

REVIEWED

By Brittany Wylie at 9:39 am, May 02, 2019



4/30/2019

Worklist: 3358

<u>LAB_CASE</u>	<u>ITEM</u>	<u>TASK_ID</u>	<u>DESCRIPTION</u>	
C2019-0636	1	150410	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0642	1	150411	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0643	1	150412	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0669	1	150413	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0675	1	150414	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0680	1	150415	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0681	1	150416	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0685	2	150417	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0693	1	150418	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0696	2	150419	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0720	1	150420	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0721	1	150421	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0738	1	150422	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	
C2019-0740	1	150423	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC	

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

Extraction Date: 4/30/19 Analyst: Anne Nord
Plate lot#: 190124 (part IDP-111) Plate Expiration: 7/24/19

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

Blank Blood Lot: 19A207P3

Column: Agilent 120 EC-C18 (2.1x 100-~~4um~~) ★ 9/18/19

LCMS-QQQ ID: 69679 2.7

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: 1926134** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 66759*
- 4. Pipette **250µL 00.5M 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: 66792
- 8. Wait 5 minutes.
- 9. Add **900uL ethyl acetate**.
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. **(10-15 PSI- Selector to the left)**.
- 12. Add **900uL ethyl acetate**.
- 13. Wait 5 minutes.
- 14. Apply positive pressure for approx. 15 seconds. **(10-15 PSI- Selector to the left)**.
- 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
SPE Dry ID: 66819
- 16. Reconstitute in **100µL 20% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Create batch and process data.
Worklist path: MassHunter|Data|am 28|043019 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? Yes, see comments Add Control data to QC tracking spreadsheet.
- 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS:

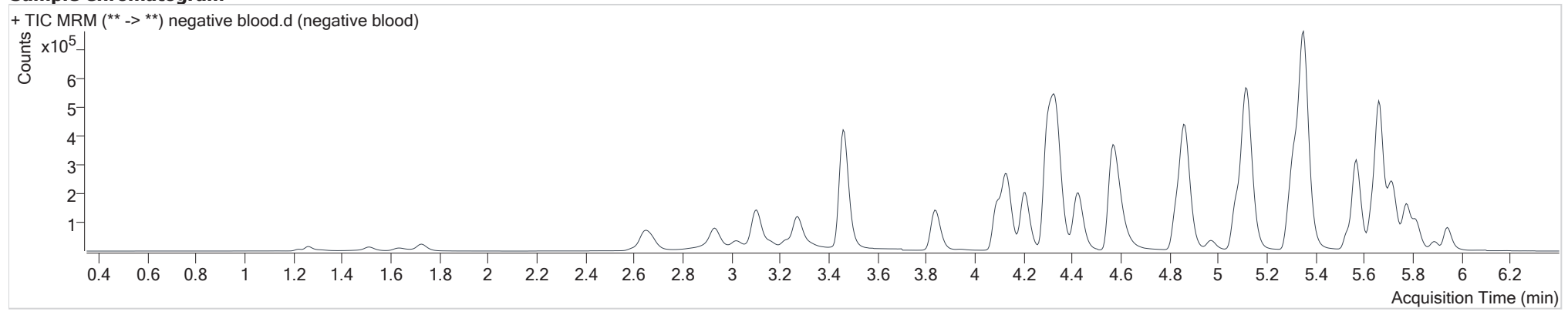
Curves limited: Dihydrocodeine 5-50, amphetamine 5-500, phentermine 5/250, trazodone 5-250, fentanyl .5-50

Dropped calibrator 2 from norbuprenorphine curve tops cut off peaks.

ISPFS AM #28 Multi-Drug Quant. Results

Batch results	D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin		
Calibration Last Update	5/1/2019 10:12:47 AM		
Instrument Type	069697	Data File	negative blood.d
Acq. Method	Sample	Sample	negative blood
Sample Position	mdq p1 cda 121818.m	Operator	Anne Nord
Injection Volume	P2-C4	Comment	
Acq. Date-Time	2.5		
Sample Info.	4/30/2019 2:51:38 PM		

Sample Chromatogram

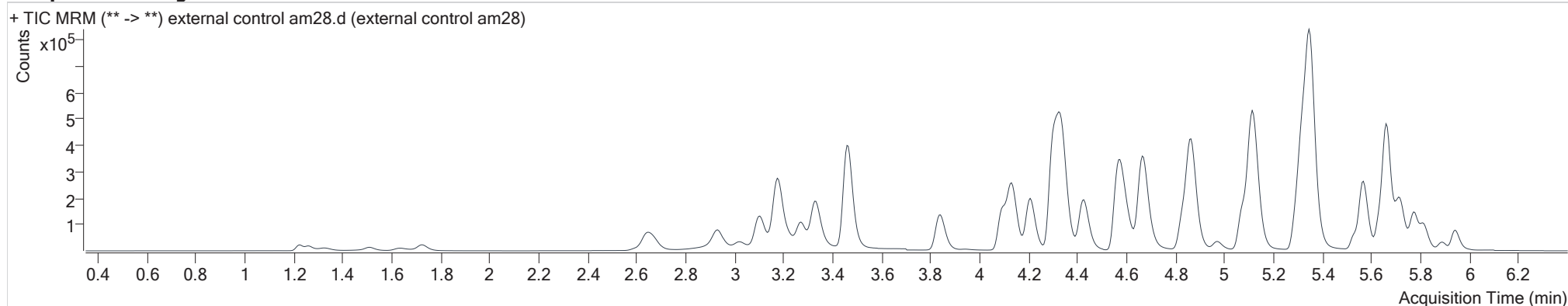


ISPFS AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Calibration Last Update 5/1/2019 10:12:47 AM

Instrument	069697	Data File	external control am28.d
Type	Sample	Sample	external control am28
Acq. Method	mdq p1 cda 121818.m	Operator	Anne Nord
Sample Position	P2-D4	Comment	
Injection Volume	2.5		
Acq. Date-Time	4/30/2019 3:02:28 PM		
Sample Info.			

Sample Chromatogram



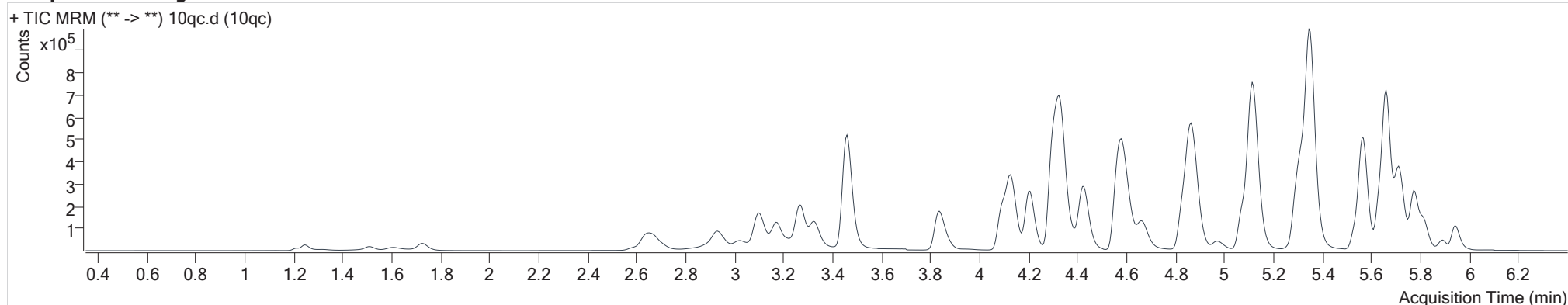
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.226	13537	∞	21.8	31682	5366	36.77 ng/ml
Amphetamine	3.178	495327	3059	52.8	2307	184598	46.45 ng/ml
Methamphetamine	3.334	264095	∞	39.7	273	269939	43.89 ng/ml
Mirtazapine	4.666	709662	∞	46.3	320785	999647	36.50 ng/ml
Dextromethorphan	5.331	296364	111661	75.4	∞	357590	40.42 ng/ml
Buprenorphine	5.667	5129	1312	16.3	1413	59656	3.31 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Calibration Last Update 5/1/2019 10:12:47 AM

Instrument	069697	Data File	10qc.d
Type	QC	Sample	10qc
Acq. Method	mdq p1 cda 121818.m	Operator	Anne Nord
Sample Position	P2-A6	Comment	
Injection Volume	2.5		
Acq. Date-Time	4/30/2019 4:07:14 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.216	3708	1144	23.0	7401	5480	9.78 ng/ml
Oxymorphone	1.515	12541	607	44.8	545	45369	9.62 ng/ml
Hydromorphone	1.733	19294	2516	62.5	2384	70263	9.96 ng/ml
Dihydrocodeine	2.677	40818	21340	64.6	13124	218295	10.50 ng/ml
Codeine	2.708	13873	8866	105.7	7511	65260	10.07 ng/ml
Oxycodone	2.950	60958	1766	29.1	2052	275032	9.95 ng/ml
Noroxycodone	3.038	24792	1851	41.6	2113	86102	10.58 ng/ml
Hydrocodone	3.119	38731	519	38.0	602	217967	9.97 ng/ml
Norhydrocodone	3.176	2384	71	43.4	22	54292	8.26 ng/ml
Amphetamine	3.178	185535	2148	54.2	710	260275	10.94 ng/ml
6-MAM	3.234	2060	∞	75.6	2805	72750	0.88 ng/ml
Methamphetamine	3.329	165150	∞	38.9	223	582217	11.26 ng/ml
O-desmethyl-tramadol	3.465	259962	19811	6.8	113	1169292	10.14 ng/ml
Phentermine	3.868	56483	303	5.0	172	504346	10.80 ng/ml
Benzoylcegonine	3.972	2487	9572	8.3	48	7763	9.98 ng/ml
Ketamine	4.106	100073	8190	38.0	7127	474185	10.09 ng/ml
Norfentanyl	4.152	18097	∞	41.2	547	762468	0.96 ng/ml
Dextrorphan	4.207	50157	∞	214.9	∞	561331	10.72 ng/ml

10qc

Generated at 10:13 AM on 5/1/2019

ISPFS AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.314	259365	20613	3.6	303	1206088	11.01 ng/ml
Cocaine	4.332	120514	∞	43.0	117	1086639	10.10 ng/ml
7-aminoclonazepam	4.338	32789	1887	84.3	6079	127357	10.50 ng/ml
Metoprolol	4.389	29972	7500	94.7	1965	1776707	10.10 ng/ml
Lamotrigine	4.385	12133	1486	88.3	15654	414544	9.68 ng/ml
alpha-PVP	4.433	138400	41925	52.8	3330	606446	10.26 ng/ml
Doxylamine	4.589	335358	6449	97.1	4377	1414862	10.21 ng/ml
Mirtazapine	4.666	203478	21790	46.4	2947	1131281	9.74 ng/ml
Bupropion	4.850	173479	21939	60.5	7392	576592	11.29 ng/ml
Zolpidem	4.883	253107	∞	30.5	1705	1083652	10.39 ng/ml
Meprobamate	4.993	18581	62888	30.5	40	88947	10.35 ng/ml
Norbuprenorphine	5.070	240	607	85.8	86	7654	0.97 ng/ml
Trazodone	5.117	125781	3934	77.4	29876	564847	10.77 ng/ml
Venlafaxine	5.115	209379	34086	39.6	3556	1074317	10.22 ng/ml
Fentanyl	5.137	12510	17452	73.4	19992	597393	0.97 ng/ml
Mitragynine	5.265	30650	62241	41.0	16764	1131281	7.67 ng/ml
Citalopram	5.297	116804	14926	46.6	∞	504846	9.98 ng/ml
EDDP	5.321	28179	101317	229.4	2206	358768	9.20 ng/ml
Dextromethorphan	5.331	78855	∞	78.5	41402	414544	9.21 ng/ml
Diphenhydramine	5.352	373321	13776	34.8	44624	1776707	10.24 ng/ml
Promethazine	5.568	208436	24143	32.8	6036	866385	10.21 ng/ml
Quetiapine	5.545	131946	∞	59.4	∞	185980	10.98 ng/ml
Clonazepam	5.633	10006	5167	34.9	4110	16879	11.42 ng/ml
Cyclobenzaprine	5.635	127168	293357	9.9	10031	477425	10.19 ng/ml
Methadone	5.664	238767	14102	47.6	36035	1131281	10.37 ng/ml
a-hydroxyalprazolam	5.709	2464	209	62.7	43	14174	8.98 ng/ml
Fluoxetine	5.710	120121	12257	9.5	61023	472340	9.46 ng/ml
Carisoprodol	5.733	43947	51776	57.6	630	213699	9.96 ng/ml
Lorazepam	5.750	5121	296	51.3	26	167941	10.23 ng/ml
Oxazepam	5.763	7484	7804	70.7	75	31082	10.03 ng/ml
Alprazolam	5.777	50938	1858	110.9	874	167941	10.37 ng/ml
Sertraline	5.777	52873	40792	101.7	92669	228535	10.10 ng/ml
Buprenorphine	5.667	1631	197	17.3	375	62813	1.00 ng/ml
Temazepam	5.819	42598	2214	30.5	148	195172	10.01 ng/ml
Nordiazepam	5.897	21100	12116	61.8	15719	70038	9.80 ng/ml
Diazepam	5.947	41002	3297	85.1	∞	183180	10.04 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results

D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin

Calibration Last Update

5/1/2019 10:12:47 AM

Instrument

069697

Data File

100qc.d

Type

QC

Sample

100qc

Acq. Method

mdq p1 cda 121818.m

Operator

Anne Nord

Sample Position

P2-B6

Comment**Injection Volume**

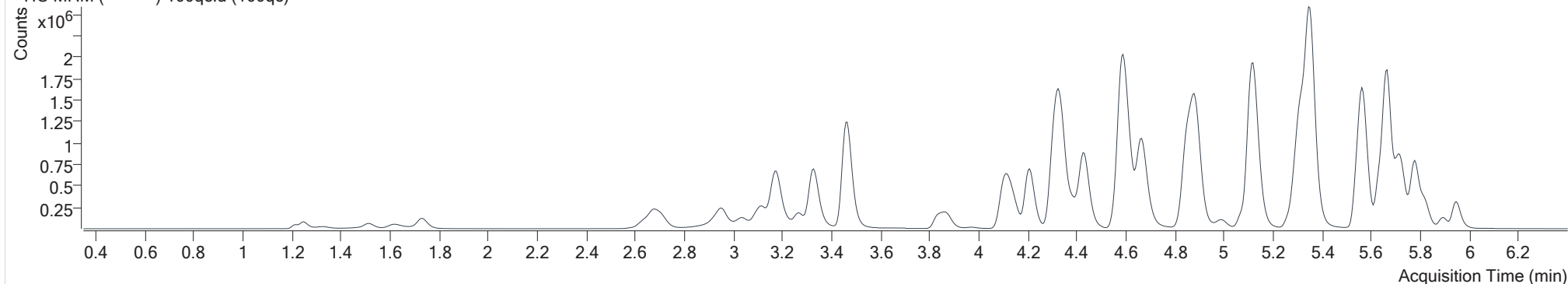
2.5

Acq. Date-Time

4/30/2019 4:18:03 PM

Sample Info.**Sample Chromatogram**

+ TIC MRM (** -> **) 100qc.d (100qc)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.216	32512	∞	22.1	257	4926	96.37 ng/ml
Oxymorphone	1.515	122021	861	44.4	573	44841	109.04 ng/ml
Hydromorphone	1.733	165294	10672	84.1	5525	67742	91.22 ng/ml
Dihydrocodeine	2.677	355923	57608	64.5	64379	206466	102.07 ng/ml
Codeine	2.708	118742	∞	104.7	30904	55947	103.60 ng/ml
Oxycodone	2.950	572822	9797	29.5	1539	265002	104.77 ng/ml
Noroxycodone	3.038	208740	∞	41.6	1928	82190	96.60 ng/ml
Hydrocodone	3.119	349943	996	39.4	415	203323	110.85 ng/ml
Norhydrocodone	3.181	35060	4451	41.8	286	54033	92.08 ng/ml
Amphetamine	3.178	1280840	13574	53.1	5216	213899	106.02 ng/ml
6-MAM	3.234	19032	∞	75.2	∞	65803	8.66 ng/ml
Methamphetamine	3.329	1032448	1115	42.2	2172	461596	102.99 ng/ml
O-desmethyl-tramadol	3.465	2360739	312575	6.5	∞	1071234	99.76 ng/ml
Phentermine	3.874	419003	3077	4.8	634	435967	101.35 ng/ml
Benzoylcegonine	3.972	20248	23990	8.1	60	7450	98.72 ng/ml
Ketamine	4.112	902368	∞	37.5	10639	440532	103.29 ng/ml
Norfentanyl	4.158	174146	∞	40.3	8367	692293	9.29 ng/ml
Dextroprphan	4.207	450085	∞	215.7	280374	508025	105.86 ng/ml

100qc

Generated at 10:13 AM on 5/1/2019

ISPFS AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.314	2181870	194634	3.6	5245	1131648	108.77 ng/ml
Cocaine	4.332	1000409	501	43.1	65437	937644	99.05 ng/ml
7-aminoclonazepam	4.343	224071	27027	84.7	728	89386	102.88 ng/ml
Metoprolol	4.389	233732	202831	96.1	∞	1477440	104.82 ng/ml
Lamotrigine	4.385	94790	52254	88.3	28236	330285	99.48 ng/ml
alpha-PVP	4.433	1252310	268418	52.8	66885	554925	98.01 ng/ml
Doxylamine	4.589	3192326	111656	97.1	204062	1341432	104.24 ng/ml
Mirtazapine	4.666	1896276	104057	45.6	56819	985151	97.84 ng/ml
Bupropion	4.850	1501592	150070	59.8	17651	526126	116.49 ng/ml
Zolpidem	4.888	2297377	12360	30.5	6166	1003953	103.90 ng/ml
Meprobamate	4.993	164480	∞	28.9	3022	80834	107.78 ng/ml
Norbuprenorphine	5.065	1791	2496	102.9	2575	7680	10.60 ng/ml
Trazodone	5.122	1023223	148626	77.7	170899	531194	101.79 ng/ml
Venlafaxine	5.115	1888720	18913	39.1	19222	962142	96.89 ng/ml
Fentanyl	5.137	105798	3506	75.5	105632	488227	9.28 ng/ml
Mitragynine	5.265	308598	∞	37.8	2445	985151	81.95 ng/ml
Citalopram	5.292	976526	64441	46.9	∞	431273	100.67 ng/ml
EDDP	5.315	449535	∞	239.4	107201	560236	91.72 ng/ml
Dextromethorphan	5.331	639183	∞	75.1	116309	330285	94.52 ng/ml
Diphenhydramine	5.352	3213575	223562	33.6	29117	1477440	99.28 ng/ml
Promethazine	5.568	1823825	201383	31.4	∞	744742	97.03 ng/ml
Quetiapine	5.544	1149426	295878	58.7	7546	166900	114.79 ng/ml
Clonazepam	5.633	71957	5735	34.1	54502	13299	113.20 ng/ml
Cyclobenzaprine	5.635	1003794	∞	10.4	90274	378058	101.35 ng/ml
Methadone	5.664	2168142	12962	46.5	19947	985151	104.21 ng/ml
a-hydroxyalprazolam	5.709	21226	1175	61.1	22566	11337	104.34 ng/ml
Fluoxetine	5.710	921748	114056	9.1	∞	361667	92.24 ng/ml
Carisoprodol	5.733	347682	509825	57.7	6525	166913	98.42 ng/ml
Lorazepam	5.755	35582	894	58.2	135	131940	108.71 ng/ml
Oxazepam	5.763	42862	1367	71.7	448	18943	99.39 ng/ml
Alprazolam	5.777	400241	5159	113.8	5290	131940	102.25 ng/ml
Sertraline	5.777	363894	105500	99.4	∞	158566	100.96 ng/ml
Buprenorphine	5.672	13379	2539	15.6	506	53421	9.62 ng/ml
Temazepam	5.824	345139	26683	30.9	2416	159177	98.25 ng/ml
Nordiazepam	5.897	156394	13055	62.4	161658	54446	97.31 ng/ml
Diazepam	5.947	330665	7018	86.1	5702	150911	109.06 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

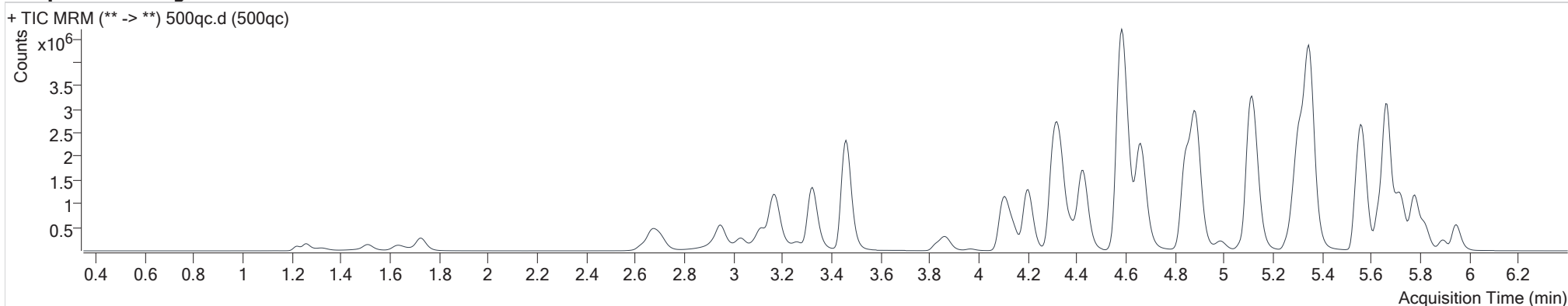
Batch results
Calibration Last Update

D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
5/1/2019 10:12:47 AM

Instrument 069697
Type QC
Acq. Method mdq p1 cda 121818.m
Sample Position P2-C6
Injection Volume 2.5
Acq. Date-Time 4/30/2019 6:49:13 PM
Sample Info.

Data File 500qc.d
Sample 500qc 250 QC *A*
Operator Anne Nord
Comment

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.226	74759	∞	22.4	7799	4594	237.77 ng/ml
Oxymorphone	1.510	313813	289	44.2	3188	42390	299.43 ng/ml
Hydromorphone	1.728	475149	15978	65.0	34182	63216	281.68 ng/ml
Dihydrocodeine	2.672	793655	∞	63.7	83914	204610	230.47 ng/ml
Codeine	2.703	251252	2623	104.6	∞	49441	248.52 ng/ml
Oxycodone	2.945	1425219	8267	29.7	838	270244	256.89 ng/ml
Noroxycodone	3.033	481692	3380	42.2	3173	79436	231.23 ng/ml
Hydrocodone	3.119	829965	∞	39.8	5145	199236	270.62 ng/ml
Norhydrocodone	3.176	90917	942	41.2	941	54627	232.79 ng/ml
Amphetamine	3.173	2395350	12355	52.4	22832	182268	234.98 ng/ml
6-MAM	3.229	47150	∞	76.1	∞	62050	22.70 ng/ml
Methamphetamine	3.324	2048439	4906	39.3	20276	401987	237.28 ng/ml
O-desmethyl-tramadol	3.460	5528882	1596848	6.4	∞	992024	252.18 ng/ml
Phentermine	3.868	796483	∞	4.7	2092	391954	215.58 ng/ml
Benzoylcegonine	3.966	53276	86159	8.0	98	8165	239.64 ng/ml
Ketamine	4.106	2038296	1424164	37.8	32339	422609	244.05 ng/ml
Norfentanyl	4.152	439156	1058825	40.7	19095	657933	24.51 ng/ml
Dextroprphan	4.202	1018413	∞	217.6	1009142	463972	262.21 ng/ml

500qc



ISPFS AM #28 Multi-Drug Quant. Results

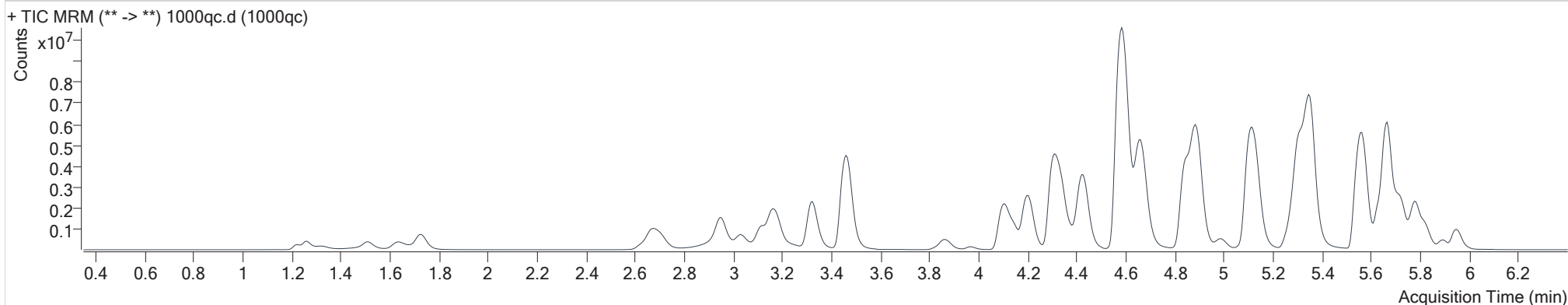
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.309	4727315	140311	3.5	3940	1083911	247.63 ng/ml
Cocaine	4.327	2160603	∞	42.5	∞	808235	248.50 ng/ml
7-aminoclonazepam	4.338	363231	396066	84.4	∞	59074	252.46 ng/ml
Metoprolol	4.384	441131	678527	95.7	9352	1191095	246.99 ng/ml
Lamotrigine	4.380	180307	2929	87.2	11856	241876	259.22 ng/ml
alpha-PVP	4.428	2836091	211984	52.7	128561	508504	241.64 ng/ml
Doxylamine	4.584	7830138	604757	97.1	1427	1351973	253.96 ng/ml
Mirtazapine	4.660	4183375	1252983	45.6	228559	833592	254.04 ng/ml
Bupropion	4.845	3261130	538945	59.6	727845	493742	271.05 ng/ml
Zolpidem	4.883	5343577	∞	29.9	8945	952420	255.10 ng/ml
Meprobamate	4.993	365016	195840	29.3	50770	77845	249.40 ng/ml
Norbuprenorphine	5.060	3883	2859	111.9	6526	6998	25.95 ng/ml
Trazodone	5.122	1904307	107079	78.1	103447	473816	213.61 ng/ml
Venlafaxine	5.109	4357284	212527	38.8	26939	883179	242.49 ng/ml
Fentanyl	5.137	195065	4263	77.8	3049	332610	24.97 ng/ml
Mitragynine	5.260	594703	∞	39.3	∞	833592	185.82 ng/ml
Citalopram	5.287	1915566	1326	47.9	492	343829	248.21 ng/ml
EDDP	5.315	1135973	457611	235.9	70256	573135	226.20 ng/ml
Dextromethorphan	5.326	1135759	841014	75.7	∞	241876	229.47 ng/ml
Diphenhydramine	5.352	6523433	43217	33.3	16949	1191095	248.89 ng/ml
Promethazine	5.568	3031823	24715	31.6	18188	497937	240.15 ng/ml
Quetiapine	5.545	2435566	3339913	59.3	1251337	155202	262.76 ng/ml
Clonazepam	5.633	147738	20937	34.0	∞	12035	258.21 ng/ml
Cyclobenzaprine	5.635	1585978	∞	10.4	7188	239310	252.93 ng/ml
Methadone	5.664	4523720	118648	45.6	592819	833592	256.36 ng/ml
a-hydroxyalprazolam	5.704	47574	2386	59.5	527	11098	239.88 ng/ml
Fluoxetine	5.710	1366153	15764	9.0	810632	214310	230.30 ng/ml
Carisoprodol	5.733	724038	1700009	56.9	13998	141926	240.65 ng/ml
Lorazepam	5.750	67721	2035	57.4	371	111190	248.44 ng/ml
Oxazepam	5.757	75084	1281	72.0	699	13154	251.67 ng/ml
Alprazolam	5.777	826728	2532	110.8	4031	111190	250.37 ng/ml
Sertraline	5.777	460216	∞	99.1	4537	82277	246.20 ng/ml
Buprenorphine	5.672	25402	7598	15.5	7518	37709	25.86 ng/ml
Temazepam	5.819	726661	7395	30.5	4895	138989	236.70 ng/ml
Nordiazepam	5.897	309678	∞	61.5	187281	45108	233.19 ng/ml
Diazepam	5.947	682077	∞	85.9	8226	127792	267.41 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Calibration Last Update 5/1/2019 10:12:47 AM

Instrument	069697	Data File	1000qc.d
Type	QC	Sample	1000qc
Acq. Method	mdq p1 cda 121818.m	Operator	Anne Nord
Sample Position	P2-D6	Comment	
Injection Volume	2.5		
Acq. Date-Time	4/30/2019 7:00:03 PM		
Sample Info.			

Sample Chromatogram

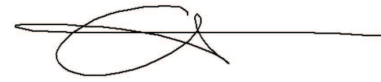


Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.226	199771	∞	22.8	632	3271	892.67 ng/ml
Oxymorphone	1.510	1036773	3658	43.9	9749	43539	966.72 ng/ml
Hydromorphone	1.728	1303651	∞	72.9	20806	49188	994.12 ng/ml
Dihydrocodeine	2.667	1998663	67506	63.7	84005	166864	713.04 ng/ml ocr A
Codeine	2.703	599605	77337	105.4	13969	30307	968.51 ng/ml
Oxycodone	2.945	4717801	14075	29.0	7014	233511	986.61 ng/ml
Noroxycodone	3.033	1387934	∞	43.6	5562	51711	1024.87 ng/ml
Hydrocodone	3.114	2334975	2027	39.9	748	154285	987.49 ng/ml
Norhydrocodone	3.176	252899	1049	42.5	∞	35439	991.00 ng/ml
Amphetamine	3.167	4108171	29679	52.7	70315	91589	806.61 ng/ml ocr A
6-MAM	3.229	154571	∞	75.1	12697	47130	97.86 ng/ml
Methamphetamine	3.324	3878604	1666	39.1	∞	207992	873.81 ng/ml
O-desmethyl-tramadol	3.460	13575695	521316	6.3	46351	608338	1009.50 ng/ml
Phentermine	3.863	1488817	6193	4.7	4069	250511	632.69 ng/ml ocr A
Benzoylcegonine	3.966	211977	314310	8.1	899	7860	996.37 ng/ml
Ketamine	4.106	4976653	∞	37.0	29911	295765	852.96 ng/ml
Norfentanyl	4.152	1350735	1768	40.5	19000	412416	119.94 ng/ml
Dextrorphan	4.202	2500480	2292875	218.4	920164	283323	1054.15 ng/ml

1000qc

Generated at 10:13 AM on 5/1/2019

ocr = outside curve range



ISPFS AM #28 Multi-Drug Quant. Results

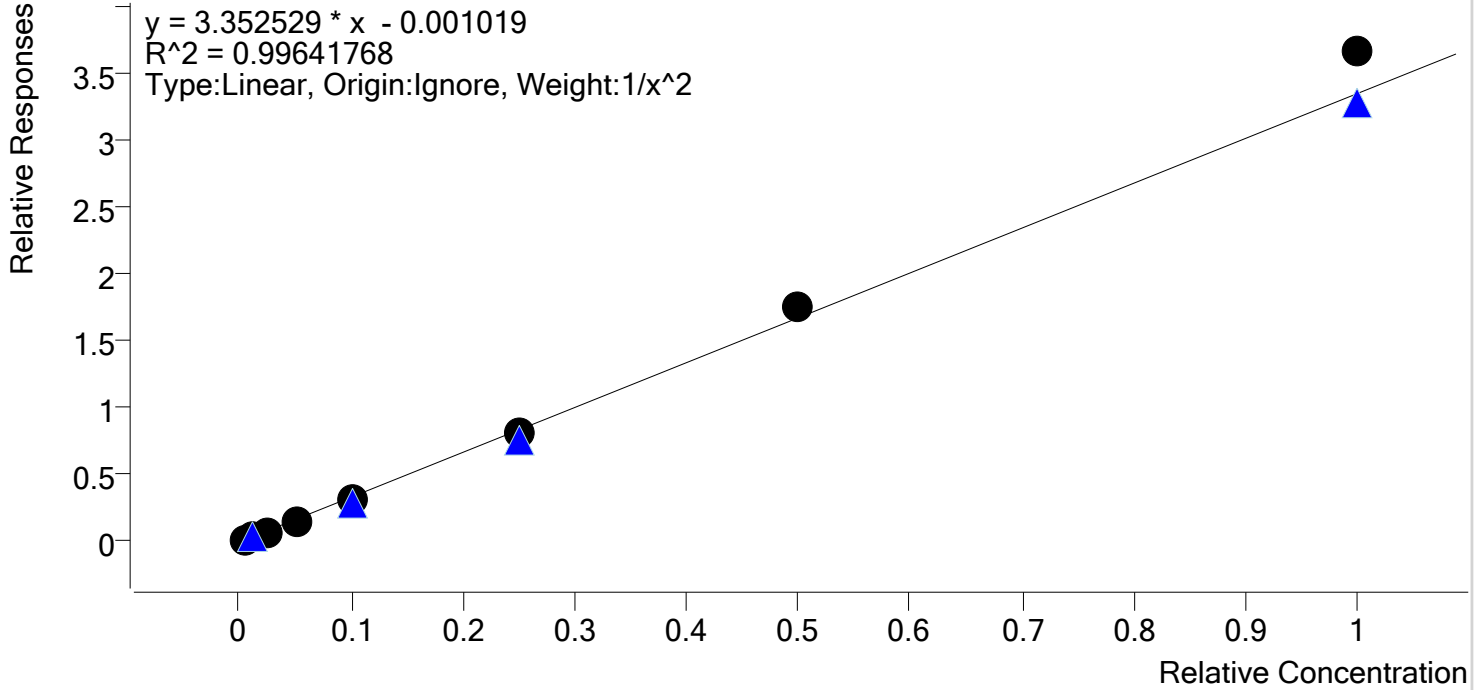
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.305	10272755	153617	3.4	3347	705130	830.14 ng/ml
Cocaine	4.332	4524889	687793	42.0	195990	416594	1010.38 ng/ml
7-aminoclonazepam	4.343	435604	43470	85.4	27396	16493	1084.67 ng/ml
Metoprolol	4.384	765294	669808	96.1	11366	573231	893.48 ng/ml
Lamotrigine	4.375	276648	6352	87.4	3813	96476	998.61 ng/ml
alpha-PVP	4.428	7179891	358870	52.4	299366	311073	998.79 ng/ml
Doxylamine	4.584	20284930	311609	97.7	17777	1008918	882.11 ng/ml
Mirtazapine	4.660	10640747	595883	45.2	700299	487949	1101.72 ng/ml
Bupropion	4.845	7419839	792955	58.9	364127	338190	902.93 ng/ml
Zolpidem	4.888	13179401	213591	29.6	15261	638713	938.86 ng/ml
Meprobamate	4.993	1021456	1614905	29.3	∞	61111	891.08 ng/ml
Norbuprenorphine	5.060	12158	16321	98.1	13947	5947	97.01 ng/ml
Trazodone	5.127	3746378	80211	78.0	151671	412946	483.61 ng/ml ocr A
Venlafaxine	5.109	10706438	1000401	37.9	18471	519565	1010.70 ng/ml
Fentanyl	5.143	507533	36478	83.0	38968	177568	121.38 ng/ml ocr A
Mitragynine	5.260	1650432	2167347	38.9	1451406	487949	878.63 ng/ml
Citalopram	5.282	3461875	198340	46.9	∞	155746	991.34 ng/ml
EDDP	5.310	3359973	1159265	245.2	16310	413799	925.90 ng/ml
Dextromethorphan	5.326	1875639	200370	75.3	∞	96476	950.38 ng/ml
Diphenhydramine	5.352	12862823	∞	33.5	119536	573231	1017.52 ng/ml
Promethazine	5.568	8365398	2200261	30.6	∞	323844	1016.40 ng/ml
Quetiapine	5.539	5449798	433621	57.8	∞	109874	832.55 ng/ml
Clonazepam	5.628	224667	16973	34.3	14169	5854	809.58 ng/ml
Cyclobenzaprine	5.630	3664916	396504	10.2	2787	138721	1008.22 ng/ml
Methadone	5.664	10874358	121538	44.6	298521	487949	1051.48 ng/ml
a-hydroxyalprazolam	5.704	121061	6258	60.0	1814	6692	1014.84 ng/ml
Fluoxetine	5.710	3624665	2182134	8.7	∞	145723	897.82 ng/ml
Carisoprodol	5.733	1345404	738931	57.5	153123	60973	1039.98 ng/ml
Lorazepam	5.750	158146	7911	58.1	782	57266	1134.71 ng/ml
Oxazepam	5.757	155755	2294	72.5	3216	6973	986.64 ng/ml
Alprazolam	5.782	1803576	6308	111.1	9283	57266	1060.00 ng/ml
Sertraline	5.782	1114849	∞	101.5	∞	51082	960.89 ng/ml
Buprenorphine	5.678	44046	21950	16.1	8656	13039	129.64 ng/ml
Temazepam	5.819	1736876	108911	30.6	∞	79787	985.10 ng/ml
Nordiazepam	5.897	647716	∞	61.9	∞	25267	871.99 ng/ml
Diazepam	5.947	1419882	9656	85.8	∞	70593	1011.10 ng/ml

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte 6-MAM **Internal Standard** 6-MAM-D6

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



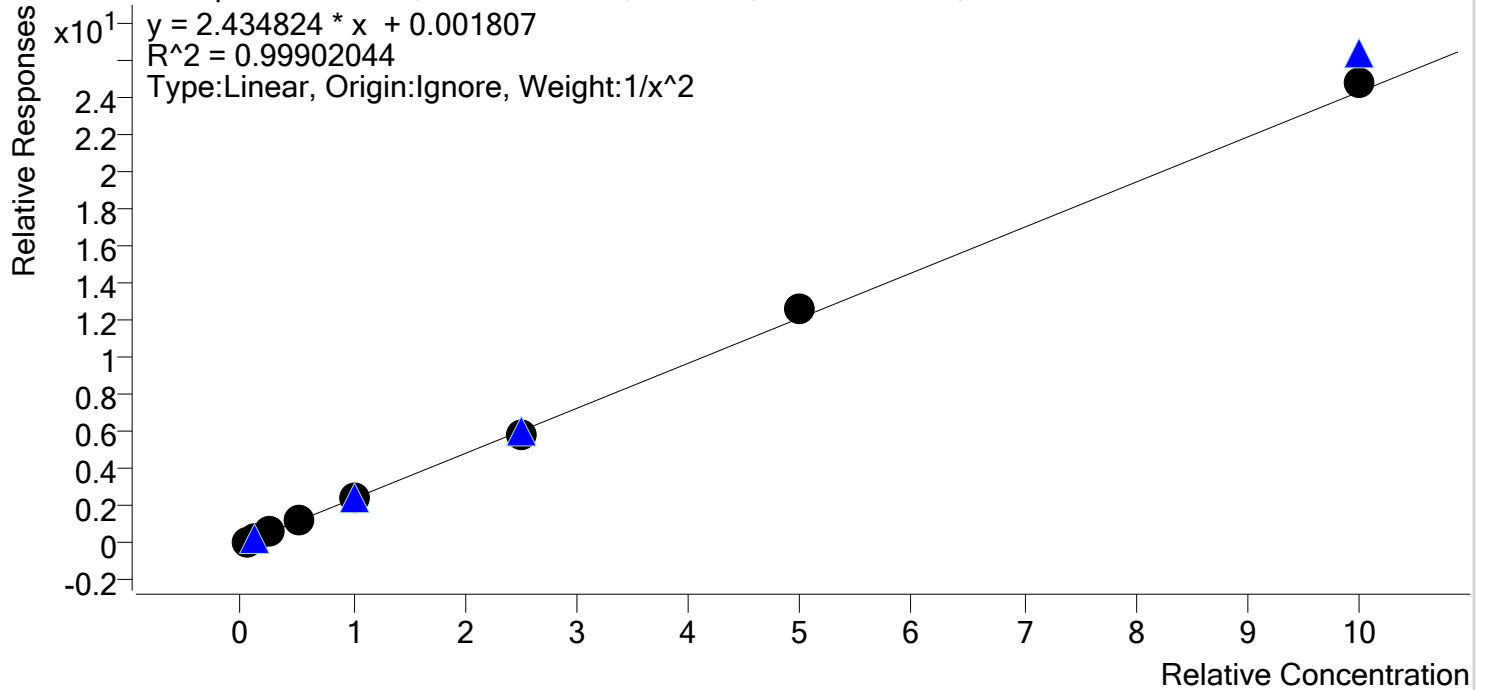
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	0.5	0.5	101.7
calibrator 2	2	✓	1.0	1.0	100.0
calibrator 3	3	✓	2.5	2.4	95.5
calibrator 4	4	✓	5.0	4.6	92.9
calibrator 5	5	✓	10.0	9.8	97.8
calibrator 6	6	✓	25.0	24.6	98.3
calibrator 7	7	✓	50.0	52.3	104.5
calibrator 8	8	✓	100.0	109.4	109.4

Compound Calibration Report



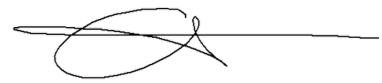
Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte 7-aminoclonazepam **Internal Standard** 7-Aminoclonazepam-D4

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

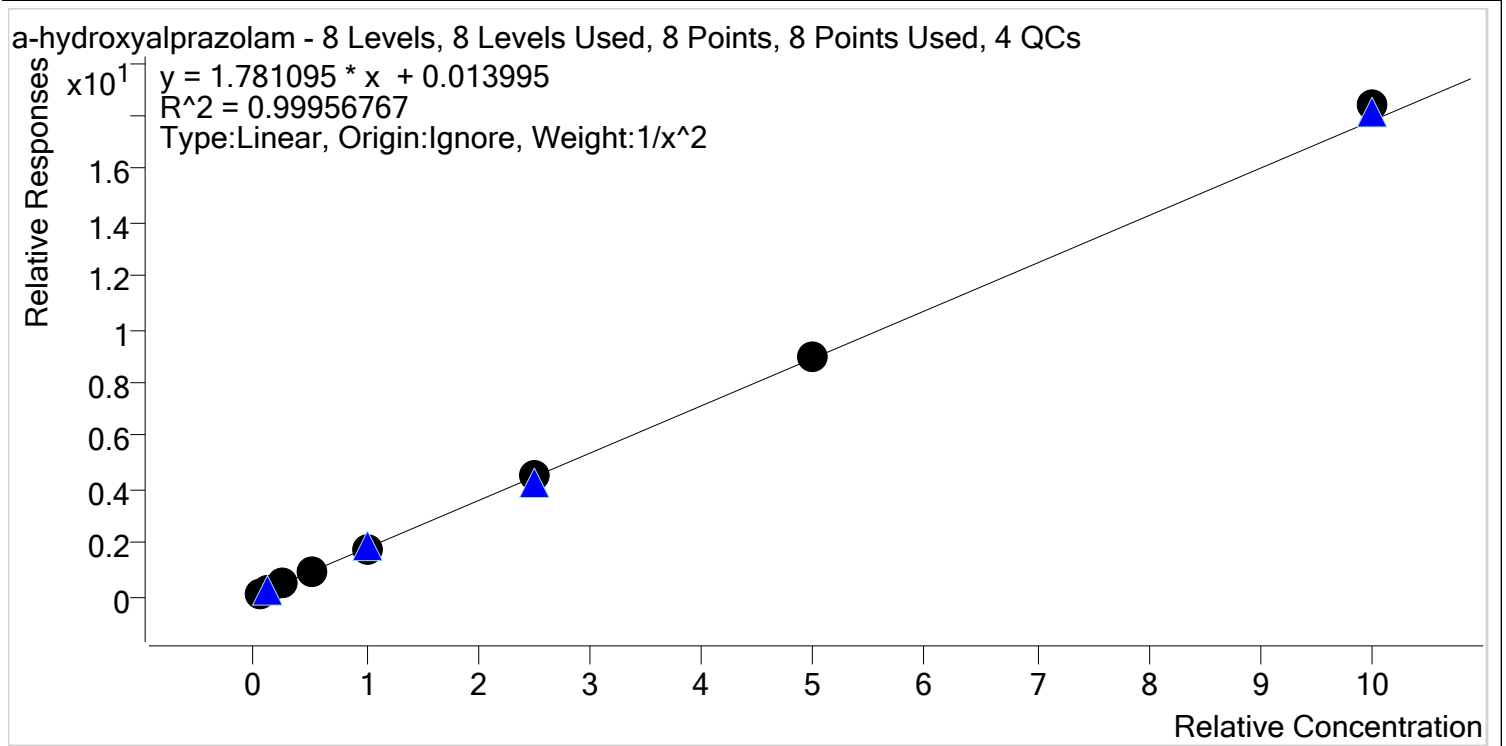


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.0	99.8
calibrator 2	2	✓	10.0	10.2	101.6
calibrator 3	3	✓	25.0	24.6	98.6
calibrator 4	4	✓	50.0	48.8	97.7
calibrator 5	5	✓	100.0	98.7	98.7
calibrator 6	6	✓	250.0	241.5	96.6
calibrator 7	7	✓	500.0	523.9	104.8
calibrator 8	8	✓	1000.0	1023.1	102.3

Compound Calibration Report

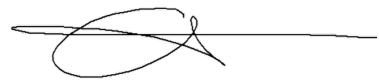



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte a-hydroxyalprazolam **Internal Standard** a-hydroxyalprazolam-D5

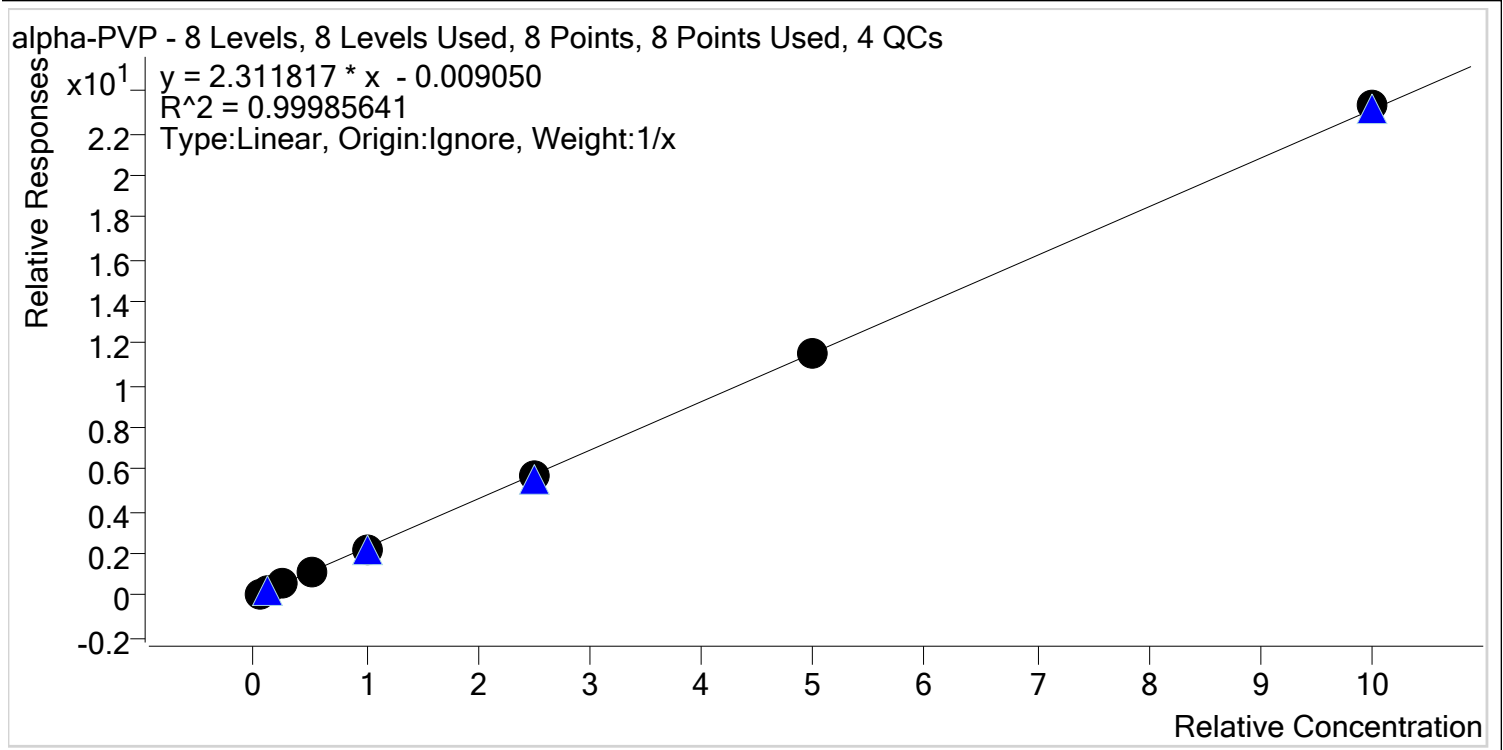


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.1	101.0
calibrator 2	2	✓	10.0	9.9	98.9
calibrator 3	3	✓	25.0	24.8	99.2
calibrator 4	4	✓	50.0	48.5	97.1
calibrator 5	5	✓	100.0	99.7	99.7
calibrator 6	6	✓	250.0	251.5	100.6
calibrator 7	7	✓	500.0	501.8	100.4
calibrator 8	8	✓	1000.0	1032.5	103.3

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte alpha-PVP **Internal Standard** alpha-PVP-d8



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.2	104.4
calibrator 2	2	✓	10.0	10.4	104.3
calibrator 3	3	✓	25.0	24.3	97.2
calibrator 4	4	✓	50.0	48.1	96.3
calibrator 5	5	✓	100.0	98.7	98.7
calibrator 6	6	✓	250.0	246.6	98.6
calibrator 7	7	✓	500.0	498.5	99.7
calibrator 8	8	✓	1000.0	1008.2	100.8

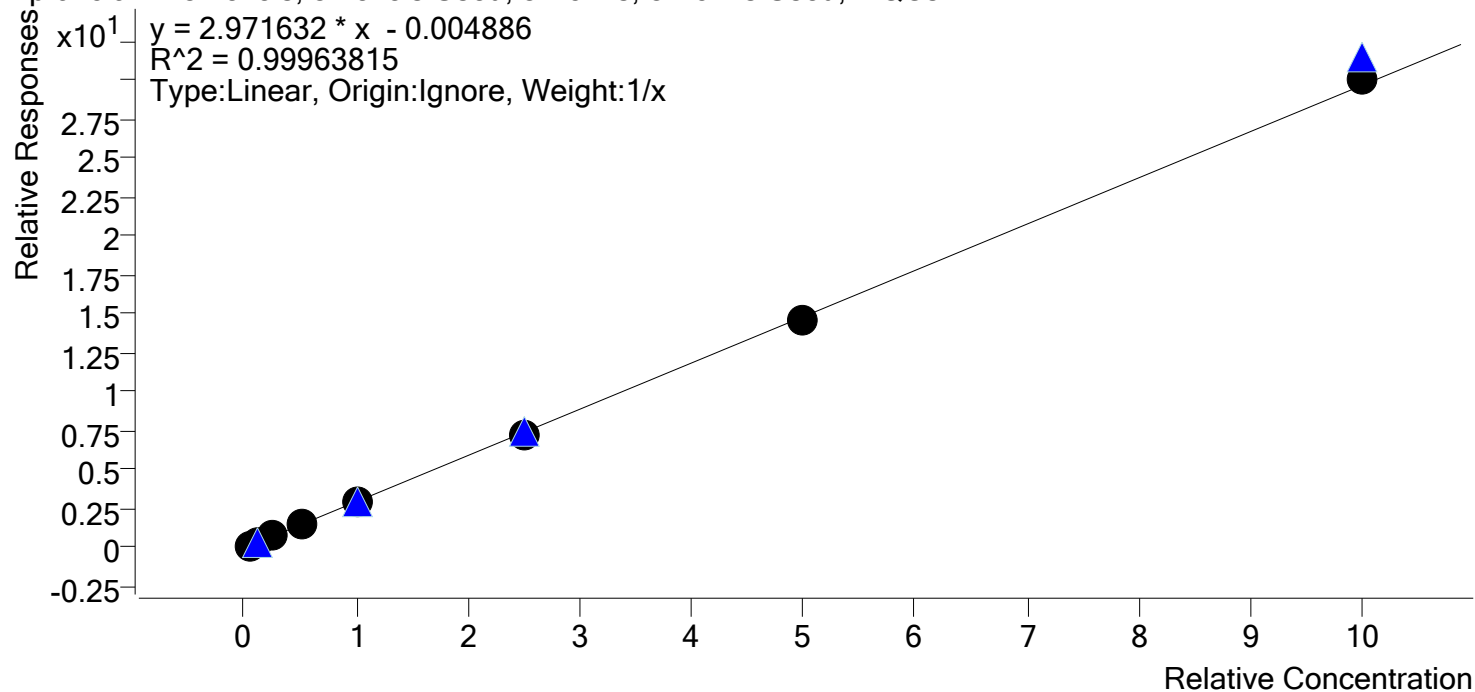
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Alprazolam

Internal Standard Alprazolam-D5

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



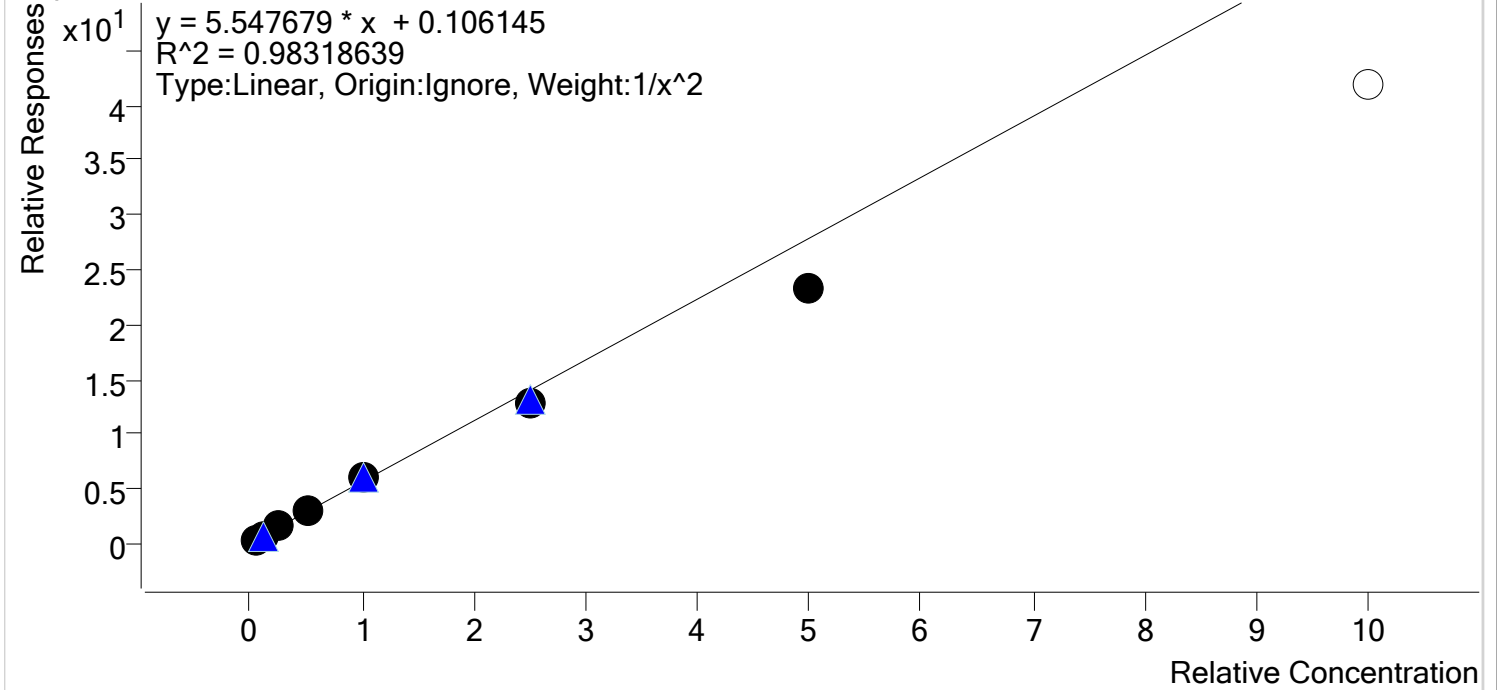
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.1	101.1
calibrator 2	2	✓	10.0	10.5	104.9
calibrator 3	3	✓	25.0	24.6	98.5
calibrator 4	4	✓	50.0	49.6	99.2
calibrator 5	5	✓	100.0	99.4	99.4
calibrator 6	6	✓	250.0	241.4	96.6
calibrator 7	7	✓	500.0	494.0	98.8
calibrator 8	8	✓	1000.0	1015.4	101.5

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Amphetamine **Internal Standard** Amphetamine-D11

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



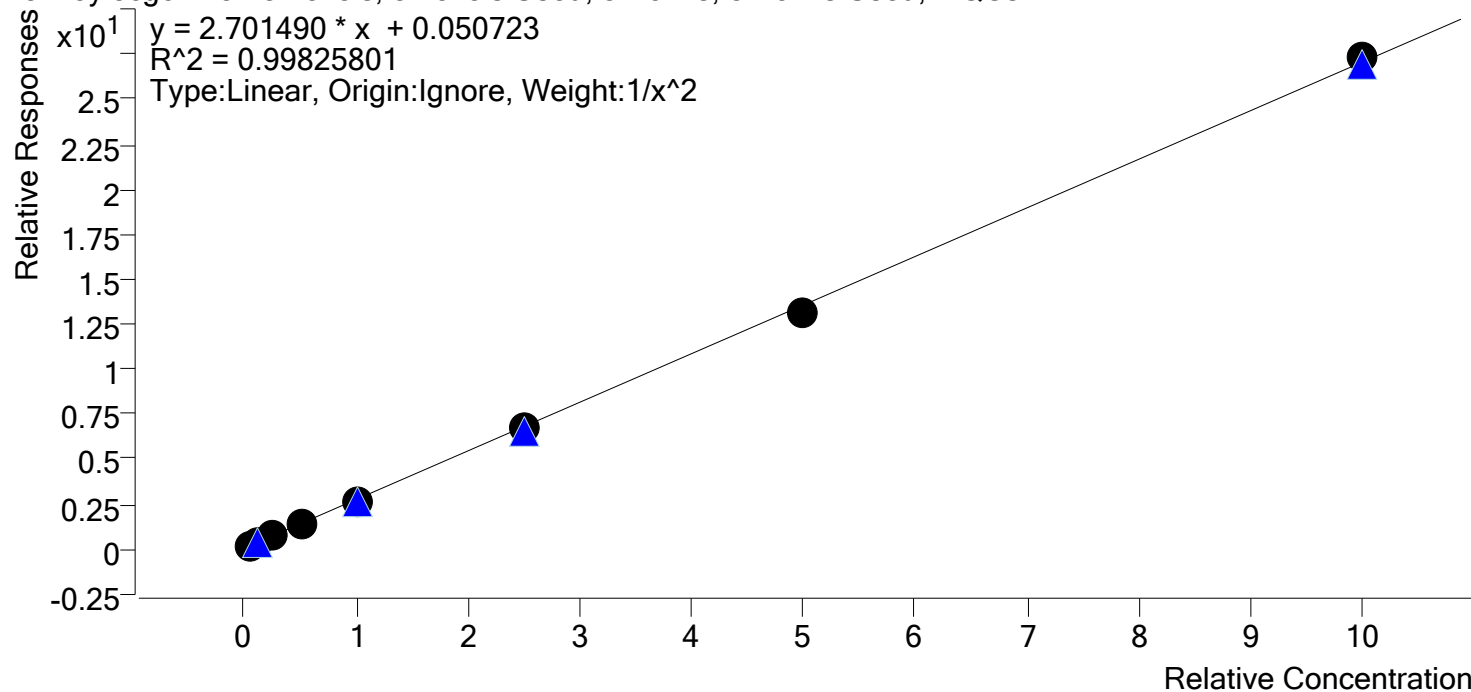
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.6	91.8
calibrator 2	2	✓	10.0	11.1	110.5
calibrator 3	3	✓	25.0	28.3	113.0
calibrator 4	4	✓	50.0	52.3	104.5
calibrator 5	5	✓	100.0	104.8	104.8
calibrator 6	6	✓	250.0	230.3	92.1
calibrator 7	7	✓	500.0	416.3	83.3
calibrator 8	8	✗	1000.0	751.2	75.1

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Benzoylecgonine **Internal Standard** Benzoylecgonine-d8

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



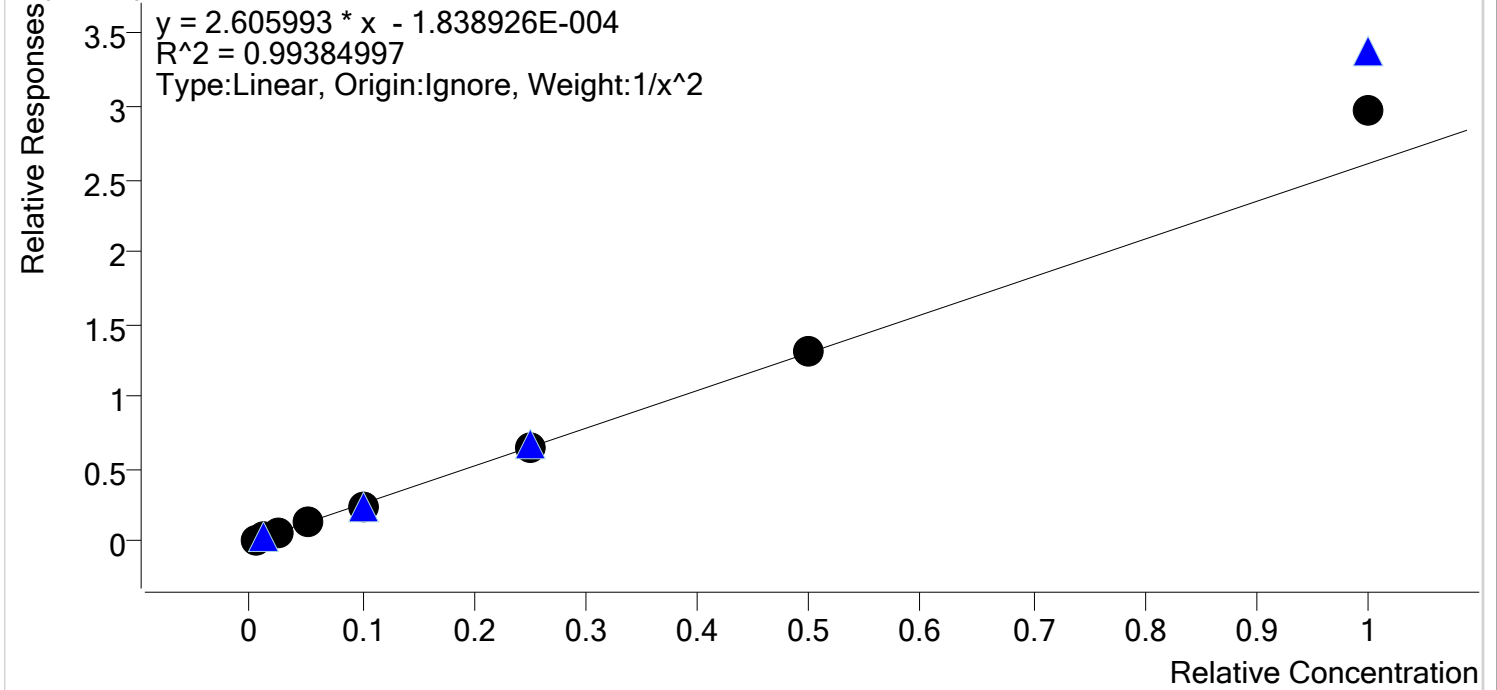
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.8	96.3
calibrator 2	2	✓	10.0	10.8	108.2
calibrator 3	3	✓	25.0	24.6	98.5
calibrator 4	4	✓	50.0	50.1	100.3
calibrator 5	5	✓	100.0	98.9	98.9
calibrator 6	6	✓	250.0	248.5	99.4
calibrator 7	7	✓	500.0	488.0	97.6
calibrator 8	8	✓	1000.0	1009.4	100.9

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Buprenorphine **Internal Standard** Buprenorphine-D4

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	0.5	0.5	104.6
calibrator 2	2	✓	1.0	0.9	93.9
calibrator 3	3	✓	2.5	2.4	94.0
calibrator 4	4	✓	5.0	4.9	98.9
calibrator 5	5	✓	10.0	9.4	93.8
calibrator 6	6	✓	25.0	24.9	99.6
calibrator 7	7	✓	50.0	50.7	101.3
calibrator 8	8	✓	100.0	113.8	113.8

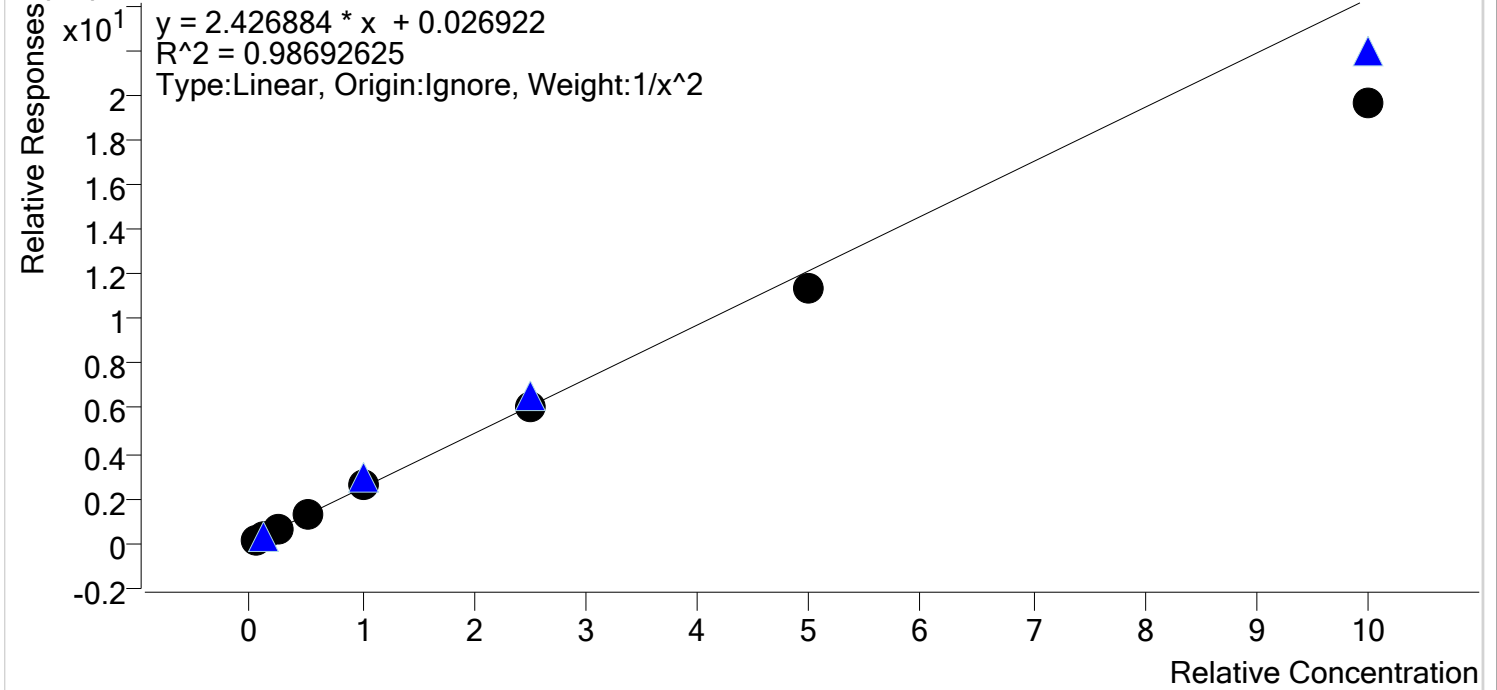
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Bupropion

Internal Standard Bupropion-D9

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



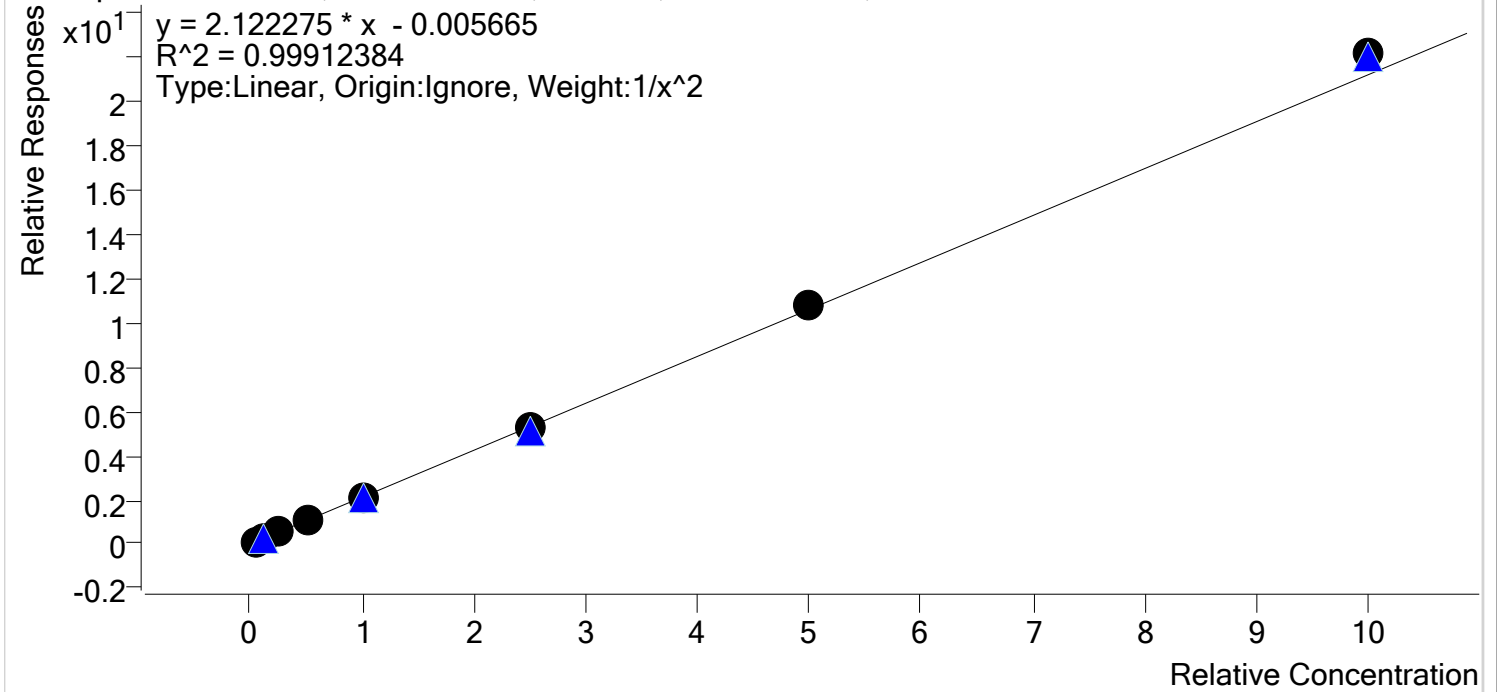
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.7	94.0
calibrator 2	2	✓	10.0	10.7	106.6
calibrator 3	3	✓	25.0	27.0	107.8
calibrator 4	4	✓	50.0	54.3	108.6
calibrator 5	5	✓	100.0	108.6	108.6
calibrator 6	6	✓	250.0	250.6	100.2
calibrator 7	7	✓	500.0	465.7	93.1
calibrator 8	8	✓	1000.0	809.8	81.0

Compound Calibration Report



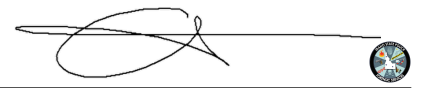
Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Carisoprodol **Internal Standard** Carisoprodol-D7

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.0	100.4
calibrator 2	2	✓	10.0	10.1	101.2
calibrator 3	3	✓	25.0	24.2	96.9
calibrator 4	4	✓	50.0	48.2	96.4
calibrator 5	5	✓	100.0	99.4	99.4
calibrator 6	6	✓	250.0	250.6	100.2
calibrator 7	7	✓	500.0	505.3	101.1
calibrator 8	8	✓	1000.0	1045.1	104.5

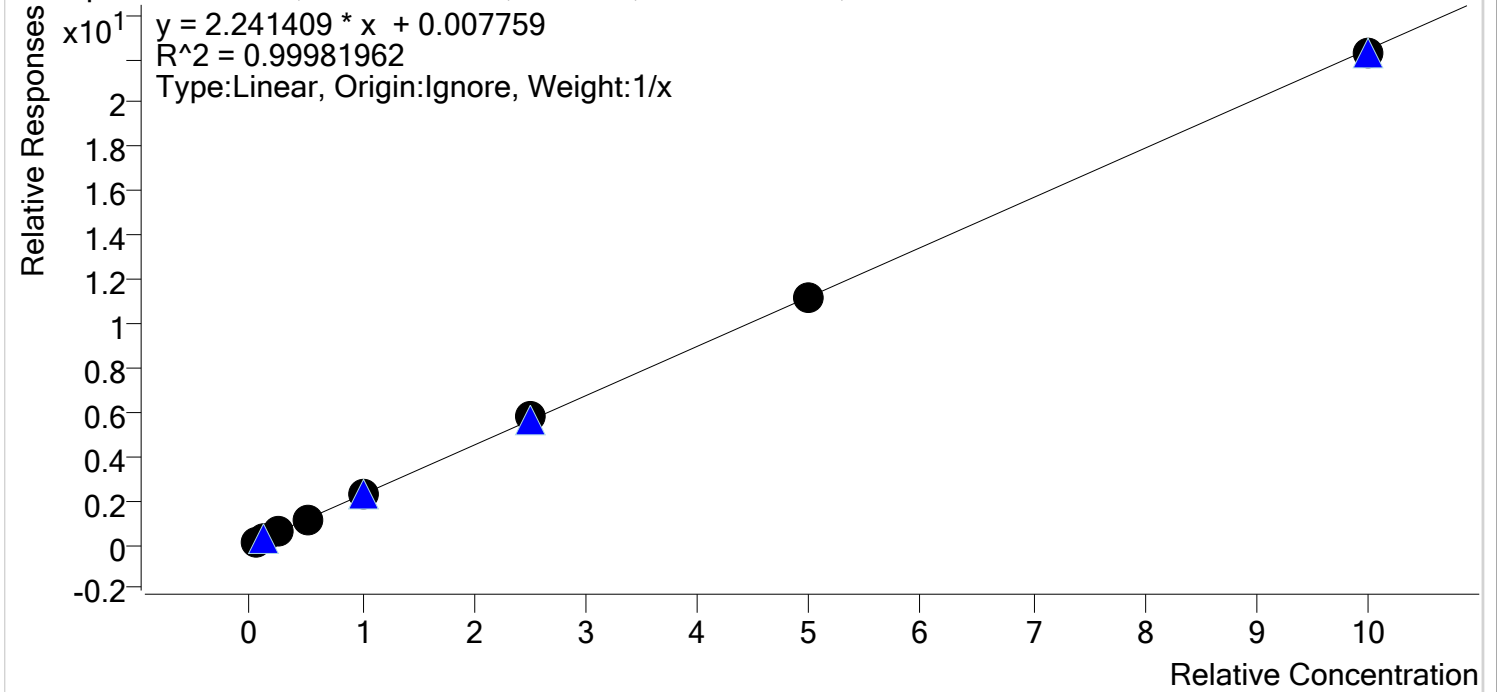
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Citalopram

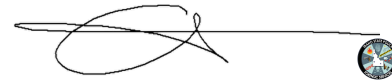
Internal Standard Citalopram-D6

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.9	97.3
calibrator 2	2	✓	10.0	10.1	100.8
calibrator 3	3	✓	25.0	25.0	100.0
calibrator 4	4	✓	50.0	48.7	97.4
calibrator 5	5	✓	100.0	102.7	102.7
calibrator 6	6	✓	250.0	255.7	102.3
calibrator 7	7	✓	500.0	501.4	100.3
calibrator 8	8	✓	1000.0	991.5	99.2

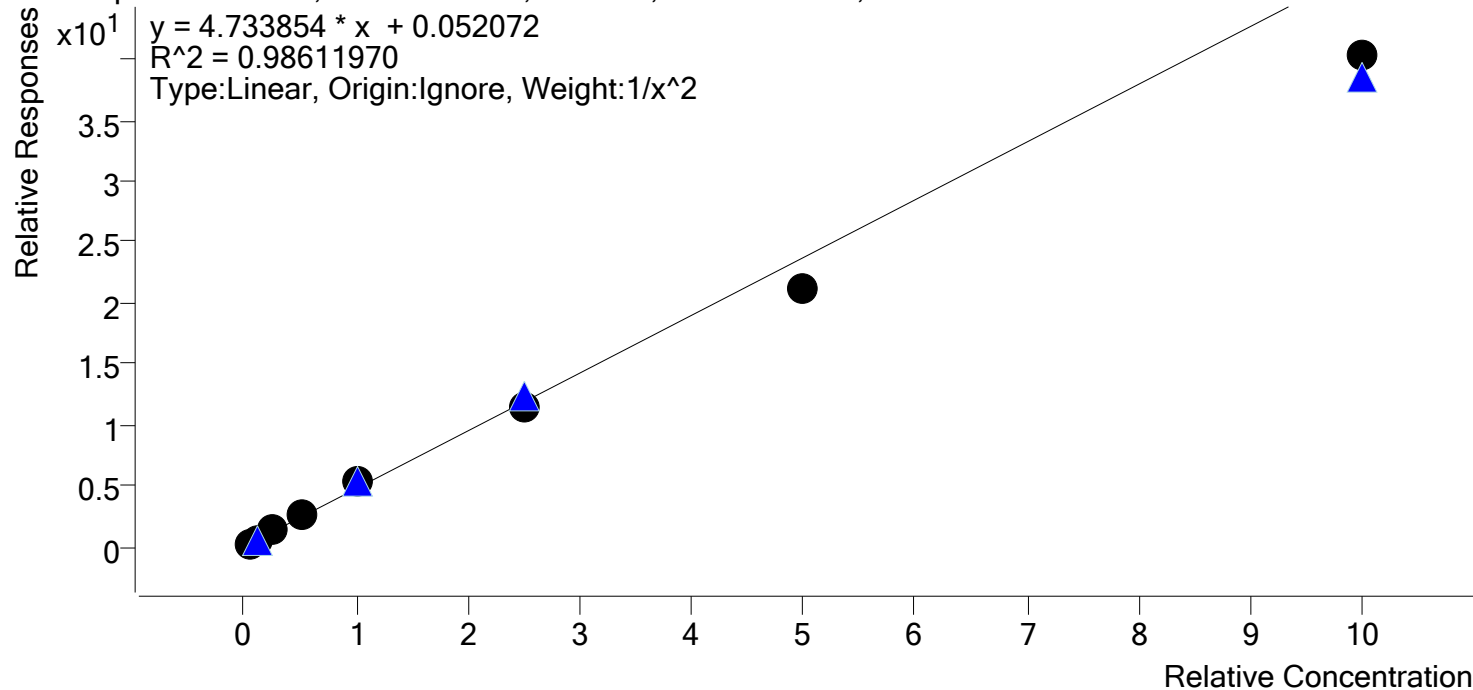
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Clonazepam

Internal Standard Clonazepam-D4

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.7	93.4
calibrator 2	2	✓	10.0	10.8	108.4
calibrator 3	3	✓	25.0	26.2	104.9
calibrator 4	4	✓	50.0	55.5	111.1
calibrator 5	5	✓	100.0	111.3	111.3
calibrator 6	6	✓	250.0	241.6	96.6
calibrator 7	7	✓	500.0	446.4	89.3
calibrator 8	8	✓	1000.0	849.7	85.0

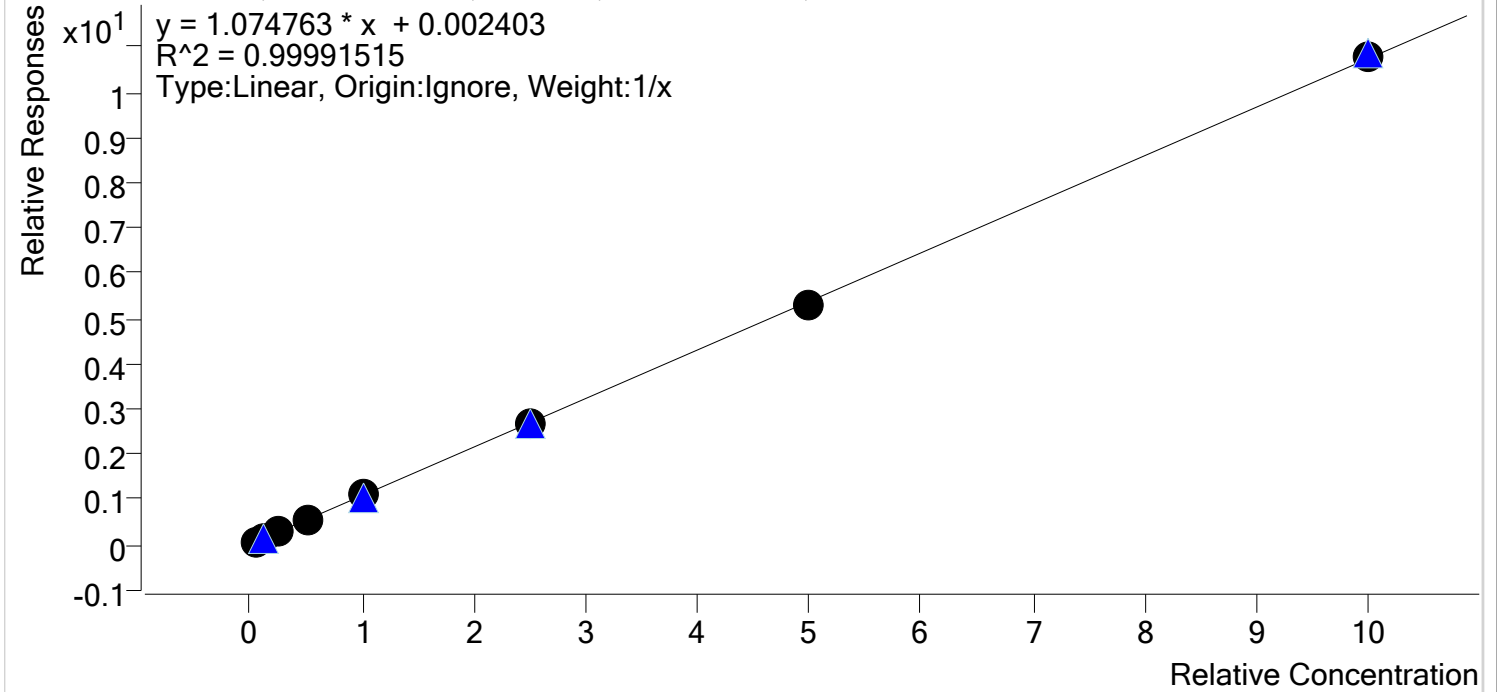
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Cocaine

Internal Standard Cocaine-d3

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.0	99.6
calibrator 2	2	✓	10.0	10.3	102.7
calibrator 3	3	✓	25.0	24.9	99.8
calibrator 4	4	✓	50.0	48.5	97.0
calibrator 5	5	✓	100.0	101.3	101.3
calibrator 6	6	✓	250.0	250.4	100.1
calibrator 7	7	✓	500.0	494.8	99.0
calibrator 8	8	✓	1000.0	1004.8	100.5

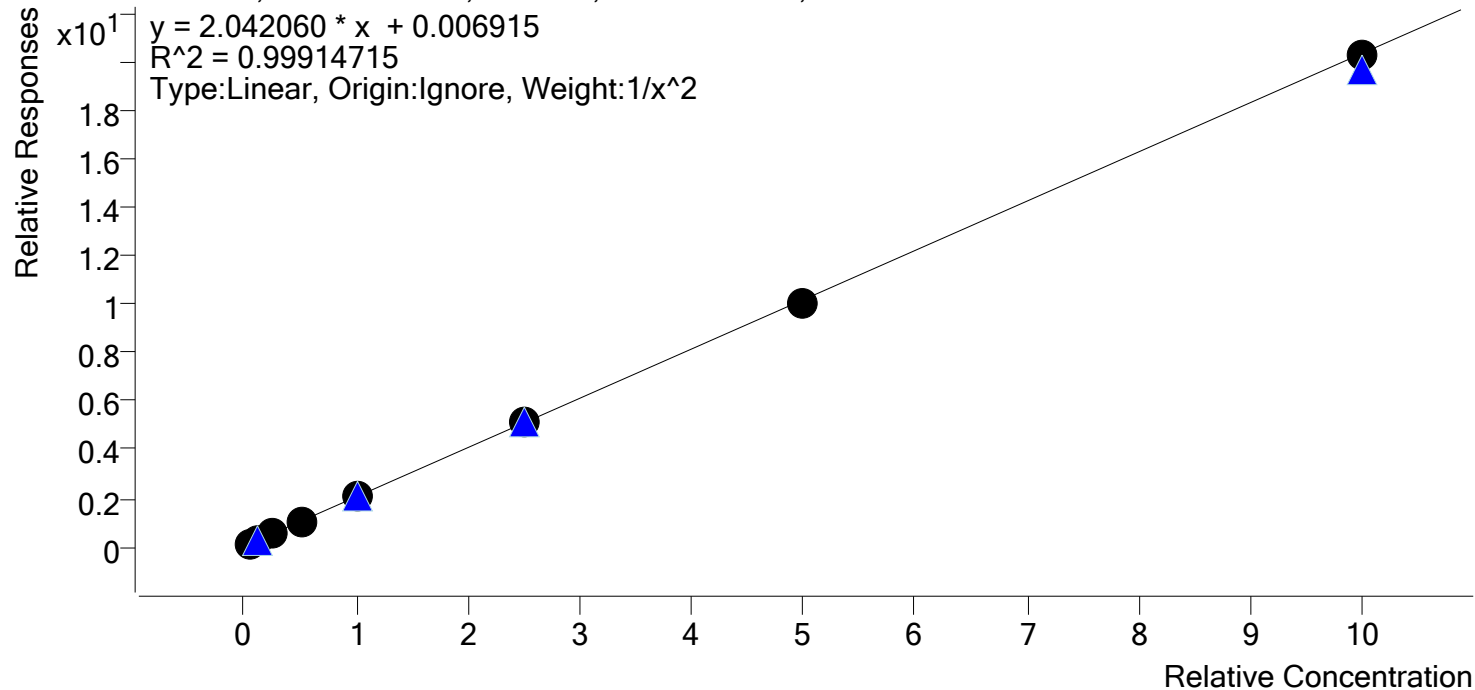
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Codeine

Internal Standard Codeine-D6

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



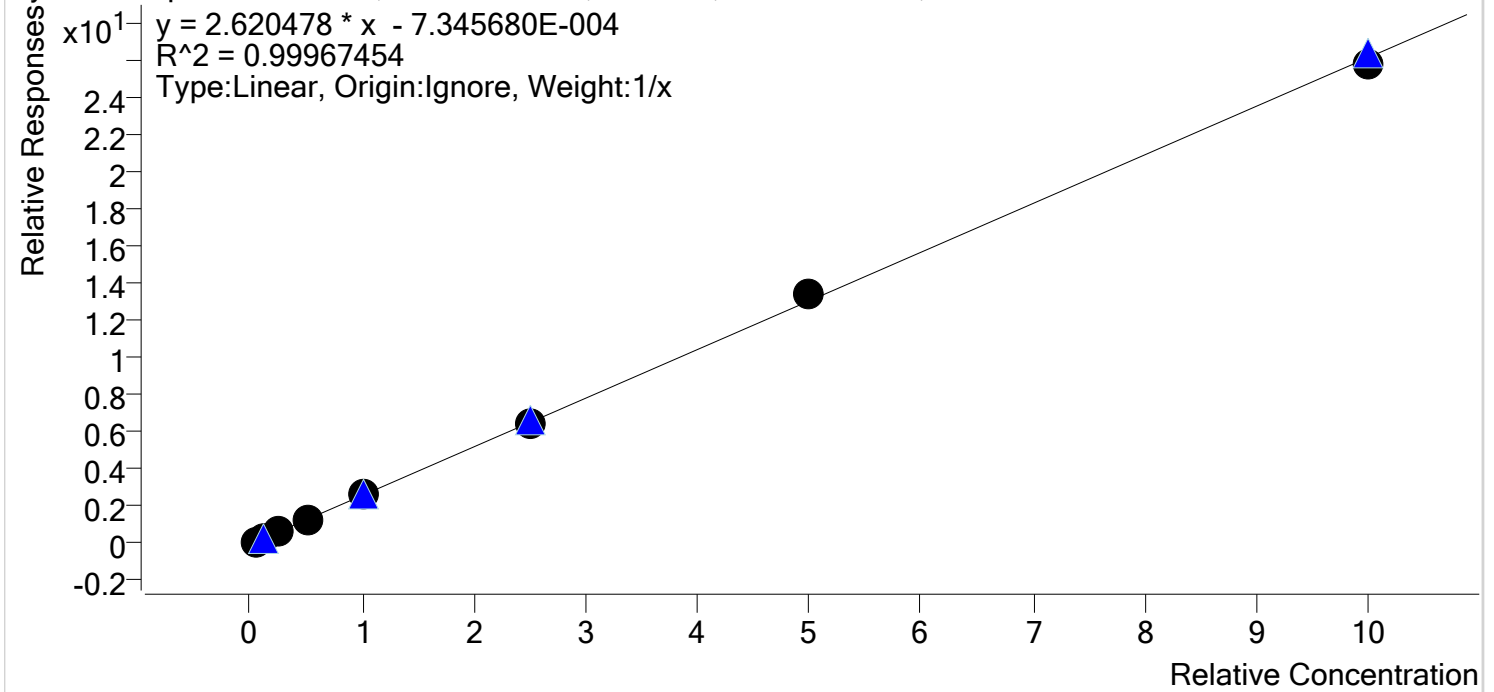
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.9	97.4
calibrator 2	2	✓	10.0	10.4	104.4
calibrator 3	3	✓	25.0	25.8	103.3
calibrator 4	4	✓	50.0	49.0	97.9
calibrator 5	5	✓	100.0	99.7	99.7
calibrator 6	6	✓	250.0	248.3	99.3
calibrator 7	7	✓	500.0	491.8	98.4
calibrator 8	8	✓	1000.0	995.5	99.5

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Cyclobenzaprine **Internal Standard** Cyclobenzaprine-D3

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



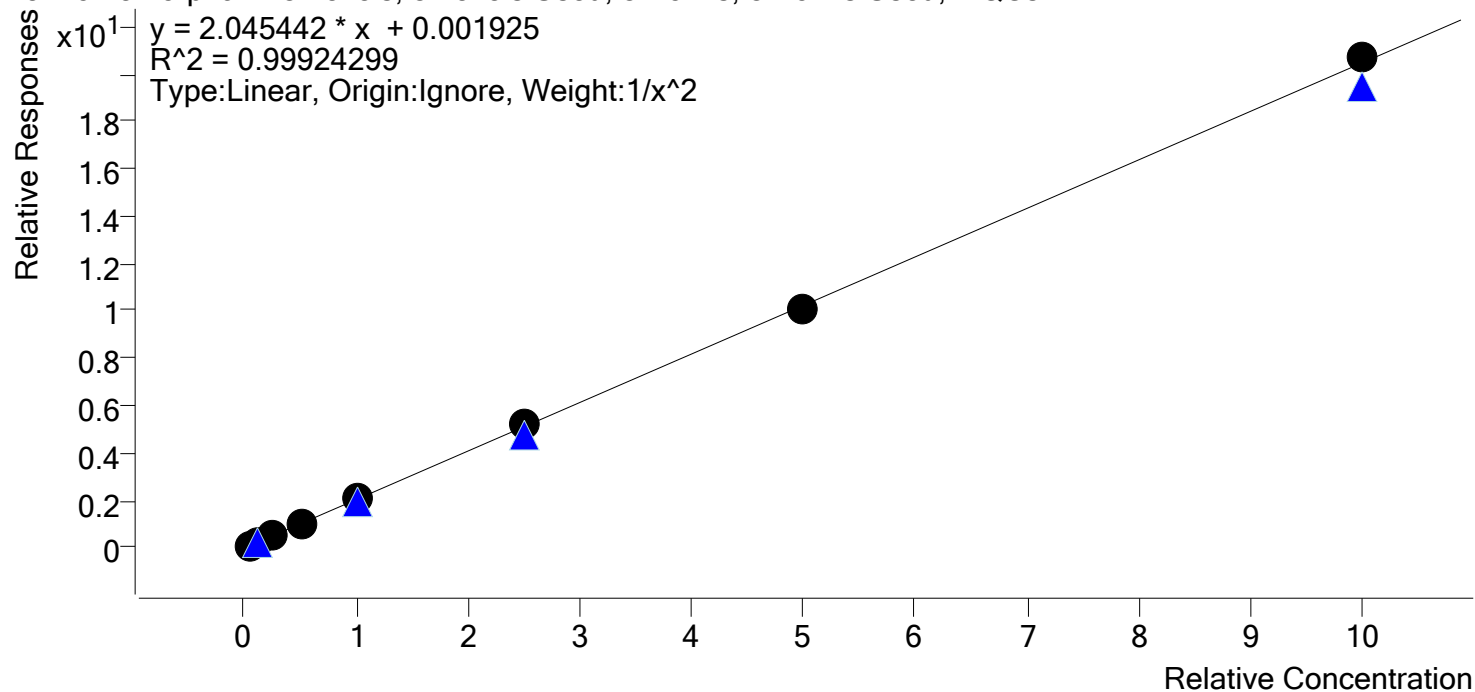
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.0	99.2
calibrator 2	2	✓	10.0	10.3	102.7
calibrator 3	3	✓	25.0	24.1	96.5
calibrator 4	4	✓	50.0	49.4	98.9
calibrator 5	5	✓	100.0	101.2	101.2
calibrator 6	6	✓	250.0	251.1	100.4
calibrator 7	7	✓	500.0	512.8	102.6
calibrator 8	8	✓	1000.0	986.2	98.6

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Dextromethorphan **Internal Standard** Dextromethorphan-D3

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.9	98.3
calibrator 2	2	✓	10.0	10.5	104.6
calibrator 3	3	✓	25.0	24.3	97.2
calibrator 4	4	✓	50.0	49.4	98.7
calibrator 5	5	✓	100.0	100.3	100.3
calibrator 6	6	✓	250.0	253.6	101.4
calibrator 7	7	✓	500.0	491.7	98.3
calibrator 8	8	✓	1000.0	1010.8	101.1

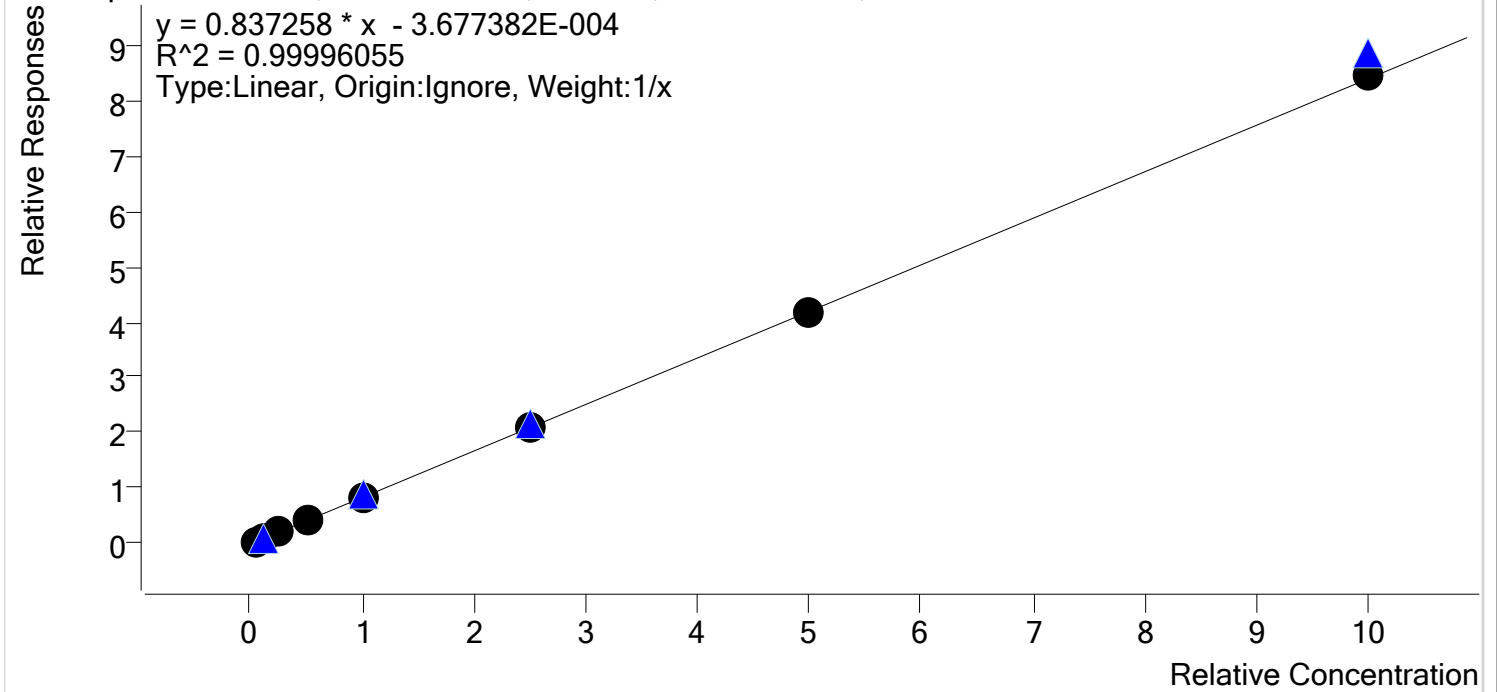
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Dextrorphan

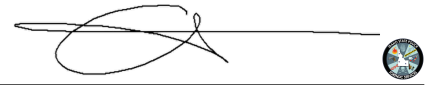
Internal Standard Dextrorphan-D3

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.0	100.7
calibrator 2	2	✓	10.0	10.2	101.6
calibrator 3	3	✓	25.0	25.0	99.9
calibrator 4	4	✓	50.0	48.9	97.8
calibrator 5	5	✓	100.0	100.4	100.4
calibrator 6	6	✓	250.0	249.8	99.9
calibrator 7	7	✓	500.0	496.6	99.3
calibrator 8	8	✓	1000.0	1004.1	100.4

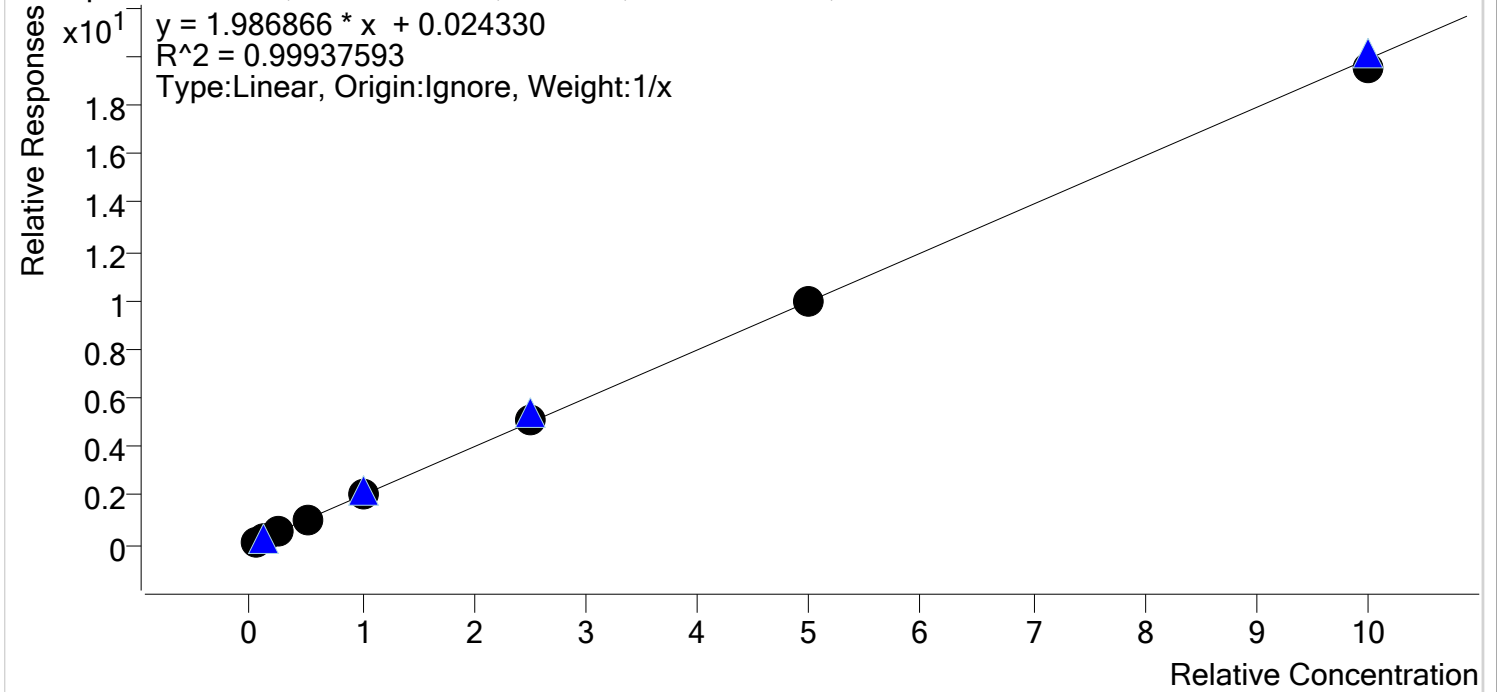
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Diazepam

Internal Standard Diazepam-D5

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



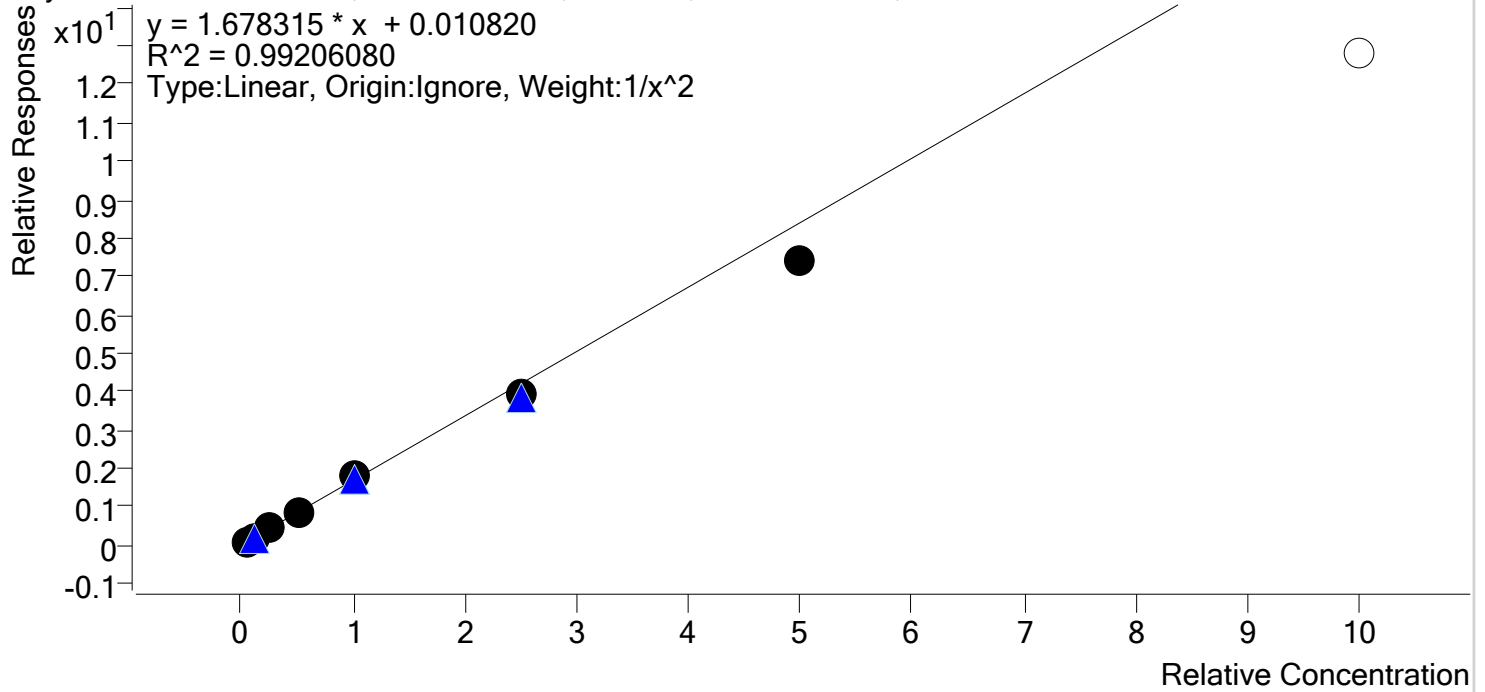
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.2	84.3
calibrator 2	2	✓	10.0	10.1	101.0
calibrator 3	3	✓	25.0	25.9	103.5
calibrator 4	4	✓	50.0	51.7	103.4
calibrator 5	5	✓	100.0	106.1	106.1
calibrator 6	6	✓	250.0	258.3	103.3
calibrator 7	7	✓	500.0	499.4	99.9
calibrator 8	8	✓	1000.0	984.3	98.4

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Dihydrocodeine **Internal Standard** Dihydrocodeine-D6

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



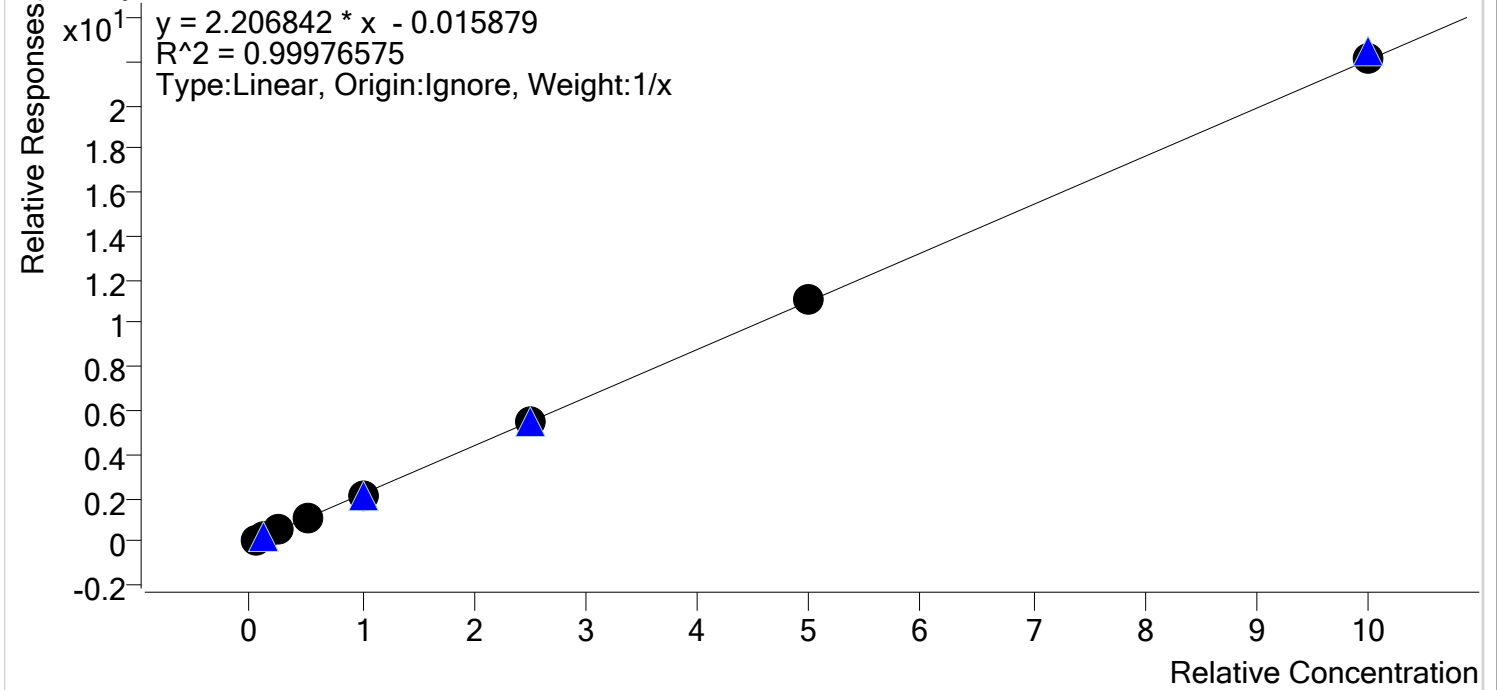
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.7	94.4
calibrator 2	2	✓	10.0	10.8	107.7
calibrator 3	3	✓	25.0	26.6	106.2
calibrator 4	4	✓	50.0	52.4	104.8
calibrator 5	5	✓	100.0	104.5	104.5
calibrator 6	6	✓	250.0	234.2	93.7
calibrator 7	7	✓	500.0	443.0	88.6
calibrator 8	8	✗	1000.0	762.3	76.2

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Diphenhydramine **Internal Standard** Diphenhydramine-D3

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



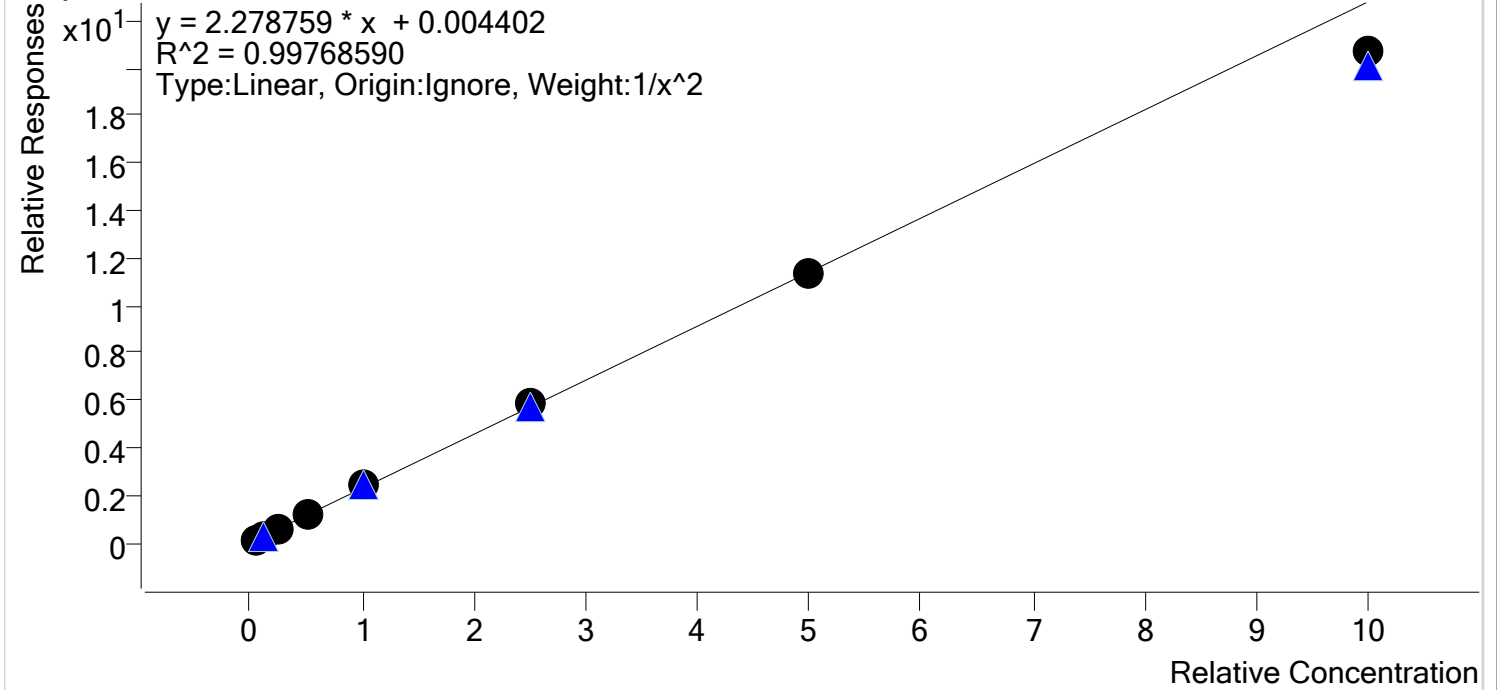
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.4	107.1
calibrator 2	2	✓	10.0	10.5	105.2
calibrator 3	3	✓	25.0	24.1	96.5
calibrator 4	4	✓	50.0	47.0	93.9
calibrator 5	5	✓	100.0	96.9	96.9
calibrator 6	6	✓	250.0	248.4	99.4
calibrator 7	7	✓	500.0	502.8	100.6
calibrator 8	8	✓	1000.0	1004.9	100.5

Compound Calibration Report



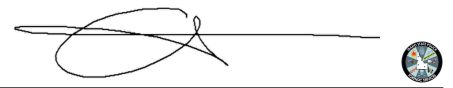
Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Doxylamine **Internal Standard** Doxylamine-D5

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.9	98.0
calibrator 2	2	✓	10.0	10.3	103.4
calibrator 3	3	✓	25.0	25.1	100.6
calibrator 4	4	✓	50.0	50.3	100.6
calibrator 5	5	✓	100.0	103.3	103.3
calibrator 6	6	✓	250.0	257.9	103.2
calibrator 7	7	✓	500.0	500.9	100.2
calibrator 8	8	✓	1000.0	907.9	90.8

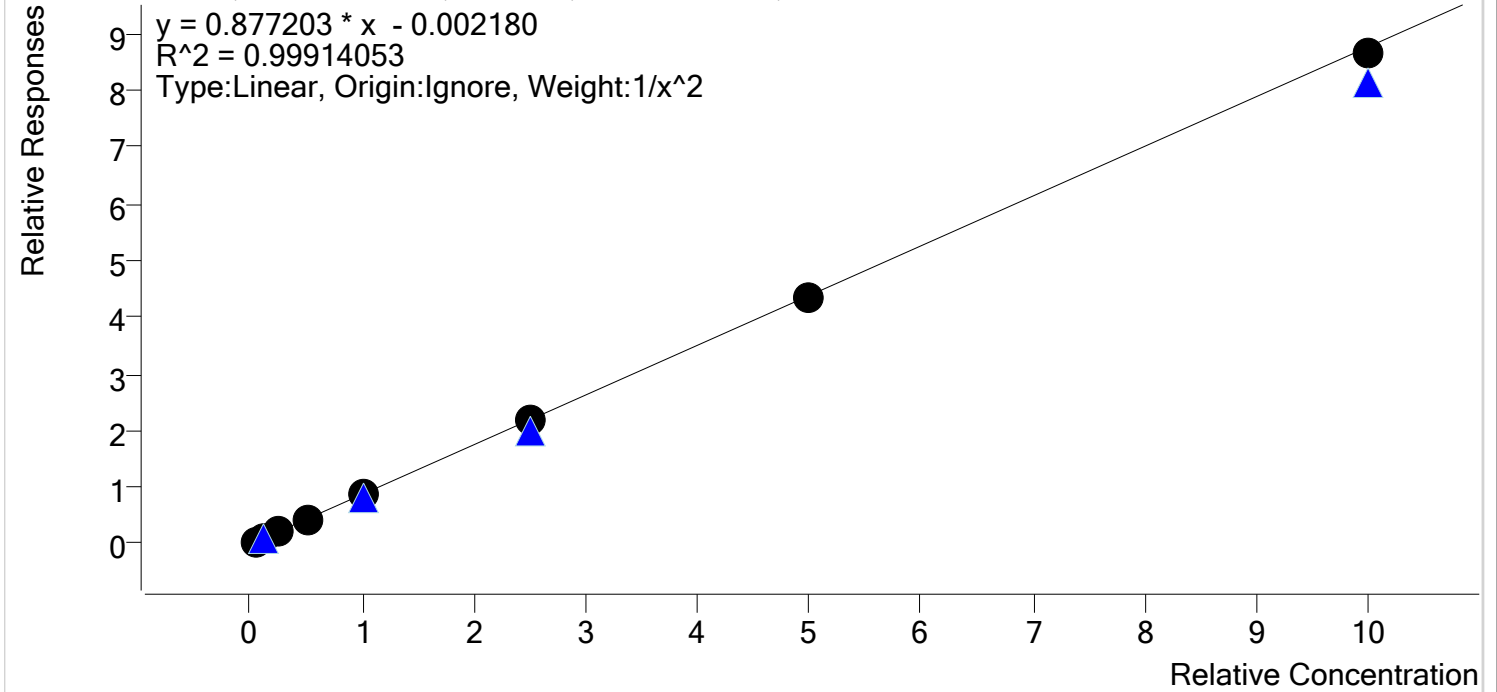
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte EDDP

Internal Standard EDDP-D3

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



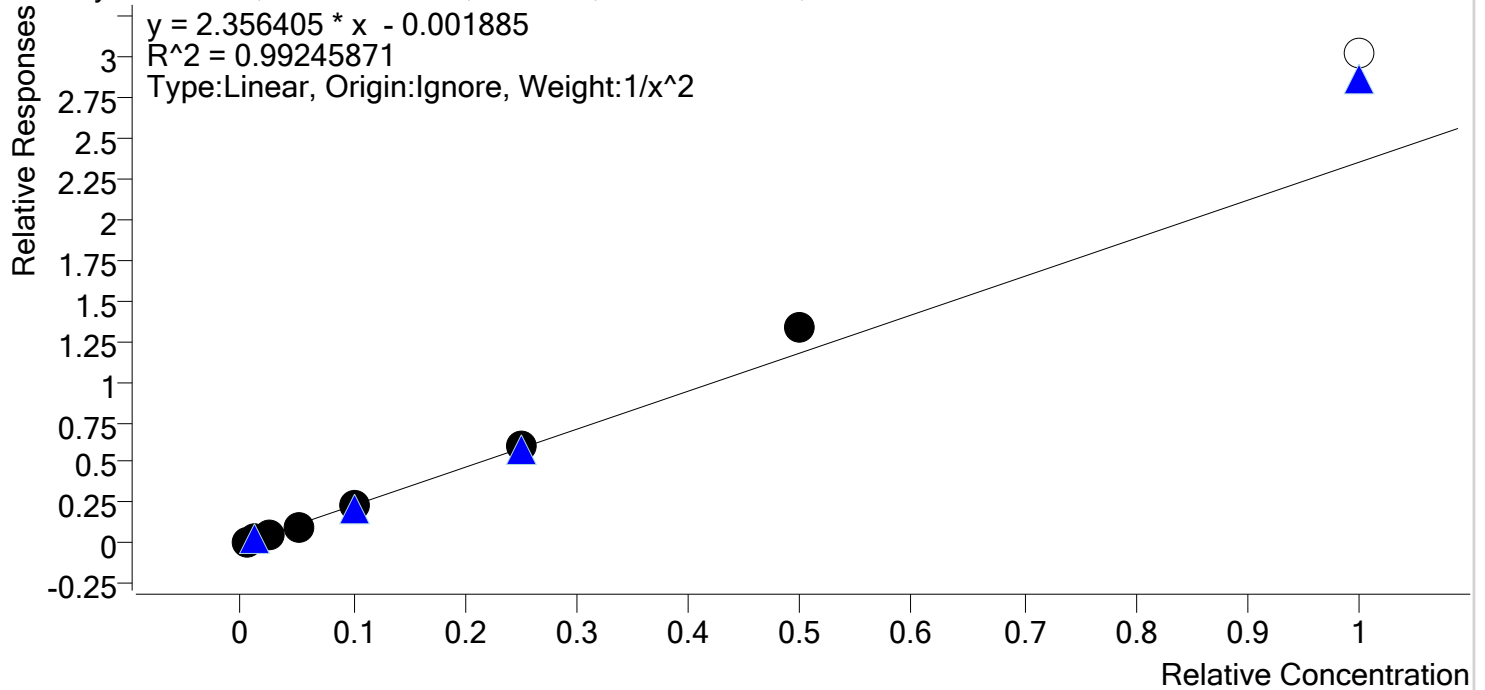
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.9	97.8
calibrator 2	2	✓	10.0	10.5	104.8
calibrator 3	3	✓	25.0	25.0	100.1
calibrator 4	4	✓	50.0	48.4	96.7
calibrator 5	5	✓	100.0	102.1	102.1
calibrator 6	6	✓	250.0	250.6	100.2
calibrator 7	7	✓	500.0	497.8	99.6
calibrator 8	8	✓	1000.0	986.6	98.7

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Fentanyl **Internal Standard** Fentanyl-D5

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	0.5	0.5	101.8
calibrator 2	2	✓	1.0	1.0	101.0
calibrator 3	3	✓	2.5	2.3	92.3
calibrator 4	4	✓	5.0	4.6	92.2
calibrator 5	5	✓	10.0	9.7	96.5
calibrator 6	6	✓	25.0	25.6	102.5
calibrator 7	7	✓	50.0	56.8	113.6
calibrator 8	8	✗	100.0	128.5	128.5

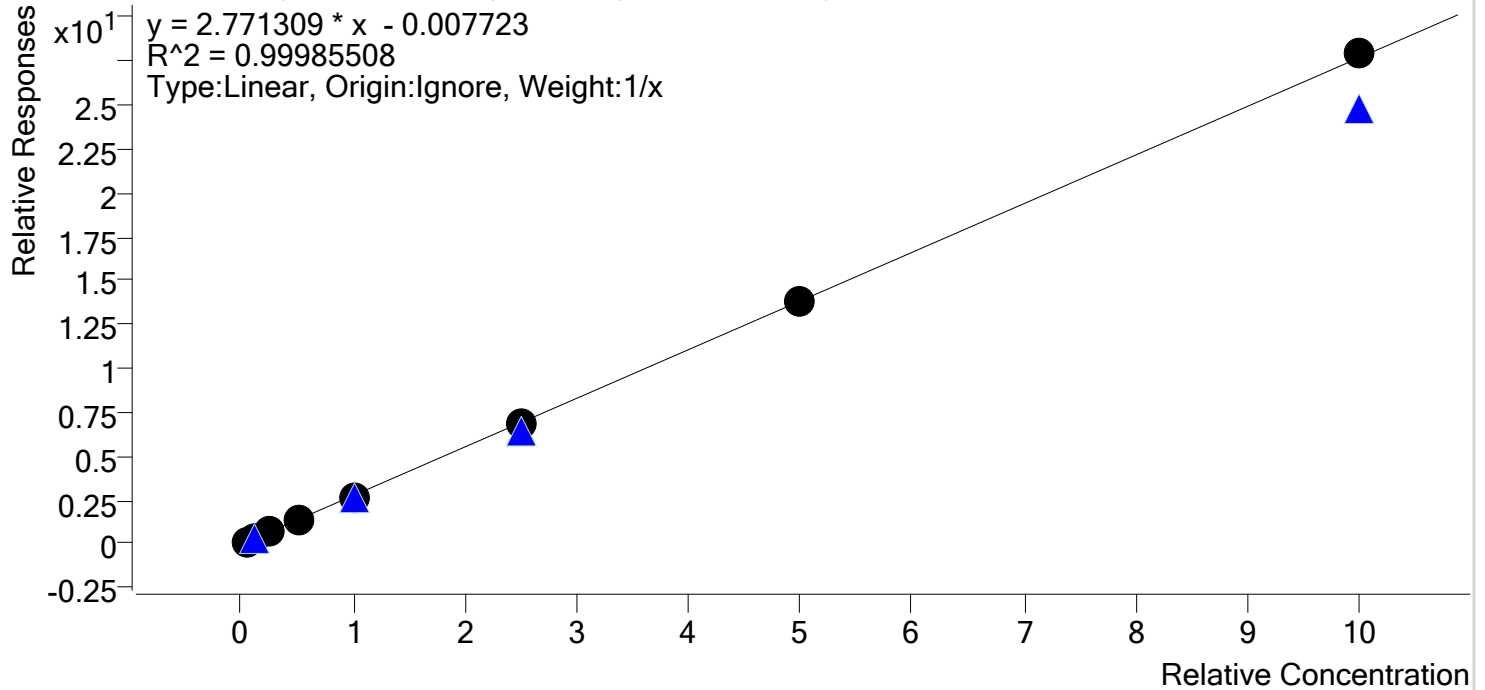
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Fluoxetine

Internal Standard Fluoxetine-D6

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



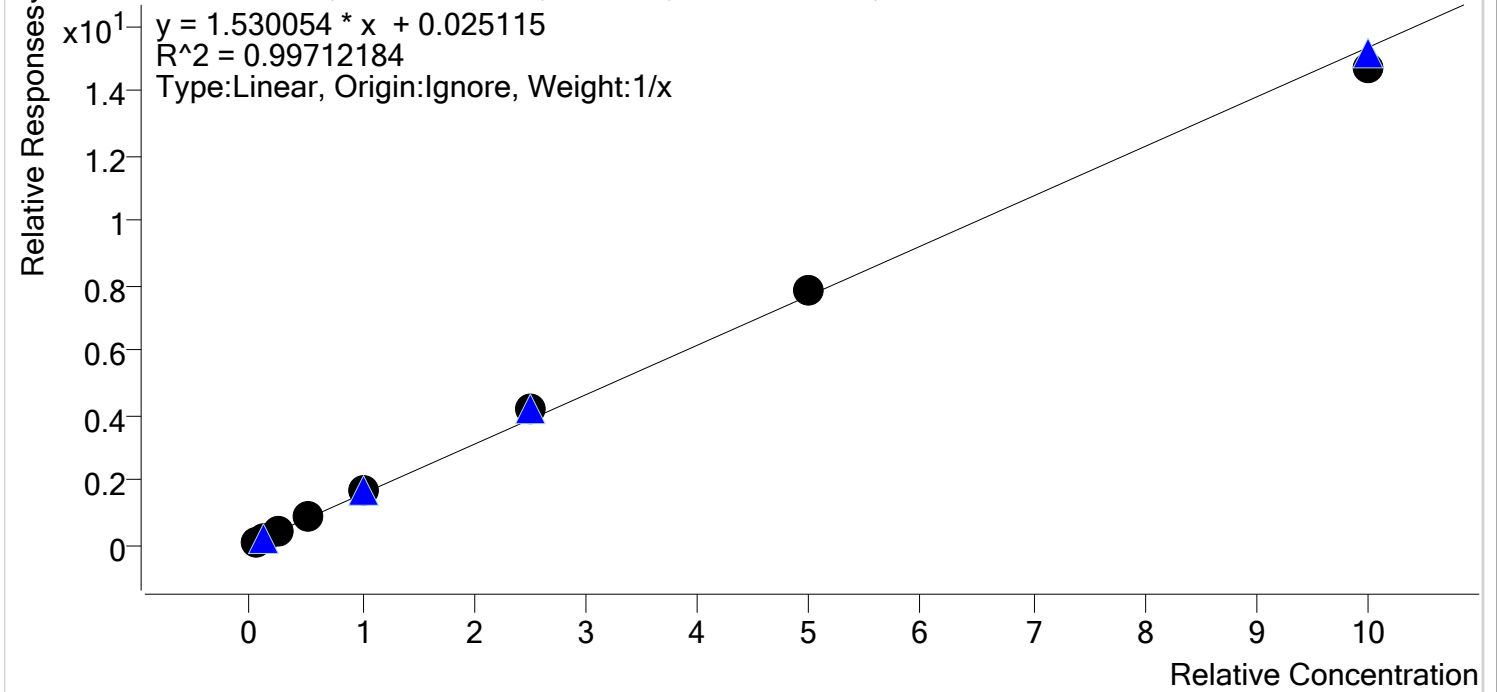
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.2	103.0
calibrator 2	2	✓	10.0	10.5	105.2
calibrator 3	3	✓	25.0	24.0	96.2
calibrator 4	4	✓	50.0	49.0	98.0
calibrator 5	5	✓	100.0	98.9	98.9
calibrator 6	6	✓	250.0	245.6	98.3
calibrator 7	7	✓	500.0	498.2	99.6
calibrator 8	8	✓	1000.0	1008.6	100.9

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Hydrocodone **Internal Standard** Hydrocodone-D6

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



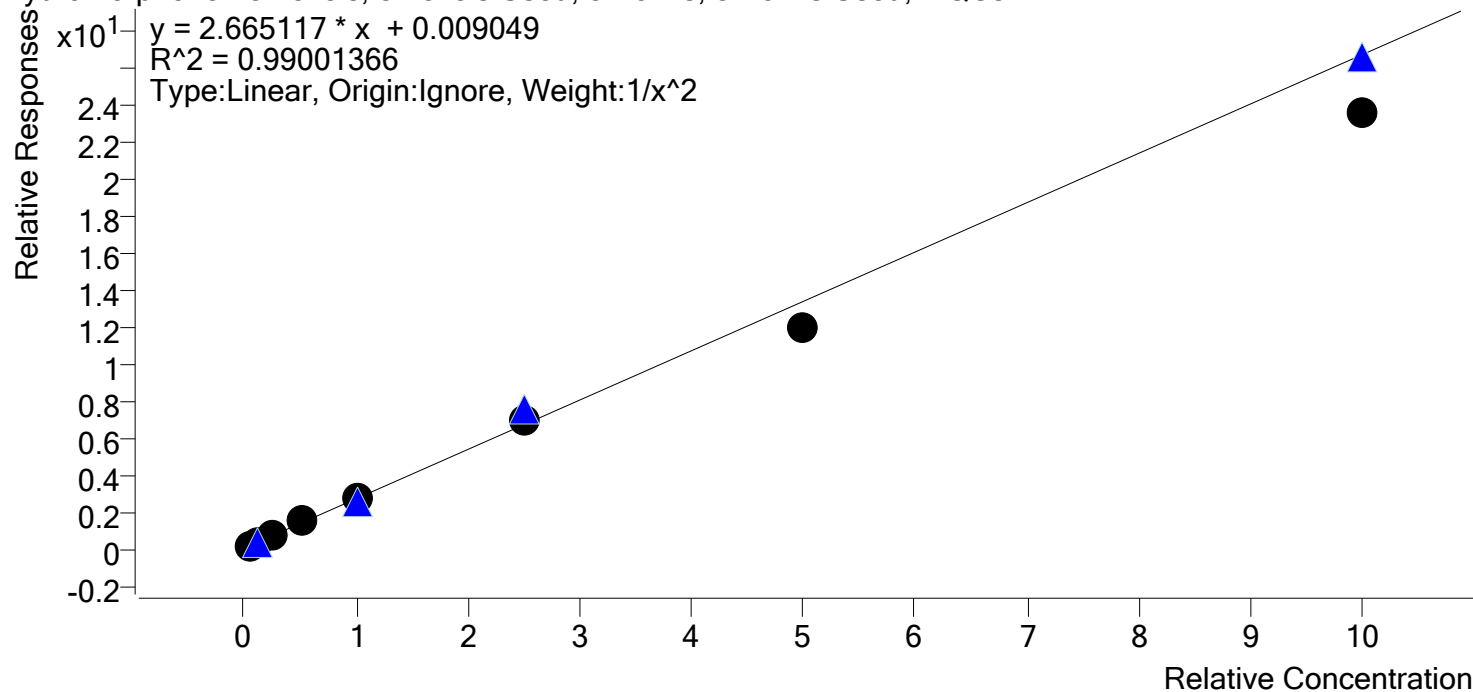
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	3.9	77.4
calibrator 2	2	✓	10.0	10.0	99.6
calibrator 3	3	✓	25.0	26.1	104.4
calibrator 4	4	✓	50.0	52.5	105.1
calibrator 5	5	✓	100.0	106.6	106.6
calibrator 6	6	✓	250.0	271.4	108.6
calibrator 7	7	✓	500.0	514.3	102.9
calibrator 8	8	✓	1000.0	955.3	95.5

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Hydromorphone **Internal Standard** Hydromorphone-D6

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



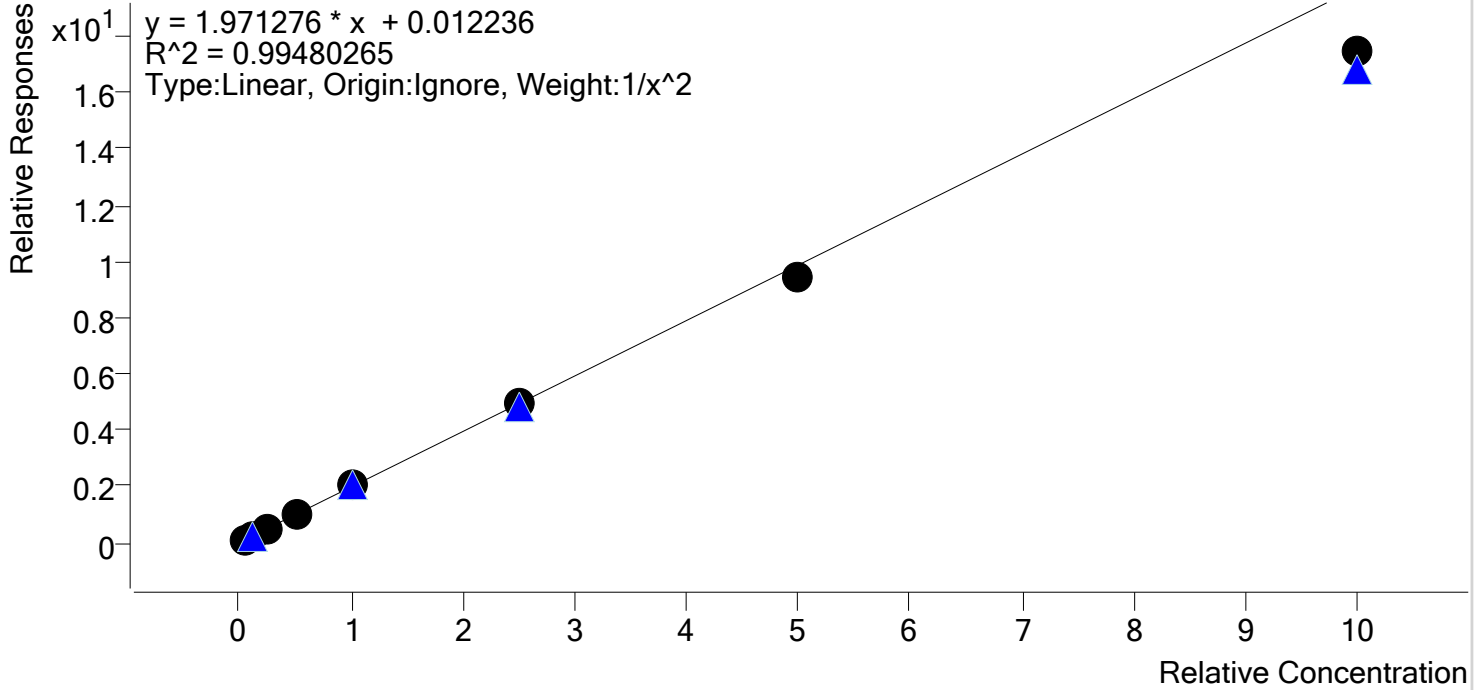
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.8	95.6
calibrator 2	2	✓	10.0	10.3	103.2
calibrator 3	3	✓	25.0	27.1	108.5
calibrator 4	4	✓	50.0	56.3	112.7
calibrator 5	5	✓	100.0	99.1	99.1
calibrator 6	6	✓	250.0	259.1	103.6
calibrator 7	7	✓	500.0	444.6	88.9
calibrator 8	8	✓	1000.0	884.5	88.5

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Ketamine **Internal Standard** Ketamine-D4

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



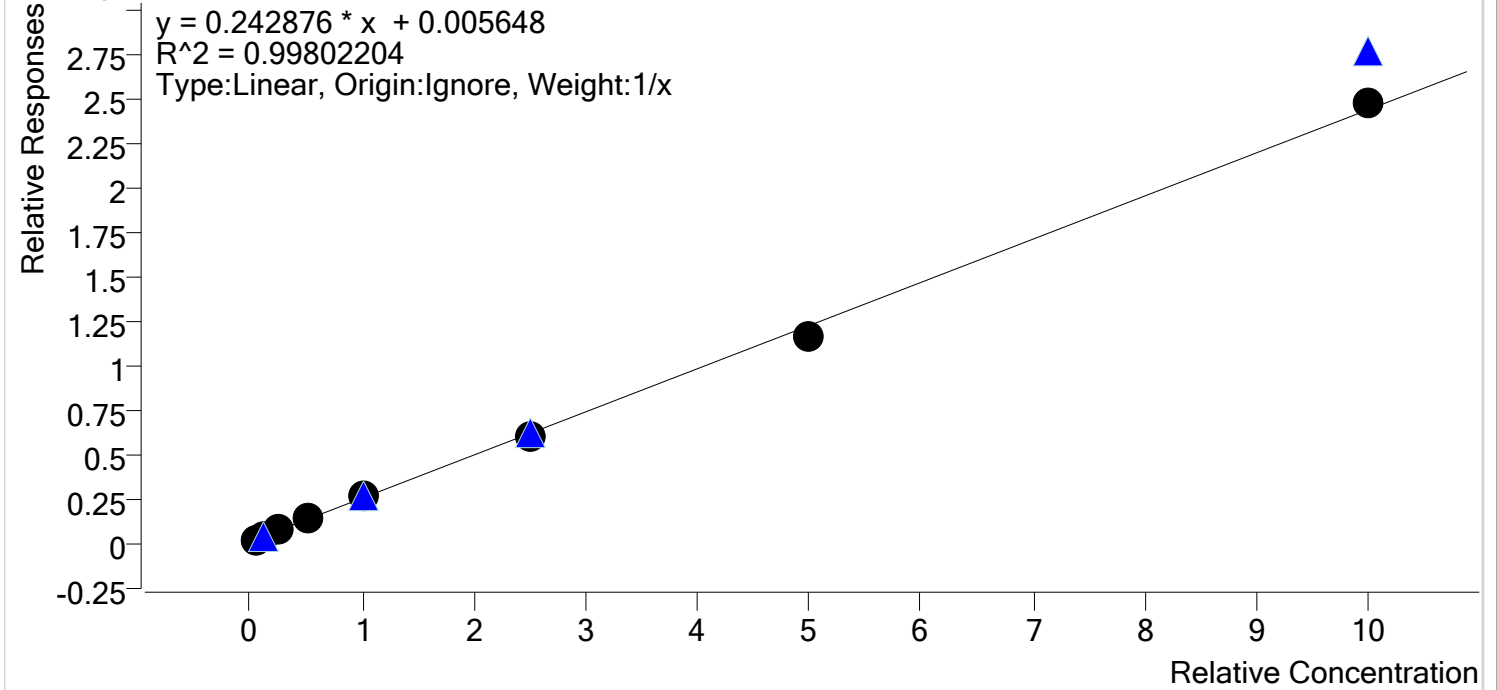
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.8	95.7
calibrator 2	2	✓	10.0	10.5	105.2
calibrator 3	3	✓	25.0	26.3	105.0
calibrator 4	4	✓	50.0	52.3	104.6
calibrator 5	5	✓	100.0	105.3	105.3
calibrator 6	6	✓	250.0	251.0	100.4
calibrator 7	7	✓	500.0	476.1	95.2
calibrator 8	8	✓	1000.0	884.8	88.5

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Lorazepam **Internal Standard** Alprazolam-D5

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



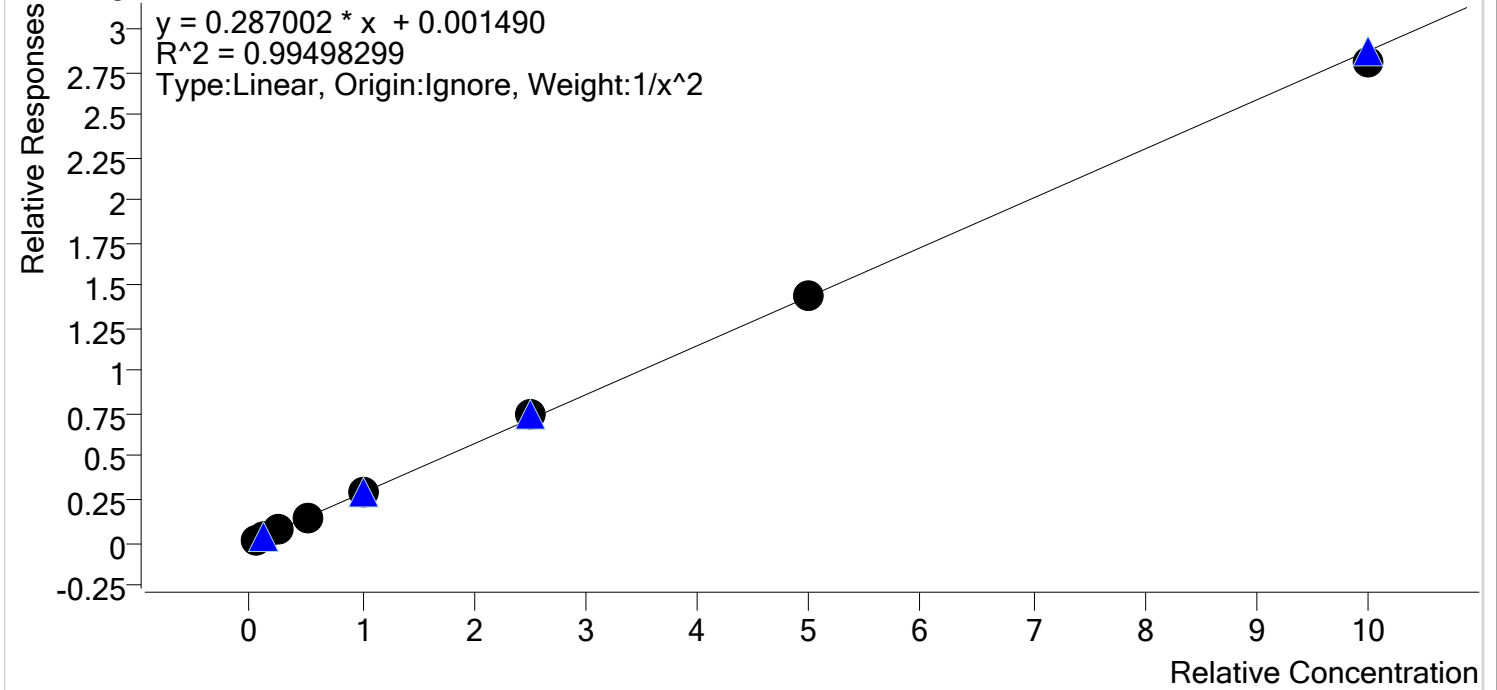
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	3.7	74.3
calibrator 2	2	✓	10.0	10.7	106.9
calibrator 3	3	✓	25.0	26.6	106.3
calibrator 4	4	✓	50.0	57.0	114.0
calibrator 5	5	✓	100.0	105.1	105.1
calibrator 6	6	✓	250.0	239.8	95.9
calibrator 7	7	✓	500.0	477.7	95.5
calibrator 8	8	✓	1000.0	1019.4	101.9

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Lamotrigine **Internal Standard** Dextromethorphan-D3

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



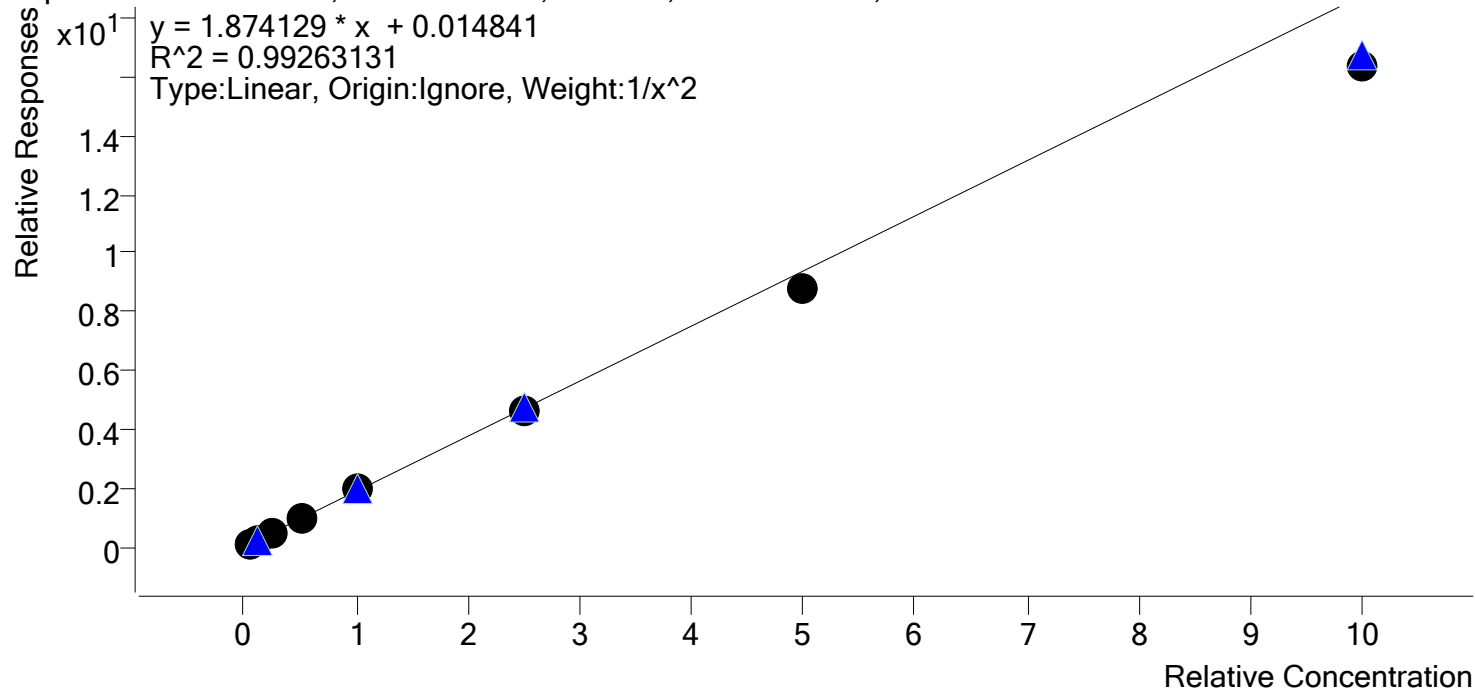
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.8	96.0
calibrator 2	2	✓	10.0	11.1	111.2
calibrator 3	3	✓	25.0	22.6	90.6
calibrator 4	4	✓	50.0	51.7	103.3
calibrator 5	5	✓	100.0	98.0	98.0
calibrator 6	6	✓	250.0	259.1	103.6
calibrator 7	7	✓	500.0	499.4	99.9
calibrator 8	8	✓	1000.0	973.8	97.4

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Meprobamate **Internal Standard** Meprobamate-D7

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.7	94.9
calibrator 2	2	✓	10.0	10.6	105.7
calibrator 3	3	✓	25.0	26.7	107.0
calibrator 4	4	✓	50.0	53.3	106.6
calibrator 5	5	✓	100.0	106.4	106.4
calibrator 6	6	✓	250.0	245.0	98.0
calibrator 7	7	✓	500.0	470.8	94.2
calibrator 8	8	✓	1000.0	872.6	87.3

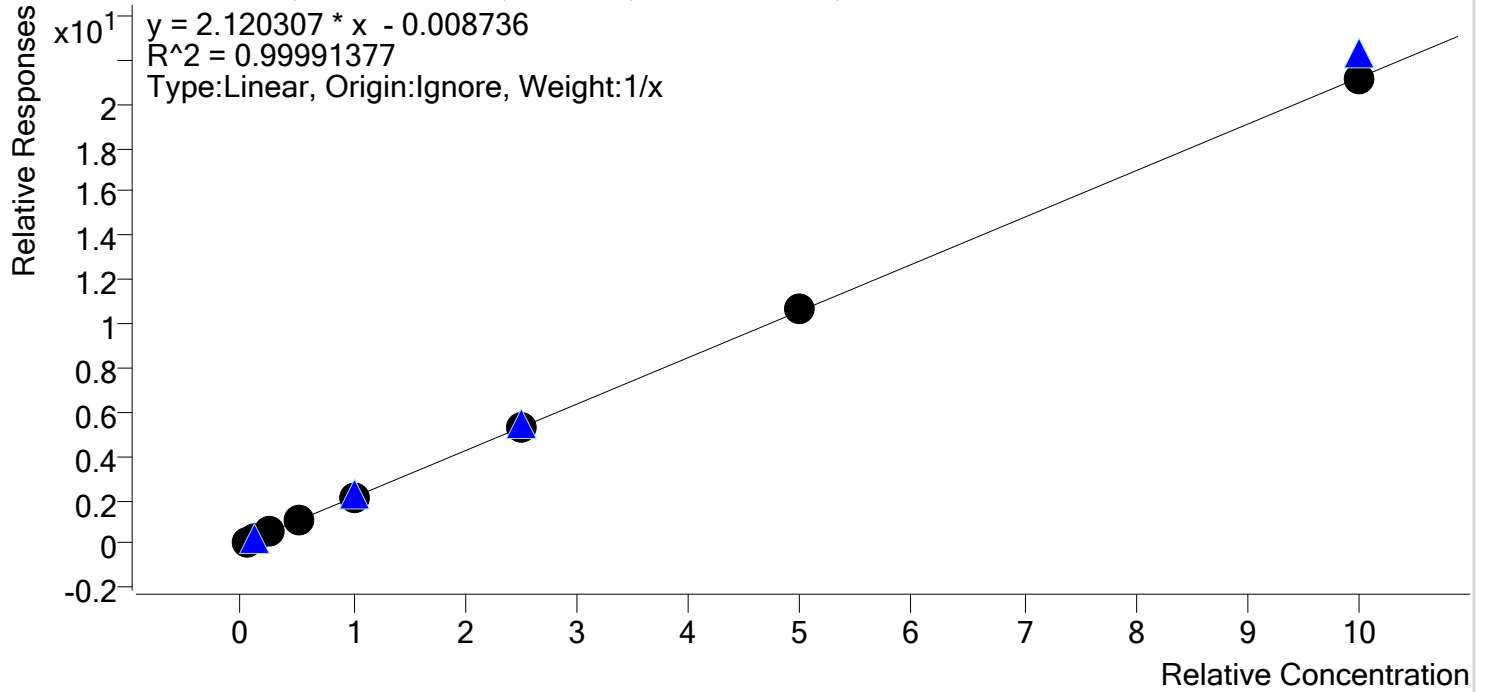
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Methadone

Internal Standard Methadone-D9

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



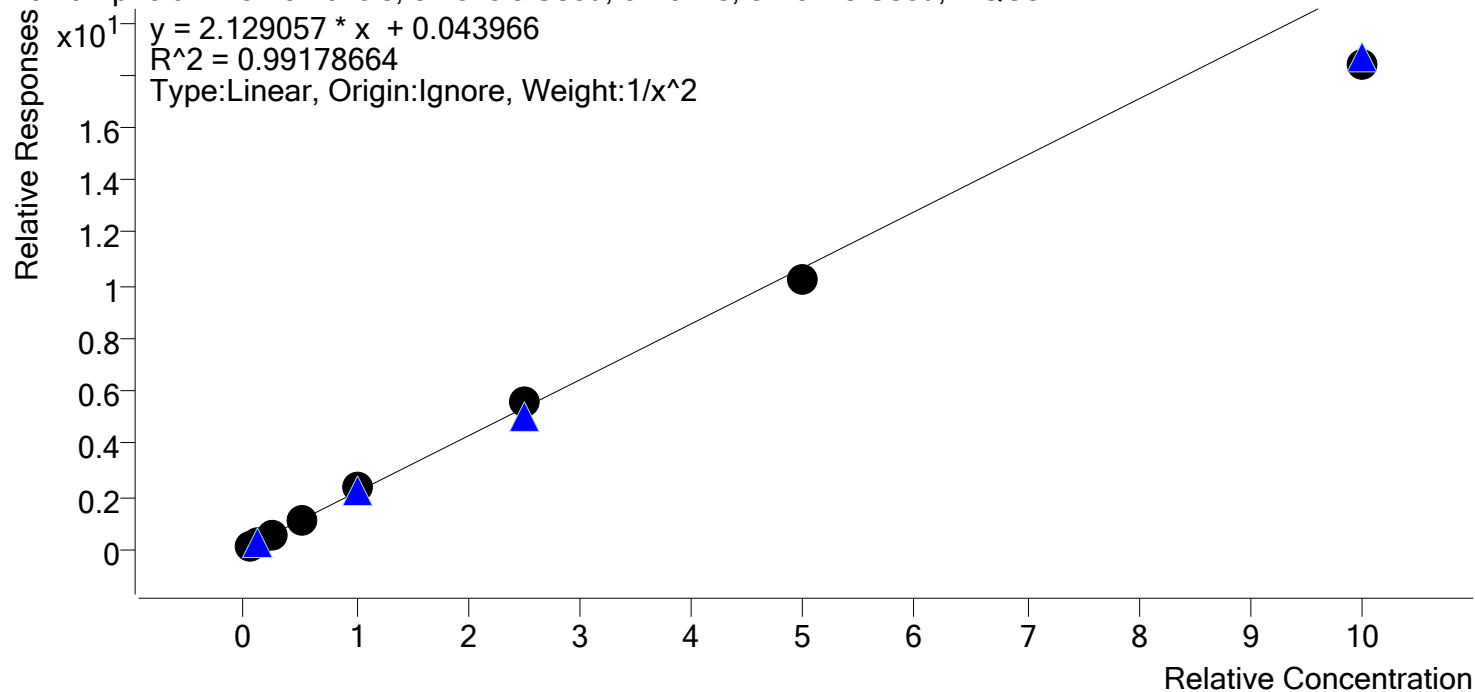
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.1	102.0
calibrator 2	2	✓	10.0	10.2	102.1
calibrator 3	3	✓	25.0	25.3	101.2
calibrator 4	4	✓	50.0	47.8	95.7
calibrator 5	5	✓	100.0	98.6	98.6
calibrator 6	6	✓	250.0	249.2	99.7
calibrator 7	7	✓	500.0	503.6	100.7
calibrator 8	8	✓	1000.0	1000.1	100.0

Compound Calibration Report



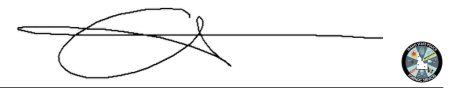
Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Methamphetamine **Internal Standard** Methamphetamine-D11

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.8	95.4
calibrator 2	2	✓	10.0	10.8	107.7
calibrator 3	3	✓	25.0	25.5	102.1
calibrator 4	4	✓	50.0	49.0	98.0
calibrator 5	5	✓	100.0	111.0	111.0
calibrator 6	6	✓	250.0	259.9	103.9
calibrator 7	7	✓	500.0	478.6	95.7
calibrator 8	8	✓	1000.0	861.4	86.1

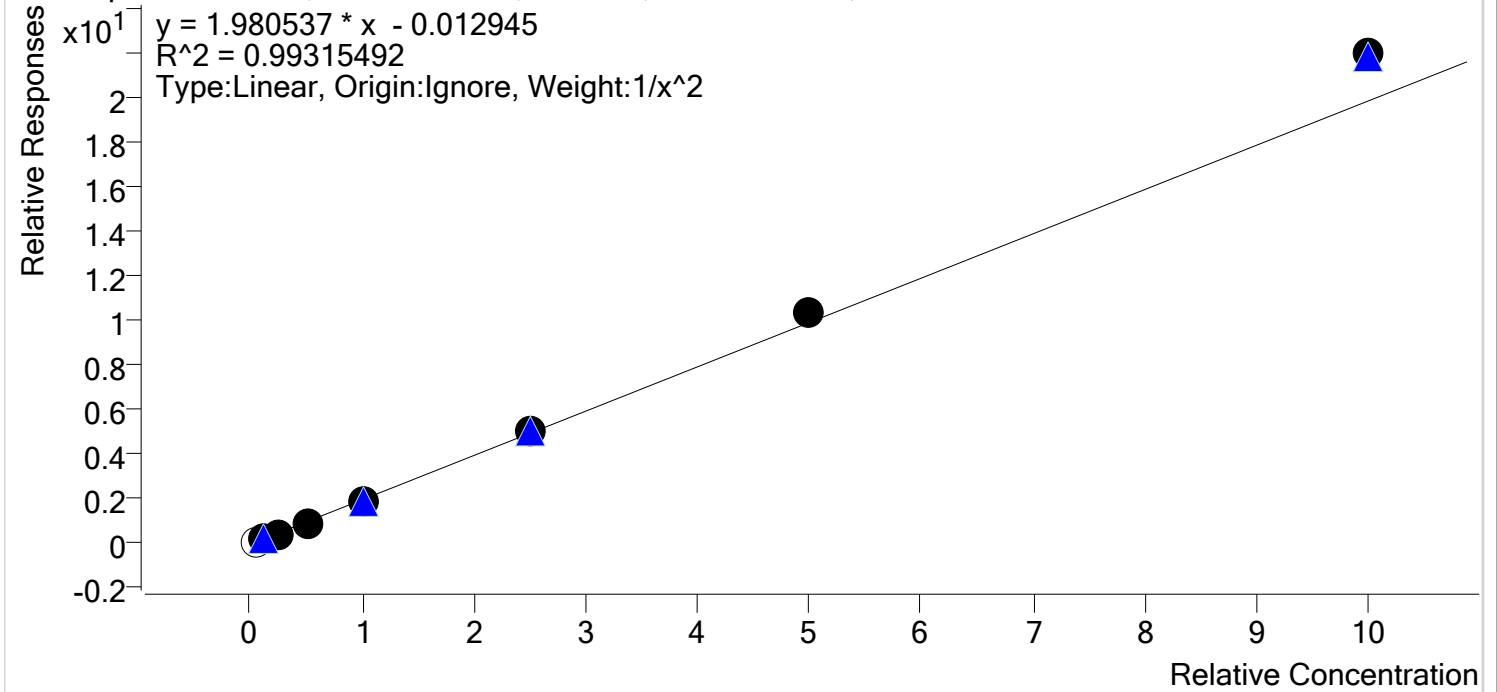
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Mirtazapine

Internal Standard Methadone-D9

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	x	5.0	5.3	105.9
calibrator 2	2	✓	10.0	10.5	104.8
calibrator 3	3	✓	25.0	23.2	92.7
calibrator 4	4	✓	50.0	45.9	91.9
calibrator 5	5	✓	100.0	94.9	94.9
calibrator 6	6	✓	250.0	251.0	100.4
calibrator 7	7	✓	500.0	522.9	104.6
calibrator 8	8	✓	1000.0	1107.0	110.7

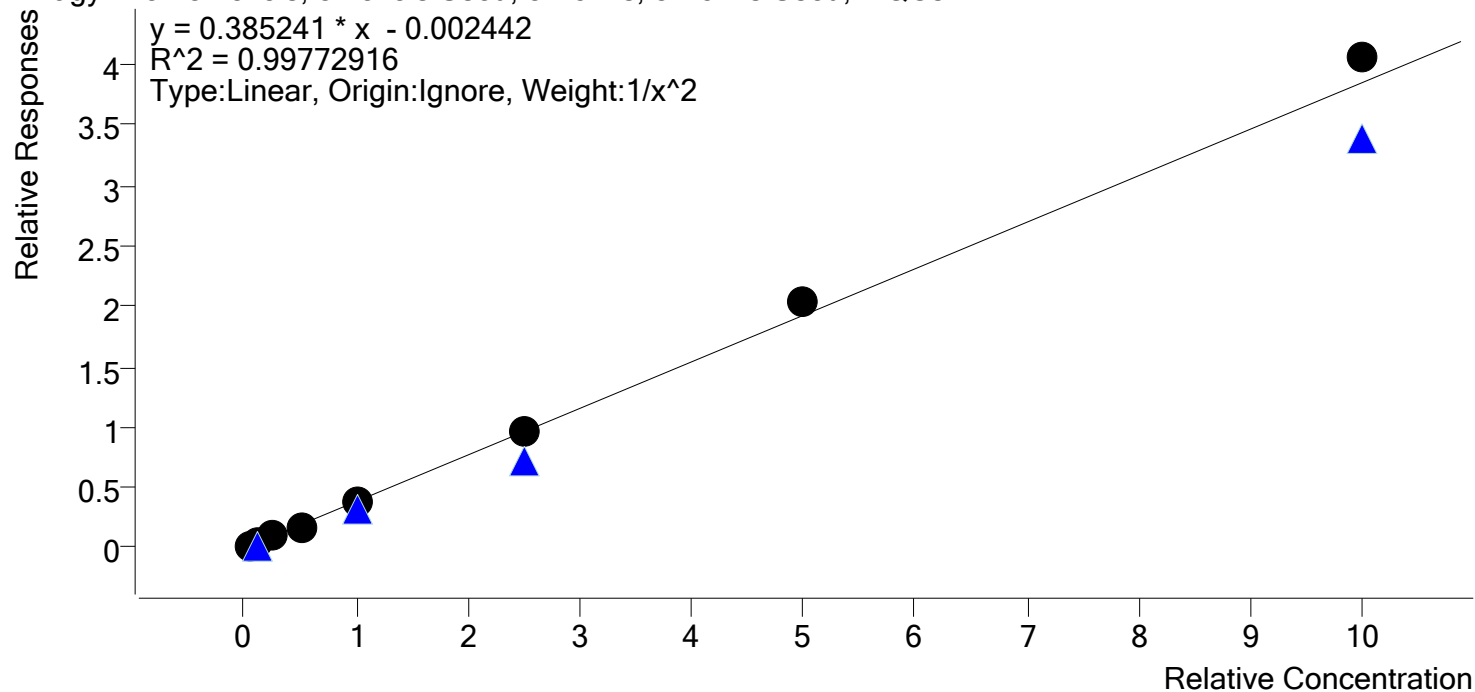
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Mitragynine

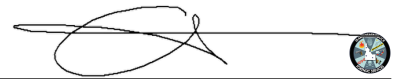
Internal Standard Methadone-D9

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.1	101.0
calibrator 2	2	✓	10.0	10.1	100.6
calibrator 3	3	✓	25.0	24.3	97.2
calibrator 4	4	✓	50.0	46.4	92.8
calibrator 5	5	✓	100.0	98.5	98.5
calibrator 6	6	✓	250.0	248.3	99.3
calibrator 7	7	✓	500.0	526.2	105.2
calibrator 8	8	✓	1000.0	1053.8	105.4

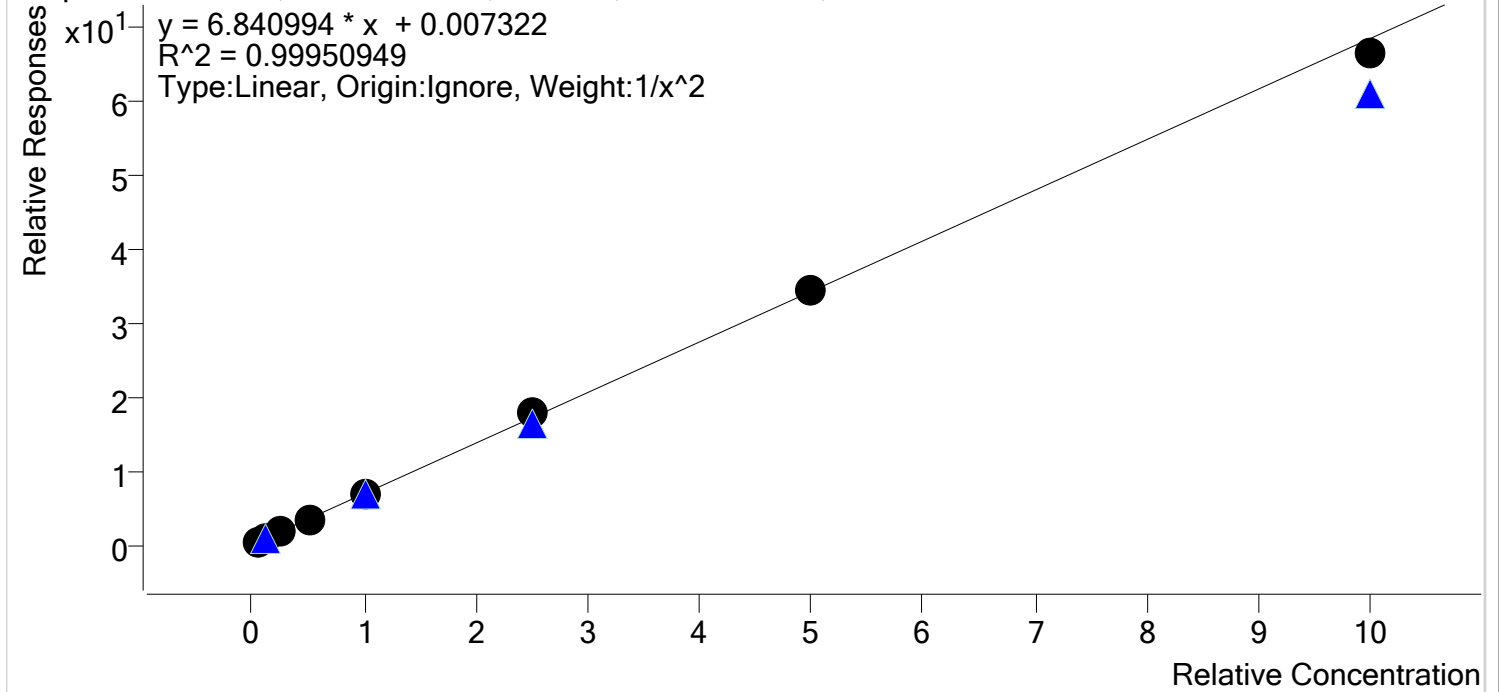
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Morphine

Internal Standard Morphine-D6

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



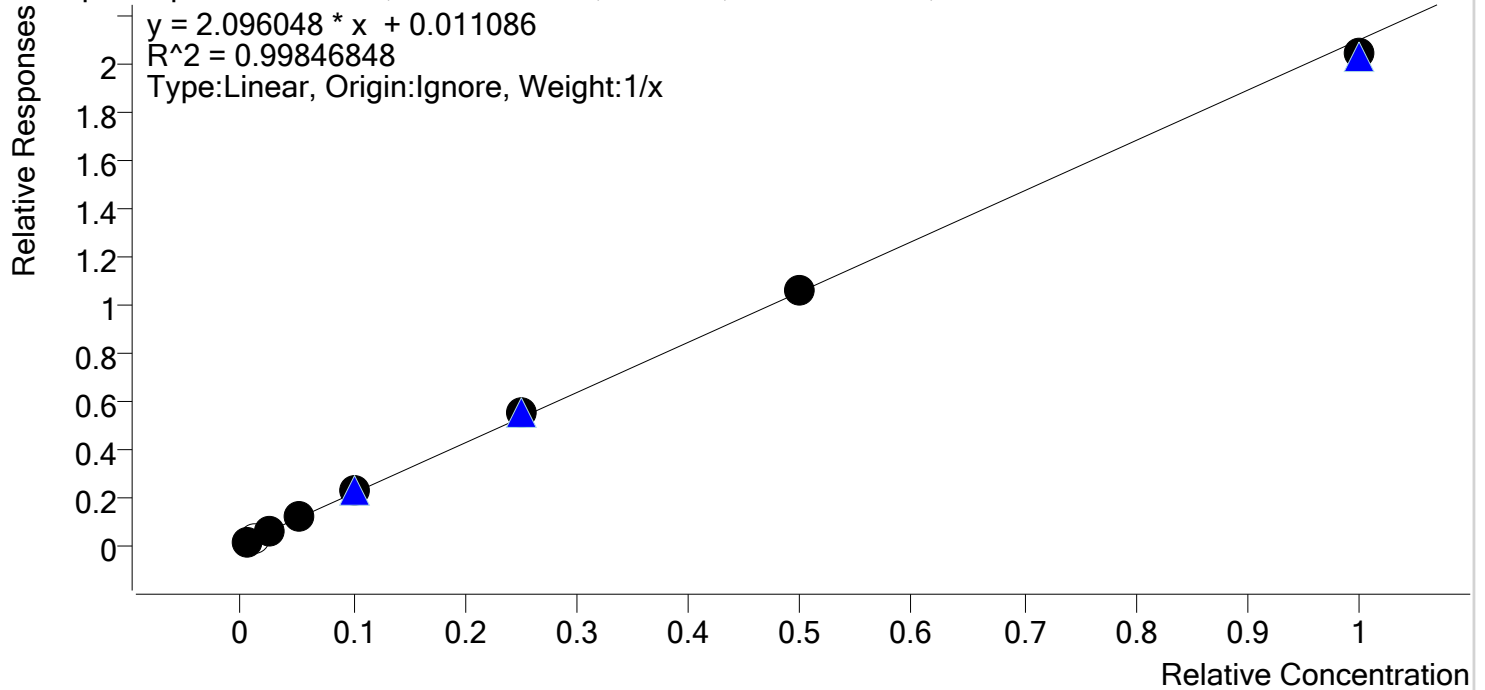
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.0	99.6
calibrator 2	2	✓	10.0	10.1	101.0
calibrator 3	3	✓	25.0	25.0	99.9
calibrator 4	4	✓	50.0	49.0	98.1
calibrator 5	5	✓	100.0	101.4	101.4
calibrator 6	6	✓	250.0	258.0	103.2
calibrator 7	7	✓	500.0	499.1	99.8
calibrator 8	8	✓	1000.0	970.3	97.0

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Norbuprenorphine **Internal Standard** Norbuprenorphine-D3

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	0.5	0.4	78.1
calibrator 2	2	x	1.0	0.9	93.9
calibrator 3	3	✓	2.5	2.5	100.4
calibrator 4	4	✓	5.0	5.6	111.4
calibrator 5	5	✓	10.0	10.8	108.1
calibrator 6	6	✓	25.0	26.0	103.8
calibrator 7	7	✓	50.0	50.5	101.0
calibrator 8	8	✓	100.0	97.3	97.3

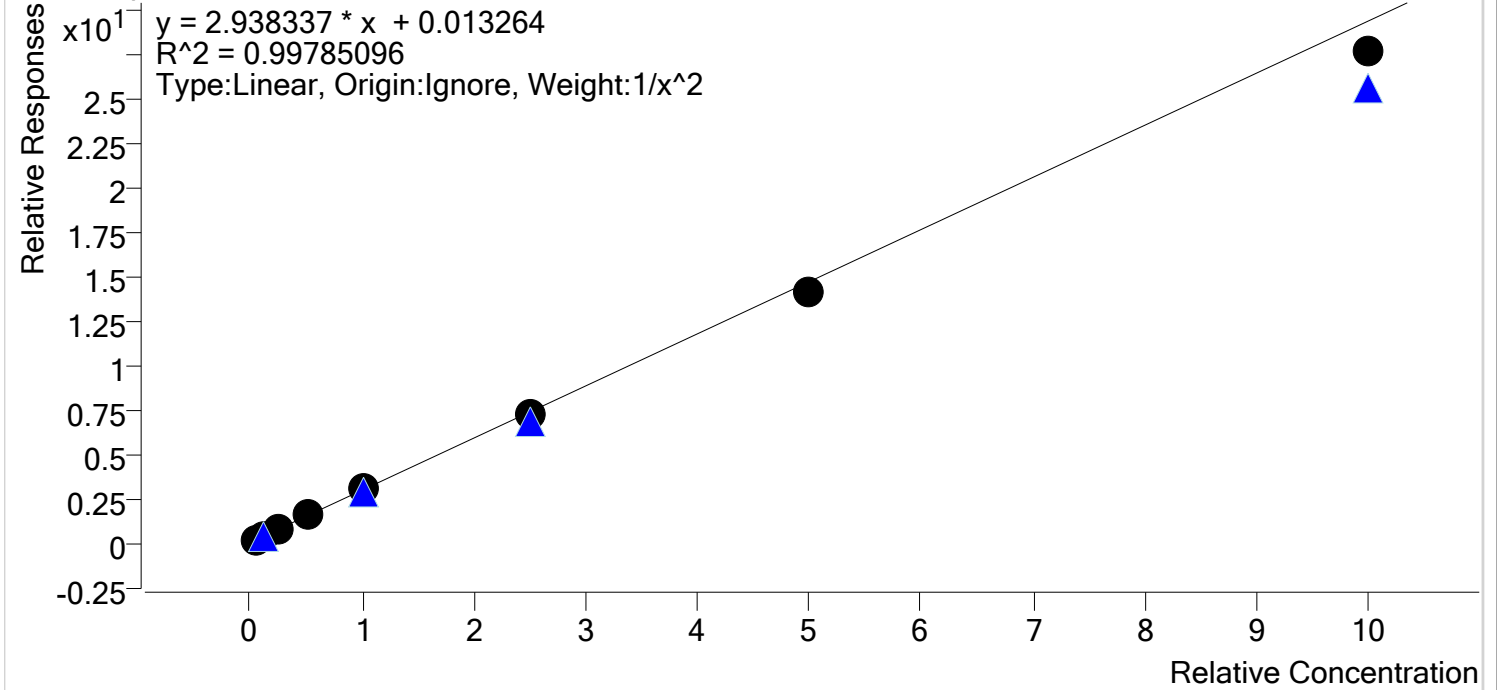
dropped calibrator 2 tops cut off peaks.

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Nordiazepam **Internal Standard** Nordiazepam-D5

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.9	97.3
calibrator 2	2	✓	10.0	10.3	102.6
calibrator 3	3	✓	25.0	26.3	105.3
calibrator 4	4	✓	50.0	51.5	103.1
calibrator 5	5	✓	100.0	103.2	103.2
calibrator 6	6	✓	250.0	245.8	98.3
calibrator 7	7	✓	500.0	480.7	96.1
calibrator 8	8	✓	1000.0	941.4	94.1

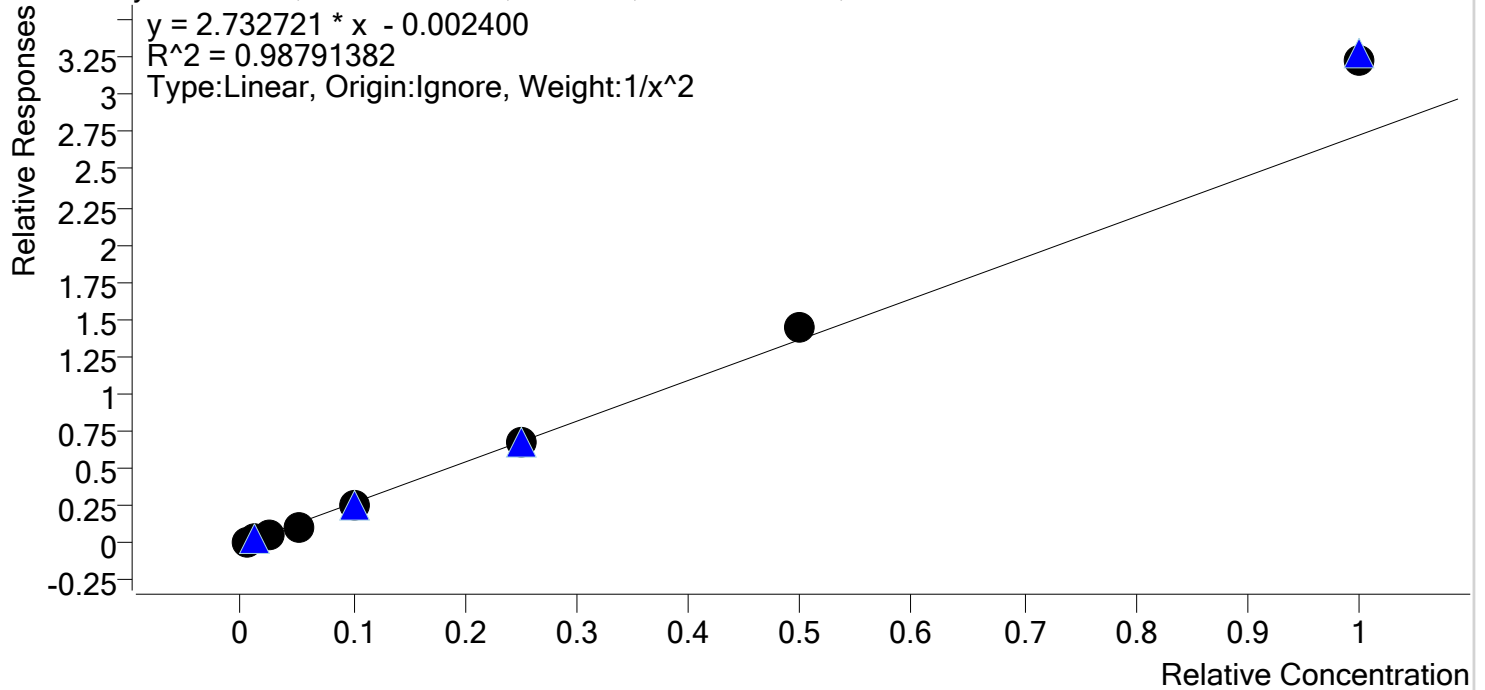
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Norfentanyl

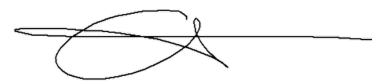
Internal Standard Norfentanyl-D5

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



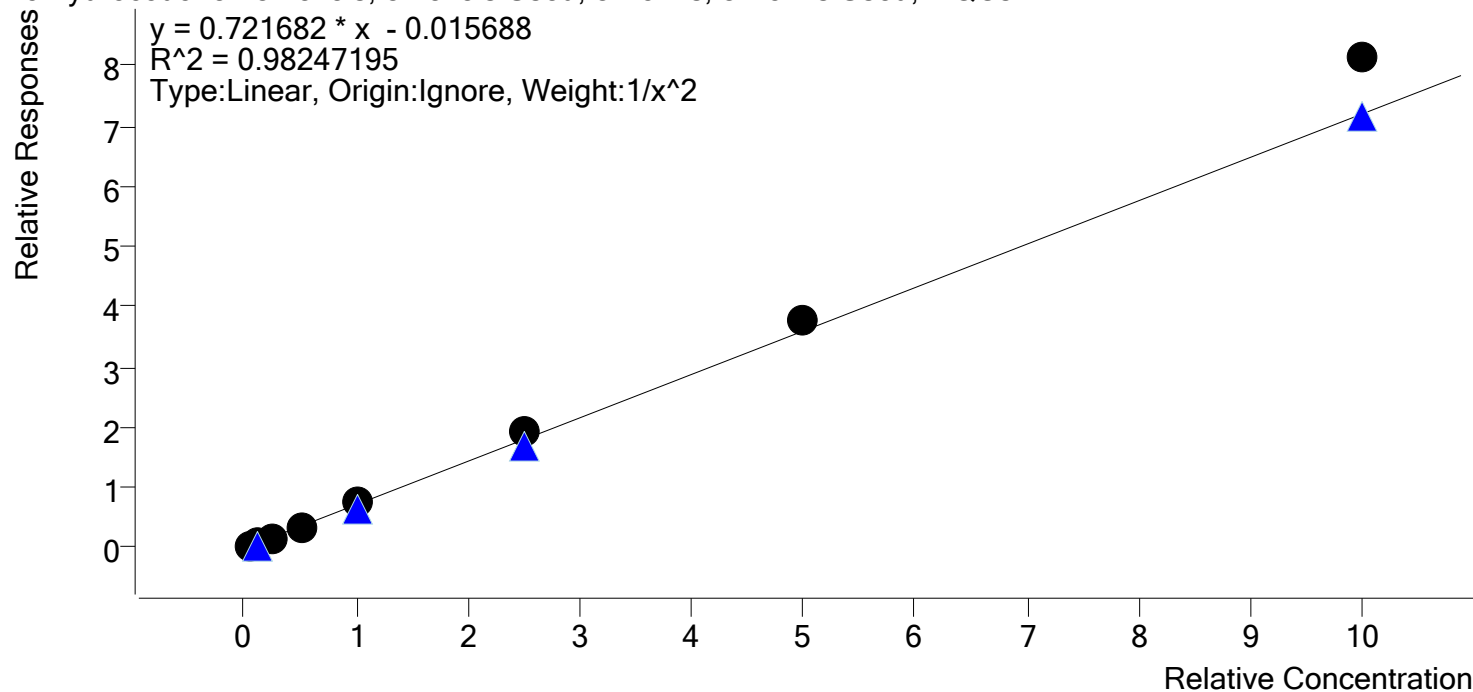
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	0.5	0.5	104.2
calibrator 2	2	✓	1.0	1.0	97.5
calibrator 3	3	✓	2.5	2.3	91.5
calibrator 4	4	✓	5.0	4.4	88.9
calibrator 5	5	✓	10.0	9.4	94.2
calibrator 6	6	✓	25.0	24.6	98.3
calibrator 7	7	✓	50.0	53.3	106.7
calibrator 8	8	✓	100.0	118.6	118.6

Compound Calibration Report




Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Norhydrocodone **Internal Standard** Norhydrocodone-D3

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



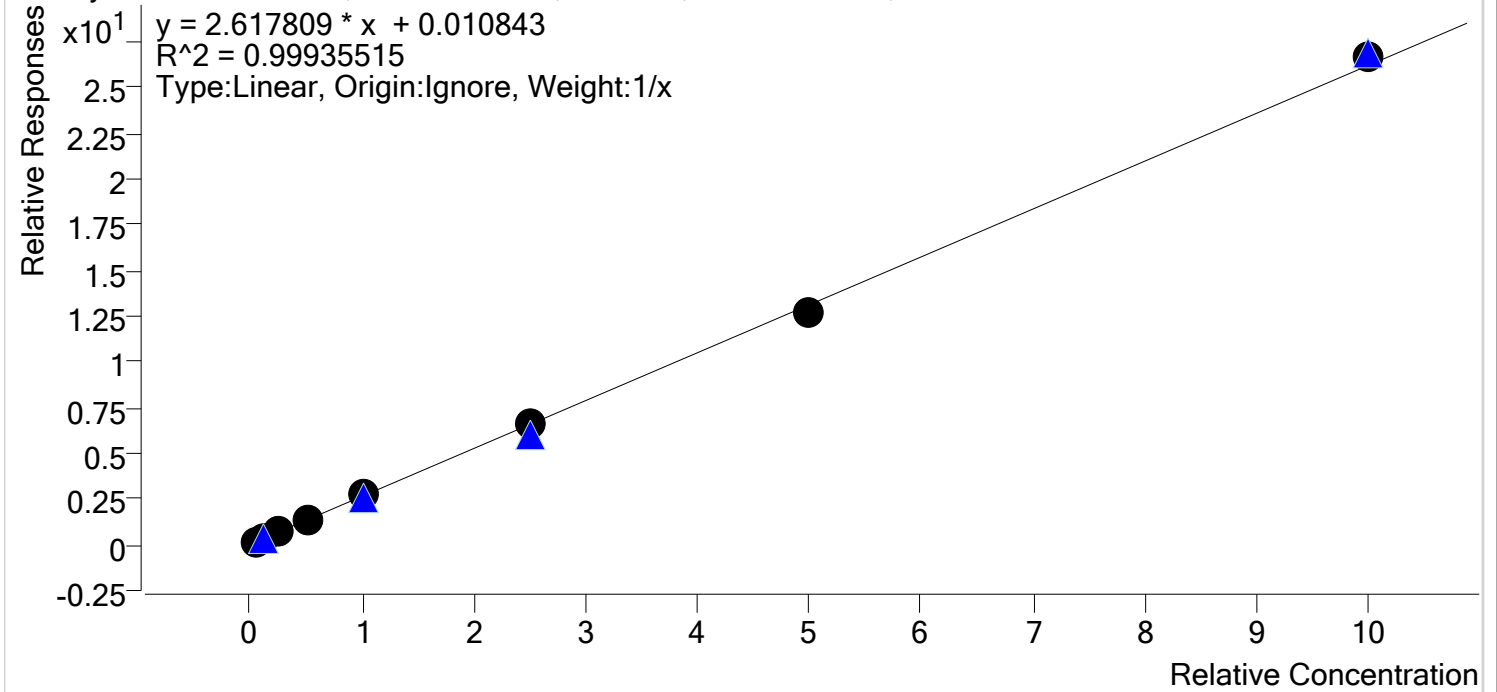
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.5	110.2
calibrator 2	2	✓	10.0	8.8	87.6
calibrator 3	3	✓	25.0	20.7	83.0
calibrator 4	4	✓	50.0	44.5	89.0
calibrator 5	5	✓	100.0	105.7	105.7
calibrator 6	6	✓	250.0	267.4	107.0
calibrator 7	7	✓	500.0	523.2	104.6
calibrator 8	8	✓	1000.0	1129.8	113.0

Compound Calibration Report



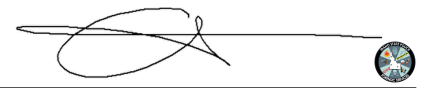
Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Noroxycodone **Internal Standard** Noroxycodone-D3

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

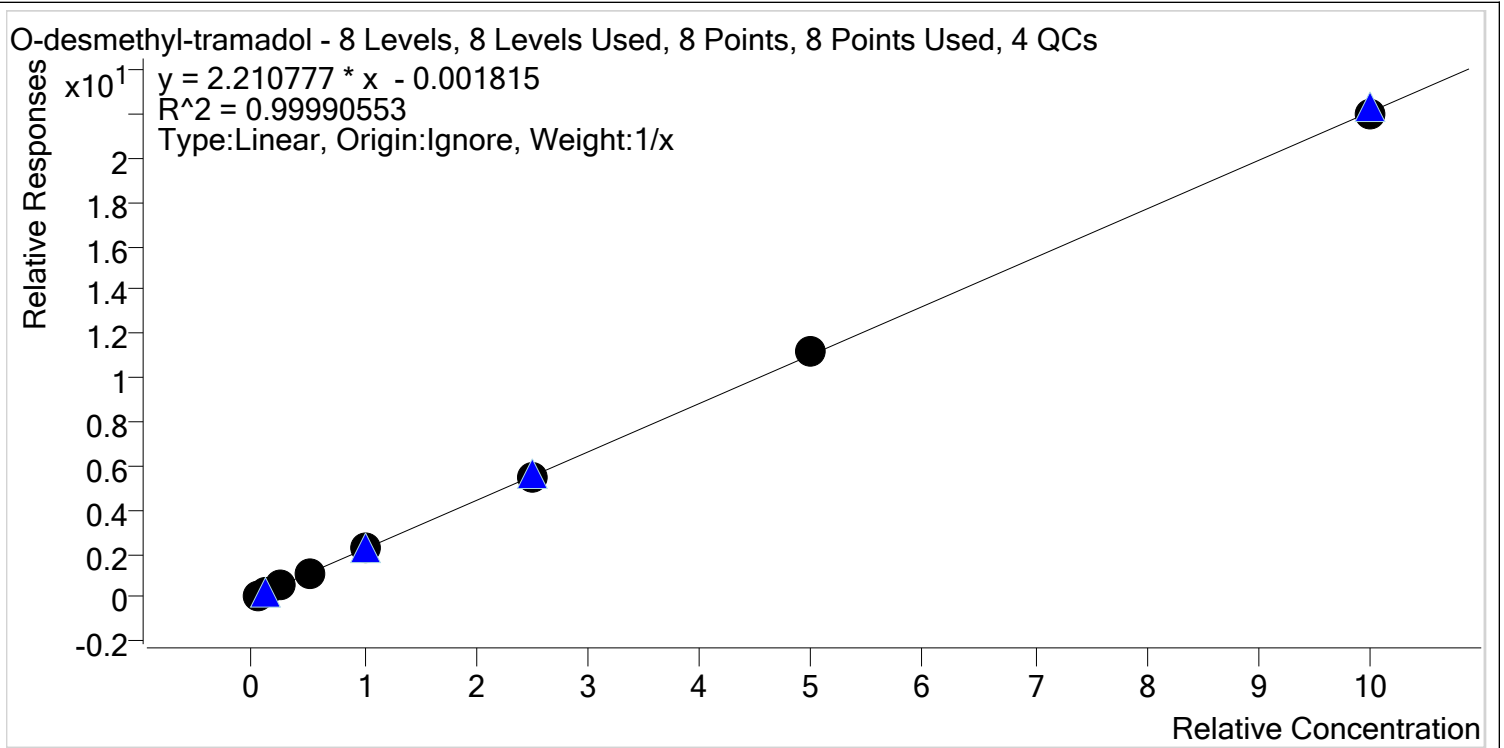


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.0	100.8
calibrator 2	2	✓	10.0	10.0	99.9
calibrator 3	3	✓	25.0	26.3	105.0
calibrator 4	4	✓	50.0	47.8	95.6
calibrator 5	5	✓	100.0	101.1	101.1
calibrator 6	6	✓	250.0	247.8	99.1
calibrator 7	7	✓	500.0	482.9	96.6
calibrator 8	8	✓	1000.0	1019.2	101.9

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte O-desmethyl-tramadol **Internal Standard** O-desmethyl-tramadol-D6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.0	99.6
calibrator 2	2	✓	10.0	10.3	103.0
calibrator 3	3	✓	25.0	24.7	98.8
calibrator 4	4	✓	50.0	48.6	97.3
calibrator 5	5	✓	100.0	100.4	100.4
calibrator 6	6	✓	250.0	250.9	100.3
calibrator 7	7	✓	500.0	506.2	101.2
calibrator 8	8	✓	1000.0	994.0	99.4

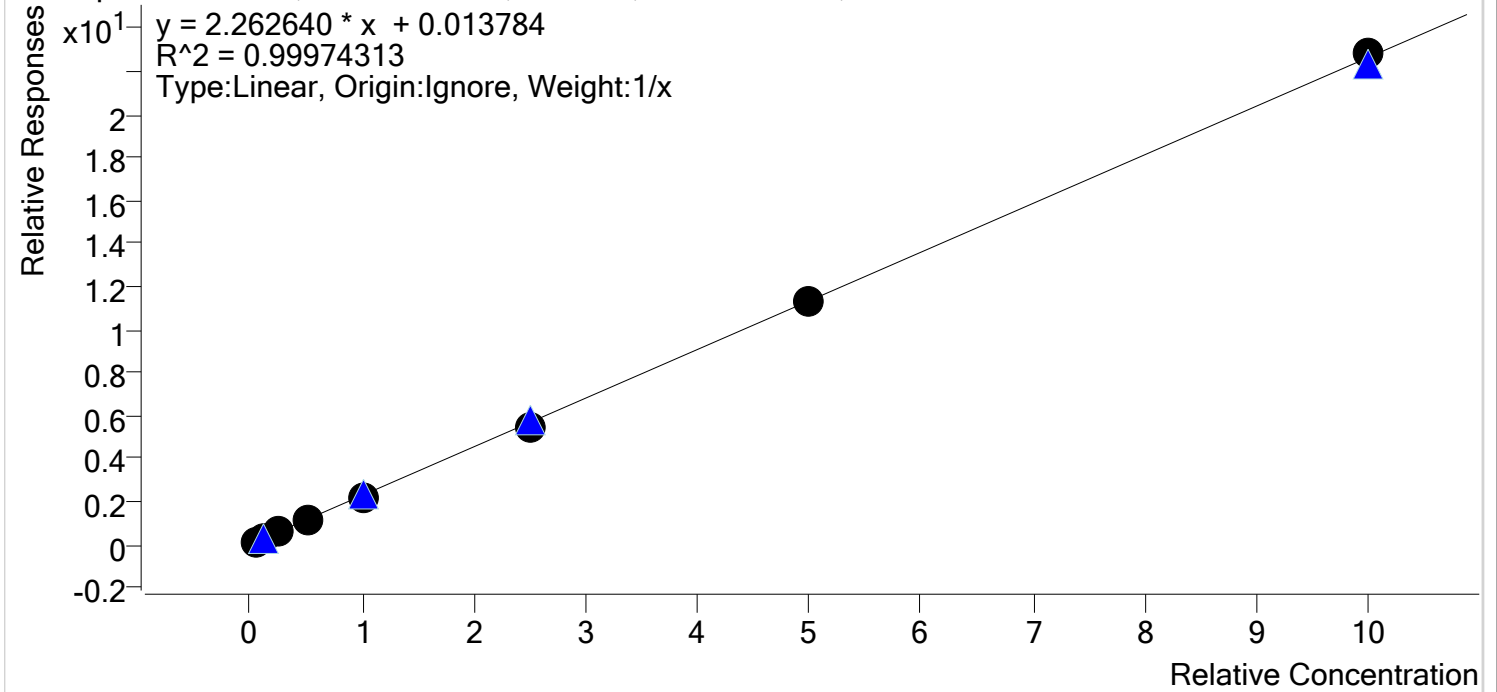
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Oxazepam

Internal Standard Oxazepam-D5

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



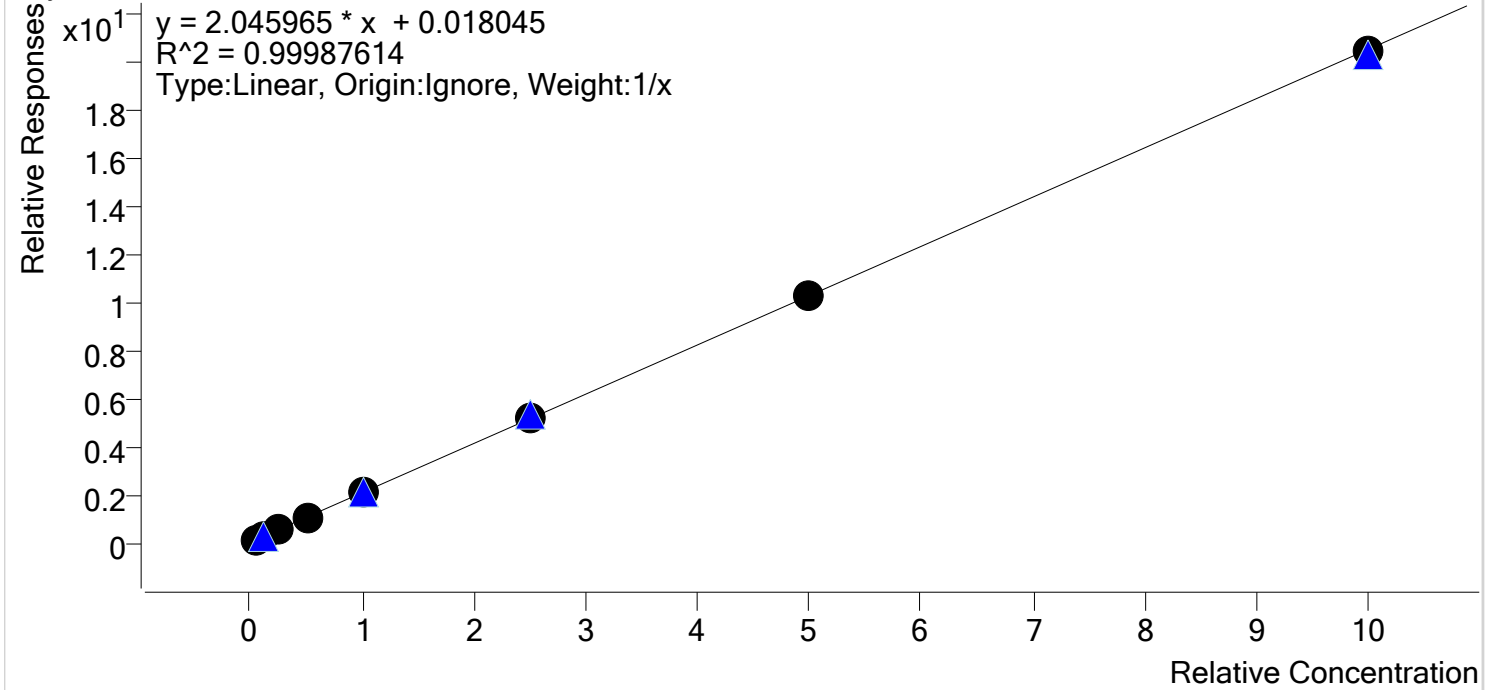
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.8	96.9
calibrator 2	2	✓	10.0	10.3	102.6
calibrator 3	3	✓	25.0	25.9	103.6
calibrator 4	4	✓	50.0	50.5	101.1
calibrator 5	5	✓	100.0	98.4	98.4
calibrator 6	6	✓	250.0	241.1	96.5
calibrator 7	7	✓	500.0	500.9	100.2
calibrator 8	8	✓	1000.0	1008.0	100.8

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Oxycodone **Internal Standard** Oxycodone-D6

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



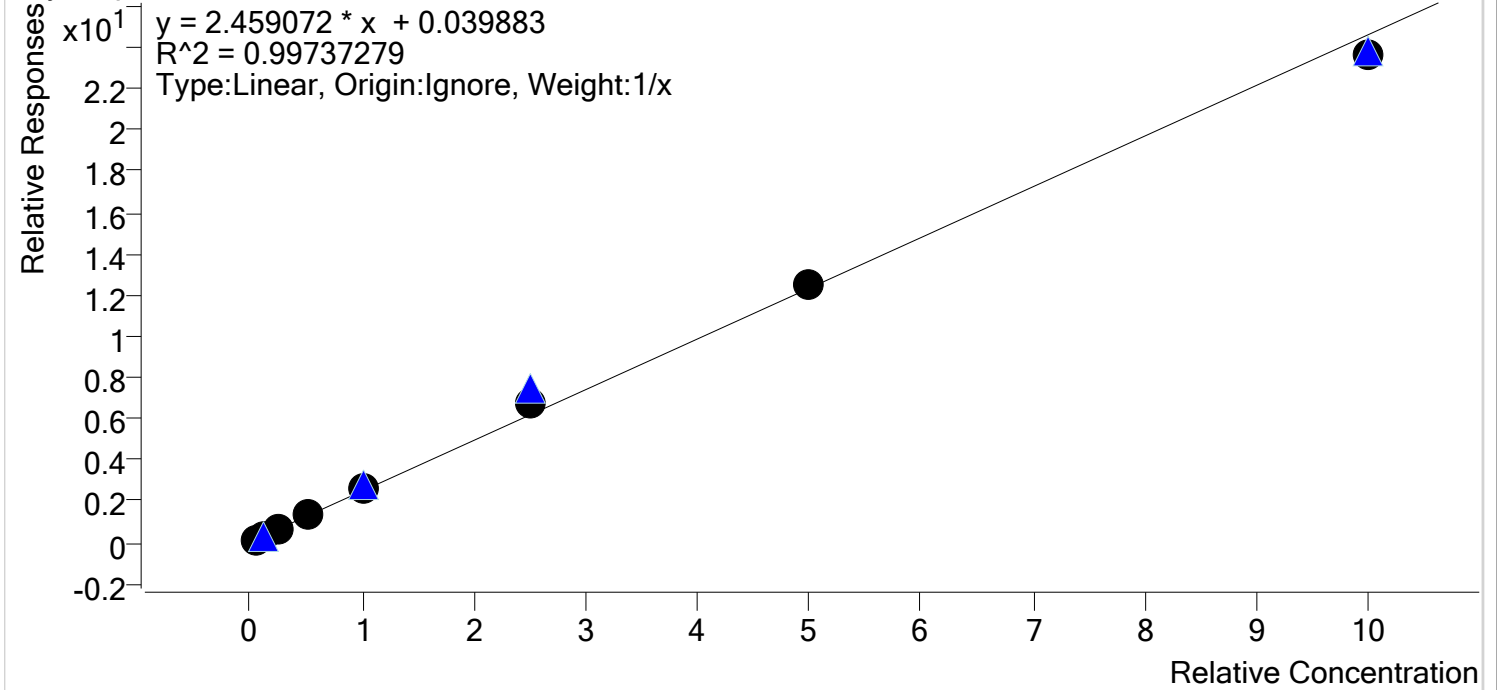
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.5	89.7
calibrator 2	2	✓	10.0	10.3	102.5
calibrator 3	3	✓	25.0	25.5	102.1
calibrator 4	4	✓	50.0	51.8	103.5
calibrator 5	5	✓	100.0	102.4	102.4
calibrator 6	6	✓	250.0	251.4	100.6
calibrator 7	7	✓	500.0	498.7	99.7
calibrator 8	8	✓	1000.0	995.5	99.6

Compound Calibration Report




Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Oxymorphone **Internal Standard** Oxymorphone-D3

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



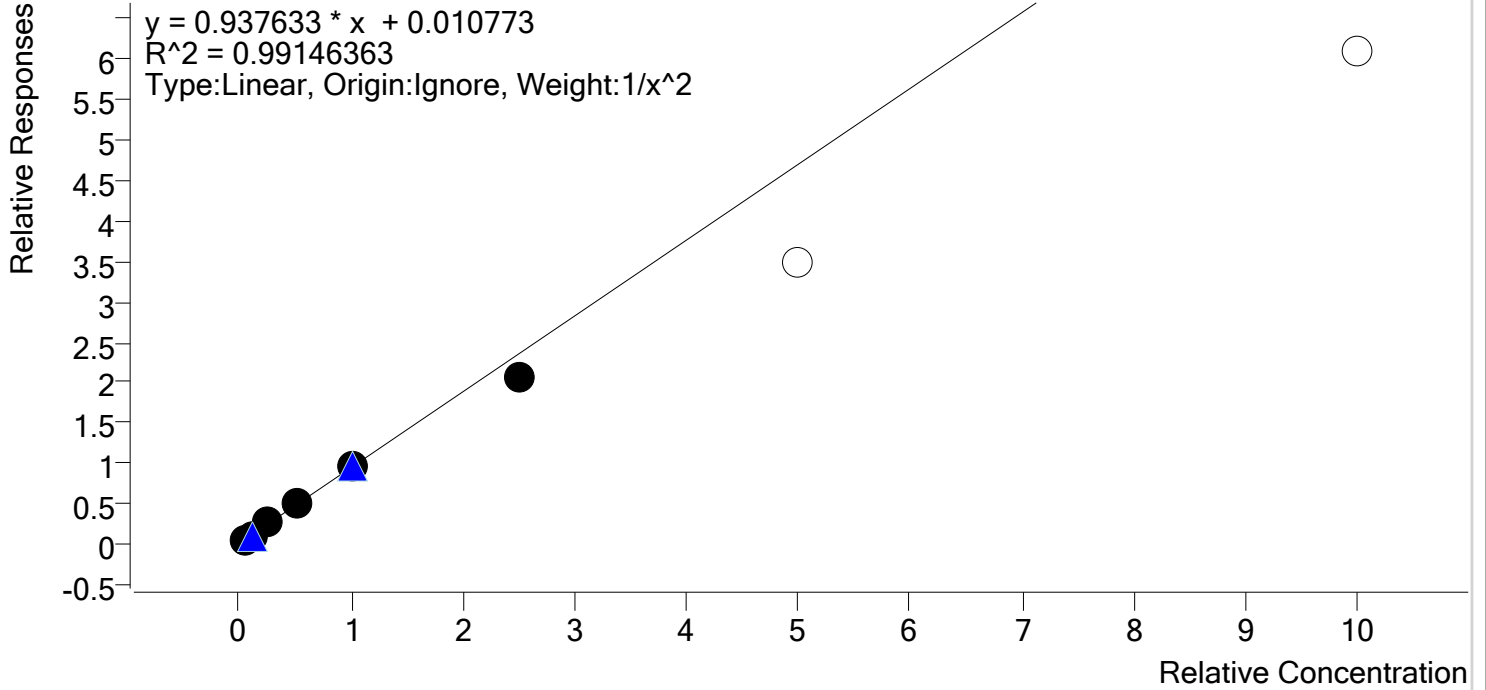
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.0	80.2
calibrator 2	2	✓	10.0	9.8	97.9
calibrator 3	3	✓	25.0	25.4	101.5
calibrator 4	4	✓	50.0	52.8	105.6
calibrator 5	5	✓	100.0	108.8	108.8
calibrator 6	6	✓	250.0	270.5	108.2
calibrator 7	7	✓	500.0	509.5	101.9
calibrator 8	8	✓	1000.0	959.2	95.9

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Phentermine **Internal Standard** Phentermine-D5

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



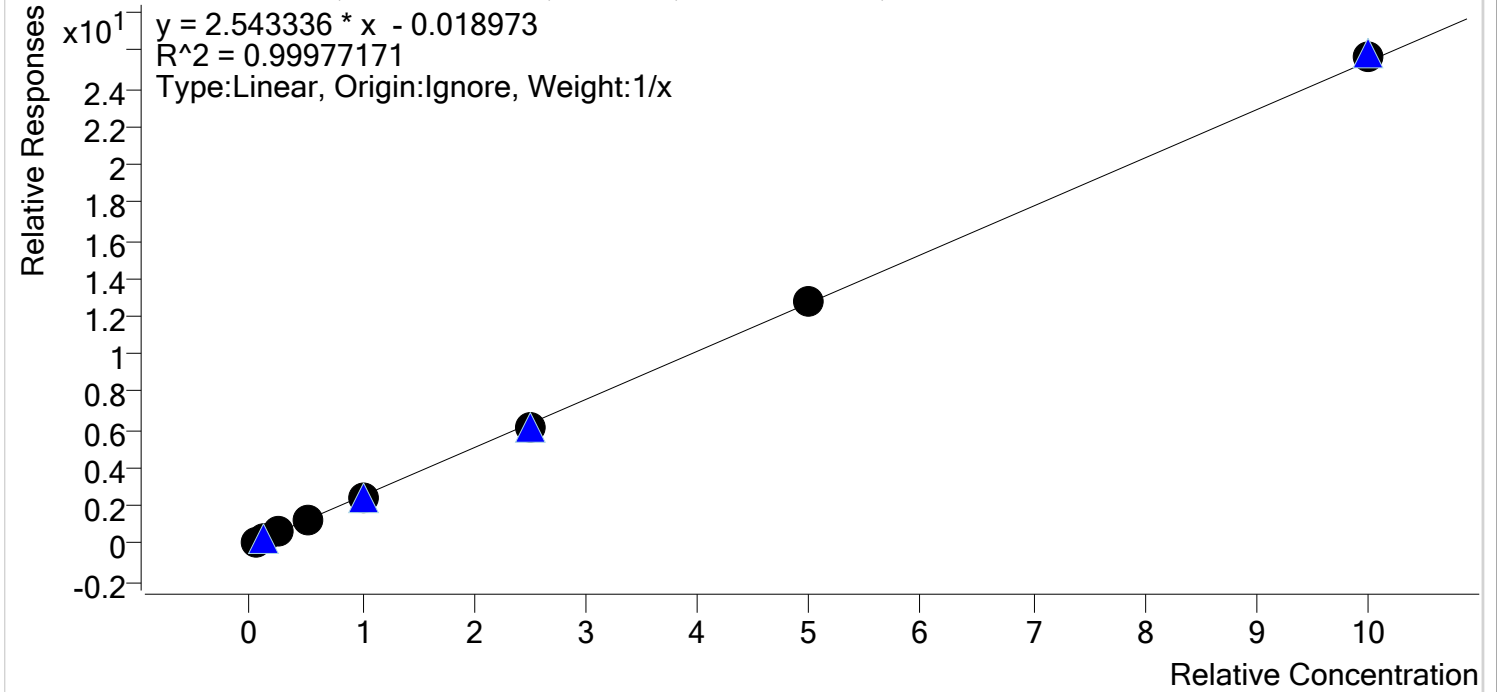
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.8	95.6
calibrator 2	2	✓	10.0	10.5	105.4
calibrator 3	3	✓	25.0	27.1	108.4
calibrator 4	4	✓	50.0	50.9	101.8
calibrator 5	5	✓	100.0	101.5	101.5
calibrator 6	6	✓	250.0	218.2	87.3
calibrator 7	7	✗	500.0	370.4	74.1
calibrator 8	8	✗	1000.0	648.6	64.9

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Promethazine **Internal Standard** Promethazine-D3

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.3	107.0
calibrator 2	2	✓	10.0	10.4	103.9
calibrator 3	3	✓	25.0	24.1	96.5
calibrator 4	4	✓	50.0	47.8	95.6
calibrator 5	5	✓	100.0	98.2	98.2
calibrator 6	6	✓	250.0	244.3	97.7
calibrator 7	7	✓	500.0	501.5	100.3
calibrator 8	8	✓	1000.0	1008.3	100.8

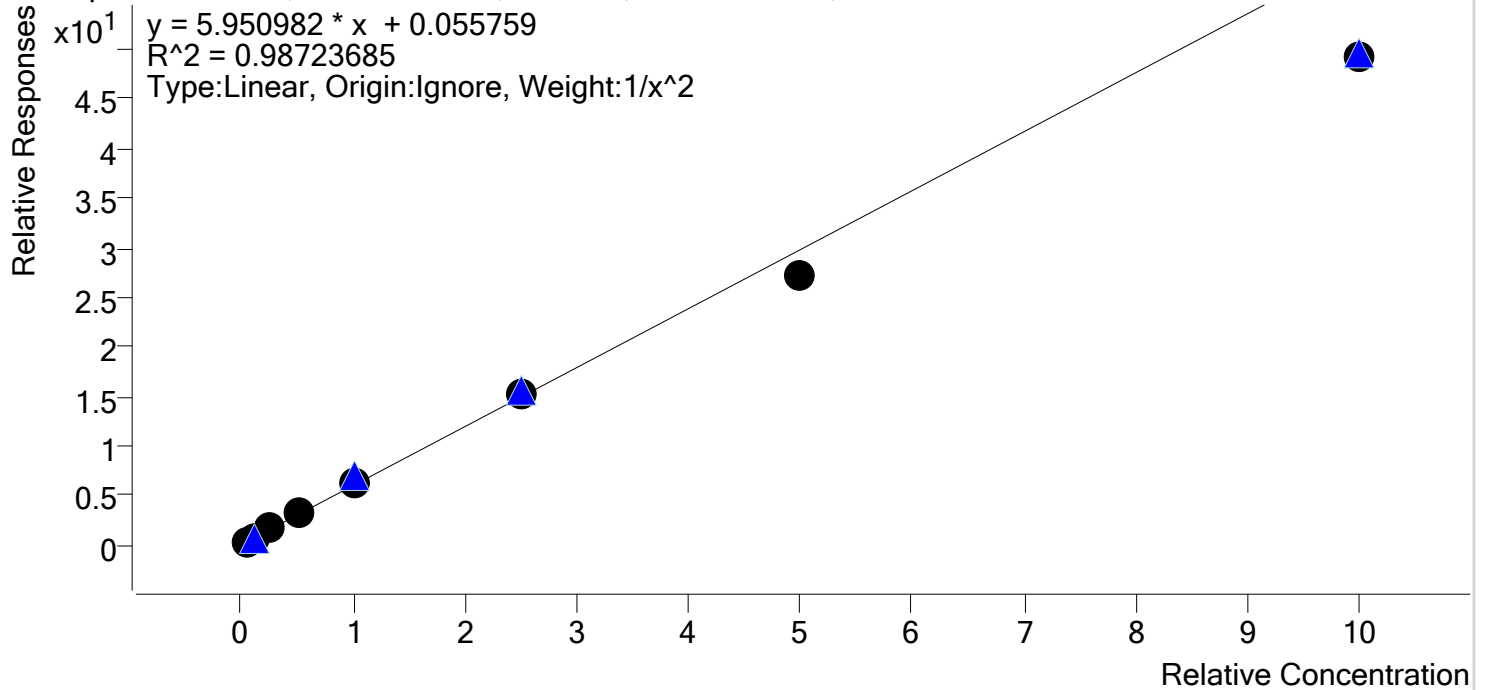
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Quetiapine

Internal Standard Quetiapine-D8

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



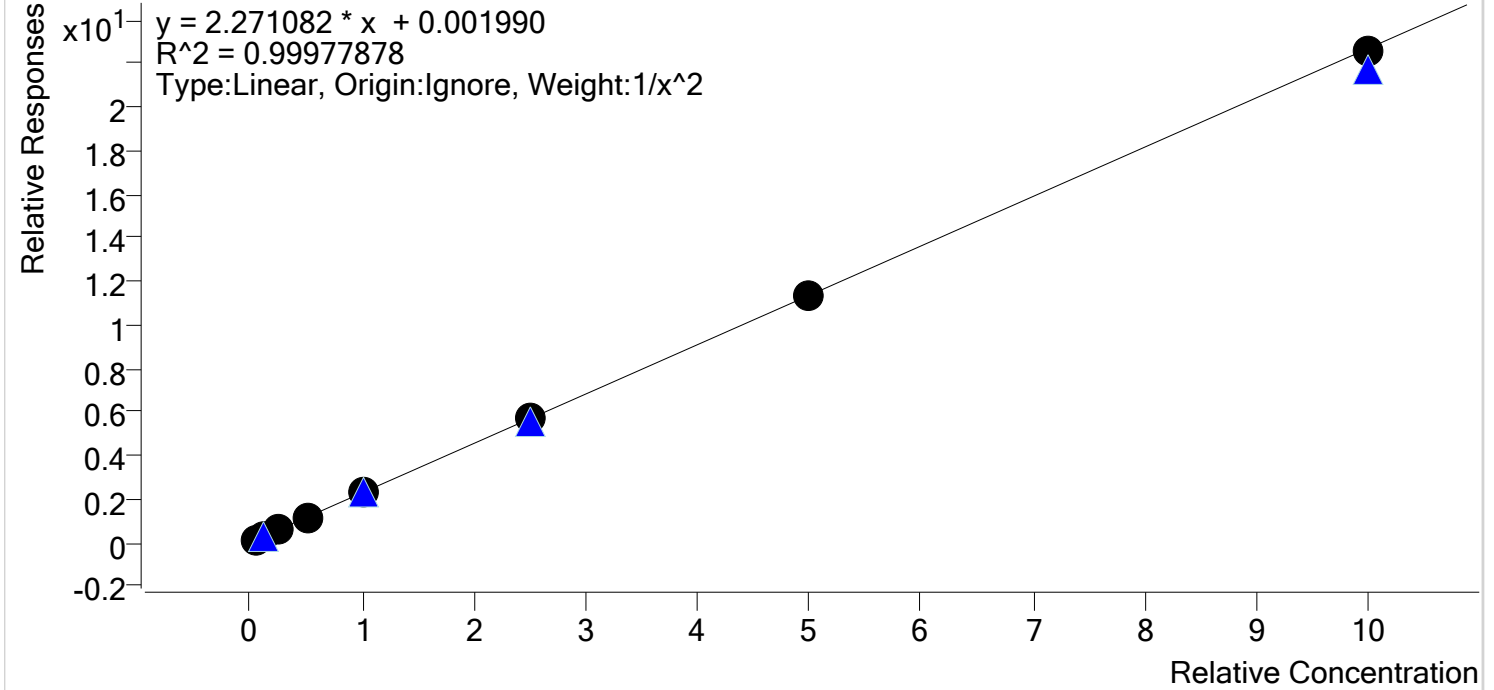
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.7	94.1
calibrator 2	2	✓	10.0	10.6	106.4
calibrator 3	3	✓	25.0	26.8	107.1
calibrator 4	4	✓	50.0	55.7	111.5
calibrator 5	5	✓	100.0	106.2	106.2
calibrator 6	6	✓	250.0	253.0	101.2
calibrator 7	7	✓	500.0	453.9	90.8
calibrator 8	8	✓	1000.0	827.5	82.7

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Sertraline **Internal Standard** Sertraline-D3

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.9	98.7
calibrator 2	2	✓	10.0	10.3	102.9
calibrator 3	3	✓	25.0	24.9	99.4
calibrator 4	4	✓	50.0	49.8	99.5
calibrator 5	5	✓	100.0	100.6	100.6
calibrator 6	6	✓	250.0	249.3	99.7
calibrator 7	7	✓	500.0	498.9	99.8
calibrator 8	8	✓	1000.0	993.6	99.4

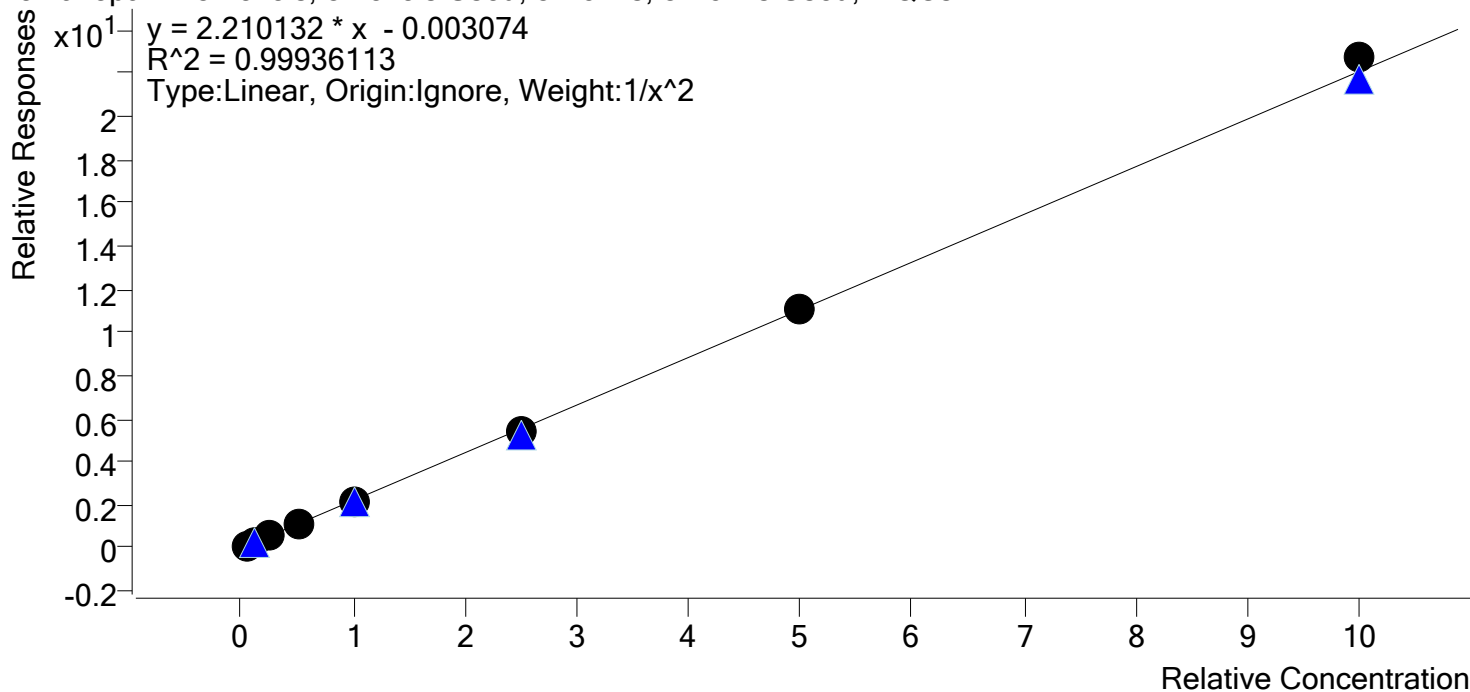
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Temazepam

Internal Standard Temazepam-D5

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



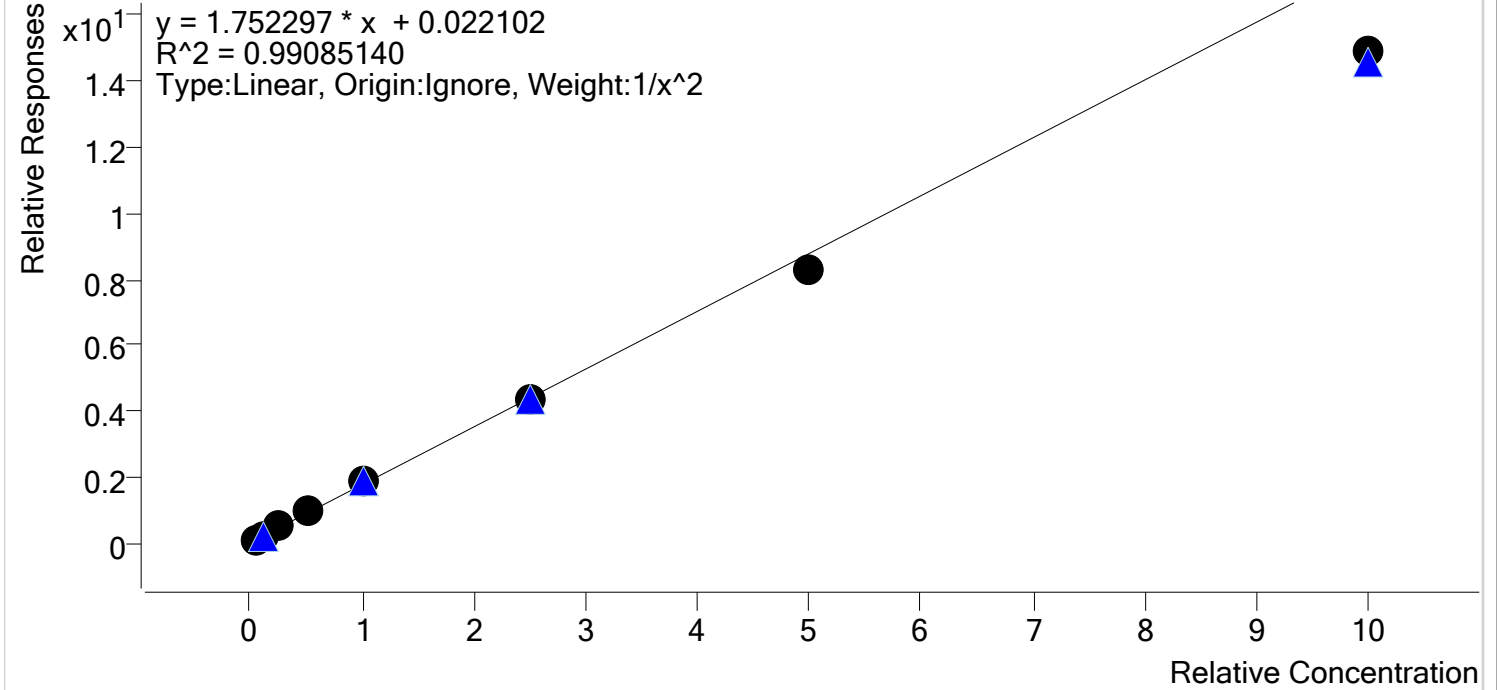
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.9	98.6
calibrator 2	2	✓	10.0	10.4	103.8
calibrator 3	3	✓	25.0	24.6	98.4
calibrator 4	4	✓	50.0	49.1	98.2
calibrator 5	5	✓	100.0	100.1	100.1
calibrator 6	6	✓	250.0	245.8	98.3
calibrator 7	7	✓	500.0	498.4	99.7
calibrator 8	8	✓	1000.0	1029.1	102.9

Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Tramadol **Internal Standard** Tramadol-13C-D3

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.8	95.1
calibrator 2	2	✓	10.0	10.6	105.5
calibrator 3	3	✓	25.0	26.4	105.7
calibrator 4	4	✓	50.0	53.9	107.8
calibrator 5	5	✓	100.0	108.7	108.7
calibrator 6	6	✓	250.0	244.8	97.9
calibrator 7	7	✓	500.0	471.9	94.4
calibrator 8	8	✓	1000.0	849.2	84.9

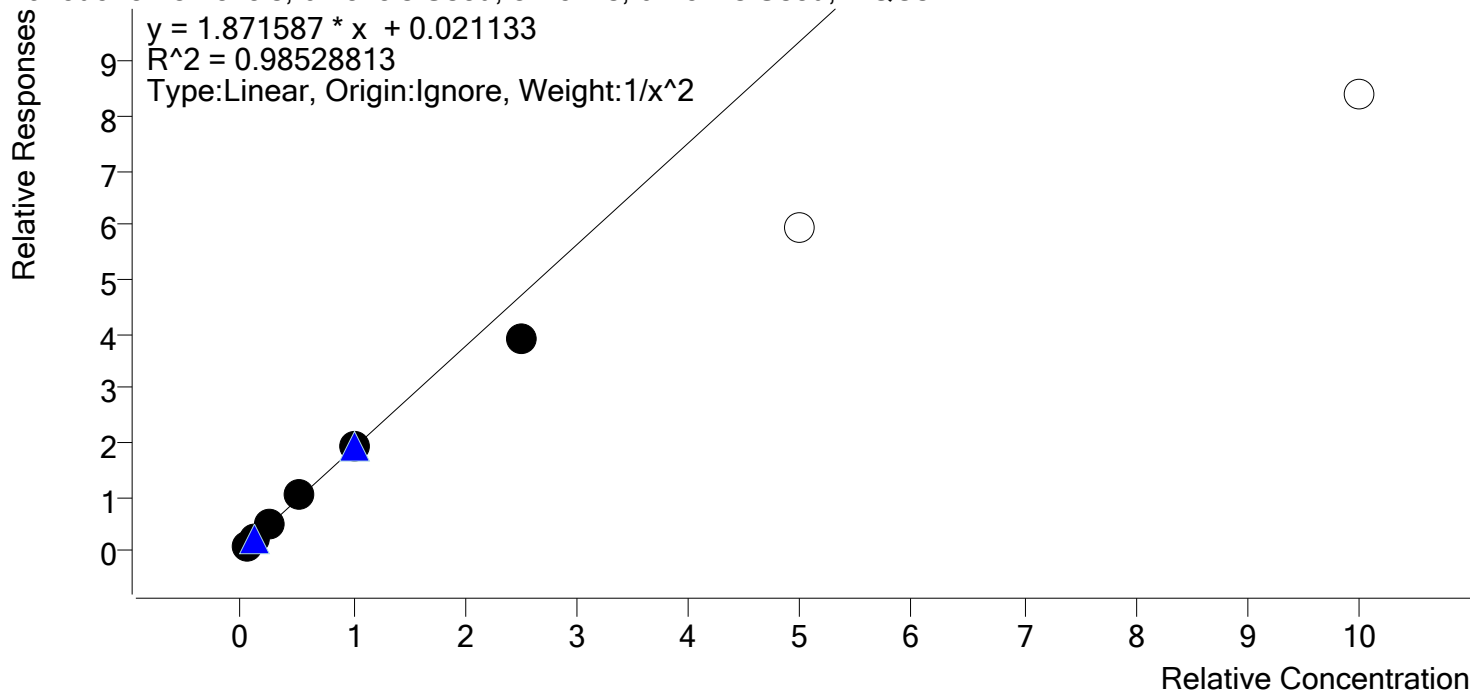
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Trazodone

Internal Standard Trazodone-D6

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.7	94.4
calibrator 2	2	✓	10.0	10.7	107.3
calibrator 3	3	✓	25.0	26.9	107.8
calibrator 4	4	✓	50.0	53.4	106.7
calibrator 5	5	✓	100.0	101.1	101.1
calibrator 6	6	✓	250.0	206.5	82.6
calibrator 7	7	✗	500.0	316.7	63.3
calibrator 8	8	✗	1000.0	446.8	44.7

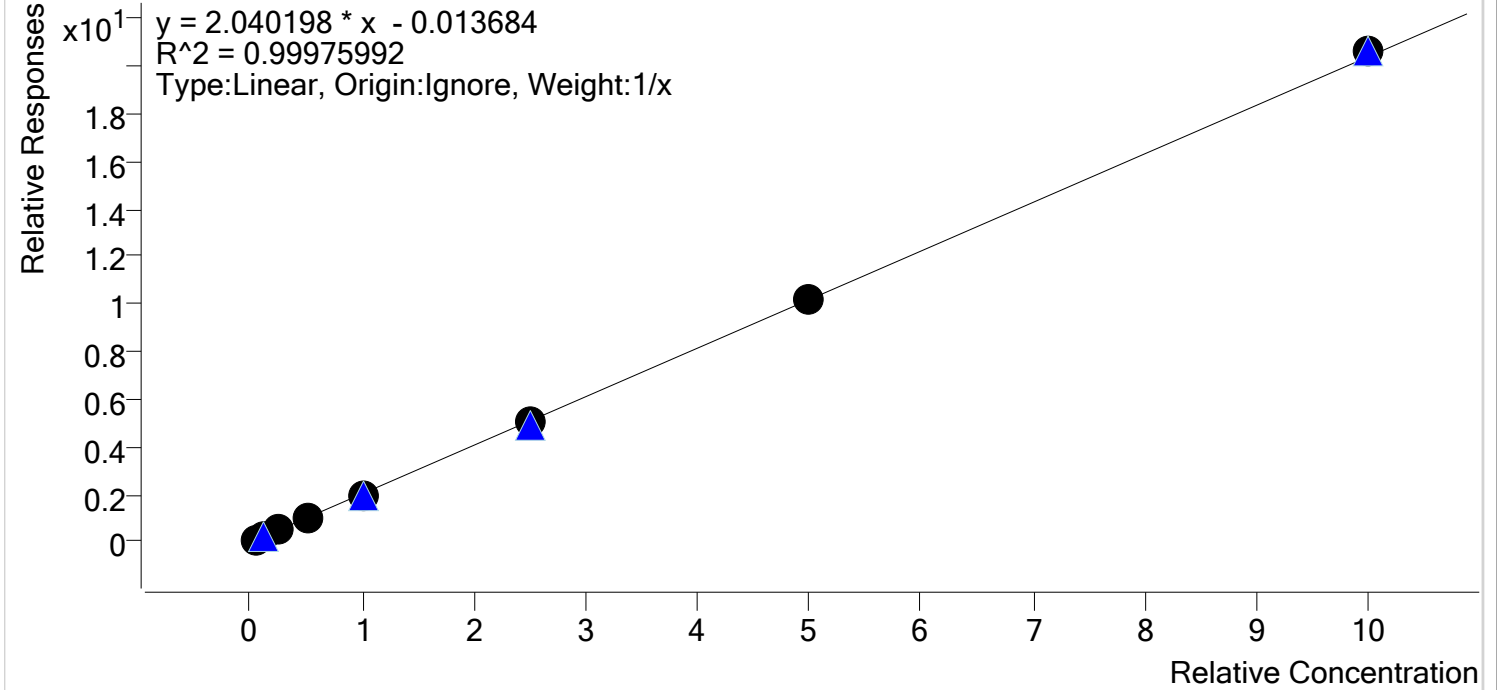
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Venlafaxine

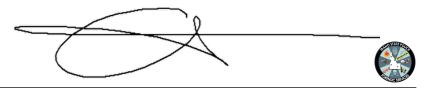
Internal Standard Venlafaxine-D6

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	5.4	108.6
calibrator 2	2	✓	10.0	10.3	103.0
calibrator 3	3	✓	25.0	24.3	97.1
calibrator 4	4	✓	50.0	47.2	94.4
calibrator 5	5	✓	100.0	97.5	97.5
calibrator 6	6	✓	250.0	246.8	98.7
calibrator 7	7	✓	500.0	498.8	99.8
calibrator 8	8	✓	1000.0	1009.7	101.0

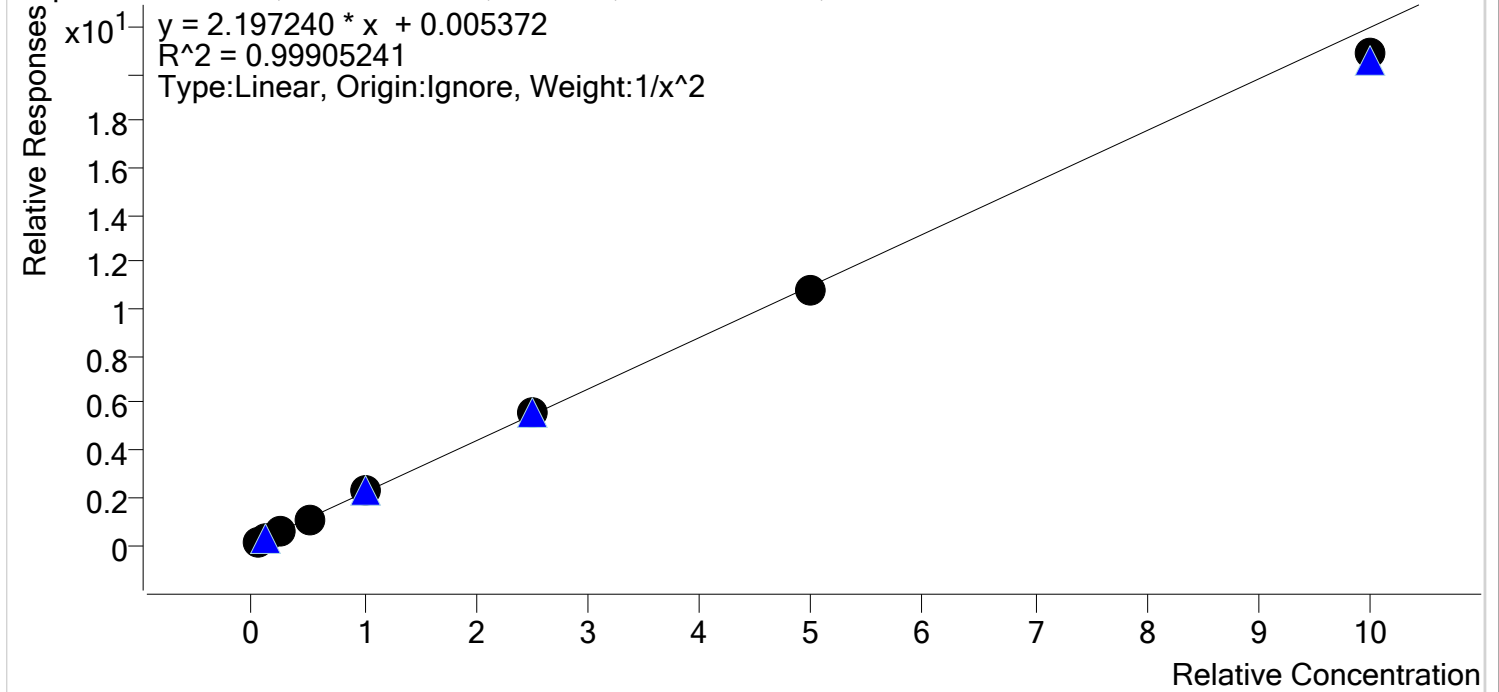
Compound Calibration Report



Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Last Cal. Update 5/1/2019 10:12 AM
Analyst Name ISP\datastor
Analyte Zolpidem

Internal Standard Zolpidem-D6

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



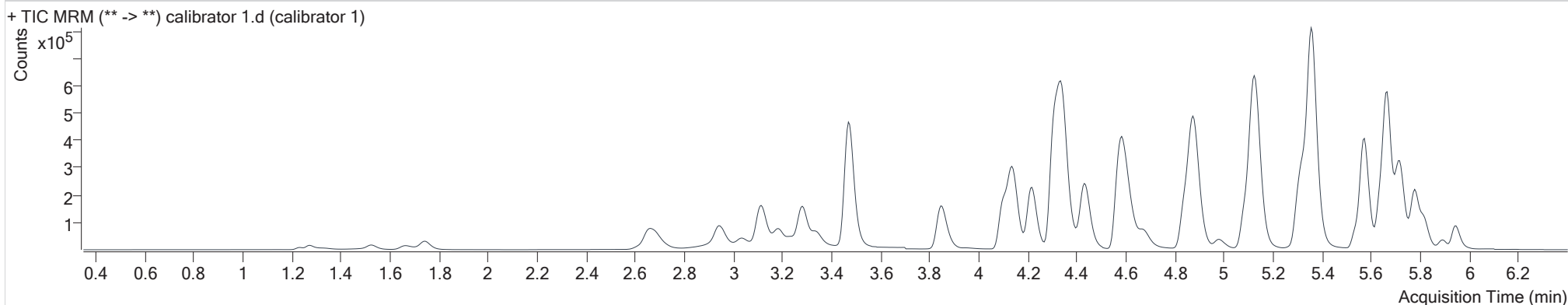
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
calibrator 1	1	✓	5.0	4.9	98.5
calibrator 2	2	✓	10.0	10.2	101.8
calibrator 3	3	✓	25.0	25.6	102.4
calibrator 4	4	✓	50.0	49.8	99.6
calibrator 5	5	✓	100.0	102.9	102.9
calibrator 6	6	✓	250.0	253.9	101.6
calibrator 7	7	✓	500.0	491.7	98.3
calibrator 8	8	✓	1000.0	949.3	94.9

ISPFS AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Calibration Last Update 5/1/2019 10:12:47 AM

Instrument	069697	Data File	calibrator 1.d
Type	Cal	Sample	calibrator 1
Acq. Method	mdq p1 cda 121818.m	Operator	Anne Nord
Sample Position	P2-A5	Comment	
Injection Volume	2.5		
Acq. Date-Time	4/30/2019 12:42:45 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.236	1822	14235	23.4	3153	5235	4.98 ng/ml
Oxymorphone	1.530	7651	665	42.5	1187	55233	4.01 ng/ml
Hydromorphone	1.753	10711	1597	73.4	1903	78509	4.78 ng/ml
Dihydrocodeine	2.692	19610	10573	65.0	∞	217758	4.72 ng/ml
Codeine	2.729	7048	22875	101.8	16388	66272	4.87 ng/ml
Oxycodone	2.965	29974	883	28.8	565	273100	4.48 ng/ml
Noroxycodone	3.053	12483	506	40.8	129	87448	5.04 ng/ml
Hydrocodone	3.134	18294	1903	39.5	398	217012	3.87 ng/ml
Norhydrocodone	3.191	1291	52	40.1	56	53652	5.51 ng/ml
Amphetamine	3.193	85286	809	52.6	602	236436	4.59 ng/ml
6-MAM	3.249	1184	∞	78.0	2136	73859	0.51 ng/ml
Methamphetamine	3.344	62446	307	42.2	134	429048	4.77 ng/ml
O-desmethyl-tramadol	3.476	123969	12550	6.6	∞	1145320	4.98 ng/ml
Phentermine	3.884	25399	∞	5.4	192	456748	4.78 ng/ml
Benzoylcegonine	3.982	1285	1092	8.5	45	7110	4.81 ng/ml
Ketamine	4.117	49475	1821	36.1	604	464072	4.79 ng/ml
Norfentanyl	4.163	8458	22192	41.2	82	714458	0.52 ng/ml
Dextropropofol	4.217	22747	39875	214.4	∞	544291	5.04 ng/ml

calibrator 1

ISPFS AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.324	127659	5983	3.4	439	1211346	4.75 ng/ml
Cocaine	4.343	60498	194	43.6	3483	1081450	4.98 ng/ml
7-aminoclonazepam	4.348	15658	382	78.6	5283	127012	4.99 ng/ml
Metoprolol	4.394	14288	∞	99.8	3889	1641416	4.63 ng/ml
Lamotrigine	4.401	5822	574	83.8	∞	381387	4.80 ng/ml
alpha-PVP	4.443	65134	4899	53.0	3281	583301	5.22 ng/ml
Doxylamine	4.599	159091	67435	96.5	3038	1371385	4.90 ng/ml
Mirtazapine	4.676	93155	512378	45.1	852	1013547	5.29 ng/ml
Bupropion	4.865	75409	7297	57.6	2156	534953	4.70 ng/ml
Zolpidem	4.898	121486	2425	30.1	1385	1069028	4.93 ng/ml
Meprobamate	5.008	8663	16035	27.9	83	83467	4.75 ng/ml
Norbuprenorphine	5.080	128	315	109.1	600	6635	0.39 ng/ml
Trazodone	5.132	55223	9130	77.3	327	504507	4.72 ng/ml
Venlafaxine	5.125	101820	34077	40.1	756	1048838	5.43 ng/ml
Fentanyl	5.148	5344	∞	76.9	8033	528676	0.51 ng/ml
Mitragynine	5.276	17245	3410	37.7	∞	1013547	5.05 ng/ml
Citalopram	5.308	53457	974	46.7	∞	457542	4.87 ng/ml
EDDP	5.326	9109	385	248.1	∞	223722	4.89 ng/ml
Dextromethorphan	5.337	39091	43038	75.0	∞	381387	4.92 ng/ml
Diphenhydramine	5.363	167943	5427	34.8	25705	1641416	5.36 ng/ml
Promethazine	5.573	95845	∞	33.1	3599	818768	5.35 ng/ml
Quetiapine	5.550	55550	77811	61.1	97382	165514	4.70 ng/ml
Clonazepam	5.638	4177	552	36.6	4334	15295	4.67 ng/ml
Cyclobenzaprine	5.640	57553	4520	9.8	∞	445448	4.96 ng/ml
Methadone	5.669	100733	1678	46.3	13197	1013547	5.10 ng/ml
a-hydroxyalprazolam	5.714	1407	2272	48.2	74	13533	5.05 ng/ml
Fluoxetine	5.715	60979	8258	8.5	9276	451644	5.15 ng/ml
Carisoprodol	5.733	20703	3424	59.3	410	205228	5.02 ng/ml
Lorazepam	5.755	2327	52	47.7	8 Low	158594	3.71 ng/ml
Oxazepam	5.768	3030	91	75.4	27	24547	4.85 ng/ml
Alprazolam	5.782	23040	626	108.3	868	158594	5.05 ng/ml
Sertraline	5.782	27565	15651	101.2	16321	241678	4.93 ng/ml
Buprenorphine	5.672	790	181	19.5	133	58748	0.52 ng/ml
Temazepam	5.824	18609	783	30.6	100	175720	4.93 ng/ml
Nordiazepam	5.897	9353	1580	59.0	8133	59873	4.86 ng/ml
Diazepam	5.952	18054	6169	86.4	4429	166983	4.22 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results

D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin

Calibration Last Update

5/1/2019 10:12:47 AM

Instrument

069697

Type

Cal

Acq. Method

mdq p1 cda 121818.m

Sample Position

P2-B5

Injection Volume

2.5

Acq. Date-Time

4/30/2019 12:53:34 PM

Sample Info.**Data File**

calibrator 2.d

Sample

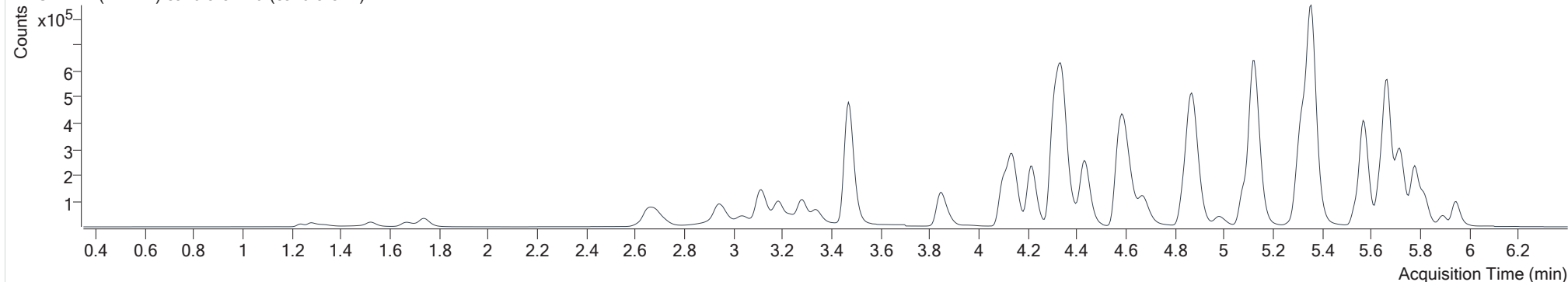
calibrator 2

Operator

Anne Nord

Comment**Sample Chromatogram**

+ TIC MRM (** -> **) calibrator 2.d (calibrator 2)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.241	3805	50068	21.7	∞	5450	10.10 ng/ml
Oxymorphone	1.525	14360	505	44.1	974	51195	9.79 ng/ml
Hydromorphone	1.748	18598	1672	76.7	4576	65476	10.32 ng/ml
Dihydrocodeine	2.687	38339	22814	64.0	839	200044	10.77 ng/ml
Codeine	2.724	13176	∞	103.0	11488	59869	10.44 ng/ml
Oxycodone	2.965	59333	1285	29.7	770	260477	10.25 ng/ml
Noroxycodone	3.053	20989	221	43.0	151	77041	9.99 ng/ml
Hydrocodone	3.134	34704	430	39.1	279	195463	9.96 ng/ml
Norhydrocodone	3.191	2067	58	39.1	20	43486	8.76 ng/ml
Amphetamine	3.188	135552	714	52.1	1061	188465	11.05 ng/ml
6-MAM	3.244	2234	14704	74.2	3567	68740	1.00 ng/ml
Methamphetamine	3.339	72450	∞	38.1	191	265139	10.77 ng/ml
O-desmethyl-tramadol	3.476	239504	19041	6.4	∞	1060258	10.30 ng/ml
Phentermine	3.884	40539	439	5.5	336	369994	10.54 ng/ml
Benzoylcegonine	3.982	2326	∞	7.1	∞	6781	10.82 ng/ml
Ketamine	4.117	94550	12625	37.0	2346	430383	10.52 ng/ml
Norfentanyl	4.163	15026	4581	41.0	149	619743	0.98 ng/ml
Dextroprphan	4.217	42154	545	218.8	1736	497726	10.16 ng/ml

calibrator 2

Generated at 10:13 AM on 5/1/2019



ISPFS AM #28 Multi-Drug Quant. Results

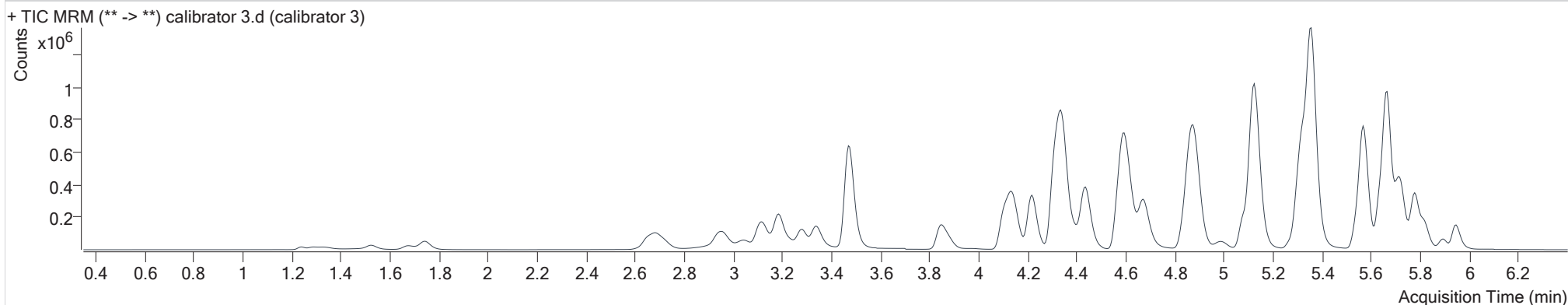
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.324	231504	16003	3.6	384	1118178	10.55 ng/ml
Cocaine	4.343	110537	∞	44.5	161	980178	10.27 ng/ml
7-aminoclonazepam	4.343	30475	78111	81.9	7903	122264	10.16 ng/ml
Metoprolol	4.394	27019	∞	96.0	4651	1463506	11.17 ng/ml
Lamotrigine	4.401	11118	1759	83.2	3615	332802	11.12 ng/ml
alpha-PVP	4.438	122156	5253	53.0	2610	526391	10.43 ng/ml
Doxylamine	4.599	299715	∞	95.4	18545	1249017	10.34 ng/ml
Mirtazapine	4.676	173892	17262	45.9	41828	893112	10.48 ng/ml
Bupropion	4.860	131969	92586	58.8	4044	461845	10.66 ng/ml
Zolpidem	4.888	224470	∞	31.0	2663	980356	10.18 ng/ml
Meprobamate	5.003	17856	20531	30.1	836	83837	10.57 ng/ml
Norbuprenorphine	5.080	180	229	70.8 Low	82	5848	0.94 ng/ml
Trazodone	5.122	97546	9049	76.4	865	439305	10.73 ng/ml
Venlafaxine	5.120	187900	30298	39.4	2830	956276	10.30 ng/ml
Fentanyl	5.143	9831	23678	69.2	4870	448627	1.01 ng/ml
Mitragynine	5.271	32420	21280	36.6	16993	893112	10.06 ng/ml
Citalopram	5.303	96265	4272	46.9	63718	411788	10.08 ng/ml
EDDP	5.326	40504	26053	235.0	1529	451215	10.48 ng/ml
Dextromethorphan	5.337	71877	84713	73.6	20754	332802	10.46 ng/ml
Diphenhydramine	5.363	316385	7260	34.7	∞	1463506	10.52 ng/ml
Promethazine	5.573	171303	3606	32.2	1757	698383	10.39 ng/ml
Quetiapine	5.550	102452	22241	59.7	68391	148661	10.64 ng/ml
Clonazepam	5.638	8696	6138	33.4	3709	15385	10.84 ng/ml
Cyclobenzaprine	5.640	99813	334466	10.3	432	372017	10.27 ng/ml
Methadone	5.669	185567	18901	47.5	23369	893112	10.21 ng/ml
a-hydroxyalprazolam	5.709	2446	414	62.5	107	12868	9.89 ng/ml
Fluoxetine	5.715	96901	54727	8.8	∞	341542	10.52 ng/ml
Carisoprodol	5.733	41327	4307	58.5	776	197729	10.12 ng/ml
Lorazepam	5.755	4725	116	51.1	17	149471	10.69 ng/ml
Oxazepam	5.768	6803	156	76.5	169	27657	10.26 ng/ml
Alprazolam	5.782	45877	3997	109.3	2411	149471	10.49 ng/ml
Sertraline	5.782	45912	12155	99.2	4897	194778	10.29 ng/ml
Buprenorphine	5.667	1313	138	19.3	412	54041	0.94 ng/ml
Temazepam	5.824	38472	1900	29.7	322	169965	10.38 ng/ml
Nordiazepam	5.897	19534	76693	60.9	21129	62088	10.26 ng/ml
Diazepam	5.947	35714	5678	84.3	4639	158694	10.10 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Calibration Last Update 5/1/2019 10:12:47 AM

Instrument	069697	Data File	calibrator 3.d
Type	Cal	Sample	calibrator 3
Acq. Method	mdq p1 cda 121818.m	Operator	Anne Nord
Sample Position	P2-C5	Comment	
Injection Volume	2.5		
Acq. Date-Time	4/30/2019 1:04:23 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.241	9310	∞	22.7	96234	5427	24.97 ng/ml
Oxymorphone	1.525	38393	2429	44.9	940	57847	25.37 ng/ml
Hydromorphone	1.748	53467	7641	72.4	5526	73053	27.12 ng/ml
Dihydrocodeine	2.687	97588	1701	63.8	13732	213810	26.55 ng/ml
Codeine	2.724	33321	3932	104.2	13825	62344	25.83 ng/ml
Oxycodone	2.965	150247	3681	29.0	2753	278038	25.53 ng/ml
Noroxycodone	3.053	57465	243	40.3	1044	82292	26.26 ng/ml
Hydrocodone	3.134	90551	555	38.6	2522	213279	26.11 ng/ml
Norhydrocodone	3.191	6678	∞	41.7	62	49846	20.74 ng/ml
Amphetamine	3.188	360855	3026	53.4	3090	215626	28.25 ng/ml
6-MAM	3.249	5643	∞	70.7	∞	71429	2.39 ng/ml
Methamphetamine	3.339	188870	∞	40.1	∞	321580	25.52 ng/ml
O-desmethyl-tramadol	3.476	612621	49313	6.5	5558	1125341	24.71 ng/ml
Phentermine	3.884	111870	988	5.2	306	422266	27.11 ng/ml
Benzoylcegonine	3.982	5276	92	8.9	∞	7372	24.62 ng/ml
Ketamine	4.117	243982	53468	37.3	2813	460548	26.25 ng/ml
Norfentanyl	4.163	41794	∞	40.2	1129	694995	2.29 ng/ml
Dextrophan	4.217	114880	∞	215.4	∞	550558	24.97 ng/ml

calibrator 3



ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.324	587119	49426	3.6	1470	1210510	26.42 ng/ml
Cocaine	4.343	281553	793	43.9	193234	1040746	24.95 ng/ml
7-aminoclonazepam	4.348	73637	∞	83.5	∞	122353	24.64 ng/ml
Metoprolol	4.394	70957	66192	95.9	∞	1772011	25.63 ng/ml
Lamotrigine	4.401	27984	∞	89.5	44617	421044	22.64 ng/ml
alpha-PVP	4.443	323739	11984	53.3	4566	585795	24.30 ng/ml
Doxylamine	4.599	808142	6503	97.3	77321	1399988	25.14 ng/ml
Mirtazapine	4.676	519814	56806	46.2	18116	1165603	23.17 ng/ml
Bupropion	4.860	376641	∞	59.6	35873	553009	26.95 ng/ml
Zolpidem	4.888	617793	2757	30.2	2298	1088227	25.59 ng/ml
Meprobamate	5.003	45045	∞	29.3	141	87287	26.74 ng/ml
Norbuprenorphine	5.075	495	574	109.7	629	7771	2.51 ng/ml
Trazodone	5.122	314840	34927	78.6	80205	599216	26.94 ng/ml
Venlafaxine	5.125	512592	92805	39.7	5097	1064789	24.27 ng/ml
Fentanyl	5.143	32615	∞	78.1	21441	621207	2.31 ng/ml
Mitragynine	5.271	106251	∞	37.5	27300	1165603	24.30 ng/ml
Citalopram	5.303	288058	523	47.2	∞	506953	25.00 ng/ml
EDDP	5.326	115502	47845	232.3	2343	531622	25.02 ng/ml
Dextromethorphan	5.337	210069	3844	76.0	∞	421044	24.30 ng/ml
Diphenhydramine	5.363	915376	28967	34.1	∞	1772011	24.13 ng/ml
Promethazine	5.573	540412	19701	32.0	9113	908436	24.14 ng/ml
Quetiapine	5.550	317630	71280	59.1	168126	192583	26.78 ng/ml
Clonazepam	5.633	20940	∞	35.5	5258	16183	26.23 ng/ml
Cyclobenzaprine	5.640	302623	17853	10.8	1900	479163	24.13 ng/ml
Methadone	5.664	615240	95097	45.5	221396	1165603	25.31 ng/ml
a-hydroxyalprazolam	5.709	6180	309	60.1	787	13565	24.79 ng/ml
Fluoxetine	5.715	261429	11012	9.0	30869	396939	24.04 ng/ml
Carisoprodol	5.733	102705	∞	59.2	976	202064	24.22 ng/ml
Lorazepam	5.755	11332	666	57.2	140	161443	26.58 ng/ml
Oxazepam	5.763	15897	695	71.3	141	26512	25.89 ng/ml
Alprazolam	5.782	117299	804	110.7	2185	161443	24.61 ng/ml
Sertraline	5.777	101319	∞	101.0	360838	178872	24.85 ng/ml
Buprenorphine	5.667	4129	381	17.2	822	67615	2.35 ng/ml
Temazepam	5.824	98849	2221	29.9	393	182803	24.61 ng/ml
Nordiazepam	5.897	51167	9758	60.5	1875	65032	26.33 ng/ml
Diazepam	5.947	96155	4795	85.6	12472	178569	25.88 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results

D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin

Calibration Last Update

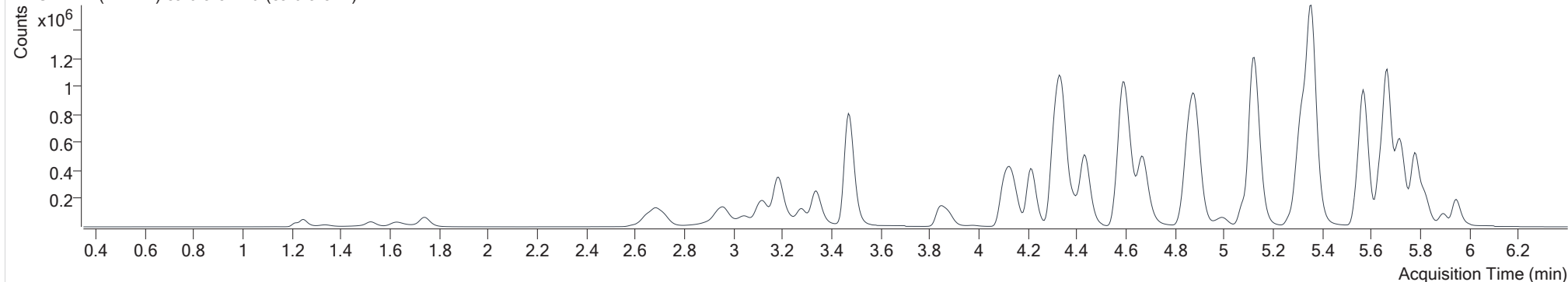
5/1/2019 10:12:47 AM

Instrument 069697
Type Cal
Acq. Method mdq p1 cda 121818.m
Sample Position P2-D5
Injection Volume 2.5
Acq. Date-Time 4/30/2019 1:15:12 PM
Sample Info.

Data File calibrator 4.d
Sample calibrator 4
Operator Anne Nord
Comment

Sample Chromatogram

+ TIC MRM (** -> **) calibrator 4.d (calibrator 4)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.216	17294	∞	22.9	∞	5144	49.04 ng/ml
Oxymorphone	1.525	59099	966	43.6	409	44151	52.81 ng/ml
Hydromorphone	1.748	90360	7546	75.3	11933	59833	56.33 ng/ml
Dihydrocodeine	2.687	183831	21581	64.3	30238	206501	52.40 ng/ml
Codeine	2.719	61217	∞	104.4	40047	60815	48.96 ng/ml
Oxycodone	2.965	289144	4882	29.5	4774	268509	51.75 ng/ml
Noroxycodone	3.048	101701	∞	43.2	2090	80589	47.79 ng/ml
Hydrocodone	3.129	168638	4354	39.3	717	203460	52.53 ng/ml
Norhydrocodone	3.186	15394	967	41.0	166	50409	44.49 ng/ml
Amphetamine	3.188	619899	6767	54.3	5157	206289	52.25 ng/ml
6-MAM	3.244	10356	853	72.8	∞	66932	4.65 ng/ml
Methamphetamine	3.339	353686	∞	41.1	321	325457	48.98 ng/ml
O-desmethyl-tramadol	3.476	1152320	137790	6.5	∞	1073494	48.64 ng/ml
Phentermine	3.879	193815	1743	5.3	892	397310	50.88 ng/ml
Benzoylcegonine	3.977	9910	∞	8.1	∞	7053	50.13 ng/ml
Ketamine	4.117	457761	143929	37.0	4259	438689	52.31 ng/ml
Norfentanyl	4.163	78544	203728	41.1	106	659417	4.45 ng/ml
Dextropropofol	4.217	202854	353150	217.3	∞	496126	48.88 ng/ml

calibrator 4



ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	1066587	79584	3.6	2296	1103695	53.89 ng/ml
Cocaine	4.338	510074	458	43.6	42099	974432	48.48 ng/ml
7-aminoclonazepam	4.343	132839	854	84.8	∞	111549	48.83 ng/ml
Metoprolol	4.394	122615	275661	97.3	53871	1471629	54.63 ng/ml
Lamotrigine	4.396	50153	14180	87.4	7909	334815	51.67 ng/ml
alpha-PVP	4.438	585621	10806	53.1	11058	530461	48.15 ng/ml
Doxylamine	4.594	1465745	285065	97.3	6603	1273333	50.32 ng/ml
Mirtazapine	4.671	857880	82816	45.2	26560	956521	45.94 ng/ml
Bupropion	4.860	632432	71816	59.8	29475	470306	54.30 ng/ml
Zolpidem	4.888	1082438	∞	30.5	∞	984099	49.82 ng/ml
Meprobamate	5.003	85788	28721	29.4	∞	84640	53.29 ng/ml
Norbuprenorphine	5.075	811	∞	89.2	1647	6344	5.57 ng/ml
Trazodone	5.122	504069	34165	77.3	31870	494172	53.37 ng/ml
Venlafaxine	5.120	891350	197517	40.3	6038	939336	47.18 ng/ml
Fentanyl	5.143	53966	40814	73.5	110623	505300	4.61 ng/ml
Mitragynine	5.271	168653	∞	38.1	3620	956521	46.40 ng/ml
Citalopram	5.303	460171	∞	47.6	∞	418739	48.68 ng/ml
EDDP	5.326	193742	144019	241.2	85687	459024	48.36 ng/ml
Dextromethorphan	5.337	338664	4947	75.4	∞	334815	49.36 ng/ml
Diphenhydramine	5.363	1501592	25888	34.3	26695	1471629	46.96 ng/ml
Promethazine	5.573	956440	∞	32.2	2175	799627	47.78 ng/ml
Quetiapine	5.545	518609	747665	58.6	330310	153735	55.75 ng/ml
Clonazepam	5.633	37050	2580	36.1	4965	13821	55.53 ng/ml
Cyclobenzaprine	5.640	560446	130093	10.5	834	432768	49.45 ng/ml
Methadone	5.669	961626	6245	46.5	26916	956521	47.83 ng/ml
a-hydroxyalprazolam	5.709	10525	480	61.5	105	11982	48.53 ng/ml
Fluoxetine	5.715	587735	4081	9.0	61063	435355	48.99 ng/ml
Carisoprodol	5.733	180061	357215	59.0	2388	177024	48.19 ng/ml
Lorazepam	5.755	19714	686	56.5	73	136861	56.98 ng/ml
Oxazepam	5.763	24644	565	71.3	179	21300	50.53 ng/ml
Alprazolam	5.782	201056	1748	109.3	2052	136861	49.60 ng/ml
Sertraline	5.782	240491	318446	99.1	3603	212401	49.77 ng/ml
Buprenorphine	5.667	6607	2103	15.0	2517	51361	4.94 ng/ml
Temazepam	5.824	171329	4117	30.2	452	158391	49.08 ng/ml
Nordiazepam	5.897	84201	∞	60.9	∞	55123	51.53 ng/ml
Diazepam	5.947	157506	8784	85.9	8988	149769	51.71 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results

D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin

Calibration Last Update

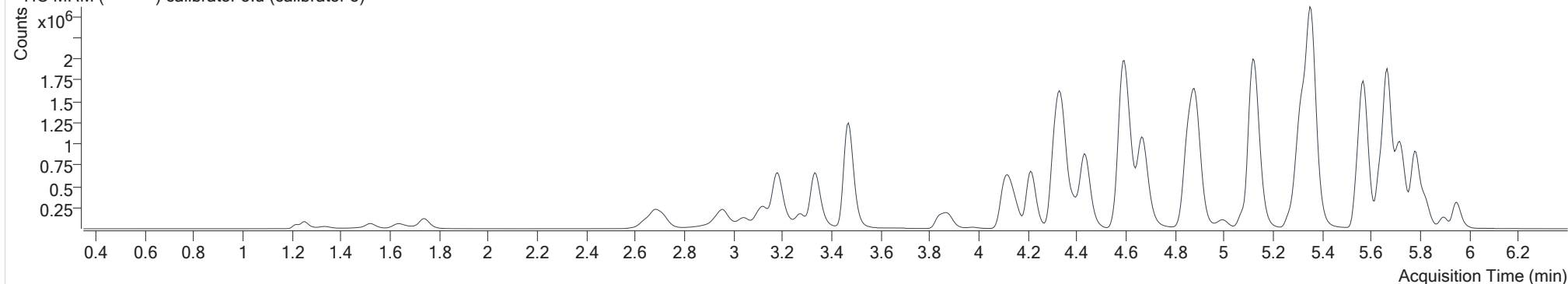
5/1/2019 10:12:47 AM

Instrument 069697
Type Cal
Acq. Method mdq p1 cda 121818.m
Sample Position P2-E5
Injection Volume 2.5
Acq. Date-Time 4/30/2019 1:26:02 PM
Sample Info.

Data File calibrator 5.d
Sample calibrator 5
Operator Anne Nord
Comment

Sample Chromatogram

+ TIC MRM (** -> **) calibrator 5.d (calibrator 5)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.221	34656	∞	21.7	∞	4990	101.41 ng/ml
Oxymorphone	1.520	124741	263	43.7	883	45938	108.80 ng/ml
Hydromorphone	1.743	173444	11946	73.6	33540	65469	99.07 ng/ml
Dihydrocodeine	2.682	364967	68857	64.1	30449	206724	104.55 ng/ml
Codeine	2.719	117205	2062	106.9	25348	57348	99.74 ng/ml
Oxycodone	2.955	554709	10158	29.8	3400	262607	102.36 ng/ml
Noroxycodone	3.043	206247	∞	44.8	10085	77640	101.06 ng/ml
Hydrocodone	3.129	343115	4701	40.2	2210	207208	106.58 ng/ml
Norhydrocodone	3.186	38059	194	43.1	466	50933	105.71 ng/ml
Amphetamine	3.183	1248971	8908	53.2	5353	210959	104.81 ng/ml
6-MAM	3.244	21826	∞	74.2	∞	66802	9.78 ng/ml
Methamphetamine	3.334	1040880	∞	39.9	∞	432245	111.04 ng/ml
O-desmethyl-tramadol	3.470	2359173	147715	6.5	366	1064181	100.36 ng/ml
Phentermine	3.879	400762	2284	5.0	2221	416308	101.52 ng/ml
Benzoylcegonine	3.977	20121	68410	7.8	1439	7394	98.85 ng/ml
Ketamine	4.112	916630	2127	37.5	∞	439091	105.28 ng/ml
Norfentanyl	4.158	170329	∞	40.5	4518	667794	9.42 ng/ml
Dextrophan	4.212	430657	257569	218.1	2583	512471	100.41 ng/ml

calibrator 5



ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	2149967	121451	3.6	2983	1115585	108.72 ng/ml
Cocaine	4.338	1022455	75721	43.3	31407	936660	101.34 ng/ml
7-aminoclonazepam	4.343	229630	463	83.0	∞	95512	98.67 ng/ml
Metoprolol	4.394	236809	934989	95.9	69250	1499162	104.66 ng/ml
Lamotrigine	4.396	95310	29894	88.0	2071	336970	98.03 ng/ml
alpha-PVP	4.438	1249544	153743	53.1	33316	550079	98.65 ng/ml
Doxylamine	4.594	3183609	1772	96.9	1508	1349345	103.34 ng/ml
Mirtazapine	4.671	1906292	142409	46.0	141470	1020936	94.93 ng/ml
Bupropion	4.855	1420576	926273	59.6	11795	533544	108.60 ng/ml
Zolpidem	4.888	2291682	18656	30.6	5746	1011626	102.86 ng/ml
Meprobamate	4.998	166279	423619	29.0	5062	82795	106.37 ng/ml
Norbuprenorphine	5.075	1669	2488	99.3	1975	7023	10.81 ng/ml
Trazodone	5.122	1066578	73326	78.6	55950	557273	101.13 ng/ml
Venlafaxine	5.120	1906322	10341	39.4	∞	964834	97.51 ng/ml
Fentanyl	5.143	118508	5697	75.7	14683	525390	9.65 ng/ml
Mitragynine	5.271	385009	710502	38.6	128539	1020936	98.52 ng/ml
Citalopram	5.303	972367	1984	47.3	∞	420822	102.74 ng/ml
EDDP	5.321	474452	416879	233.7	14079	530840	102.14 ng/ml
Dextromethorphan	5.337	691640	9103	76.0	∞	336970	100.25 ng/ml
Diphenhydramine	5.358	3181293	172503	33.9	182562	1499162	96.88 ng/ml
Promethazine	5.573	2057163	2071455	31.9	9925	830335	98.16 ng/ml
Quetiapine	5.544	1116422	∞	58.6	520531	175157	106.17 ng/ml
Clonazepam	5.633	68150	623	34.2	1336	12803	111.35 ng/ml
Cyclobenzaprine	5.640	1133414	∞	10.2	52986	427706	101.15 ng/ml
Methadone	5.669	2125598	151366	45.8	2728	1020936	98.61 ng/ml
a-hydroxyalprazolam	5.709	20521	830	60.2	1688	11471	99.66 ng/ml
Fluoxetine	5.715	1227863	25343	8.9	126826	449161	98.92 ng/ml
Carisoprodol	5.733	339762	558088	57.8	5907	161508	99.39 ng/ml
Lorazepam	5.755	34503	777	56.1	349	132195	105.14 ng/ml
Oxazepam	5.763	40577	749	71.2	993	18110	98.42 ng/ml
Alprazolam	5.782	389999	∞	110.9	1826	132195	99.44 ng/ml
Sertraline	5.782	506899	1001	102.2	497910	221663	100.60 ng/ml
Buprenorphine	5.667	12822	2860	17.2	∞	52473	9.38 ng/ml
Temazepam	5.824	347571	6824	30.9	2388	157333	100.09 ng/ml
Nordiazepam	5.897	161924	∞	62.3	∞	53178	103.18 ng/ml
Diazepam	5.947	323638	7360	85.5	4067	151805	106.08 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results

D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin

Calibration Last Update

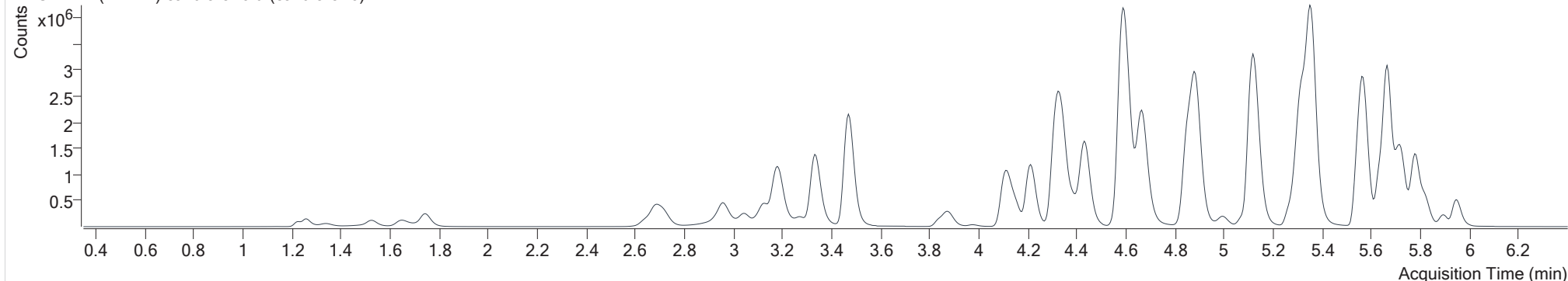
5/1/2019 10:12:47 AM

Instrument 069697
Type Cal
Acq. Method mdq p1 cda 121818.m
Sample Position P2-F5
Injection Volume 2.5
Acq. Date-Time 4/30/2019 1:36:51 PM
Sample Info.

Data File calibrator 6.d
Sample calibrator 6
Operator Anne Nord
Comment

Sample Chromatogram

+ TIC MRM (** -> **) calibrator 6.d (calibrator 6)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.226	74110	∞	22.4	89	4198	257.97 ng/ml
Oxymorphone	1.525	294280	346	44.7	399	43978	270.49 ng/ml
Hydromorphone	1.748	408774	4269	73.6	∞	59118	259.11 ng/ml
Dihydrocodeine	2.682	756269	6635	64.7	18062	191864	234.21 ng/ml
Codeine	2.719	241379	26078	104.8	86698	47538	248.31 ng/ml
Oxycodone	2.960	1280218	11827	29.3	2148	248038	251.39 ng/ml
Noroxycodone	3.043	466104	7042	41.5	12767	71746	247.75 ng/ml
Hydrocodone	3.129	763433	737	38.9	∞	182740	271.40 ng/ml
Norhydrocodone	3.186	94262	2853	42.2	907	49246	267.40 ng/ml
Amphetamine	3.183	2330515	8481	52.4	7024	180883	230.33 ng/ml
6-MAM	3.244	48143	∞	75.4	1172	58488	24.58 ng/ml
Methamphetamine	3.334	2281977	4191	38.2	2183	409192	259.87 ng/ml
O-desmethyl-tramadol	3.470	5103209	652825	6.4	∞	920427	250.87 ng/ml
Phentermine	3.879	769844	∞	4.9	2037	374228	218.25 ng/ml
Benzoylcegonine	3.977	48491	∞	8.4	168	7168	248.55 ng/ml
Ketamine	4.112	1954801	34619	37.5	52454	394150	250.97 ng/ml
Norfentanyl	4.158	409762	201119	40.5	∞	612242	24.58 ng/ml
Dextropropofol	4.212	933238	2098	217.1	330304	446250	249.82 ng/ml

calibrator 6

ISPFS AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.314	4423559	239129	3.5	5340	1025866	244.82 ng/ml
Cocaine	4.338	2050090	175705	43.0	576932	761209	250.36 ng/ml
7-aminoclonazepam	4.348	367405	5849	83.1	679	62469	241.48 ng/ml
Metoprolol	4.389	422316	4400	96.0	∞	1137212	247.66 ng/ml
Lamotrigine	4.396	174589	12615	86.0	3932	234353	259.05 ng/ml
alpha-PVP	4.438	2729828	141595	52.6	29296	479682	246.56 ng/ml
Doxylamine	4.589	7287868	5332	96.0	14007	1239186	257.89 ng/ml
Mirtazapine	4.666	4067290	193022	45.8	644962	820468	250.95 ng/ml
Bupropion	4.855	2895544	428317	60.2	277479	473991	250.61 ng/ml
Zolpidem	4.883	4908069	59108	30.3	7080	878918	253.90 ng/ml
Meprobamate	4.998	352203	∞	29.4	∞	76456	245.01 ng/ml
Norbuprenorphine	5.070	3733	5417	106.9	6485	6726	25.95 ng/ml
Trazodone	5.122	1916647	157088	77.7	52958	493159	206.53 ng/ml
Venlafaxine	5.120	4105876	188894	38.5	91065	817560	246.83 ng/ml
Fentanyl	5.143	219404	3544	78.2	∞	364321	25.64 ng/ml
Mitragynine	5.271	782688	1356448	38.9	421028	820468	248.26 ng/ml
Citalopram	5.297	1849405	1364	46.2	∞	322253	255.70 ng/ml
EDDP	5.321	1133232	26732	236.0	227977	516067	250.58 ng/ml
Dextromethorphan	5.331	1216020	23103	75.1	∞	234353	253.58 ng/ml
Diphenhydramine	5.358	6217046	479901	33.7	132836	1137212	248.45 ng/ml
Promethazine	5.573	3792074	46276	31.2	18524	612057	244.35 ng/ml
Quetiapine	5.545	2284409	∞	58.2	∞	151166	253.00 ng/ml
Clonazepam	5.633	123420	6529	33.6	2084	10744	241.55 ng/ml
Cyclobenzaprine	5.640	1979249	13024	10.1	5336	300883	251.06 ng/ml
Methadone	5.668	4328029	32485	45.3	4886	820468	249.20 ng/ml
a-hydroxyalprazolam	5.709	42689	1254	57.2	981	9499	251.53 ng/ml
Fluoxetine	5.715	2174751	278218	8.7	182619	319846	245.63 ng/ml
Carisoprodol	5.733	639716	954543	58.2	7529	120435	250.55 ng/ml
Lorazepam	5.755	62204	1492	56.0	252	105793	239.76 ng/ml
Oxazepam	5.763	65851	7584	72.3	1107	12039	241.13 ng/ml
Alprazolam	5.782	758495	4561	110.6	14107	105793	241.43 ng/ml
Sertraline	5.782	789504	∞	100.4	∞	139405	249.28 ng/ml
Buprenorphine	5.673	24813	1414	15.6	2390	38255	24.90 ng/ml
Temazepam	5.824	695761	58846	30.7	9005	128149	245.79 ng/ml
Nordiazepam	5.897	306397	10584	60.0	∞	42345	245.80 ng/ml
Diazepam	5.947	627984	7598	86.2	11581	121779	258.32 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results

D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin

Calibration Last Update

5/1/2019 10:12:47 AM

Instrument

069697

Type

Cal

Acq. Method

mdq p1 cda 121818.m

Sample Position

P2-G5

Injection Volume

2.5

Acq. Date-Time

4/30/2019 2:19:17 PM

Sample Info.**Data File**

7calibrator.d

Sample

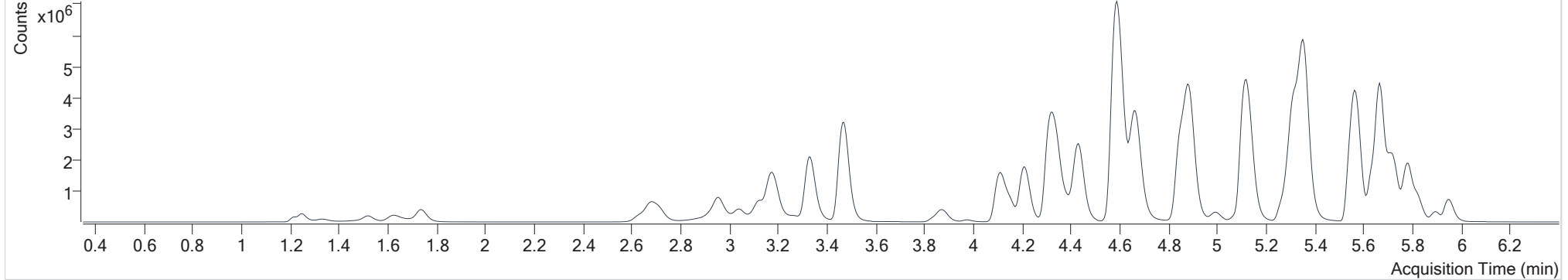
calibrator 7

Operator

Anne Nord

Comment**Sample Chromatogram**

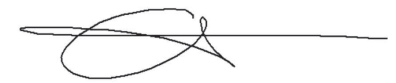
+ TIC MRM (** -> **) 7calibrator.d (calibrator 7)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.216	125721	∞	22.3	313	3681	499.08 ng/ml
Oxymorphone	1.520	496798	395	44.3	217	39525	509.51 ng/ml
Hydromorphone	1.738	655805	27404	74.2	14473	55299	444.64 ng/ml
Dihydrocodeine	2.677	1285950	45743	64.7	77187	172707	443.00 ng/ml
Codeine	2.714	398338	2865	104.4	44188	39638	491.78 ng/ml
Oxycodone	2.955	2430301	∞	29.6	848	237757	498.72 ng/ml
Noroxycodone	3.043	799069	∞	43.1	2824	63152	482.94 ng/ml
Hydrocodone	3.124	1346704	10902	39.6	1462	170596	514.29 ng/ml
Norhydrocodone	3.181	167055	1672	42.0	1881	44427	523.21 ng/ml
Amphetamine	3.178	3362106	11404	52.2	7772	144920	416.28 ng/ml
6-MAM	3.239	88341	130941	75.3	∞	50459	52.25 ng/ml
Methamphetamine	3.329	3586087	2744	38.7	1179	350423	478.60 ng/ml
O-desmethyl-tramadol	3.470	8647916	660324	6.2	∞	772897	506.19 ng/ml
Phentermine	3.874	1127918	8867	4.9	1829	323790	370.37 ng/ml
Benzoylcegonine	3.972	94633	17229	8.1	∞	7151	487.99 ng/ml
Ketamine	4.112	3233955	1312635	37.3	32614	344122	476.11 ng/ml
Norfentanyl	4.158	763583	197553	40.6	4895	524703	53.34 ng/ml
Dextroprphan	4.212	1529718	1173856	220.2	∞	367942	496.60 ng/ml

calibrator 7

Generated at 10:13 AM on 5/1/2019



ISPFS AM #28 Multi-Drug Quant. Results

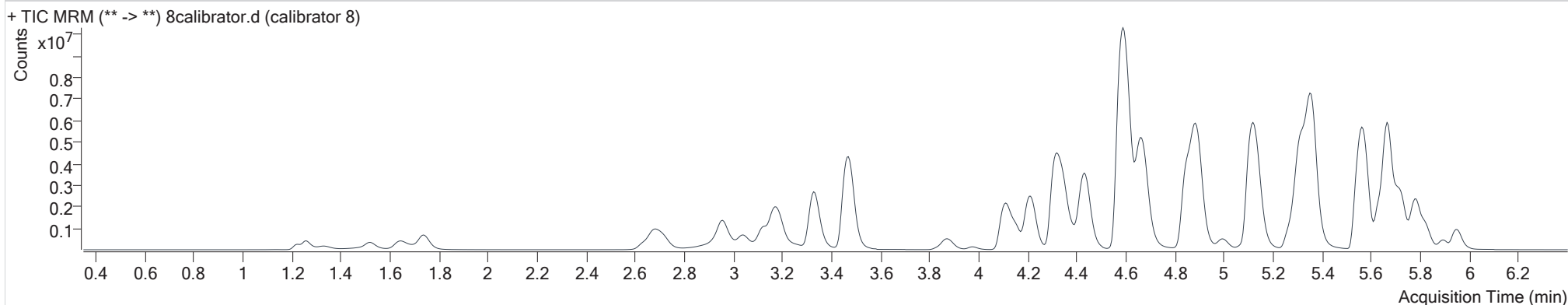
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.309	6949655	140259	3.5	17743	838128	471.94 ng/ml
Cocaine	4.338	3166324	∞	43.3	∞	595168	494.77 ng/ml
7-aminoclonazepam	4.348	437191	112589	83.4	∞	34270	523.88 ng/ml
Metoprolol	4.389	578178	881226	95.7	∞	845233	457.21 ng/ml
Lamotrigine	4.391	231186	8633	88.0	147004	161145	499.36 ng/ml
alpha-PVP	4.433	4598218	443238	52.3	105243	399315	498.50 ng/ml
Doxylamine	4.589	12879978	∞	95.9	14211	1127890	500.94 ng/ml
Mirtazapine	4.666	6826785	2963254	45.4	170830	659982	522.93 ng/ml
Bupropion	4.850	4653679	9482399	59.2	317988	410818	465.66 ng/ml
Zolpidem	4.883	8236822	11799	29.5	∞	762007	491.71 ng/ml
Meprobamate	4.998	599662	∞	29.2	14221	67849	470.80 ng/ml
Norbuprenorphine	5.070	6699	13218	94.6	11945	6265	50.48 ng/ml
Trazodone	5.122	2807683	123011	78.9	123880	472044	316.67 ng/ml
Venlafaxine	5.115	6773576	∞	38.5	24737	666520	498.79 ng/ml
Fentanyl	5.143	358887	3782	80.2	266434	268607	56.78 ng/ml
Mitragynine	5.265	1336151	3257578	38.6	886141	659982	526.16 ng/ml
Citalopram	5.292	2599094	161456	46.6	322	231117	501.38 ng/ml
EDDP	5.321	2107841	11070	243.3	348485	482953	497.79 ng/ml
Dextromethorphan	5.331	1621027	58536	74.9	∞	161145	491.70 ng/ml
Diphenhydramine	5.358	9364854	∞	33.0	∞	845233	502.78 ng/ml
Promethazine	5.573	6114846	592143	30.9	88596	480127	501.50 ng/ml
Quetiapine	5.545	3608307	∞	58.7	∞	133311	453.89 ng/ml
Clonazepam	5.633	164506	332559	35.1	89183	7766	446.38 ng/ml
Cyclobenzaprine	5.635	2999637	461242	10.1	9849	223257	512.75 ng/ml
Methadone	5.664	7041503	26403	44.7	541307	659982	503.61 ng/ml
a-hydroxyalprazolam	5.709	70568	1293	59.9	2167	7883	501.85 ng/ml
Fluoxetine	5.715	3306386	15566	8.7	∞	239628	498.17 ng/ml
Carisoprodol	5.733	946786	∞	57.5	13719	88328	505.34 ng/ml
Lorazepam	5.750	95729	1816	57.3	2491	82110	477.70 ng/ml
Oxazepam	5.763	95571	4653	72.4	873	8422	500.89 ng/ml
Alprazolam	5.782	1204875	2514	109.2	14921	82110	493.96 ng/ml
Sertraline	5.782	1083813	∞	100.1	∞	95646	498.86 ng/ml
Buprenorphine	5.673	32537	25367	15.5	3230	24643	50.67 ng/ml
Temazepam	5.824	1141546	∞	30.4	2621	103672	498.35 ng/ml
Nordiazepam	5.897	470849	∞	61.8	345362	33307	480.66 ng/ml
Diazepam	5.952	974564	12294	87.1	5189	97980	499.39 ng/ml

ISPFS AM #28 Multi-Drug Quant. Results

Batch results D:\MassHunter\Data\am 28\043019\QuantResults\mdq.batch.bin
Calibration Last Update 5/1/2019 10:12:47 AM

Instrument	069697	Data File	8calibrator.d
Type	Cal	Sample	calibrator 8
Acq. Method	mdq p1 cda 121818.m	Operator	Anne Nord
Sample Position	P2-H5	Comment	
Injection Volume	2.5		
Acq. Date-Time	4/30/2019 2:30:07 PM		
Sample Info.			

Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.226	208333	∞	22.4	61	3138	970.30 ng/ml
Oxymorphone	1.520	956702	3815	43.7	991	40491	959.21 ng/ml
Hydromorphone	1.738	1189764	∞	75.6	10178	50452	884.50 ng/ml
Dihydrocodeine	2.677	1976606	87742	65.2	73071	154375	762.26 ng/ml
Codeine	2.714	603510	76196	103.6	∞	29678	995.47 ng/ml
Oxycodone	2.955	4403024	∞	28.9	1074	215984	995.51 ng/ml
Noroxycodone	3.038	1346667	∞	44.0	7779	50455	1019.16 ng/ml
Hydrocodone	3.124	2261386	7390	39.5	1978	154456	955.25 ng/ml
Norhydrocodone	3.181	281206	∞	41.2	254	34555	1129.80 ng/ml
Amphetamine	3.178	4314631	6493	52.0	50991	103265	751.23 ng/ml
6-MAM	3.239	158339	∞	74.2	∞	43195	109.37 ng/ml
Methamphetamine	3.329	4709278	2574	38.7	∞	256178	861.36 ng/ml
O-desmethyl-tramadol	3.470	13083439	∞	6.2	48332	595450	993.96 ng/ml
Phentermine	3.874	1606945	17198	4.8	4347	263767	648.60 ng/ml
Benzoylcegonine	3.972	202115	114639	7.8	6220	7399	1009.35 ng/ml
Ketamine	4.112	4922627	43315	37.0	16968	282019	884.84 ng/ml
Norfentanyl	4.158	1343509	203578	40.4	75953	414832	118.60 ng/ml
Dextrophan	4.212	2359878	1198556	220.4	484777	280714	1004.12 ng/ml

calibrator 8

ISPFS AM #28 Multi-Drug Quant. Results



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.309	9971919	370381	3.4	3474	669109	849.24 ng/ml
Cocaine	4.338	4448024	413372	42.7	∞	411775	1004.84 ng/ml
7-aminoclonazepam	4.348	453920	21271	84.3	30251	18220	1023.12 ng/ml
Metoprolol	4.389	746890	535008	95.7	∞	563606	886.87 ng/ml
Lamotrigine	4.391	266638	151926	86.7	49006	95357	973.76 ng/ml
alpha-PVP	4.433	7105111	186738	52.3	295354	304957	1008.20 ng/ml
Doxylamine	4.589	19994307	8869	97.5	∞	966232	907.89 ng/ml
Mirtazapine	4.666	10494333	273732	45.3	205615	478950	1106.98 ng/ml
Bupropion	4.850	6757123	2097184	59.0	467598	343359	809.79 ng/ml
Zolpidem	4.889	12362613	17708	29.6	11252	592543	949.29 ng/ml
Meprobamate	4.998	996416	1156298	29.7	71717	60874	872.60 ng/ml
Norbuprenorphine	5.070	11683	17691	100.9	24973	5698	97.29 ng/ml
Trazodone	5.127	3664815	169192	78.4	65700	437114	446.84 ng/ml
Venlafaxine	5.115	10276047	716371	37.7	11413	499177	1009.69 ng/ml
Fentanyl	5.148	549544	7332	82.1	30080	181653	128.46 ng/ml
Mitragynine	5.265	1943208	533191	39.4	∞	478950	1053.80 ng/ml
Citalopram	5.292	3293734	670168	46.5	73387	148151	991.54 ng/ml
EDDP	5.321	3178853	11627	242.3	157380	367417	986.55 ng/ml
Dextromethorphan	5.331	1971809	6618	74.8	∞	95357	1010.84 ng/ml
Diphenhydramine	5.363	12490460	∞	33.1	40971	563606	1004.95 ng/ml
Promethazine	5.573	8970261	16551	30.5	∞	350038	1008.34 ng/ml
Quetiapine	5.539	5229777	188603	56.4	290898	106082	827.49 ng/ml
Clonazepam	5.628	203035	1618	33.0	8583	5041	849.68 ng/ml
Cyclobenzaprine	5.635	3893657	15766	10.2	5155	150664	986.24 ng/ml
Methadone	5.669	10152504	25749	45.9	20490	478950	1000.15 ng/ml
a-hydroxyalprazolam	5.709	116860	5392	59.2	1835	6350	1032.51 ng/ml
Fluoxetine	5.710	4330466	10607	8.6	526120	154974	1008.58 ng/ml
Carisoprodol	5.733	1226281	1207224	57.6	6934	55303	1045.08 ng/ml
Lorazepam	5.750	142285	5752	57.9	1925	57335	1019.44 ng/ml
Oxazepam	5.763	138005	3070	74.2	1173	6047	1008.04 ng/ml
Alprazolam	5.782	1729755	911	108.9	5484	57335	1015.40 ng/ml
Sertraline	5.782	1258867	∞	100.7	838390	55782	993.61 ng/ml
Buprenorphine	5.678	38201	4427	15.9	8075	12878	113.84 ng/ml
Temazepam	5.824	1739088	66539	30.3	8734	76470	1029.13 ng/ml
Nordiazepam	5.897	658949	∞	61.7	1150747	23809	941.44 ng/ml
Diazepam	5.947	1373882	3317	85.6	15166	70163	984.31 ng/ml



Toxicology AM method 28 panel 1 external prep information

working solution 10000 ng/ml in meoh amphetamine, dextromethorphan, methamphetamine, morphine, paroxetine, amitriptyline meperidine, doxepine, mirtazapine, 1000 ng/ml buprenorphine

Stock solution 1mg/ml (.1mg/ml buprenorphine) 100 ul each in 9000 ul meOH

Ppd 3/14/19 Exp: 3/14/20 lot 31420 by AMN

Drug	lot	expiration
amphetamine	FE06011503	6/1/2020
dextromethorphan	FN07231501	7/1/2020
methamphetamine	FE08101708	10/1/2022
morphine	FE08141515	11/1/2020
buprenorphine	FE09211501	9/1/2020
paroxetine	FN05111505	6/1/2020
mirtazapine	FN04201503	4/1/2020
meperidine	FE01191502	2/1/2020 (this compound will not be evaluated in this control after 2/1/2020)
doxepine	FN01281502	2/1/2020 (this compound will not be evaluated in this control after 2/1/2020)
amitriptyline	FN07081401	9/1/2019 (this compound will not be evaluated in this control after 9/1/2019)

AM 28 control 50 ul working solution lot (31420) in 9950 ul blood lot (19A207P3)

ppd 3/14/19 Exp 3/14/2020 by AMN Concentration 50 ng/ml each (5 ng/ml buprenorphine)