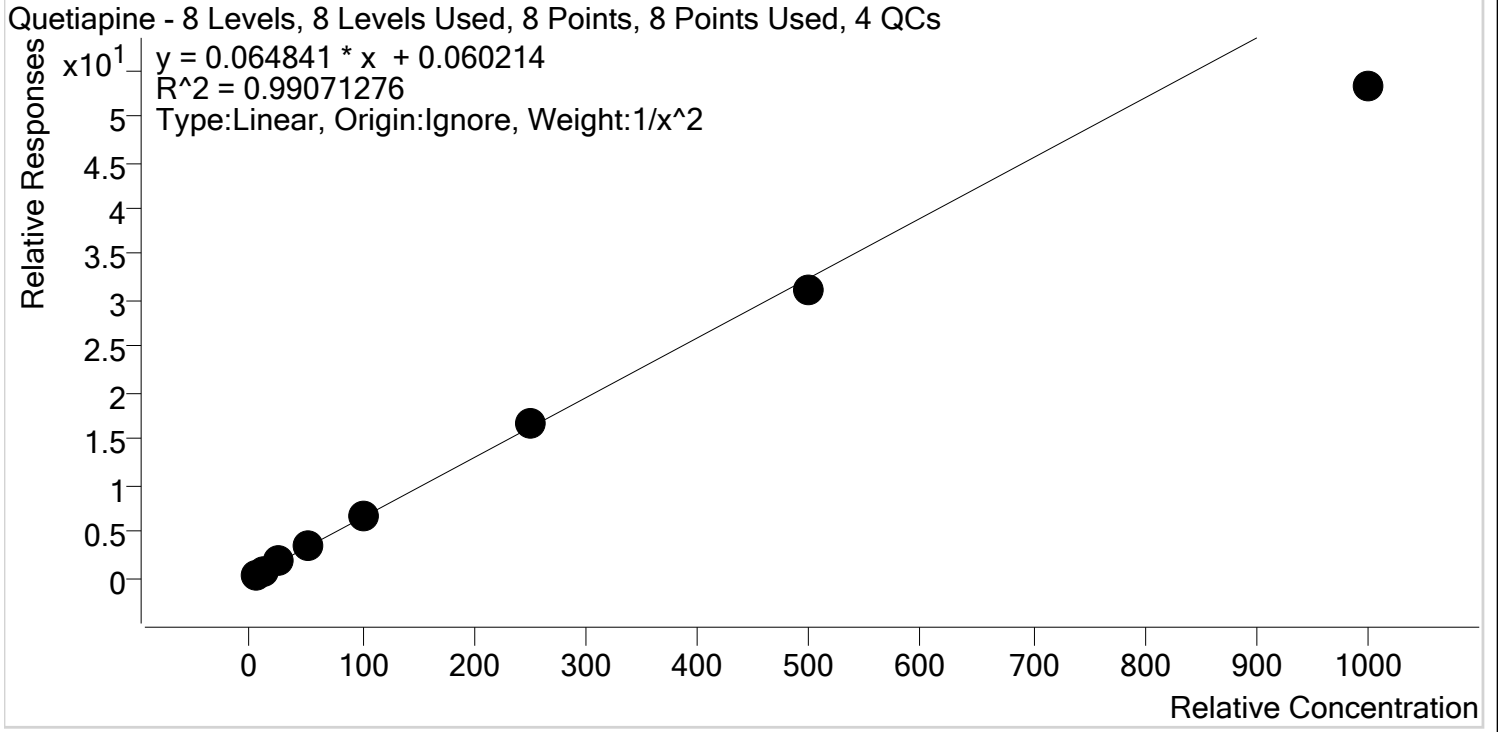
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	95.4
p1 Cal 2- 10ng	2	✓	10.0	10.0	99.9
p1 Cal 3 -25ng	3	✓	25.0	25.2	101.0
p1 Cal 4-50ng	4	✓	50.0	50.6	101.3
p1 Cal 5-100ng	5	✓	100.0	101.8	101.8
p1 Cal 6-250ng	6	✓	250.0	253.1	101.2
p1 Cal 7-500ng	7	✓	500.0	499.0	99.8
p1 Cal 8-1000ng	8	✓	1000.0	995.4	99.5



SP

AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
 Last Cal. Update 5/17/2019 8:16 AM
 Analyst Name ISP\Datastor
 Analyte Quetiapine Internal Standard Quetiapine-D8

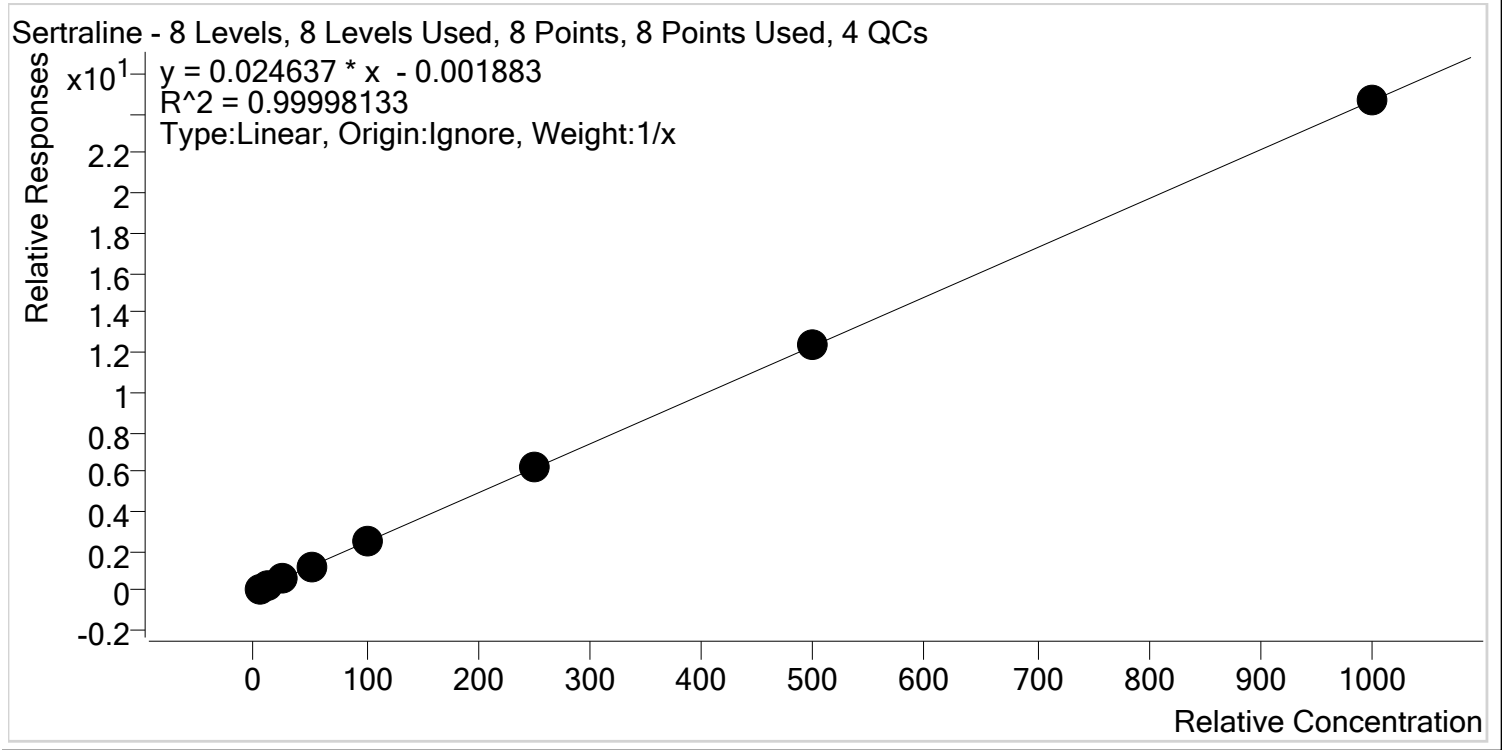


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.2
p1 Cal 2- 10ng	2	✓	10.0	10.3	103.3
p1 Cal 3 -25ng	3	✓	25.0	26.6	106.4
p1 Cal 4-50ng	4	✓	50.0	53.3	106.6
p1 Cal 5-100ng	5	✓	100.0	105.2	105.2
p1 Cal 6-250ng	6	✓	250.0	260.2	104.1
p1 Cal 7-500ng	7	✓	500.0	481.6	96.3
p1 Cal 8-1000ng	8	✓	1000.0	819.1	81.9



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Sertraline **Internal Standard** Sertraline-D3

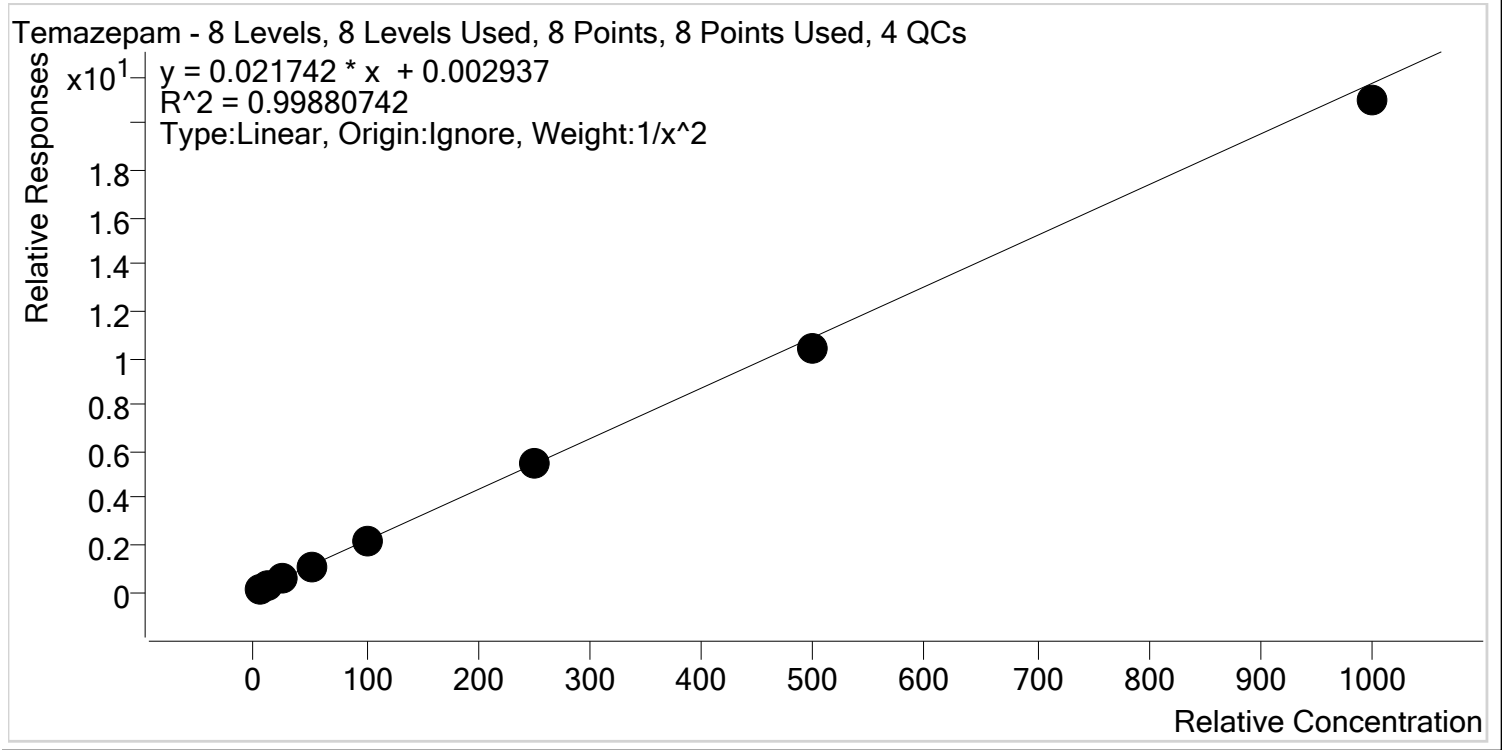


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.1
p1 Cal 2- 10ng	2	✓	10.0	10.3	102.9
p1 Cal 3 -25ng	3	✓	25.0	25.5	102.1
p1 Cal 4-50ng	4	✓	50.0	49.7	99.4
p1 Cal 5-100ng	5	✓	100.0	99.4	99.4
p1 Cal 6-250ng	6	✓	250.0	249.9	99.9
p1 Cal 7-500ng	7	✓	500.0	500.0	100.0
p1 Cal 8-1000ng	8	✓	1000.0	1000.4	100.0



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Temazepam **Internal Standard** Temazepam-D5



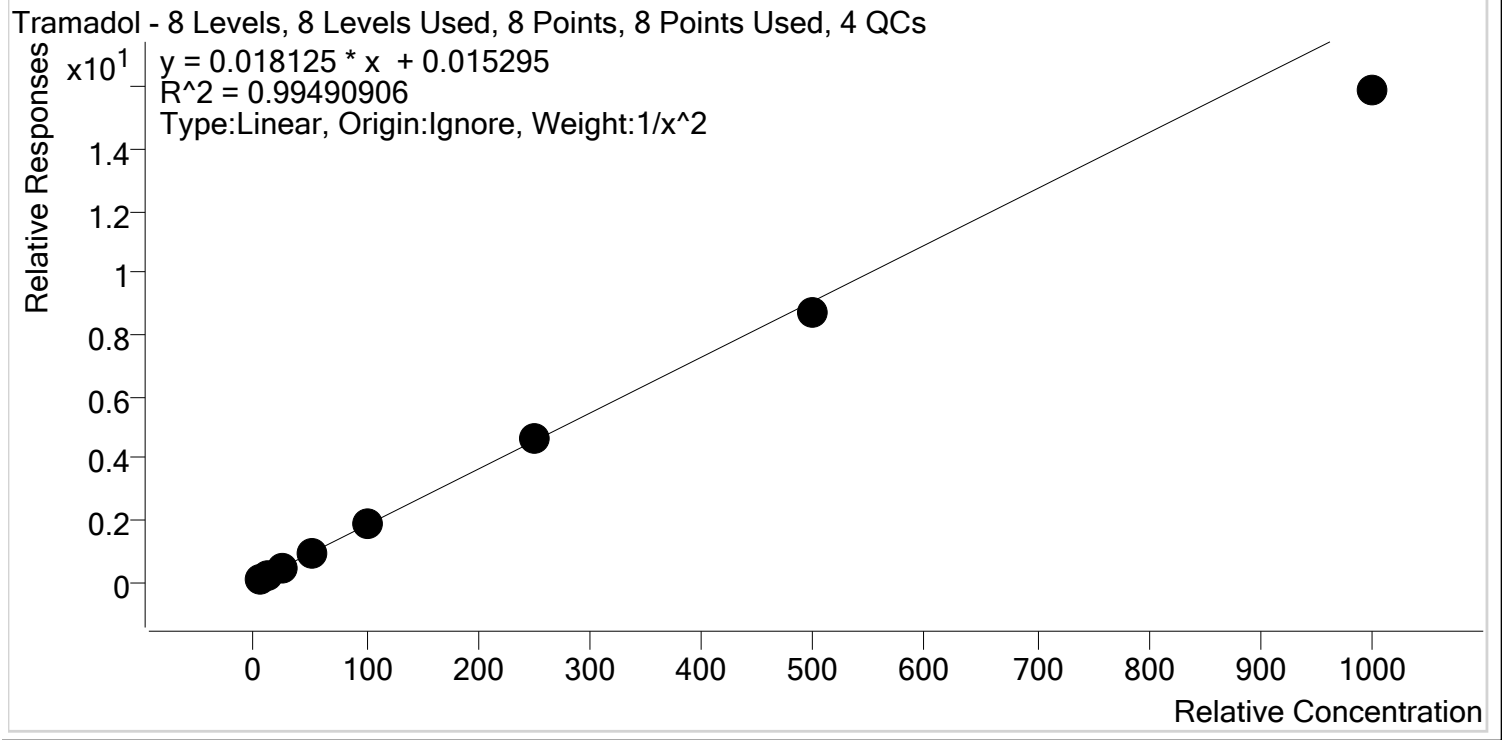
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.9	97.4
p1 Cal 2- 10ng	2	✓	10.0	10.4	103.6
p1 Cal 3 -25ng	3	✓	25.0	25.7	102.7
p1 Cal 4-50ng	4	✓	50.0	50.9	101.8
p1 Cal 5-100ng	5	✓	100.0	101.5	101.5
p1 Cal 6-250ng	6	✓	250.0	251.5	100.6
p1 Cal 7-500ng	7	✓	500.0	478.7	95.7
p1 Cal 8-1000ng	8	✓	1000.0	965.9	96.6

SP



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Tramadol **Internal Standard** Tramadol-13C-D3

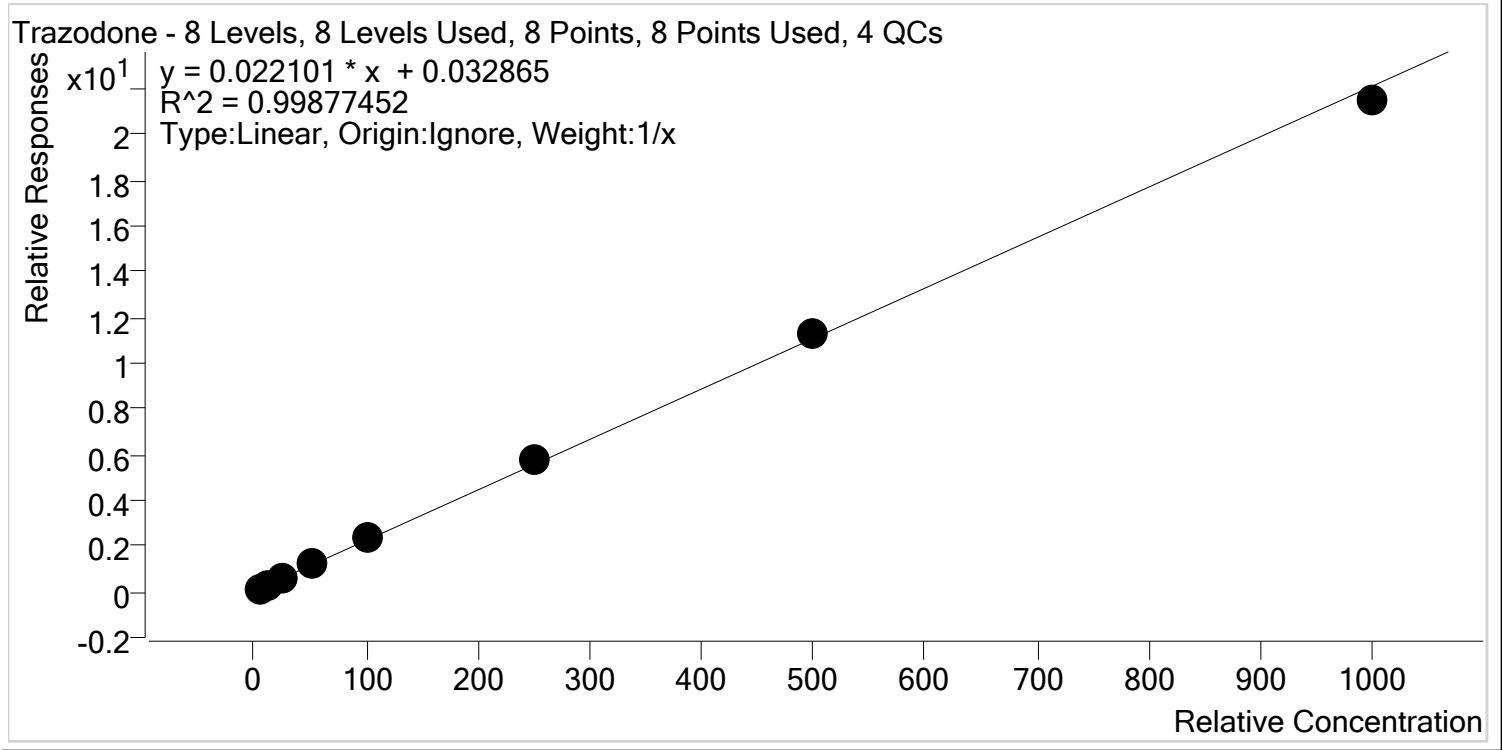


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	96.3
p1 Cal 2- 10ng	2	✓	10.0	10.5	104.6
p1 Cal 3 -25ng	3	✓	25.0	25.9	103.4
p1 Cal 4-50ng	4	✓	50.0	52.2	104.5
p1 Cal 5-100ng	5	✓	100.0	105.3	105.3
p1 Cal 6-250ng	6	✓	250.0	255.4	102.2
p1 Cal 7-500ng	7	✓	500.0	480.7	96.1
p1 Cal 8-1000ng	8	✓	1000.0	875.3	87.5



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Trazodone **Internal Standard** Trazodone-D6

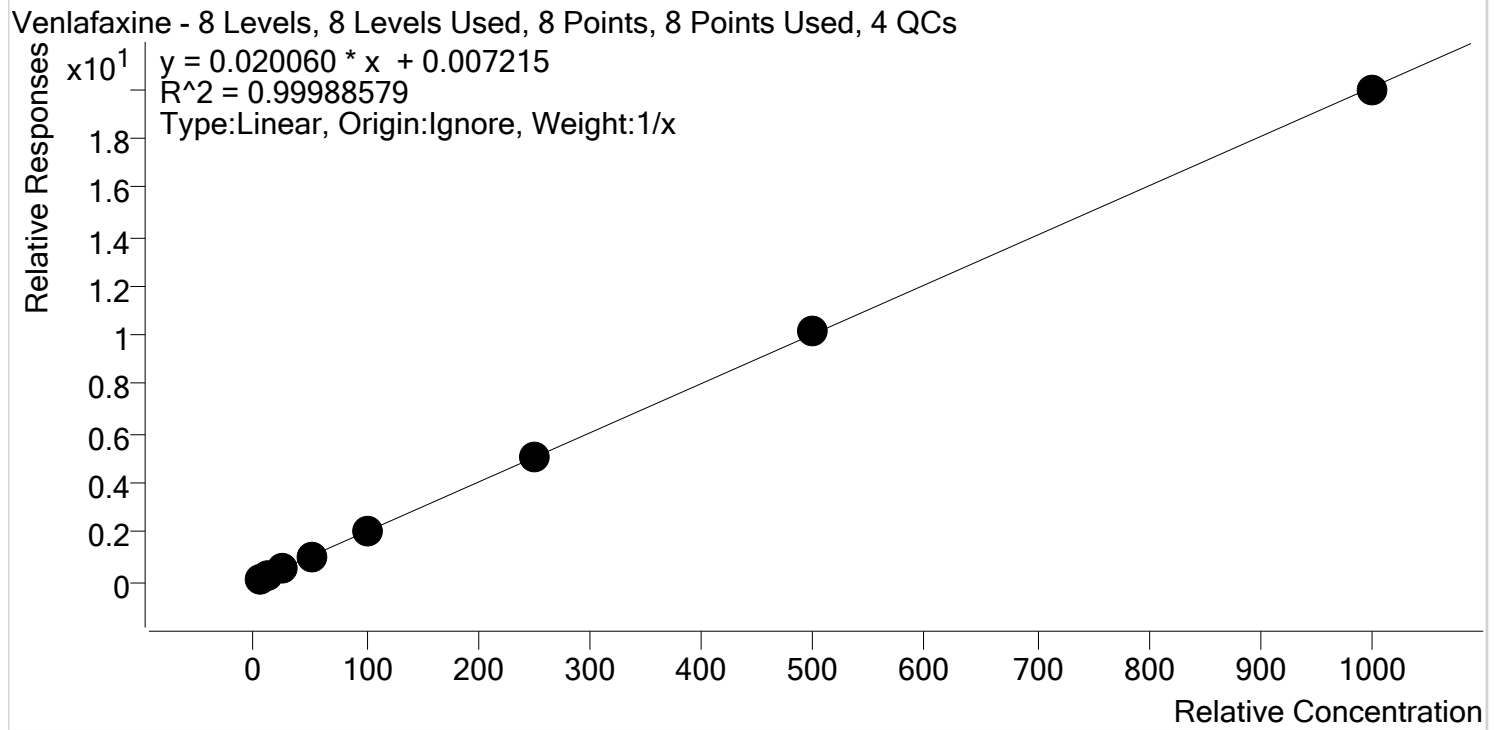


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.2	84.5
p1 Cal 2- 10ng	2	✓	10.0	10.0	99.5
p1 Cal 3 -25ng	3	✓	25.0	25.2	100.7
p1 Cal 4-50ng	4	✓	50.0	52.3	104.7
p1 Cal 5-100ng	5	✓	100.0	107.9	107.9
p1 Cal 6-250ng	6	✓	250.0	258.7	103.5
p1 Cal 7-500ng	7	✓	500.0	510.1	102.0
p1 Cal 8-1000ng	8	✓	1000.0	971.6	97.2



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Venlafaxine **Internal Standard** Venlafaxine-D6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.7	94.7
p1 Cal 2- 10ng	2	✓	10.0	10.2	102.0
p1 Cal 3 -25ng	3	✓	25.0	25.2	100.8
p1 Cal 4-50ng	4	✓	50.0	49.8	99.6
p1 Cal 5-100ng	5	✓	100.0	102.9	102.9
p1 Cal 6-250ng	6	✓	250.0	249.1	99.6
p1 Cal 7-500ng	7	✓	500.0	505.0	101.0
p1 Cal 8-1000ng	8	✓	1000.0	993.1	99.3

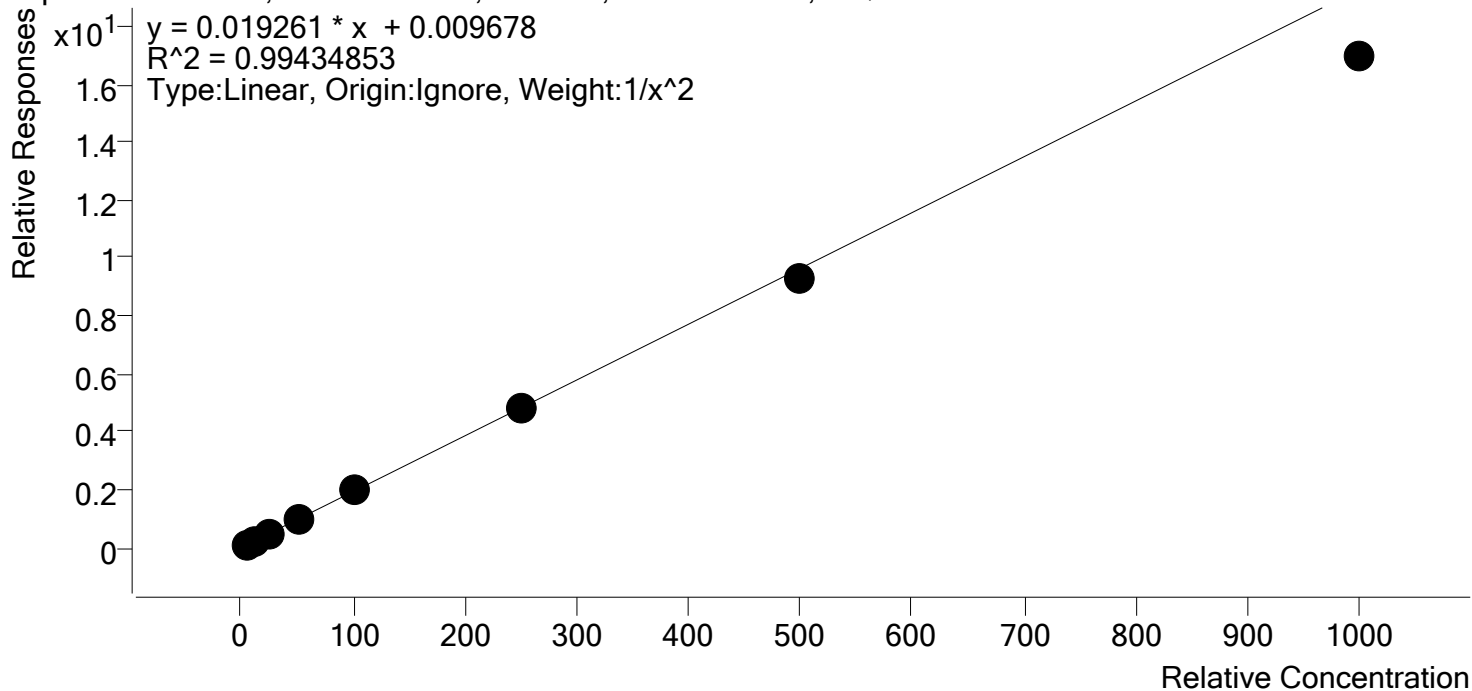
SP



AM #28 Multi-Drug Quant. Calibration Curve Report

Batch results D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
Last Cal. Update 5/17/2019 8:16 AM
Analyst Name ISP\Datastor
Analyte Zolpidem **Internal Standard** Zolpidem-D6

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
p1 Cal 1-5ng	1	✓	5.0	4.8	95.2
p1 Cal 2- 10ng	2	✓	10.0	10.6	105.5
p1 Cal 3 -25ng	3	✓	25.0	26.7	107.0
p1 Cal 4-50ng	4	✓	50.0	52.8	105.7
p1 Cal 5-100ng	5	✓	100.0	102.3	102.3
p1 Cal 6-250ng	6	✓	250.0	250.5	100.2
p1 Cal 7-500ng	7	✓	500.0	480.5	96.1
p1 Cal 8-1000ng	8	✓	1000.0	879.6	88.0

AM #28 Multi-Drug Quant. Results



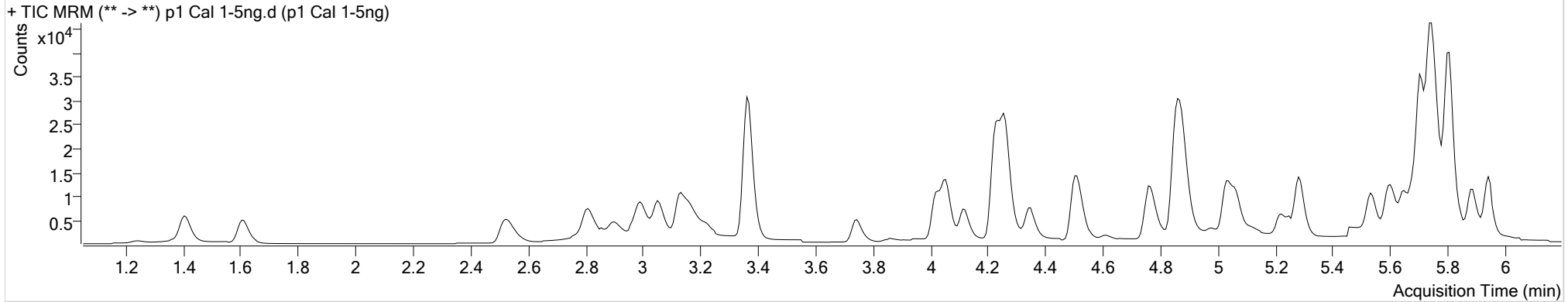
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
5/17/2019 8:16:31 AM

Instrument FALCO-LCMS (Property ID 069901)
Type Cal
Acq. Method MDQ P1 Combined 011619.m
Sample Position P1-A1
Injection Volume 1
Acq. Date-Time 5/14/2019 11:18:33 AM
Sample Info.

Data File p1 Cal 1-5ng.d
Sample p1 Cal 1-5ng
Operator
Comment

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.138	287	156.02	74.8	93.46	18855	0.4876 ng/ml
7-aminoclonazepam	4.253	1918	1339.13	81.9	∞	16372	4.7784 ng/ml
a-hydroxyalprazolam	5.689	1730	257.09	64.2	155.78	16425	4.7535 ng/ml
alpha-PVP	4.360	1427	219.37	53.6	254.02	12931	4.6910 ng/ml
Alprazolam	5.766	3430	374.09	103.2	546.05	21047	4.3393 ng/ml
Amphetamine	3.055	2589	145.14	57.9	82.66	6521	4.6212 ng/ml
Benzoylcegonine	3.876	209	3.56 Low	9.3	39.36	1162	4.4210 ng/ml
Buprenorphine	5.810	90	11.56	21.1	11.13	7283	0.4909 ng/ml
Bupropion	4.782	3610	1511.18	57.9	171.49	23670	4.1603 ng/ml
Carisoprodol	5.714	4496	439.84	57.5	81.82	46535	4.9585 ng/ml
Citalopram	5.222	935	105.24	40.7	306.64	7423	4.7590 ng/ml
Clonazepam	5.602	2425	667.36	33.4	∞	7708	4.8414 ng/ml
Cocaine	4.259	2144	2935.17	44.7	1578.98	39689	4.7724 ng/ml
Codeine	2.577	453	717.99	102.1	858.52	4233	4.0389 ng/ml
Cyclobenzaprine	5.618	739	584.05	9.8	10.45	5821	5.0116 ng/ml
Dextromethorphan	5.258	499	42.26	77.4	128.46	4897	4.5491 ng/ml
Dextrorphan	4.122	544	282.29	199.3	1978.59	12253	4.8039 ng/ml
Diazepam	5.952	1899	398.30	89.1	336.67	17784	4.8308 ng/ml

AM #28 Multi-Drug Quant. Results

SP



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.555	1082	3667.78	69.6	2194.80	11544	4.8222 ng/ml
Diphenhydramine	5.286	2388	142.16	34.9	146.20	24732	4.9668 ng/ml
Doxylamine	4.522	3560	4139.18	98.3	586.29	32346	3.9994 ng/ml
EDDP	5.257	24	3.06 Low	44.8	14.27	246	5.8764 ng/ml
Fentanyl	5.079	80	9.11 Low	46.4 Low	17.51	6883	0.5403 ng/ml
Fluoxetine	5.711	867	∞	11.0	96.02	6324	4.7986 ng/ml
Hydrocodone	3.025	1067	102.96	38.8	158.93	12752	4.6735 ng/ml
Hydromorphone	1.621	1545	∞	72.4	1091.04	10873	4.9029 ng/ml
Ketamine	4.035	2259	2773.63	38.2	102.71	21092	4.8223 ng/ml
Lamotrigine	4.290	385	197.59	82.9	524.96	21092	4.5018 ng/ml
Lorazepam	5.737	6274	322.74	58.1	16.51	7708	4.0951 ng/ml
Meprobamate	4.906	2911	2773.07	27.5	137.45	25193	4.7079 ng/ml
Methadone	5.650	1289	118.44	52.5	56.49	12258	4.7410 ng/ml
Methamphetamine	3.224	2888	91.26	38.0	∞	12298	5.1796 ng/ml
Metoprolol	4.322	482	392.84	95.7	451.08	41042	4.6821 ng/ml
Mirtazapine	4.610	1367	2404.30	48.6	239.77	12931	4.6318 ng/ml
Mitragynine	5.221	225	110.48	37.9	57.67	12258	4.5660 ng/ml
Morphine	1.253	352	532.01	22.9	298.11	767	4.8964 ng/ml
Norbuprenorphine	4.982	47	5.94 Low	75.3 Low	20.95	2118	0.5418 ng/ml
Nordiazepam	5.891	2207	3352.46	56.8	716.96	13239	4.8673 ng/ml
Norfentanyl	4.084	275	102.19	34.1	13.10	23799	0.5041 ng/ml
Norhydrocodone	3.073	200	46.73	47.6	55.53	12922	5.9980 ng/ml
Noroxycodone	2.921	1166	∞	50.2	103.01	8021	4.7784 ng/ml
O-desmethyl-tramadol	3.373	7299	1421.72	6.8	114.09	65507	4.9131 ng/ml
Oxazepam	5.747	6848	161.09	67.1	103.89	53043	4.7443 ng/ml
Oxycodone	2.840	2547	228.52	31.5	156.67	20696	4.8045 ng/ml
Oxymorphone	1.410	1986	301.15	47.2	182.33	14205	4.8455 ng/ml
Phentermine	3.781	586	216.11	6.4 High	3.08 Low	11650	3.7111 ng/ml
Promethazine	5.535	1343	281.94	27.2	53.29	10524	4.7685 ng/ml
Quetiapine	5.545	1185	1342.78	58.5	472.82	3185	4.8100 ng/ml
Sertraline	5.780	469	53.46	93.3	130.05	4026	4.8052 ng/ml
Temazepam	5.814	6695	406.61	35.1	32.18	61506	4.8713 ng/ml
Tramadol	4.242	4211	1552.45	3.5	13.04	41042	4.8168 ng/ml
Trazodone	5.120	1109	548.57	75.5	583.00	8785	4.2245 ng/ml
Venlafaxine	5.033	2319	306.78	37.4	43.32	22684	4.7374 ng/ml
Zolpidem	4.876	5756	974.57	32.6	900.97	56762	4.7623 ng/ml

AM #28 Multi-Drug Quant. Results



PS

Batch results

D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin

Calibration Last Update

5/17/2019 8:16:31 AM

Instrument

FALCO-LCMS (Property ID 069901)

Data File

p1 Cal 2- 10ng.d

Type

Cal

Sample

p1 Cal 2- 10ng

Acq. Method

MDQ P1 Combined 011619.m

Operator

Sample Position

P1-B1

Comment

Injection Volume

1

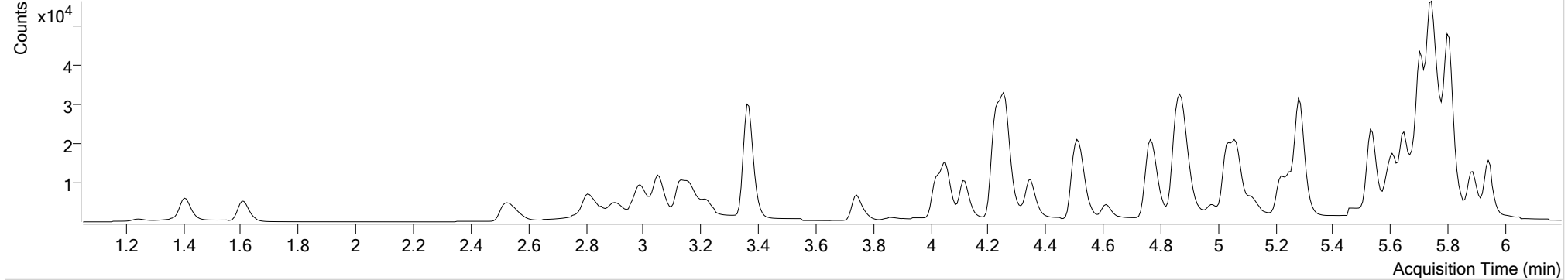
Acq. Date-Time

5/14/2019 11:29:10 AM

Sample Info.

Sample Chromatogram

+ TIC MRM (** -> **) p1 Cal 2- 10ng.d (p1 Cal 2- 10ng)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.138	588	277.55	71.9	184.87	17927	1.0421 ng/ml
7-aminoclonazepam	4.253	4187	210.71	80.9	∞	17061	10.6422 ng/ml
a-hydroxyalprazolam	5.689	3595	1562.67	64.0	447.93	16525	10.6464 ng/ml
alpha-PVP	4.360	3889	1530.33	51.6	568.05	17132	10.1000 ng/ml
Alprazolam	5.766	6364	164.06	107.0	200.88	19584	9.7110 ng/ml
Amphetamine	3.055	6952	279.69	55.8	348.94	8627	10.9413 ng/ml
Benzoylcegonine	3.876	360	247.72	8.4	29.60	1119	10.1724 ng/ml
Buprenorphine	5.817	435	37.12	21.2	6.05 Low	17258	1.0158 ng/ml
Bupropion	4.782	11974	1032.01	58.5	1276.52	38499	10.0349 ng/ml
Carisoprodol	5.714	8488	238.40	56.4	∞	43863	10.0108 ng/ml
Citalopram	5.222	3664	346.16	40.8	476.65	14824	10.1603 ng/ml
Clonazepam	5.602	4695	725.26	35.4	2339.92	7480	10.3136 ng/ml
Cocaine	4.259	4552	2813.01	43.8	3201.28	42389	10.1016 ng/ml
Codeine	2.577	881	1668.67	100.1	∞	3909	10.0648 ng/ml
Cyclobenzaprine	5.618	3594	2534.97	10.8	126.47	14263	10.0407 ng/ml
Dextromethorphan	5.258	2393	800.13	78.4	368.49	10804	10.4273 ng/ml
Dextrorphan	4.122	1530	817.38	205.3	753.96	17058	10.1347 ng/ml
Diazepam	5.952	3998	∞	84.3	308.02	17659	10.5273 ng/ml

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.555	2041	5794.68	68.0	2057.76	10618	10.4858 ng/ml
Diphenhydramine	5.292	9965	3278.23	35.7	791.49	52083	9.9844 ng/ml
Doxylamine	4.522	9960	7959.56	98.4	20379.13	43574	9.9219 ng/ml
EDDP	5.251	723	177.40	42.4	94.31	4070	10.0054 ng/ml
Fentanyl	5.079	347	73.40	73.7	279.46	16541	1.0035 ng/ml
Fluoxetine	5.704	4029	9902.05	10.3	1715.80	15087	9.7783 ng/ml
Hydrocodone	3.018	2266	297.56	38.0	123.81	12787	10.8590 ng/ml
Hydromorphone	1.614	2835	1288.37	76.2	213.87	9931	10.2505 ng/ml
Ketamine	4.035	4548	2798.28	38.0	343.88	20699	10.4458 ng/ml
Lamotrigine	4.290	773	521.55	77.7	976.51	20699	11.7335 ng/ml
Lorazepam	5.737	12693	487.83	56.7	73.01	7480	10.7973 ng/ml
Meprobamate	4.906	5823	9448.89	27.2	293.16	24406	10.7546 ng/ml
Methadone	5.650	5952	∞	52.7	1319.56	27956	10.0415 ng/ml
Methamphetamine	3.224	5157	58.42	42.2	84.39	15973	9.2338 ng/ml
Metoprolol	4.322	1126	1879.31	93.7	405.82	44906	10.8976 ng/ml
Mirtazapine	4.610	5750	2330.84	47.2	2531.43	17132	11.5011 ng/ml
Mitragynine	5.221	1154	572.46	37.0	233.92	27956	9.9774 ng/ml
Morphine	1.253	630	7401.06	24.0	409.06	686	10.2548 ng/ml
Norbuprenorphine	4.988	154	31.52	94.4	68.40	4659	1.0371 ng/ml
Nordiazepam	5.891	4291	1401.67	59.0	628.27	12913	10.2630 ng/ml
Norfentanyl	4.077	624	280.19	36.9	11.71	25952	1.0107 ng/ml
Norhydrocodone	3.073	499	64.64	41.1	36.18	13715	9.8470 ng/ml
Noroxycodone	2.921	2434	160.93	49.4	203.60	8276	10.4837 ng/ml
O-desmethyl-tramadol	3.373	13206	2745.89	6.8	262.20	58231	10.3239 ng/ml
Oxazepam	5.747	13455	199.00	69.6	53.04	50438	10.5361 ng/ml
Oxycodone	2.840	4640	302.51	30.8	230.28	19054	10.5183 ng/ml
Oxymorphone	1.410	3649	224.86	47.2	333.23	12583	10.4123 ng/ml
Phentermine	3.781	1691	119.50	4.5	16.53	16067	9.7334 ng/ml
Promethazine	5.535	6789	2342.29	28.3	259.54	26824	9.9944 ng/ml
Quetiapine	5.545	4652	2293.67	55.7	∞	6372	10.3307 ng/ml
Sertraline	5.780	2498	273.51	90.5	568.87	9923	10.2939 ng/ml
Temazepam	5.814	13440	1179.27	29.2	39.89	58874	10.3645 ng/ml
Tramadol	4.242	9204	1128.22	3.6	49.45	44906	10.4646 ng/ml
Trazodone	5.120	4450	1135.77	81.3	1019.76	17597	9.9543 ng/ml
Venlafaxine	5.040	6855	836.99	37.3	91.98	32354	10.2034 ng/ml
Zolpidem	4.883	12009	7385.91	33.0	4505.40	56388	10.5542 ng/ml

AM #28 Multi-Drug Quant. Results



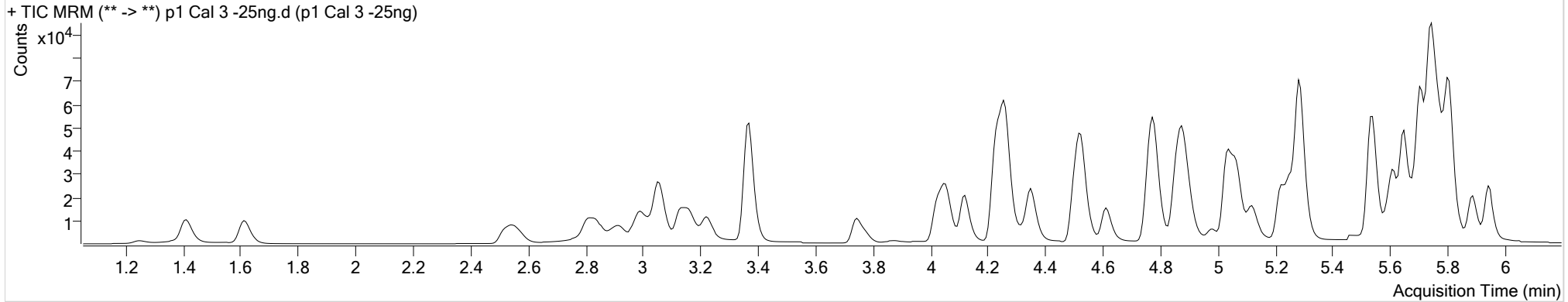
Batch results
Calibration Last Update

D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
5/17/2019 8:16:31 AM

Instrument FALCO-LCMS (Property ID 069901)
Type Cal
Acq. Method MDQ P1 Combined 011619.m
Sample Position P1-C1
Injection Volume 1
Acq. Date-Time 5/14/2019 11:39:36 AM
Sample Info.

Data File p1 Cal 3 -25ng.d
Sample p1 Cal 3 -25ng
Operator
Comment

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.138	2078	933.23	69.9	1186.42	25822	2.5502 ng/ml
7-aminoclonazepam	4.253	10626	16902.24	81.0	24763.82	18346	25.8998 ng/ml
a-hydroxyalprazolam	5.689	8870	908.85	65.3	522.89	17296	26.1560 ng/ml
alpha-PVP	4.360	16111	3409.54	51.6	441.52	29081	25.2584 ng/ml
Alprazolam	5.766	17766	1195.72	103.6	1196.01	21902	25.8292 ng/ml
Amphetamine	3.062	26928	1632.47	57.8	∞	14188	27.8293 ng/ml
Benzoyllecgonine	3.876	791	1380.13	7.1	39.21	1181	24.3053 ng/ml
Buprenorphine	5.817	1879	167.57	17.2	55.74	31924	2.3963 ng/ml
Bupropion	4.782	53488	25742.46	59.4	1762.57	72848	25.7194 ng/ml
Carisoprodol	5.714	21886	1291.65	56.1	202.66	44130	25.7833 ng/ml
Citalopram	5.222	14729	571.41	41.5	5104.44	25285	25.0978 ng/ml
Clonazepam	5.602	12766	559.50	33.4	3351.87	8225	26.4691 ng/ml
Cocaine	4.259	16467	47901.56	44.0	3087.55	63932	25.1028 ng/ml
Codeine	2.577	2898	457.52	102.6	814.79	5437	25.7244 ng/ml
Cyclobenzaprine	5.618	15245	6494.57	10.2	852.58	24826	24.6138 ng/ml
Dextromethorphan	5.258	9618	∞	79.8	10191.83	18545	25.0390 ng/ml
Dextrorphan	4.122	5938	3239.25	201.0	5474.47	27207	25.2650 ng/ml
Diazepam	5.952	11824	667.13	86.5	1700.62	21898	25.4609 ng/ml

AM #28 Multi-Drug Quant. Results



5

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.555	6916	1099.33	68.4	7155.85	14968	26.0054 ng/ml
Diphenhydramine	5.292	43147	7545.60	34.2	2079.79	90038	25.2259 ng/ml
Doxylamine	4.522	39225	415.87	96.9	23668.60	70900	26.1480 ng/ml
EDDP	5.251	5072	686.66	40.7	2286.70	10675	25.3502 ng/ml
Fentanyl	5.086	1485	303.15	74.2	∞	28827	2.5132 ng/ml
Fluoxetine	5.704	18097	719.69	10.1	2463.94	27035	25.1901 ng/ml
Hydrocodone	3.025	8002	197.40	40.5	176.37	19340	26.5066 ng/ml
Hydromorphone	1.621	8923	443.42	77.1	470.46	12851	25.5020 ng/ml
Ketamine	4.035	15886	21552.34	37.6	1523.61	29914	25.9927 ng/ml
Lamotrigine	4.290	2243	1120.44	78.9	2361.36	29914	26.0178 ng/ml
Lorazepam	5.737	32021	1087.08	56.2	∞	8225	27.4654 ng/ml
Meprobamate	4.906	14126	6315.17	27.5	705.82	25143	26.6407 ng/ml
Methadone	5.650	25688	5196.17	50.0	2383.75	48439	25.6579 ng/ml
Methamphetamine	3.224	16151	∞	41.0	286.51	24943	24.1855 ng/ml
Metoprolol	4.322	4090	11109.62	92.5	∞	70703	26.1699 ng/ml
Mirtazapine	4.610	23679	15402.27	48.0	6216.09	29081	25.7987 ng/ml
Mitragynine	5.214	5151	6422.40	37.9	1904.52	48439	25.3249 ng/ml
Morphine	1.253	1906	2122.67	23.6	2539.79	854	25.5493 ng/ml
Norbuprenorphine	4.988	489	211.62	97.3	457.46	8291	2.2111 ng/ml
Nordiazepam	5.891	12832	7445.23	57.4	2087.85	15690	26.0827 ng/ml
Norfentanyl	4.084	2333	2982.89	37.6	102.70	40308	2.3829 ng/ml
Norhydrocodone	3.073	1953	305.57	45.7	277.59	19948	21.1780 ng/ml
Noroxycodone	2.921	7839	182.36	49.9	1109.56	10891	26.8135 ng/ml
O-desmethyl-tramadol	3.373	43672	12036.91	6.7	388.47	80932	24.9958 ng/ml
Oxazepam	5.747	35576	957.08	67.1	1131.22	53861	27.1039 ng/ml
Oxycodone	2.840	15571	213.91	32.1	110.42	27497	25.8313 ng/ml
Oxymorphone	1.410	11149	749.15	46.4	278.60	15725	25.9383 ng/ml
Phentermine	3.781	6538	653.02	4.1	66.35	25964	25.7980 ng/ml
Promethazine	5.535	30136	2122.95	28.5	439.66	48662	25.2468 ng/ml
Quetiapine	5.545	18775	9309.04	59.6	6472.91	10523	26.5878 ng/ml
Sertraline	5.780	10569	483.43	90.0	2284.30	16850	25.5343 ng/ml
Temazepam	5.814	35341	3275.25	30.3	208.58	62959	25.6831 ng/ml
Tramadol	4.242	34224	10728.21	3.5	1101.06	70703	25.8625 ng/ml
Trazodone	5.120	17660	12346.78	77.8	3351.63	29960	25.1849 ng/ml
Venlafaxine	5.040	27087	5292.13	37.4	530.12	52835	25.1981 ng/ml
Zolpidem	4.883	39269	24081.23	31.4	4031.79	74830	26.7428 ng/ml

AM #28 Multi-Drug Quant. Results



PS

Batch results

Calibration Last Update

D:\MassHunter\Data\2019\AM 28\051419 MDQ P1 SP\QuantResults\MDQ.batch.bin
5/17/2019 8:16:31 AM

Instrument

Type

Acq. Method

Sample Position

Injection Volume

Acq. Date-Time

Sample Info.

FALCO-LCMS (Property ID 069901)
Cal
MDQ P1 Combined 011619.m
P1-D1
1
5/14/2019 11:50:03 AM

Data File

Sample

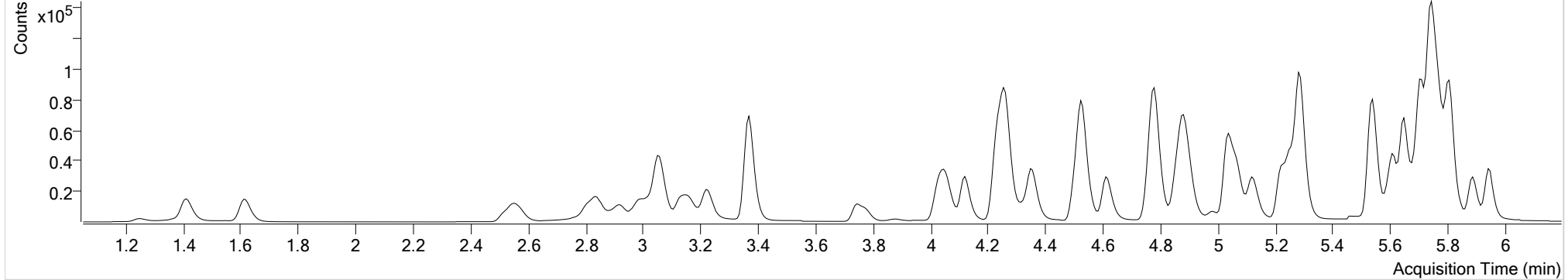
Operator

Comment

p1 Cal 4-50ng.d
p1 Cal 4-50ng

Sample Chromatogram

+ TIC MRM (** -> **) p1 Cal 4-50ng.d (p1 Cal 4-50ng)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.138	4016	1127.86	69.4	411.57	25368	5.0111 ng/ml
7-aminoclonazepam	4.253	21247	3588.48	79.8	51849.10	18343	52.3756 ng/ml
a-hydroxyalprazolam	5.689	17361	394.88	65.4	1388.28	16980	52.9163 ng/ml
alpha-PVP	4.360	32869	19619.62	52.0	5226.26	30306	49.8532 ng/ml
Alprazolam	5.766	34178	1450.20	106.9	1126.40	21548	51.5225 ng/ml
Amphetamine	3.062	53952	2079.17	58.4	2685.04	15202	53.3589 ng/ml
Benzoylcegonine	3.883	1494	575.65	7.8	147.03	1197	47.7688 ng/ml
Buprenorphine	5.817	3700	∞	17.3	∞	30519	4.9574 ng/ml
Bupropion	4.782	109006	39813.16	59.6	13400.24	75785	51.8128 ng/ml
Carisoprodol	5.714	42710	4068.33	55.6	1247.93	43517	51.1041 ng/ml
Citalopram	5.222	28857	2740.08	41.9	∞	25227	50.1059 ng/ml
Clonazepam	5.602	23929	9900.06	35.2	2738.05	7983	51.7258 ng/ml
Cocaine	4.259	33460	23577.46	44.0	4072.67	65890	50.0954 ng/ml
Codeine	2.577	5618	806.04	103.8	7487.03	5359	51.9603 ng/ml
Cyclobenzaprine	5.618	29121	22858.29	10.5	551.01	23815	49.1109 ng/ml
Dextromethorphan	5.265	19250	1656.65	79.3	2373.36	18772	49.9625 ng/ml
Dextrorphan	4.122	12167	26794.12	203.4	1040.04	28309	50.1585 ng/ml
Diazepam	5.952	23310	1898.54	84.8	2256.07	21630	51.0705 ng/ml

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.555	13260	40894.24	69.1	261.93	14662	51.4460 ng/ml
Diphenhydramine	5.292	84719	11817.44	34.7	11916.54	89772	49.8190 ng/ml
Doxylamine	4.529	79657	59365.24	98.6	118096.90	73764	52.4670 ng/ml
EDDP	5.257	14576	3510.24	42.0	12206.07	15943	48.0117 ng/ml
Fentanyl	5.086	2883	419.73	73.1	1096.20	28941	4.8920 ng/ml
Fluoxetine	5.704	36253	5982.14	9.6	6511.00	27045	50.8959 ng/ml
Hydrocodone	3.025	15939	409.29	38.6	165.26	19217	54.0071 ng/ml
Hydromorphone	1.621	17098	622.04	75.9	464.21	12438	50.8758 ng/ml
Ketamine	4.042	31674	18116.85	37.7	675.06	30219	51.8133 ng/ml
Lamotrigine	4.290	4400	2092.52	78.6	∞	30219	52.7952 ng/ml
Lorazepam	5.737	57539	797.83	57.2	411.02	7983	52.6202 ng/ml
Meprobamate	4.906	27324	19728.16	27.5	1248.70	24747	53.2895 ng/ml
Methadone	5.650	49917	11735.22	51.9	4712.01	49065	49.6191 ng/ml
Methamphetamine	3.224	34672	2233.82	40.6	1025.98	27736	51.9380 ng/ml
Metoprolol	4.322	8330	16117.18	93.5	∞	71163	53.7592 ng/ml
Mirtazapine	4.610	46813	87118.73	48.2	25879.83	30306	47.6180 ng/ml
Mitragynine	5.221	9626	15366.62	40.6	3186.22	49065	46.5160 ng/ml
Morphine	1.253	3656	4181.30	23.5	∞	824	51.2272 ng/ml
Norbuprenorphine	4.988	1002	340.60	94.7	166.16	8170	5.0976 ng/ml
Nordiazepam	5.891	24686	10561.05	56.8	5163.27	15317	51.9468 ng/ml
Norfentanyl	4.084	5148	4594.24	37.2	648.46	43394	4.8456 ng/ml
Norhydrocodone	3.073	4488	1356.45	44.5	331.19	20294	43.8815 ng/ml
Noroxycodone	2.921	14996	249.91	50.2	156.94	10899	51.9756 ng/ml
O-desmethyl-tramadol	3.373	84744	43494.70	6.6	2207.16	78803	50.1245 ng/ml
Oxazepam	5.747	65720	530.82	67.8	1443.35	51557	52.9464 ng/ml
Oxycodone	2.840	30573	252.26	32.1	611.61	26898	52.8890 ng/ml
Oxymorphone	1.410	21561	669.08	47.1	1165.03	15606	50.8614 ng/ml
Phentermine	3.781	13734	1290.17	4.1	293.95	27762	52.4171 ng/ml
Promethazine	5.535	57781	54158.70	28.0	2662.93	47014	50.6419 ng/ml
Quetiapine	5.545	36560	21184.23	60.4	80105.20	10395	53.3110 ng/ml
Sertraline	5.780	19126	3529.98	90.1	6535.95	15638	49.7185 ng/ml
Temazepam	5.814	69322	1299.45	29.7	506.28	62473	50.9014 ng/ml
Tramadol	4.242	68457	1564.00	3.5	257.29	71163	52.2309 ng/ml
Trazodone	5.120	35913	∞	78.9	∞	30195	52.3290 ng/ml
Venlafaxine	5.040	55434	4239.35	37.4	499.65	55082	49.8104 ng/ml
Zolpidem	4.883	77164	206841.74	31.9	74982.30	75096	52.8454 ng/ml

AM #28 Multi-Drug Quant. Results



Batch results

Calibration Last Update

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5/17/2019 8:16:31 AM

Instrument

Type

Acq. Method

Sample Position

Injection Volume

Acq. Date-Time

Sample Info.

FALCO-LCMS (Property ID 069901)

Cal

MDQ P1 Combined 011619.m

P1-E1

1

5/14/2019 12:00:29 PM

Data File

Sample

Operator

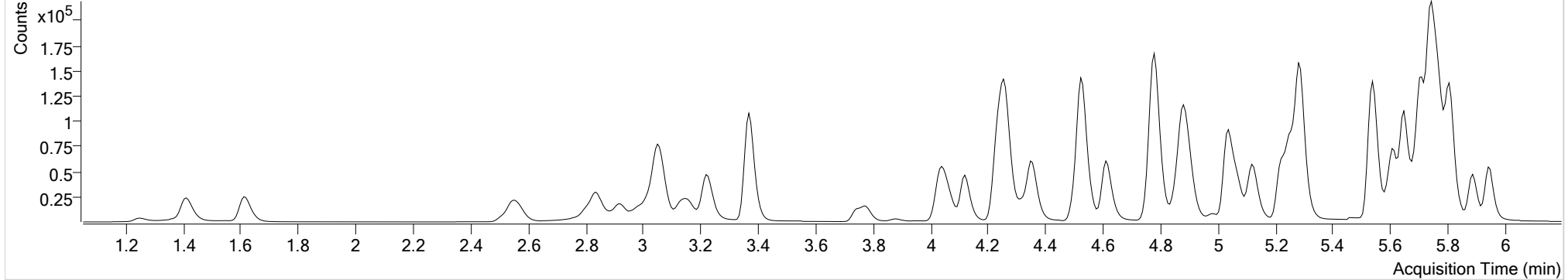
Comment

p1 Cal 5-100ng.d

p1 Cal 5-100ng

Sample Chromatogram

+ TIC MRM (** -> **) p1 Cal 5-100ng.d (p1 Cal 5-100ng)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.138	8398	1368.35	70.7	975.97	26581	9.9942 ng/ml
7-aminoclonazepam	4.253	40981	6651.70	80.3	11130.44	17961	103.7251 ng/ml
a-hydroxyalprazolam	5.689	32833	1985.54	64.1	534.94	16128	106.1317 ng/ml
alpha-PVP	4.360	71445	2406.53	51.4	8805.97	31955	103.2220 ng/ml
Alprazolam	5.766	65931	1675.39	105.6	1130.60	20376	106.2119 ng/ml
Amphetamine	3.055	112987	12540.15	58.0	8682.96	16466	104.5838 ng/ml
Benzoyllecgonine	3.876	3051	608.91	8.0	182.18	1188	101.3711 ng/ml
Buprenorphine	5.817	8120	∞	16.4	∞	32263	10.3125 ng/ml
Bupropion	4.782	238987	39457.44	58.7	6830.52	82250	106.1888 ng/ml
Carisoprodol	5.714	78080	7058.30	56.4	3180.60	40466	100.5487 ng/ml
Citalopram	5.222	60002	6239.63	41.4	340.10	25813	102.6965 ng/ml
Clonazepam	5.602	45379	∞	35.2	14572.82	7506	104.9938 ng/ml
Cocaine	4.259	70283	6216.50	43.8	∞	67898	102.7622 ng/ml
Codeine	2.577	11609	13099.29	102.0	10724.45	5389	108.2384 ng/ml
Cyclobenzaprine	5.618	64243	25729.75	10.3	761.29	25626	100.7911 ng/ml
Dextromethorphan	5.265	39272	31484.26	80.2	∞	18656	103.0525 ng/ml
Dextrorphan	4.122	24833	1936.90	205.4	71972.26	28586	101.8162 ng/ml
Diazepam	5.945	45948	3546.94	85.5	8865.58	20870	104.6054 ng/ml

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.547	27658	1932.37	68.7	31571.88	15331	103.1974 ng/ml
Diphenhydramine	5.292	175096	11022.95	34.7	83057.58	91886	100.7440 ng/ml
Doxylamine	4.522	164305	1372.01	98.4	151662.59	75297	107.5507 ng/ml
EDDP	5.257	43468	5377.98	41.9	13893.91	22249	101.6467 ng/ml
Fentanyl	5.086	6125	2240.82	76.9	24962.75	30586	9.8676 ng/ml
Fluoxetine	5.704	78620	15043.69	9.6	509.53	29063	103.1746 ng/ml
Hydrocodone	3.018	32843	389.32	38.9	275.46	19892	108.3637 ng/ml
Hydromorphone	1.621	34727	931.74	74.6	839.99	12479	103.3959 ng/ml
Ketamine	4.042	67567	36739.23	37.5	1971.97	31975	104.9947 ng/ml
Lamotrigine	4.290	8953	4953.41	79.2	1866.20	31975	103.7737 ng/ml
Lorazepam	5.737	96038	2002.87	57.2	741.87	7506	95.0219 ng/ml
Meprobamate	4.906	50034	14096.44	28.1	3303.30	22980	106.0271 ng/ml
Methadone	5.650	104338	11279.04	51.2	14770.52	49990	102.2498 ng/ml
Methamphetamine	3.224	84697	1473.82	41.3	3454.13	34131	108.6558 ng/ml
Metoprolol	4.322	17249	41439.13	94.3	∞	74144	107.6261 ng/ml
Mirtazapine	4.610	98892	52942.94	47.7	28022.64	31955	93.9228 ng/ml
Mitragynine	5.221	21739	1723.98	39.1	9116.14	49990	102.8099 ng/ml
Morphine	1.253	7439	1365.39	23.1	920.11	836	103.2428 ng/ml
Norbuprenorphine	4.988	2058	401.34	93.7	381.71	8588	10.3974 ng/ml
Nordiazepam	5.891	48265	1390.65	57.7	2126.57	15253	102.5327 ng/ml
Norfentanyl	4.084	11574	∞	37.7	527.43	48244	9.7619 ng/ml
Norhydrocodone	3.073	12070	1165.50	38.0	978.58	20984	109.0955 ng/ml
Noroxycodone	2.921	29709	223.96	48.9	486.97	10653	106.1695 ng/ml
O-desmethyl-tramadol	3.373	175127	206542.07	6.6	∞	79884	102.5060 ng/ml
Oxazepam	5.747	112792	2314.97	68.7	1961.19	44457	106.0615 ng/ml
Oxycodone	2.833	61349	∞	32.3	546.61	27888	103.3307 ng/ml
Oxymorphone	1.410	43173	1191.10	47.0	733.72	15402	103.5379 ng/ml
Phentermine	3.781	30352	1348.72	3.9	170.41	30546	107.0975 ng/ml
Promethazine	5.535	123697	34776.01	28.7	8736.08	50323	101.8326 ng/ml
Quetiapine	5.545	75452	1011.70	59.6	44574.66	10963	105.2167 ng/ml
Sertraline	5.780	39417	1539.08	92.3	1715.42	16108	99.4014 ng/ml
Temazepam	5.808	133595	984.45	29.7	1308.27	60478	101.4660 ng/ml
Tramadol	4.242	142601	2038.53	3.6	703.24	74144	105.2689 ng/ml
Trazodone	5.120	75137	∞	78.1	∞	31079	107.9014 ng/ml
Venlafaxine	5.040	115942	∞	37.2	1001.66	55995	102.8631 ng/ml
Zolpidem	4.883	159074	13024.65	32.6	101845.23	80345	102.2897 ng/ml

AM #28 Multi-Drug Quant. Results



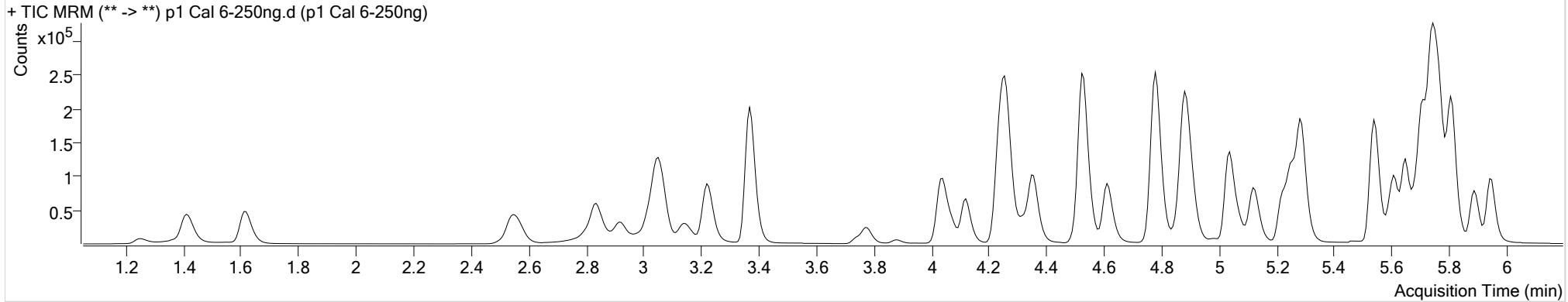
Batch results
Calibration Last Update

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5/17/2019 8:16:31 AM

Instrument FALCO-LCMS (Property ID 069901)
Type Cal
Acq. Method MDQ P1 Combined 011619.m
Sample Position P1-F1
Injection Volume 1
Acq. Date-Time 5/14/2019 12:10:56 PM
Sample Info.

Data File p1 Cal 6-250ng.d
Sample p1 Cal 6-250ng
Operator
Comment

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.138	19496	974.64	71.4	1709.11	24987	24.6734 ng/ml
7-aminoclonazepam	4.253	88366	∞	81.1	15641.04	16425	245.3553 ng/ml
a-hydroxyalprazolam	5.689	67643	1736.64	63.9	1345.25	14106	251.0464 ng/ml
alpha-PVP	4.360	139451	∞	51.7	7788.25	25497	253.1190 ng/ml
Alprazolam	5.766	141259	3787.76	104.6	2602.02	17965	259.6218 ng/ml
Amphetamine	3.055	199272	12688.08	58.6	12235.00	12883	237.6468 ng/ml
Benzoyllecgonine	3.876	7329	5609.72	7.7	1125.11	1144	257.2423 ng/ml
Buprenorphine	5.817	10135	1325.72	17.3	∞	16828	24.7043 ng/ml
Bupropion	4.782	391524	70394.17	58.5	13932.32	54973	262.4460 ng/ml
Carisoprodol	5.714	155872	1802.66	57.4	4680.64	33730	240.9226 ng/ml
Citalopram	5.222	82407	854.14	41.5	32297.78	14567	251.1480 ng/ml
Clonazepam	5.602	88927	27456.76	34.9	25924.52	6355	243.9032 ng/ml
Cocaine	4.259	143937	116454.59	44.6	75359.84	56668	253.0680 ng/ml
Codeine	2.570	25099	14128.37	102.7	8553.25	4855	261.7168 ng/ml
Cyclobenzaprine	5.618	88308	∞	10.6	∞	14219	249.8407 ng/ml
Dextromethorphan	5.265	51708	98204.33	79.8	2146.60	9978	254.3809 ng/ml
Dextrorphan	4.122	42802	20806.74	205.2	52631.47	20140	249.6928 ng/ml
Diazepam	5.952	96781	1158.28	86.5	6791.32	18327	251.2548 ng/ml

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.540	63575	87753.32	68.6	51479.31	14787	246.7145 ng/ml
Diphenhydramine	5.292	240255	1825.46	34.5	87091.04	50936	249.5807 ng/ml
Doxylamine	4.522	310933	220146.98	98.7	339639.84	59032	261.7291 ng/ml
EDDP	5.257	86468	24290.93	41.6	47769.47	17908	249.9897 ng/ml
Fentanyl	5.086	8686	1802.92	71.3	33880.52	17161	24.9917 ng/ml
Fluoxetine	5.704	102606	∞	9.7	∞	15476	253.5316 ng/ml
Hydrocodone	3.018	67000	∞	41.3	681.35	18051	244.6865 ng/ml
Hydromorphone	1.621	75847	1166.08	75.1	1419.85	11374	248.3215 ng/ml
Ketamine	4.035	148017	1467.71	37.7	4584.49	29461	250.3616 ng/ml
Lamotrigine	4.290	18502	6821.79	79.5	2534.75	29461	235.7801 ng/ml
Lorazepam	5.737	145184	3909.91	56.8	302.90	6355	171.3202 ng/ml
Meprobamate	4.906	95340	4228.17	28.2	2600.95	19393	240.6326 ng/ml
Methadone	5.650	137071	3831.33	50.7	9733.77	26747	251.6909 ng/ml
Methamphetamine	3.224	166840	10286.48	40.9	3821.68	28377	265.1473 ng/ml
Metoprolol	4.322	33700	83996.91	93.0	∞	65025	240.7408 ng/ml
Mirtazapine	4.610	145985	126646.82	47.8	5169.17	25497	172.5119 ng/ml
Mitragynine	5.221	30761	46326.02	38.7	2818.72	26747	271.5019 ng/ml
Morphine	1.253	16755	2195.72	23.3	9426.51	774	251.6211 ng/ml
Norbuprenorphine	4.988	2875	413.37	93.0	484.56	4924	25.9880 ng/ml
Nordiazepam	5.891	96438	36317.41	57.4	25370.81	12248	255.9747 ng/ml
Norfentanyl	4.084	25952	3703.53	37.6	1167.14	43426	24.2645 ng/ml
Norhydrocodone	3.073	31550	728.05	42.1	1252.31	17550	334.2888 ng/ml
Noroxycodone	2.921	61121	1314.77	48.7	477.60	9499	245.9866 ng/ml
O-desmethyl-tramadol	3.373	404239	144691.02	6.7	4966.67	75910	249.4431 ng/ml
Oxazepam	5.747	185186	1600.93	68.6	1598.90	31245	248.6828 ng/ml
Oxycodone	2.833	143013	∞	31.9	∞	27176	248.6286 ng/ml
Oxymorphone	1.410	92627	2109.49	46.9	1181.22	13924	246.1873 ng/ml
Phentermine	3.781	52679	3134.17	4.0	174.05	23367	245.2694 ng/ml
Promethazine	5.535	170518	91785.25	29.2	2717.94	28000	253.1014 ng/ml
Quetiapine	5.545	120851	3919.99	59.0	14914.94	7138	260.1971 ng/ml
Sertraline	5.780	49737	724.05	91.8	22842.10	8082	249.8511 ng/ml
Temazepam	5.814	280191	1264.15	29.7	480.46	51211	251.5118 ng/ml
Tramadol	4.242	302051	4407.21	3.5	1569.35	65025	255.4399 ng/ml
Trazodone	5.120	112736	5263.77	78.9	∞	19603	258.7227 ng/ml
Venlafaxine	5.040	208167	72260.00	38.2	1889.25	41602	249.0862 ng/ml
Zolpidem	4.883	359024	321499.62	32.4	81472.59	74266	250.4847 ng/ml

AM #28 Multi-Drug Quant. Results



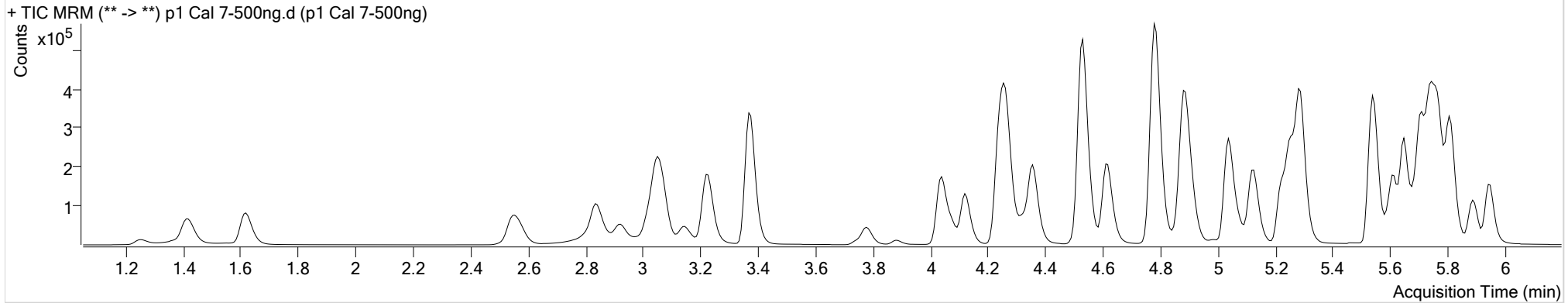
Batch results
Calibration Last Update

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Instrument FALCO-LCMS (Property ID 069901)
Type Cal
Acq. Method MDQ P1 Combined 011619.m
Sample Position P1-G1
Injection Volume 1
Acq. Date-Time 5/14/2019 12:21:22 PM
Sample Info.

Data File p1 Cal 7-500ng.d
Sample p1 Cal 7-500ng
Operator
Comment

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.144	39533	1243.26	70.2	2996.77	25135	49.7309 ng/ml
7-aminoclonazepam	4.260	137452	48651.96	80.4	1946.34	14295	438.9675 ng/ml
a-hydroxyalprazolam	5.689	106392	2499.22	65.1	∞	11924	467.8112 ng/ml
alpha-PVP	4.360	297047	4916.88	51.4	4353.29	27195	505.9378 ng/ml
Alprazolam	5.766	239636	15887.78	103.6	4228.21	15423	514.0597 ng/ml
Amphetamine	3.055	372518	15465.43	58.5	14005.03	14259	402.4338 ng/ml
Benzoylcegonine	3.883	15188	60625.17	7.9	1062.02	1209	507.2882 ng/ml
Buprenorphine	5.817	24881	5033.72	16.9	136.26	20993	48.6352 ng/ml
Bupropion	4.782	902564	5215.62	59.2	43029.98	65635	508.1150 ng/ml
Carisoprodol	5.714	239410	19857.06	57.4	1863.00	25926	481.5186 ng/ml
Citalopram	5.222	184864	1064.75	42.0	∞	16490	498.5437 ng/ml
Clonazepam	5.602	132467	9585.79	35.8	15788.33	5244	440.7585 ng/ml
Cocaine	4.266	277887	182091.89	44.6	224847.68	55959	495.3555 ng/ml
Codeine	2.577	44106	28737.53	100.3	∞	4389	510.0470 ng/ml
Cyclobenzaprine	5.618	205052	283557.88	10.6	∞	16365	504.1753 ng/ml
Dextromethorphan	5.265	115317	42307.37	79.5	375.20	11197	506.0108 ng/ml
Dextrorphan	4.122	92601	14470.74	202.8	113374.76	21913	496.9158 ng/ml
Diazepam	5.952	166979	∞	87.1	∞	16585	479.2727 ng/ml

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.547	115461	53394.68	69.2	23743.24	14755	449.5017 ng/ml
Diphenhydramine	5.292	561273	85664.51	34.2	20731.46	59733	497.3376 ng/ml
Doxylamine	4.529	670220	∞	98.3	10577.35	65218	512.0746 ng/ml
EDDP	5.257	227758	17879.21	41.9	151902.40	23364	503.8471 ng/ml
Fentanyl	5.086	20915	3862.55	75.0	14625.34	21054	49.0798 ng/ml
Fluoxetine	5.704	225656	∞	9.9	∞	17327	498.4290 ng/ml
Hydrocodone	3.018	124945	624.20	40.5	435.68	17744	464.9640 ng/ml
Hydromorphone	1.621	136508	∞	75.9	1259.61	10338	492.1181 ng/ml
Ketamine	4.042	288790	101000.17	37.6	3483.37	29795	483.4760 ng/ml
Lamotrigine	4.290	33530	24163.60	79.7	26013.95	29795	424.4108 ng/ml
Lorazepam	5.737	176531	3218.22	57.3	222.48	5244	253.3941 ng/ml
Meprobamate	4.912	153357	83986.69	26.5	2578.53	16449	457.1907 ng/ml
Methadone	5.650	324535	100004.10	51.1	16586.92	31671	503.6924 ng/ml
Methamphetamine	3.224	356180	9435.39	40.8	8722.80	32166	504.3562 ng/ml
Metoprolol	4.322	66870	89967.48	93.5	12802.13	66469	468.0586 ng/ml
Mirtazapine	4.617	351140	120845.27	47.5	121411.92	27195	387.1911 ng/ml
Mitragynine	5.221	74134	302959.84	38.5	19807.48	31671	552.3259 ng/ml
Morphine	1.253	29647	727.70	23.3	14382.61	714	483.2219 ng/ml
Norbuprenorphine	4.988	6814	2648.32	97.7	2830.39	6225	49.1232 ng/ml
Nordiazepam	5.891	149980	3629.04	59.0	∞	10295	474.1010 ng/ml
Norfentanyl	4.084	55955	6197.91	37.5	5407.92	45074	50.3645 ng/ml
Norhydrocodone	3.073	64592	520.96	41.9	892.38	16668	716.9838 ng/ml
Noroxycodone	2.921	104858	2557.01	49.4	334.11	8512	471.7005 ng/ml
O-desmethyl-tramadol	3.373	752975	271038.94	6.6	3711.63	71164	495.9374 ng/ml
Oxazepam	5.747	216701	∞	70.4	∞	19440	468.3329 ng/ml
Oxycodone	2.833	273085	∞	30.9	∞	26588	486.2463 ng/ml
Oxymorphone	1.417	161911	983.87	47.1	1256.53	11956	501.4989 ng/ml
Phentermine	3.781	108390	4453.65	3.9	711.78	26458	447.1745 ng/ml
Promethazine	5.535	394080	8401.40	28.7	36474.17	32856	499.0102 ng/ml
Quetiapine	5.545	256920	∞	59.4	69179.68	8212	481.5899 ng/ml
Sertraline	5.780	101688	2552.37	90.2	13929.98	8256	500.0197 ng/ml
Temazepam	5.814	451007	1895.44	29.6	3976.08	43323	478.6828 ng/ml
Tramadol	4.242	580111	12878.35	3.6	1427.91	66469	480.6766 ng/ml
Trazodone	5.126	271611	41171.27	78.0	∞	24022	510.1154 ng/ml
Venlafaxine	5.040	454815	24276.59	37.5	∞	44868	504.9727 ng/ml
Zolpidem	4.883	693533	2131.65	31.5	∞	74854	480.5276 ng/ml

AM #28 Multi-Drug Quant. Results



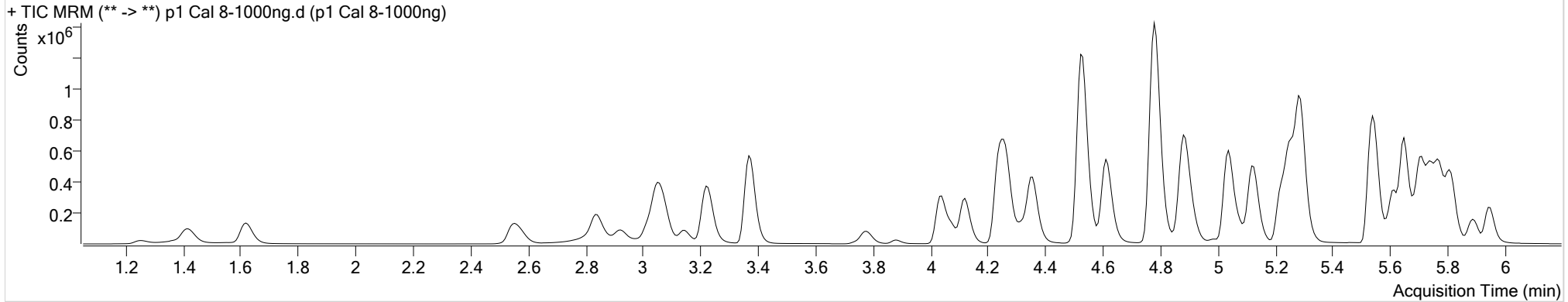
Batch results
Calibration Last Update

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Instrument FALCO-LCMS (Property ID 069901)
Type Cal
Acq. Method MDQ P1 Combined 011619.m
Sample Position P1-H1
Injection Volume 1
Acq. Date-Time 5/14/2019 12:31:48 PM
Sample Info.

Data File p1 Cal 8-1000ng.d
Sample p1 Cal 8-1000ng
Operator
Comment

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
6-MAM	3.144	83777	4827.75	71.8	11182.47	27043	97.9495 ng/ml
7-aminoclonazepam	4.253	159362	45469.70	81.1	31740.66	10326	704.9473 ng/ml
a-hydroxyalprazolam	5.682	152090	1308.78	63.8	4385.68	9079	878.9711 ng/ml
alpha-PVP	4.360	676609	34788.13	51.4	90899.99	31739	987.8185 ng/ml
Alprazolam	5.766	360069	2403.10	102.0	∞	12310	968.7047 ng/ml
Amphetamine	3.055	683104	42422.03	58.1	∞	17712	594.8310 ng/ml
Benzoylcegonine	3.876	33266	17683.81	7.9	2717.61	1349	997.9170 ng/ml
Buprenorphine	5.817	79134	∞	16.8	∞	31167	104.2109 ng/ml
Bupropion	4.782	2399426	505667.47	58.9	1773.20	91386	971.5229 ng/ml
Carisoprodol	5.721	298124	28315.64	56.2	7283.16	15218	1021.5929 ng/ml
Citalopram	5.222	453068	∞	41.5	∞	20216	997.4888 ng/ml
Clonazepam	5.602	171717	34853.80	35.5	1562.48	4259	703.9008 ng/ml
Cocaine	4.259	549509	208880.18	44.1	6470.47	54919	998.7421 ng/ml
Codeine	2.577	76163	600.55	101.0	23973.39	3998	968.2094 ng/ml
Cyclobenzaprine	5.618	518577	370779.61	10.7	20932.88	20637	1011.2273 ng/ml
Dextromethorphan	5.265	269304	59607.72	79.4	1752.83	13417	986.5780 ng/ml
Dextrorphan	4.122	224909	2701.43	205.7	171544.11	26426	1001.2130 ng/ml
Diazepam	5.952	276119	8635.39	86.5	8957.69	14112	931.6426 ng/ml

AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Dihydrocodeine	2.547	199360	131387.54	70.6	101319.79	15820	724.2531 ng/ml
Diphenhydramine	5.292	1453793	2949.70	34.1	58732.47	76778	1002.3415 ng/ml
Doxylamine	4.522	1636437	264804.66	98.5	321340.23	84519	966.1094 ng/ml
EDDP	5.257	653416	2241.17	41.9	35633.76	33708	1001.0977 ng/ml
Fentanyl	5.086	67422	∞	75.1	51559.08	31893	104.4839 ng/ml
Fluoxetine	5.704	611332	96245.64	9.6	102523.69	23544	994.2019 ng/ml
Hydrocodone	3.018	245332	381.24	41.4	1966.08	19149	846.6882 ng/ml
Hydromorphone	1.621	238214	∞	75.9	1382.59	9395	945.2970 ng/ml
Ketamine	4.035	560616	192748.25	37.8	35891.91	31204	896.6402 ng/ml
Lamotrigine	4.290	54902	∞	79.3	3866.21	31204	664.9257 ng/ml
Lorazepam	5.737	210623	8630.89	56.2	1042.98	4259	373.2322 ng/ml
Meprobamate	4.912	216476	42760.13	27.9	∞	11622	914.3550 ng/ml
Methadone	5.650	900237	150777.66	51.8	87033.61	44613	992.3075 ng/ml
Methamphetamine	3.224	768109	56015.24	40.8	28884.98	40006	878.6492 ng/ml
Metoprolol	4.322	136185	∞	93.2	∞	72346	876.4917 ng/ml
Mirtazapine	4.610	945444	335008.66	48.3	713460.35	31739	891.3198 ng/ml
Mitragynine	5.221	175294	35004.41	39.3	146499.14	44613	926.9779 ng/ml
Morphine	1.253	50764	6684.91	23.3	3850.26	626	943.3692 ng/ml
Norbuprenorphine	4.988	22061	1345.33	96.4	1737.46	9976	99.7168 ng/ml
Nordiazepam	5.891	227855	5706.05	57.3	∞	8060	920.5640 ng/ml
Norfentanyl	4.084	134942	6921.29	37.5	∞	49541	110.4656 ng/ml
Norhydrocodone	3.080	134497	∞	41.8	1966.37	17648	1407.0114 ng/ml
Noroxycodone	2.921	186486	∞	49.2	106.40	7986	894.8489 ng/ml
O-desmethyl-tramadol	3.373	1358231	393818.33	6.7	30504.57	65789	967.9592 ng/ml
Oxazepam	5.740	223186	13187.88	69.9	∞	10880	862.4236 ng/ml
Oxycodone	2.833	514352	804.13	32.2	∞	27205	895.9300 ng/ml
Oxymorphone	1.417	270487	5503.85	47.4	2230.66	10989	911.7816 ng/ml
Phentermine	3.781	219959	3602.72	3.9	2771.07	34343	700.1357 ng/ml
Promethazine	5.535	1003300	207754.87	29.1	37800.98	41957	995.4043 ng/ml
Quetiapine	5.545	537484	131647.61	61.7	718.46	10109	819.0751 ng/ml
Sertraline	5.780	244247	737.23	92.8	85355.98	9911	1000.3760 ng/ml
Temazepam	5.814	659799	902.87	29.8	5963.05	31415	965.8786 ng/ml
Tramadol	4.235	1148820	30292.07	3.6	2665.23	72346	875.2732 ng/ml
Trazodone	5.120	740858	∞	79.5	134283.42	34450	971.5678 ng/ml
Venlafaxine	5.040	1093214	186677.38	37.5	5898.88	54856	993.1287 ng/ml
Zolpidem	4.883	1330907	2041.11	31.8	218685.63	78511	879.6022 ng/ml