

REVIEWED

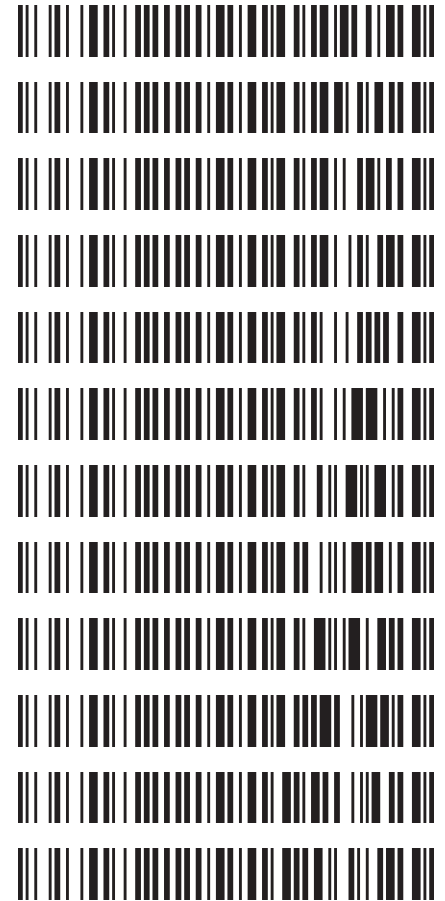
By Britany Wylie at 1:48 pm, Apr 10, 2019

4/10/2019

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Worklist: 3249

<u>LAB_CASE</u>	<u>ITEM</u>	<u>TASK_ID</u>	<u>DESCRIPTION</u>
C2019-0500	1	147815	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0501	1	147816	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0502	1	147817	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0503	1	147818	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0528	1	147819	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0530	1	147820	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0538	3	147821	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0541	1	147822	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0560	1	147823	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0604	1	147824	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0611	2	147825	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
C2019-0626	1	147826	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC



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

4/9/19

Extraction Date: ~~3/22/19~~ <sup>A</sup> 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~~) <sup>A</sup> 9/18/19  
**LCMS-QQQ ID:** 69679 <sup>2.7</sup>

## 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 0.5M ammonium hydroxide** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **300µL of blood+base** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).  
**(Load at 85-100 PSI- Selector to the right) Manifold ID: 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\040919 Batch Name: mdq pl
- 2. Make necessary changes to integration limits
- 3. Integration linear and R<sup>2</sup> 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 5-250, Norhydrocodone 5-250, metoprolol 5-250, lamotrigine 5-250m mirtazapine 5-250, Meprobamate 5-250, trazodone 5-500, lorazepam 10-1000,*

*Did not evaluate 1000 ng control for methamphetamine due to low internal standard response.*

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)

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# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results**

D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin

**Calibration Last Update**

4/10/2019 10:19:46 AM

**Instrument**

069697

**Type**

Sample

**Acq. Method**

mdq p1 cda 121818.m

**Sample Position**

P2-E2

**Injection Volume**

2.5

**Acq. Date-Time**

4/9/2019 4:50:51 PM

**Sample Info.****Data File**

neg.d

**Sample**

neg

**Operator**

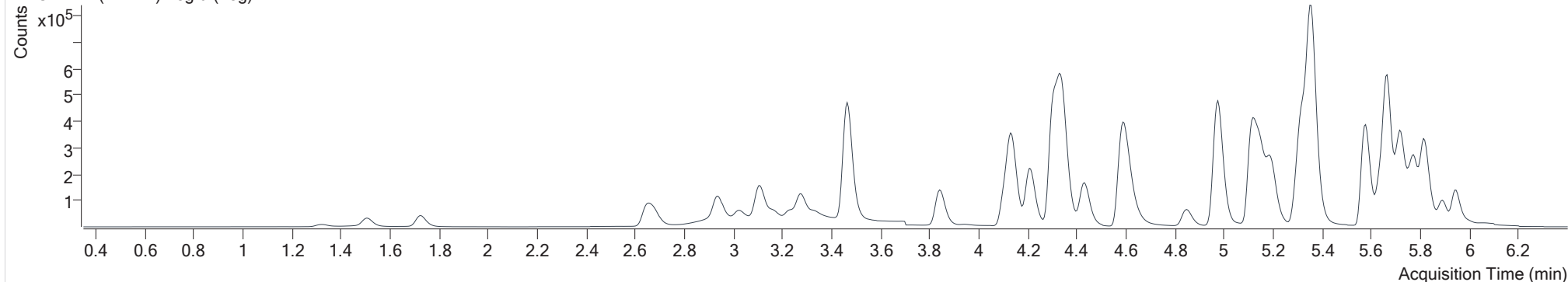
Anne Nord

**Comment**

negative blood control

**Sample Chromatogram**

+ TIC MRM (\*\* -&gt; \*\*) neg.d (neg)



# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results**

D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin

**Calibration Last Update**

4/10/2019 10:19:46 AM

**Instrument**

069697

**Type**

Sample

**Acq. Method**

mdq p1 cda 121818.m

**Sample Position**

P2-F2

**Injection Volume**

2.5

**Acq. Date-Time**

4/9/2019 5:01:41 PM

**Sample Info.**
**Data File**

external control.d

**Sample**

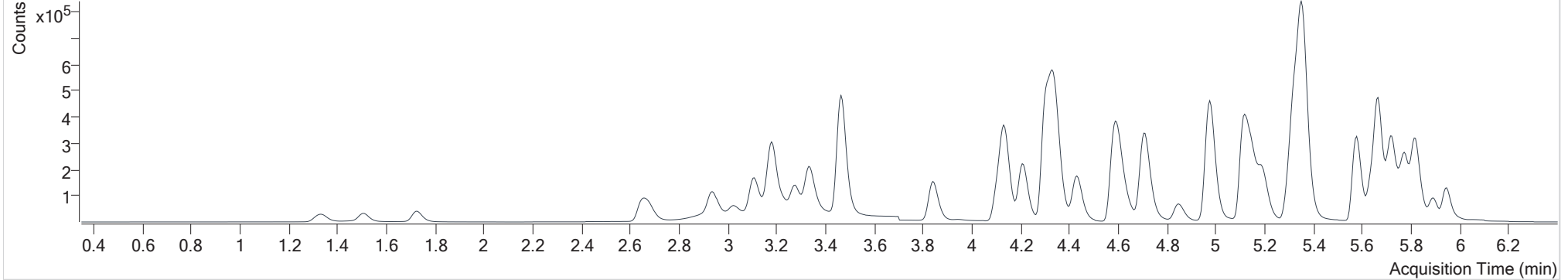
external control

**Operator**

Anne Nord

**Comment**
**Sample Chromatogram**

+ TIC MRM (\*\* -&gt; \*\*) external control.d (external control)



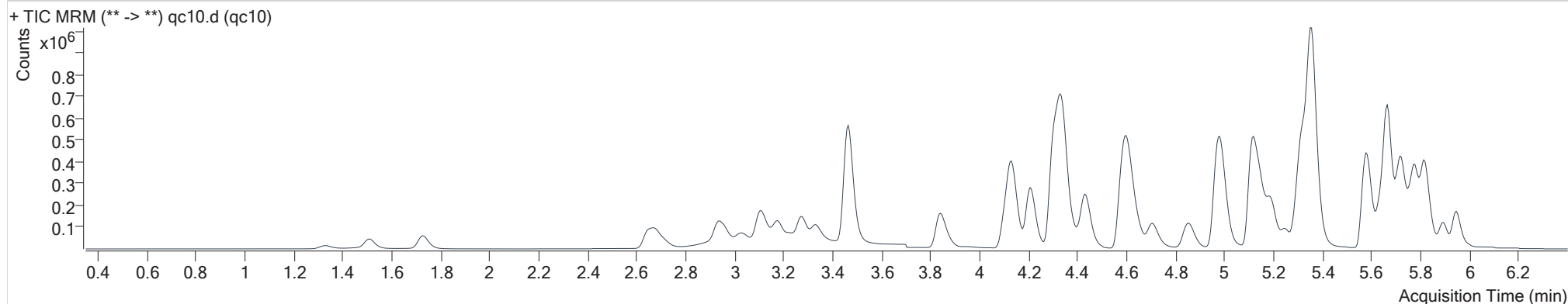
Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	27847	∞	22.3	∞	10739	37.63 ng/ml
Amphetamine	3.183	495824	2184	53.5	1722	194128	43.30 ng/ml
Methamphetamine	3.334	282974	329	39.9	∞	299570	41.92 ng/ml
Mirtazapine	4.711	709092	71372	44.5	33944	961680	35.56 ng/ml
Dextromethorphan	5.337	276482	17110	75.6	∞	345296	39.46 ng/ml
Buprenorphine	5.857	6488	∞	16.3	2549	75131	3.12 ng/ml

# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Calibration Last Update** 4/10/2019 10:19:46 AM

<b>Instrument</b>	069697	<b>Data File</b>	qc10.d
<b>Type</b>	QC	<b>Sample</b>	qc10
<b>Acq. Method</b>	mdq p1 cda 121818.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-A2	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	4/9/2019 5:12:30 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	7494	∞	21.7	66	11404	8.80 ng/ml
Oxymorphone	1.515	30819	4423	43.9	1946	113853	9.66 ng/ml
Hydromorphone	1.738	32977	5440	74.5	2749	120785	9.86 ng/ml
Dihydrocodeine	2.687	43545	2972	65.1	3206	235593	10.23 ng/ml
Codeine	2.719	16599	3186	106.0	∞	74110	10.28 ng/ml
Oxycodone	2.965	80898	587	29.3	929	348992	9.59 ng/ml
Noroxycodone	3.043	32343	1190	42.1	526	118687	10.13 ng/ml
Hydrocodone	3.129	44314	646	39.3	364	244484	9.72 ng/ml
Norhydrocodone	3.181	3176	134	39.4	17	66473	8.56 ng/ml
Amphetamine	3.183	138557	173	53.9	617	188666	11.03 ng/ml
6-MAM	3.239	2339	984	70.4	3994	80770	0.92 ng/ml
Methamphetamine	3.334	115550	124	39.4	54	330253	11.38 ng/ml
O-desmethyl-tramadol	3.470	272453	31960	6.5	2277	1214096	10.27 ng/ml
Phentermine	3.874	49059	∞	4.9	117	452215	9.91 ng/ml
Benzoylcegonine	3.972	3058	2704	6.7	∞	10023	10.07 ng/ml
Ketamine	4.122	93420	15247	37.9	1146	446197	9.54 ng/ml
Norfentanyl	4.158	19498	1888	41.4	73	806484	1.06 ng/ml
Dextrophan	4.212	52653	195	219.6	518	591125	10.62 ng/ml

qc10

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# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	276275	31380	3.5	280	1295366	10.91 ng/ml
Cocaine	4.337	134104	157	41.6	90	1131569	10.46 ng/ml
7-aminoclonazepam	4.348	34731	5400	82.5	83	135683	10.48 ng/ml
Metoprolol	4.389	32899	1720	95.8	∞	1295366	10.67 ng/ml
Lamotrigine	4.401	12125	2008	84.2	∞	625028	10.98 ng/ml
alpha-PVP	4.438	112689	73697	52.6	2618	525627	9.95 ng/ml
Doxylamine	4.609	351790	6485	96.5	2916	1490187	10.16 ng/ml
Mirtazapine	4.706	206968	13102	46.6	7371	1065677	9.52 ng/ml
Bupropion	4.865	75760	2681	56.0	1523	260426	11.53 ng/ml
Zolpidem	4.995	272185	∞	30.7	5360	1180891	10.81 ng/ml
Meprobamate	4.998	34799	∞	30.3	49	151846	10.86 ng/ml
Norbuprenorphine	5.070	461	1434	105.8	1820	14957	0.83 ng/ml
Venlafaxine	5.120	225973	3667	40.5	1625	1172002	10.15 ng/ml
Fentanyl	5.168	10050	1132	70.6	12558	492239	0.98 ng/ml
Trazodone	5.250	120271	6648	78.9	2582	512481	10.26 ng/ml
Mitragynine	5.296	22877	19786	37.3	10898	1065677	8.37 ng/ml
Citalopram	5.303	111788	2008	48.0	∞	470340	10.32 ng/ml
EDDP	5.321	49982	60391	237.0	3347	625028	9.33 ng/ml
Dextromethorphan	5.337	76249	21543	72.9	4912	376892	9.97 ng/ml
Diphenhydramine	5.358	380690	35597	34.4	7543	1788325	10.54 ng/ml
Promethazine	5.578	162396	∞	32.0	1236	663318	10.29 ng/ml
Quetiapine	5.591	143949	1913	58.8	3528	190948	10.89 ng/ml
Clonazepam	5.638	43394	1393	34.2	1060	68737	10.96 ng/ml
Cyclobenzaprine	5.645	96858	∞	10.5	366	348335	10.37 ng/ml
Methadone	5.669	226597	54940	46.6	6405	1065677	10.42 ng/ml
a-hydroxyalprazolam	5.709	10753	3137	62.6	∞	58494	10.36 ng/ml
Fluoxetine	5.715	102948	5864	9.4	∞	388080	10.14 ng/ml
Carisoprodol	5.733	81108	3173	58.6	524	393469	10.35 ng/ml
Lorazepam	5.755	27726	177	56.0	122	68737	6.79 ng/ml
Oxazepam	5.768	44742	462	75.1	529	181577	10.04 ng/ml
Alprazolam	5.782	90430	∞	108.9	∞	289293	10.59 ng/ml
Sertraline	5.787	55834	4105	86.9	1074	233343	10.78 ng/ml
Buprenorphine	5.857	2375	709	16.3	303	85793	0.93 ng/ml
Temazepam	5.824	125858	2844	30.7	335	606597	9.42 ng/ml
Nordiazepam	5.897	49809	6228	64.1	3338	168539	9.61 ng/ml
Diazepam	5.952	62496	2766	84.3	2227	270268	10.08 ng/ml

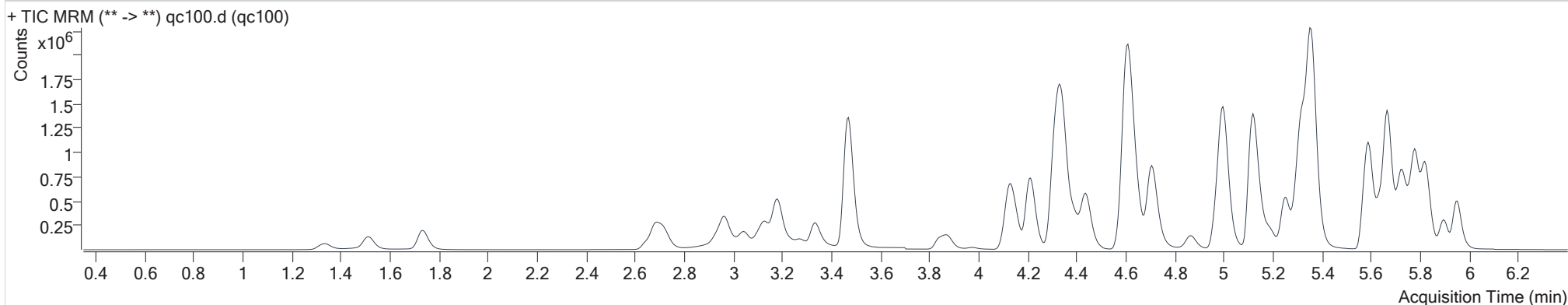
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# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Calibration Last Update** 4/10/2019 10:19:46 AM

<b>Instrument</b>	069697	<b>Data File</b>	qc100.d
<b>Type</b>	QC	<b>Sample</b>	qc100
<b>Acq. Method</b>	mdq p1 cda 121818.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-B2	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	4/9/2019 5:23:19 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	65218	234	22.8	44	10476	91.73 ng/ml
Oxymorphone	1.515	272821	6227	44.3	3094	102014	105.94 ng/ml
Hydromorphone	1.738	277346	30078	73.8	7697	103480	102.82 ng/ml
Dihydrocodeine	2.687	390811	44275	64.4	∞	232300	99.52 ng/ml
Codeine	2.719	142124	19515	103.6	∞	64412	100.75 ng/ml
Oxycodone	2.965	748508	1861	29.1	2199	328069	109.00 ng/ml
Noroxycodone	3.043	287237	10153	40.9	∞	105960	99.77 ng/ml
Hydrocodone	3.129	392648	2761	39.6	1005	224063	113.70 ng/ml
Norhydrocodone	3.186	41853	2215	41.9	188	62967	89.93 ng/ml
Amphetamine	3.183	861029	548	53.4	3866	144574	103.62 ng/ml
6-MAM	3.244	22225	∞	75.2	∞	77802	8.85 ng/ml
Methamphetamine	3.334	358586	∞	43.2	521	176063	97.99 ng/ml
O-desmethyl-tramadol	3.470	2533387	∞	6.5	142069	1133221	101.44 ng/ml
Phentermine	3.879	311161	∞	4.9	1156	315744	105.50 ng/ml
Benzoylcegonine	3.972	26113	235	8.0	24	9418	98.88 ng/ml
Ketamine	4.127	720851	54959	37.7	2082	358101	103.58 ng/ml
Norfentanyl	4.158	194684	58376	40.9	3686	772814	9.10 ng/ml
Dextrophan	4.212	480380	111911	217.5	∞	544154	105.75 ng/ml

qc100



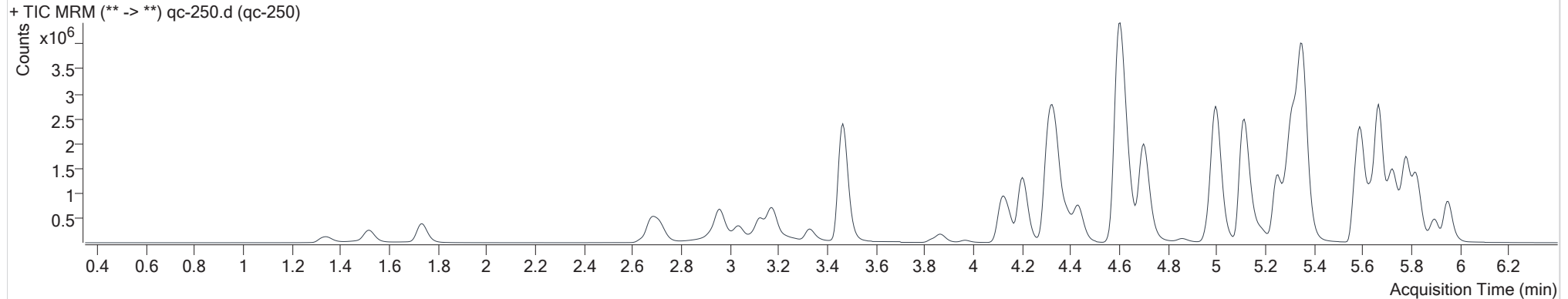
# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	2357852	84079	3.6	7655	1221287	108.28 ng/ml
Cocaine	4.343	1091042	∞	42.7	68912	1007844	98.79 ng/ml
7-aminoclonazepam	4.348	278840	647	85.0	332	110676	101.23 ng/ml
Metoprolol	4.389	275161	85075	96.0	3748	1221287	101.36 ng/ml
Lamotrigine	4.401	101538	3061	87.3	5231	603623	81.88 ng/ml
alpha-PVP	4.443	759308	7224	53.1	7764	381606	107.03 ng/ml
Doxylamine	4.609	3413851	∞	97.1	∞	1437441	103.88 ng/ml
Mirtazapine	4.706	1674091	100812	45.3	112199	768864	104.60 ng/ml
Bupropion	4.870	208960	7772	59.5	8008	85528	103.31 ng/ml
Zolpidem	4.995	2557125	224335	30.2	43127	1167958	108.06 ng/ml
Meprobamate	4.998	255181	∞	29.2	4534	131046	98.13 ng/ml
Norbuprenorphine	5.075	2857	7419	99.7	5252	11669	10.77 ng/ml
Venlafaxine	5.120	2166614	153868	39.0	32928	1105801	97.74 ng/ml
Fentanyl	5.168	63666	10121	72.9	101037	317268	9.18 ng/ml
Trazodone	5.250	847379	57124	77.9	23834	389030	101.66 ng/ml
Mitragynine	5.296	143325	136204	39.2	55588	768864	70.98 ng/ml
Citalopram	5.303	771624	∞	47.5	20125	336697	102.48 ng/ml
EDDP	5.321	484333	8336	238.3	34616	603623	93.26 ng/ml
Dextromethorphan	5.337	488302	103696	74.8	15508	255012	94.36 ng/ml
Diphenhydramine	5.358	2814796	13757	33.9	∞	1317741	99.62 ng/ml
Promethazine	5.578	832182	16198	32.3	11049	343536	99.58 ng/ml
Quetiapine	5.591	1099374	137025	58.4	∞	150374	107.52 ng/ml
Clonazepam	5.638	322735	16646	34.7	2006	53093	113.70 ng/ml
Cyclobenzaprine	5.645	477590	∞	10.6	1007	182356	100.01 ng/ml
Methadone	5.669	1627792	15178	46.4	53444	768864	100.20 ng/ml
a-hydroxyalprazolam	5.709	84929	3503	57.8	1208	48266	105.01 ng/ml
Fluoxetine	5.715	364052	8557	9.0	68774	143831	93.04 ng/ml
Carisoprodol	5.733	663489	13878	57.0	5530	328240	98.15 ng/ml
Lorazepam	5.755	157590	9789	56.8	1006	53093	111.00 ng/ml
Oxazepam	5.763	227049	3095	71.5	1672	98380	105.70 ng/ml
Alprazolam	5.782	730201	13585	111.2	6597	243461	102.88 ng/ml
Sertraline	5.782	141446	348	103.3	1314	61975	101.37 ng/ml
Buprenorphine	5.857	14405	1814	17.8	7216	56574	9.39 ng/ml
Temazepam	5.824	1087816	42027	30.0	2371	511428	95.10 ng/ml
Nordiazepam	5.897	376145	70883	61.9	97540	130716	97.21 ng/ml
Diazepam	5.952	530516	5494	85.9	9808	233339	107.54 ng/ml

# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results**  
**Calibration Last Update**

 D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
 4/10/2019 10:19:46 AM

**Instrument** 069697  
**Type** QC  
**Acq. Method** mdq p1 cda 121818.m  
**Sample Position** P2-C2  
**Injection Volume** 2.5  
**Acq. Date-Time** 4/9/2019 8:37:32 PM  
**Sample Info.**
**Data File** qc-250.d  
**Sample** qc-250  
**Operator** Anne Nord  
**Comment**
**Sample Chromatogram**


Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.342	145946	42313	22.8	∞	9270	233.48 ng/ml
Oxymorphone	1.515	602444	8413	43.4	15039	93406	257.17 ng/ml
Hydromorphone	1.738	604261	17729	77.8	13148	91746	253.67 ng/ml
Dihydrocodeine	2.677	822814	4777	64.3	154020	221260	220.94 ng/ml
Codeine	2.714	276636	∞	105.8	12759	51937	243.14 ng/ml
Oxycodone	2.955	1710105	3649	28.9	11964	317255	259.77 ng/ml
Noroxycodone	3.038	587719	∞	42.0	4892	97031	222.78 ng/ml
Hydrocodone	3.124	870996	3241	39.6	852	205115	278.75 ng/ml
Norhydrocodone	3.181	99165	184	39.7	563	55774	236.76 ng/ml
Amphetamine	3.178	1154907	11379	52.5	2300	84463	240.49 ng/ml
6-MAM	3.234	52866	∞	75.3	∞	71421	22.89 ng/ml
Methamphetamine	3.329	359591	∞	41.7	156	78864	227.54 ng/ml
O-desmethyl-tramadol	3.465	5564400	161651	6.4	41086	997593	252.96 ng/ml
Phentermine	3.868	407202	399	4.7	940	180725	243.66 ng/ml
Benzoylcegonine	3.966	67199	∞	8.0	24998	10306	233.76 ng/ml
Ketamine	4.122	1320870	21066	37.9	4133	268606	255.03 ng/ml
Norfentanyl	4.152	452740	∞	40.0	10285	698427	23.09 ng/ml
Dextrorphan	4.202	1050065	1411581	214.2	1245	476781	263.90 ng/ml

qc-250

Generated at 10:20 AM on 4/10/2019

# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.309	4916699	190516	3.5	3385	1071360	259.02 ng/ml
Cocaine	4.332	2265954	319149	41.8	72056	826108	250.93 ng/ml
7-aminoclonazepam	4.343	491891	11675	85.5	1173	79907	247.02 ng/ml
Metoprolol	4.384	505486	∞	96.4	9919	1071360	213.19 ng/ml
Lamotrigine	4.391	194073	10813	86.4	7269	594986	157.14 ng/ml
alpha-PVP	4.438	1083060	53758	53.0	10206	238732	246.30 ng/ml
Doxylamine	4.604	7779216	43971	97.0	∞	1341225	253.95 ng/ml
Mirtazapine	4.701	3945511	325862	46.1	98112	712221	265.81 ng/ml
Bupropion	4.860	104938	76223	58.4	2751	19120	233.16 ng/ml
Zolpidem	4.995	5568196	171110	30.2	42485	1082987	254.60 ng/ml
Meprobamate	4.988	428616	∞	29.5	12488	111947	193.70 ng/ml
Norbuprenorphine	5.065	6692	6815	103.5	28504	11610	26.17 ng/ml
Venlafaxine	5.115	4741755	∞	39.1	52209	963907	244.52 ng/ml
Fentanyl	5.163	163201	4672	74.2	272045	311047	23.92 ng/ml
Trazodone	5.250	2195585	120953	78.7	64868	420994	244.49 ng/ml
Mitragynine	5.291	314763	270193	39.3	105854	712221	167.99 ng/ml
Citalopram	5.292	1633112	∞	47.8	∞	294896	248.13 ng/ml
EDDP	5.315	1171682	17836	241.2	13325	594986	228.82 ng/ml
Dextromethorphan	5.331	966074	37100	77.1	∞	202601	234.99 ng/ml
Diphenhydramine	5.358	5963903	606956	33.5	10975	1110586	249.40 ng/ml
Promethazine	5.573	2150649	79907	32.6	5623	358583	246.18 ng/ml
Quetiapine	5.591	2582055	25636	57.1	∞	146046	260.32 ng/ml
Clonazepam	5.633	533726	14525	32.9	17047	37957	264.27 ng/ml
Cyclobenzaprine	5.640	1196974	21725	11.0	8772	183614	249.35 ng/ml
Methadone	5.664	3824181	39012	45.7	217273	712221	253.51 ng/ml
a-hydroxyalprazolam	5.704	140311	15829	59.0	1803	34996	240.15 ng/ml
Fluoxetine	5.715	1189567	323710	9.0	63397	188678	231.09 ng/ml
Carisoprodol	5.733	1146406	168946	57.4	7495	233975	237.37 ng/ml
Lorazepam	5.750	227527	3526	56.2	453	37957	233.95 ng/ml
Oxazepam	5.757	275481	4681	73.1	1958	51763	245.56 ng/ml
Alprazolam	5.782	1328708	4382	110.4	3747	179392	254.29 ng/ml
Sertraline	5.782	461229	∞	101.8	34499	80706	253.58 ng/ml
Buprenorphine	5.862	36031	14767	16.2	7491	59721	22.40 ng/ml
Temazepam	5.824	1976863	58100	31.1	8073	371357	237.78 ng/ml
Nordiazepam	5.897	657004	7027	61.2	62816	95183	233.75 ng/ml
Diazepam	5.952	1038589	25613	85.3	7922	188117	262.50 ng/ml

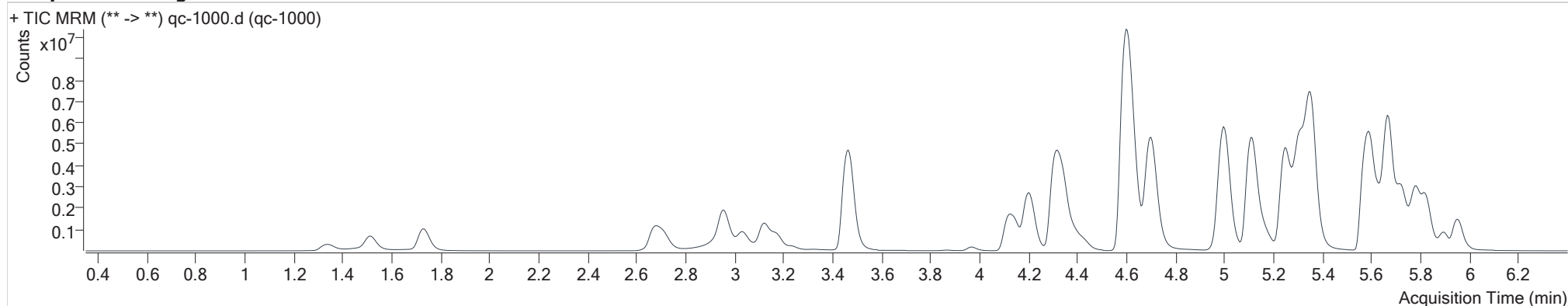
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# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Calibration Last Update** 4/10/2019 10:19:46 AM

<b>Instrument</b>	069697	<b>Data File</b>	qc-1000.d
<b>Type</b>	QC	<b>Sample</b>	qc-1000
<b>Acq. Method</b>	mdq p1 cda 121818.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-D2	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	4/9/2019 8:48:22 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.342	390564	∞	23.1	∞	6576	883.47 ng/ml
Oxymorphone	1.510	1952295	21831	43.4	∞	81721	955.75 ng/ml
Hydromorphone	1.733	1827515	∞	79.4	42477	75513	933.93 ng/ml
Dihydrocodeine	2.672	2054990	164943	64.2	65411	200330	<del>610.84</del> ng/ml ocr A
Codeine	2.714	675307	4911	105.8	5029	31420	980.96 ng/ml
Oxycodone	2.955	5776526	1148	28.5	1089	282392	990.43 ng/ml
Noroxycodone	3.033	1796860	∞	39.8	∞	71395	925.31 ng/ml
Hydrocodone	3.124	2752384	∞	39.0	1435	187955	966.86 ng/ml
Norhydrocodone	3.176	380779	8154	41.2	1547	43150	<del>1166.13</del> ng/ml ocr A
Amphetamine	3.173	999399	2752	52.5	1998	18026	981.21 ng/ml
6-MAM	3.234	183970	18712	76.7	∞	59714	95.18 ng/ml
Methamphetamine	3.329	50531	2 Low	52.2 High	∞	1567	<del>1648.97</del> ng/ml not evaluated poor internal response. A
O-desmethyl-tramadol	3.465	14191190	247287	6.3	∞	635517	1012.39 ng/ml
Phentermine	3.868	75107	463	4.7	192	7736	1056.21 ng/ml
Benzoylcegonine	3.966	278252	2190246	7.8	374	9777	1023.34 ng/ml
Ketamine	4.122	3096983	445115	37.6	10603	165268	975.71 ng/ml
Norfentanyl	4.152	1463883	2619	40.1	46295	510718	101.40 ng/ml
Dextroprphan	4.202	2641703	∞	218.0	374020	296732	1066.93 ng/ml
qc-1000							

ocr = outside curve range

Generated at 10:20 AM on 4/10/2019

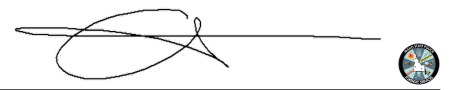
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# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.303	10369364	616779	3.4	20817	679097	864.58 ng/ml
Cocaine	4.336	4955880	629509	41.9	391486	456539	994.25 ng/ml
7-aminoclonazepam	4.348	712393	22722	85.6	10938	27556	1036.75 ng/ml
Metoprolol	4.384	1012100	13844	96.3	∞	679097	<del>675.28</del> ng/ml ocr A
Lamotrigine	4.401	379084	6596	86.2	9008	369300	<del>490.80</del> ng/ml
alpha-PVP	4.433	465309	74500	53.1	12773	23668	1073.26 ng/ml
Doxylamine	4.599	20487684	535823	97.5	604606	968445	926.74 ng/ml
Mirtazapine	4.701	11786226	1016342	45.9	517617	497595	<del>1135.86</del> ng/ml ocr A
Bupropion	4.860	18669	76	50.7	505	663	1199.13 ng/ml
Zolpidem	4.995	14428383	∞	30.4	119994	872703	820.09 ng/ml
Meprobamate	4.978	693144	38066	29.9	19663	79060	<del>444.55</del> ng/ml ocr A
Norbuprenorphine	5.065	24850	39428	98.8	35934	11311	101.45 ng/ml
Venlafaxine	5.109	12448468	2350186	38.9	18211	603949	1022.65 ng/ml
Fentanyl	5.163	855850	∞	75.7	1490793	371537	104.82 ng/ml
Trazodone	5.245	7992521	612007	77.1	612590	579292	<del>648.08</del> ng/ml ocr A
Mitragynine	5.286	955095	34935	40.5	628753	497595	<del>728.85</del> ng/ml ocr A
Citalopram	5.287	3349575	∞	47.6	∞	151996	988.42 ng/ml
EDDP	5.316	3005246	16736	244.1	22553	369300	945.44 ng/ml
Dextromethorphan	5.326	2159859	11108	74.7	207562	109003	976.48 ng/ml
Diphenhydramine	5.358	12917215	448827	33.3	18363	579982	1032.21 ng/ml
Promethazine	5.573	7798297	∞	30.9	12955	323021	990.17 ng/ml
Quetiapine	5.596	6332263	207358	56.8	868714	93270	1000.29 ng/ml
Clonazepam	5.628	644565	14434	33.9	11687	13988	868.20 ng/ml
Cyclobenzaprine	5.635	3480668	16617	10.7	2145	134058	993.95 ng/ml
Methadone	5.669	10962787	47519	45.1	385429	497595	1038.96 ng/ml
a-hydroxyalprazolam	5.704	265110	5187	58.4	1338	16696	953.13 ng/ml
Fluoxetine	5.715	3728531	∞	8.7	403360	144138	946.78 ng/ml
Carisoprodol	5.733	2005951	253778	58.2	118250	93315	1040.15 ng/ml
Lorazepam	5.750	396667	18082	58.3	8107	13988	1142.58 ng/ml
Oxazepam	5.757	386494	65310	72.8	5919	18765	954.35 ng/ml
Alprazolam	5.782	2656947	134	109.8	∞	90762	1005.46 ng/ml
Sertraline	5.787	1239177	∞	101.0	∞	55306	993.70 ng/ml
Buprenorphine	5.862	160739	20153	16.1	∞	59411	100.80 ng/ml
Temazepam	5.824	4138451	171604	30.5	16604	179019	1032.04 ng/ml
Nordiazepam	5.897	1253590	∞	61.0	5136	46240	919.28 ng/ml
Diazepam	5.952	2200756	7779	86.0	3205	105592	993.61 ng/ml

ocr = outside curve range

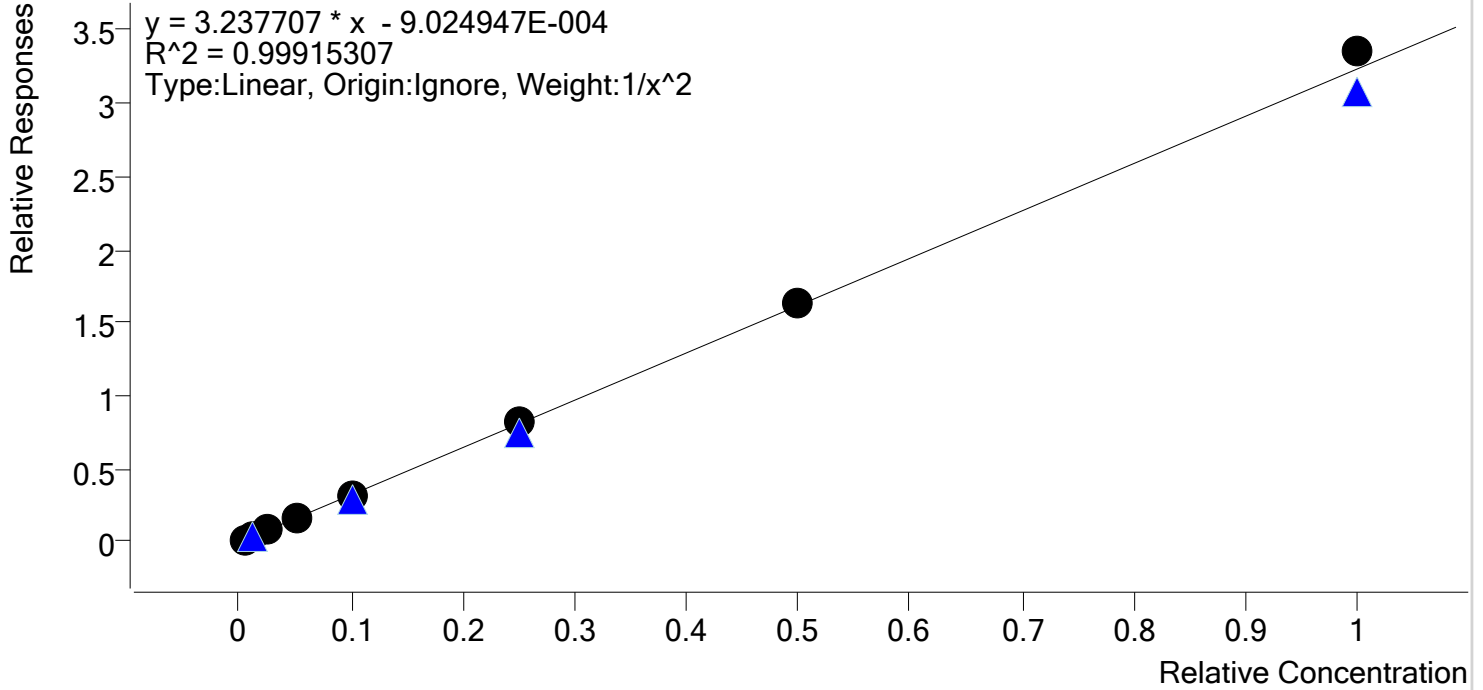
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** 6-MAM

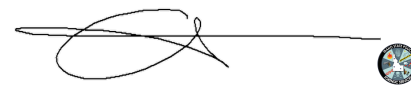
**Internal Standard** 6-MAM-D6

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



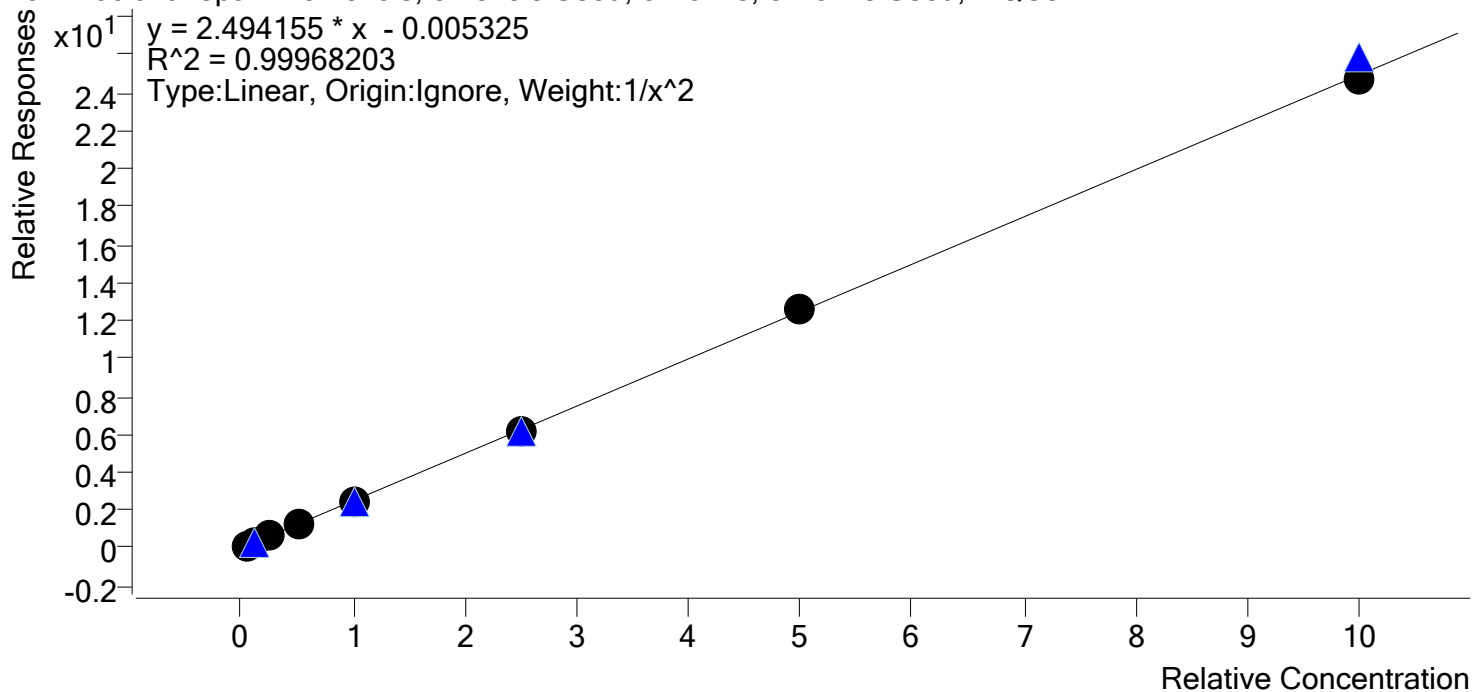
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
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cal 2	2	✓	1.0	1.0	96.3
cal 3	3	✓	2.5	2.5	99.4
cal 4	4	✓	5.0	4.9	97.1
cal 5	5	✓	10.0	9.9	99.3
cal 6	6	✓	25.0	25.1	100.3
cal 7	7	✓	50.0	50.8	101.6
cal 8	8	✓	100.0	103.7	103.7

# Compound Calibration Report



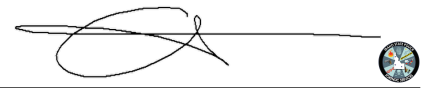
**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** 7-aminoclonazepam **Internal Standard** 7-Aminoclonazepam-D4

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

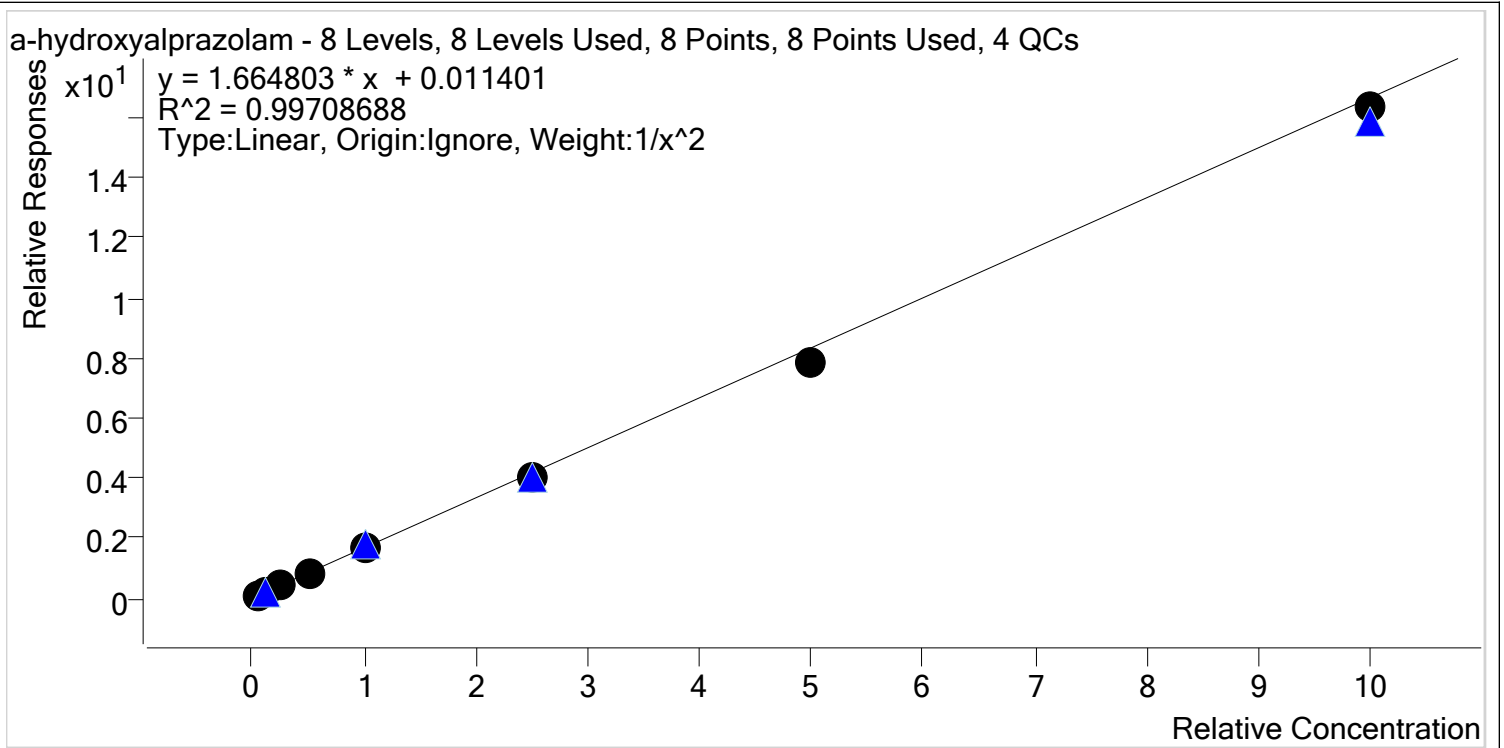


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.9	98.7
cal 2	2	✓	10.0	10.3	103.0
cal 3	3	✓	25.0	24.7	99.0
cal 4	4	✓	50.0	50.1	100.2
cal 5	5	✓	100.0	100.7	100.7
cal 6	6	✓	250.0	245.8	98.3
cal 7	7	✓	500.0	504.5	100.9
cal 8	8	✓	1000.0	992.4	99.2

# Compound Calibration Report



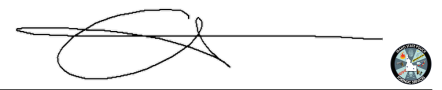
**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** a-hydroxyalprazolam **Internal Standard** a-hydroxyalprazolam-D5



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.8	95.6
cal 2	2	✓	10.0	10.6	106.2
cal 3	3	✓	25.0	26.3	105.2
cal 4	4	✓	50.0	51.5	103.0
cal 5	5	✓	100.0	102.0	102.0
cal 6	6	✓	250.0	238.3	95.3
cal 7	7	✓	500.0	472.6	94.5
cal 8	8	✓	1000.0	981.1	98.1



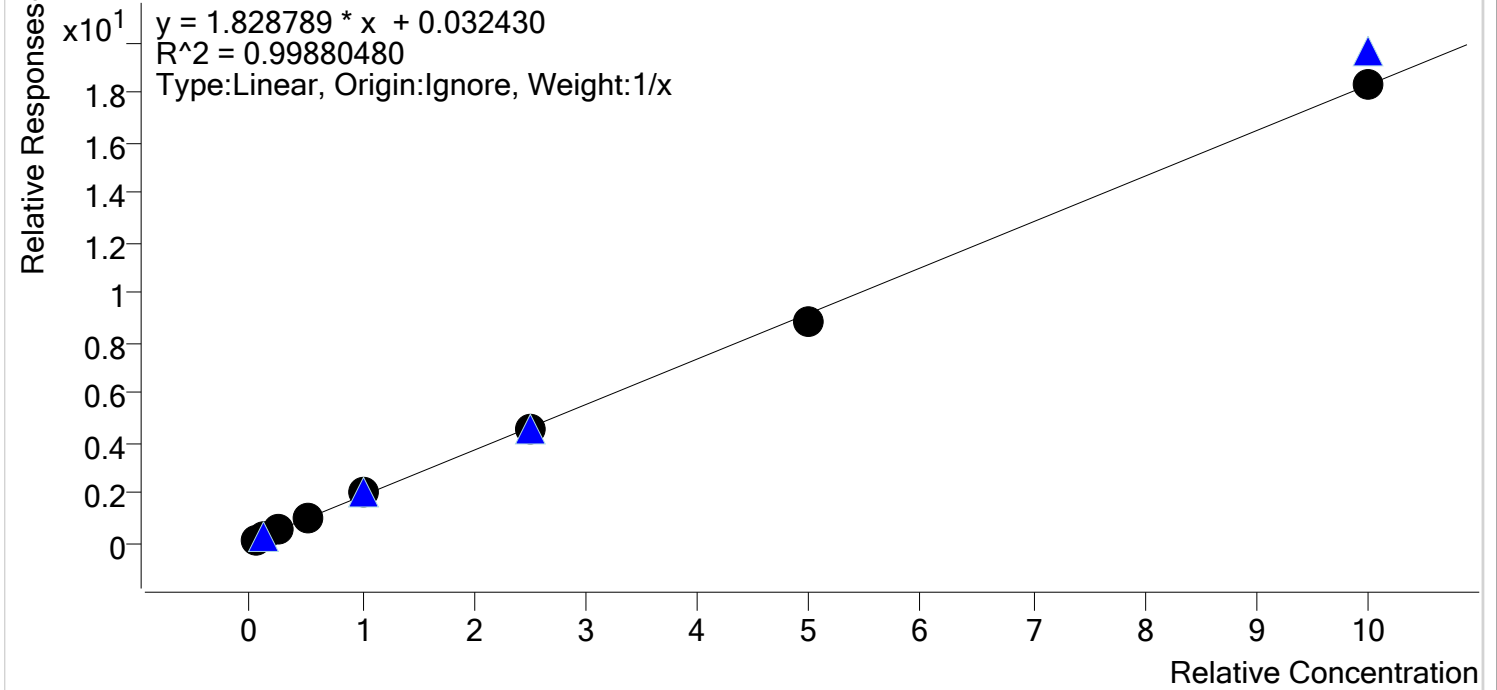
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** alpha-PVP

**Internal Standard** alpha-PVP-d8

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	3.9	78.6
cal 2	2	✓	10.0	10.2	101.5
cal 3	3	✓	25.0	26.5	106.0
cal 4	4	✓	50.0	53.8	107.6
cal 5	5	✓	100.0	109.6	109.6
cal 6	6	✓	250.0	249.1	99.7
cal 7	7	✓	500.0	483.2	96.6
cal 8	8	✓	1000.0	1003.6	100.4

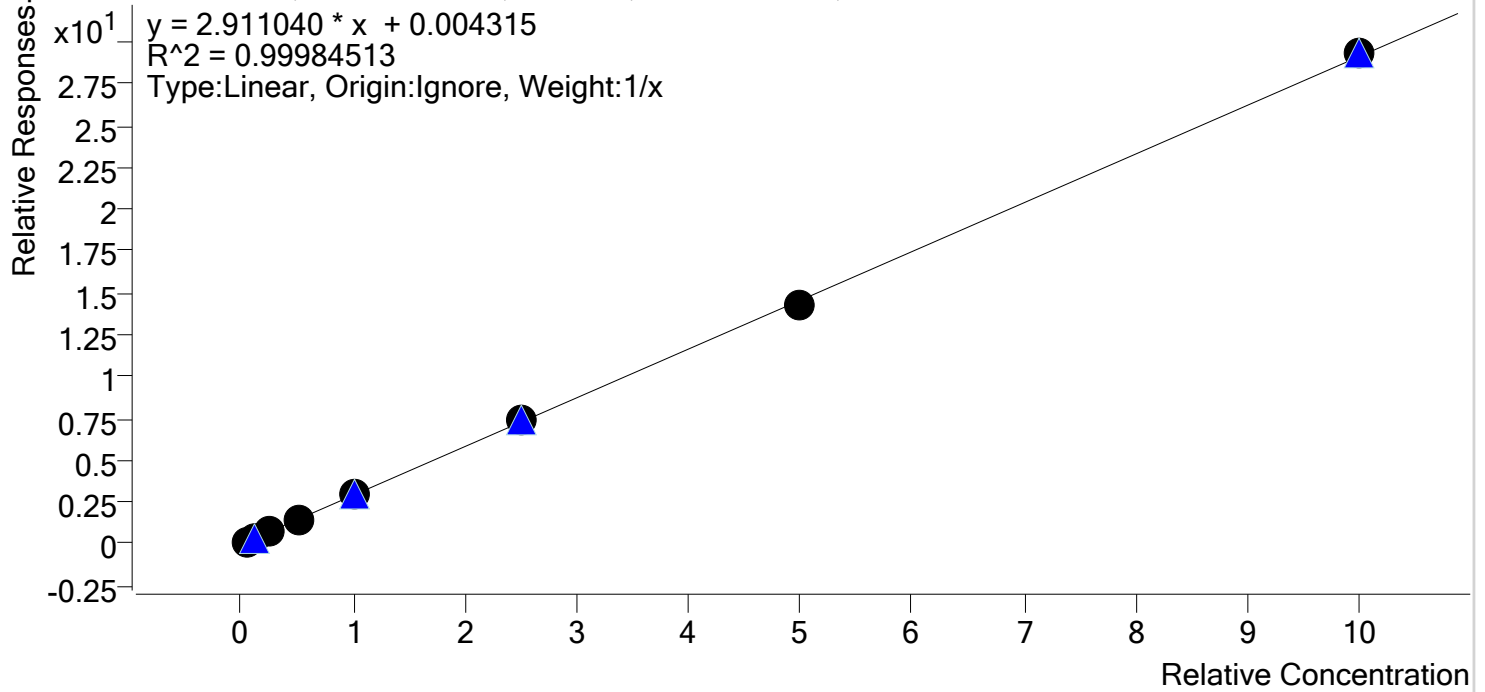
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Alprazolam

**Internal Standard** Alprazolam-D5

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



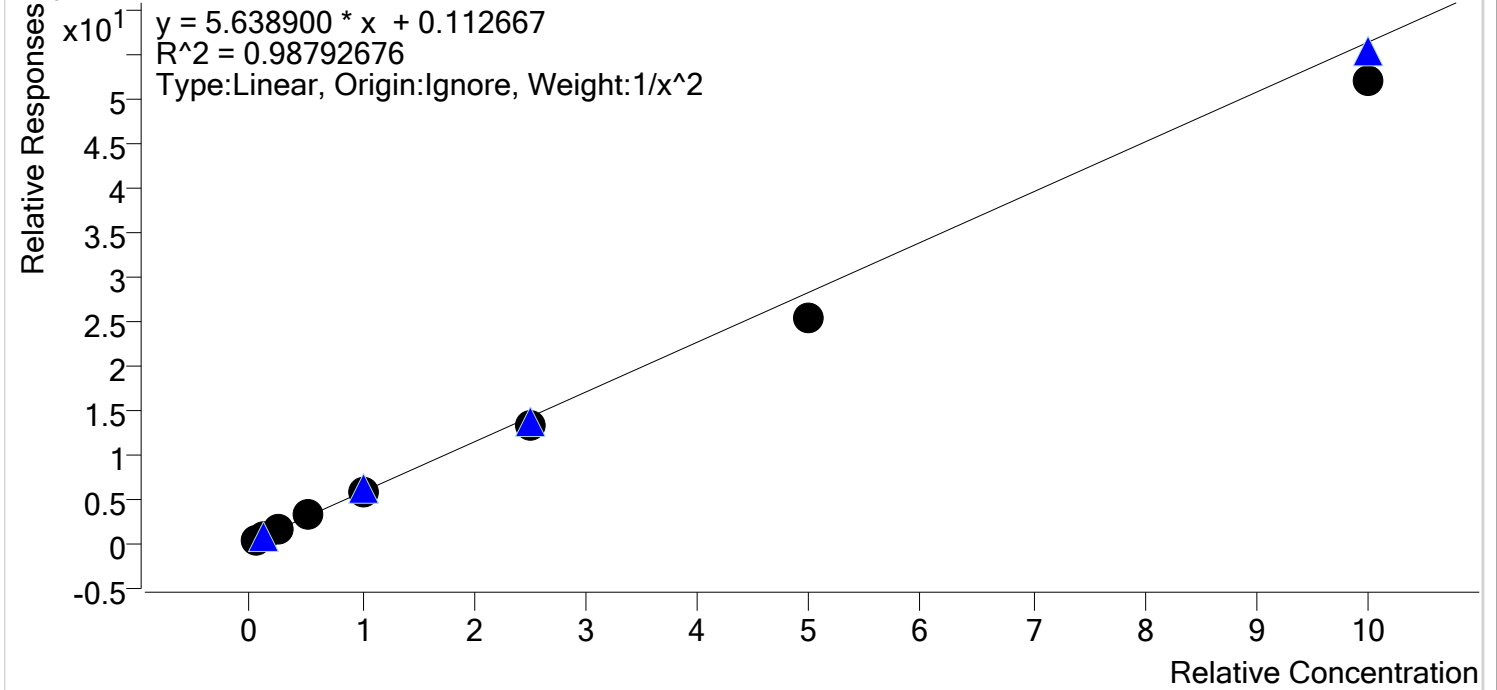
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.7	95.0
cal 2	2	✓	10.0	10.5	104.8
cal 3	3	✓	25.0	24.6	98.4
cal 4	4	✓	50.0	50.6	101.3
cal 5	5	✓	100.0	101.3	101.3
cal 6	6	✓	250.0	251.2	100.5
cal 7	7	✓	500.0	490.9	98.2
cal 8	8	✓	1000.0	1006.1	100.6

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Amphetamine **Internal Standard** Amphetamine-D11

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



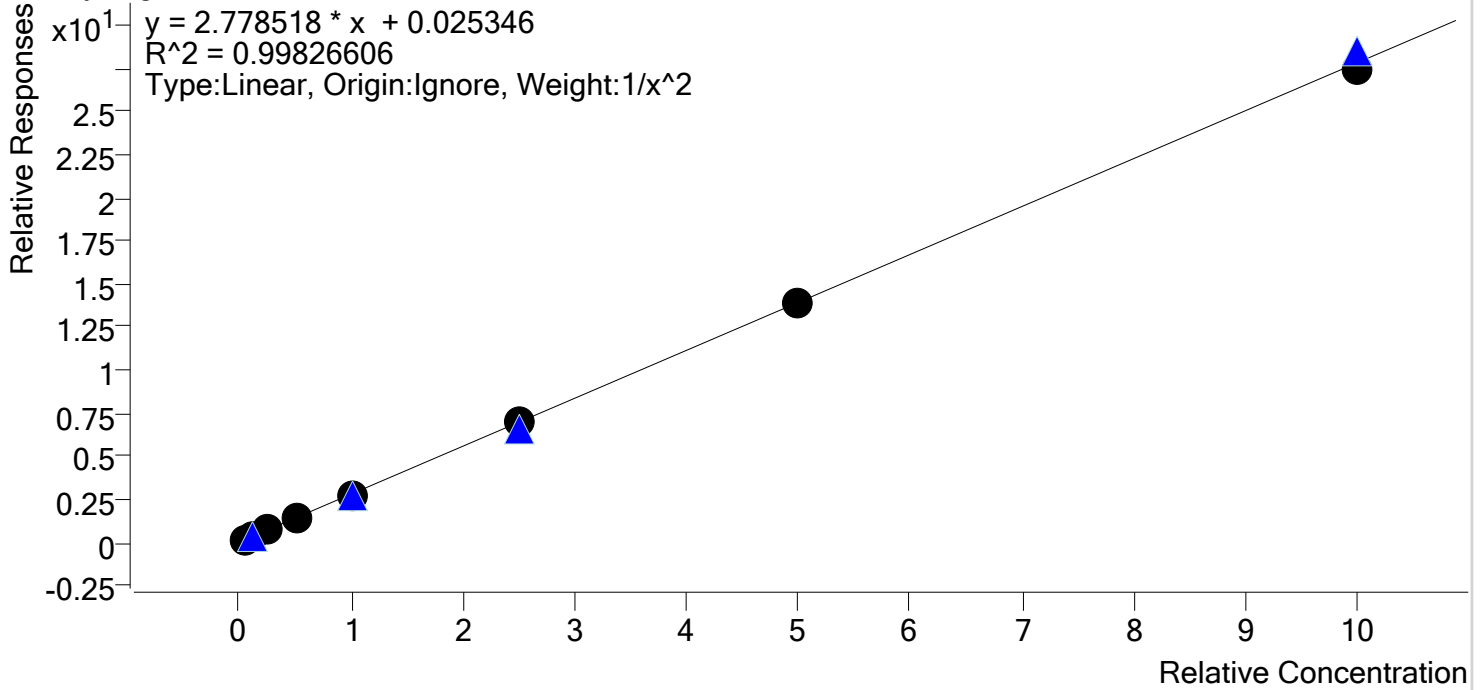
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.6	91.0
cal 2	2	✓	10.0	11.2	111.7
cal 3	3	✓	25.0	28.2	113.0
cal 4	4	✓	50.0	53.6	107.2
cal 5	5	✓	100.0	101.2	101.2
cal 6	6	✓	250.0	234.7	93.9
cal 7	7	✓	500.0	446.6	89.3
cal 8	8	✓	1000.0	926.6	92.7

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.8	96.0
cal 2	2	✓	10.0	10.8	108.2
cal 3	3	✓	25.0	25.1	100.2
cal 4	4	✓	50.0	50.2	100.4
cal 5	5	✓	100.0	97.7	97.7
cal 6	6	✓	250.0	249.1	99.6
cal 7	7	✓	500.0	495.7	99.1
cal 8	8	✓	1000.0	987.1	98.7

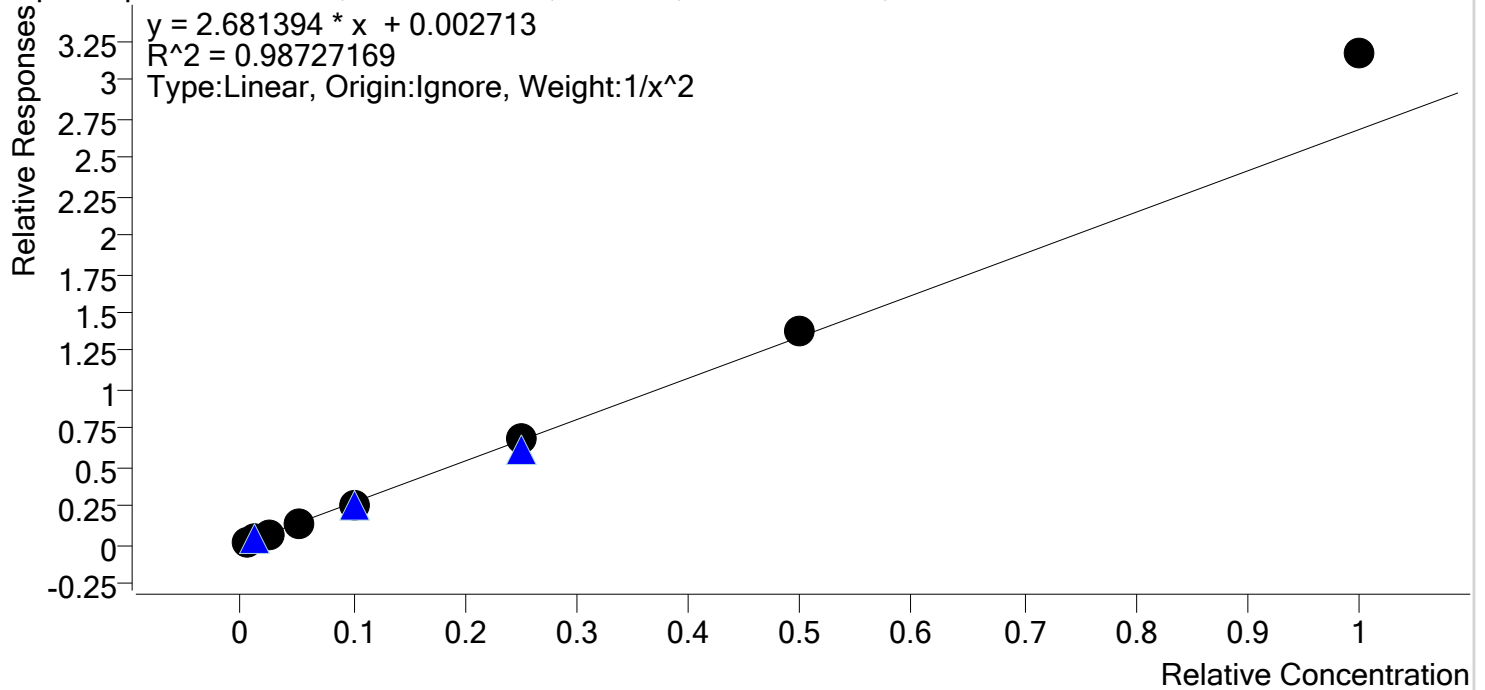
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	0.5	0.5	107.9
cal 2	2	✓	1.0	0.9	88.7
cal 3	3	✓	2.5	2.3	93.3
cal 4	4	✓	5.0	4.6	91.3
cal 5	5	✓	10.0	9.6	95.6
cal 6	6	✓	25.0	25.3	101.3
cal 7	7	✓	50.0	51.8	103.5
cal 8	8	✓	100.0	118.3	118.3

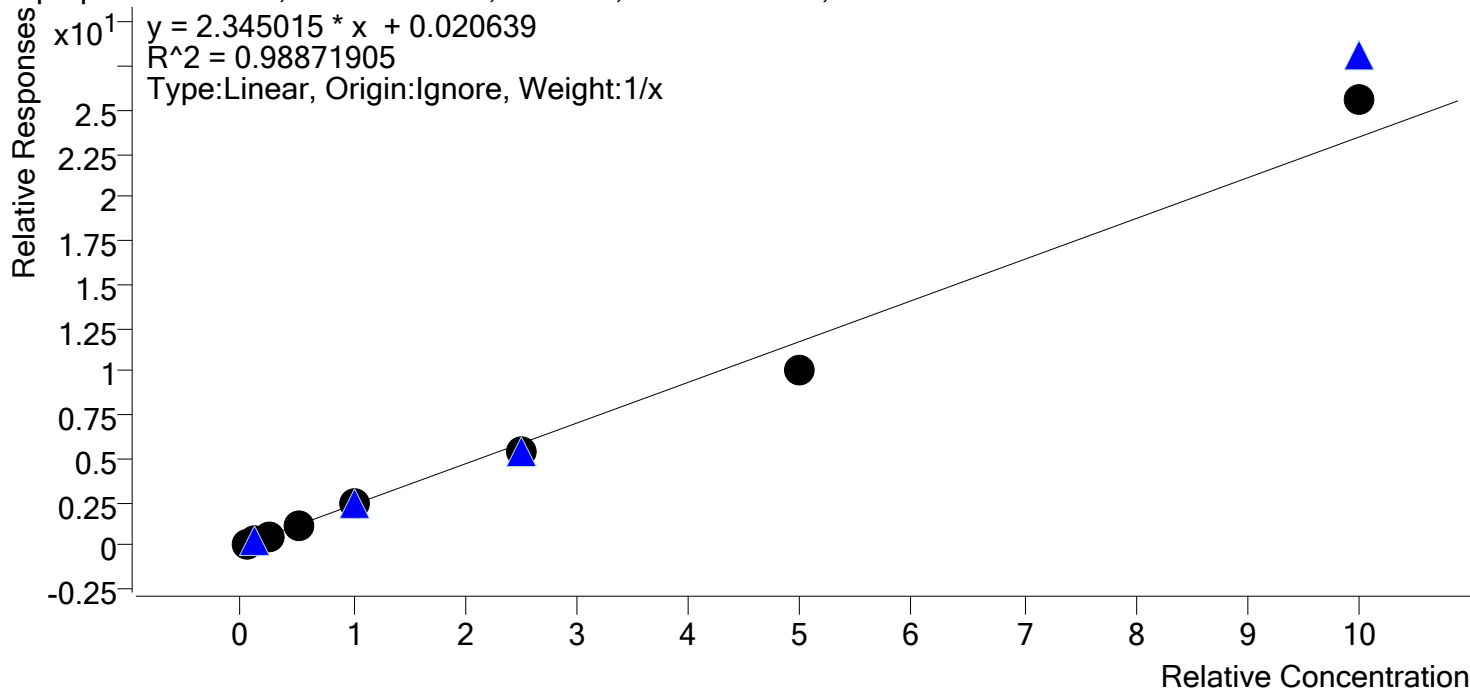
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.9	97.4
cal 2	2	✓	10.0	11.1	110.8
cal 3	3	✓	25.0	25.9	103.6
cal 4	4	✓	50.0	51.3	102.5
cal 5	5	✓	100.0	99.8	99.8
cal 6	6	✓	250.0	227.4	91.0
cal 7	7	✓	500.0	429.8	86.0
cal 8	8	✓	1000.0	1090.0	109.0

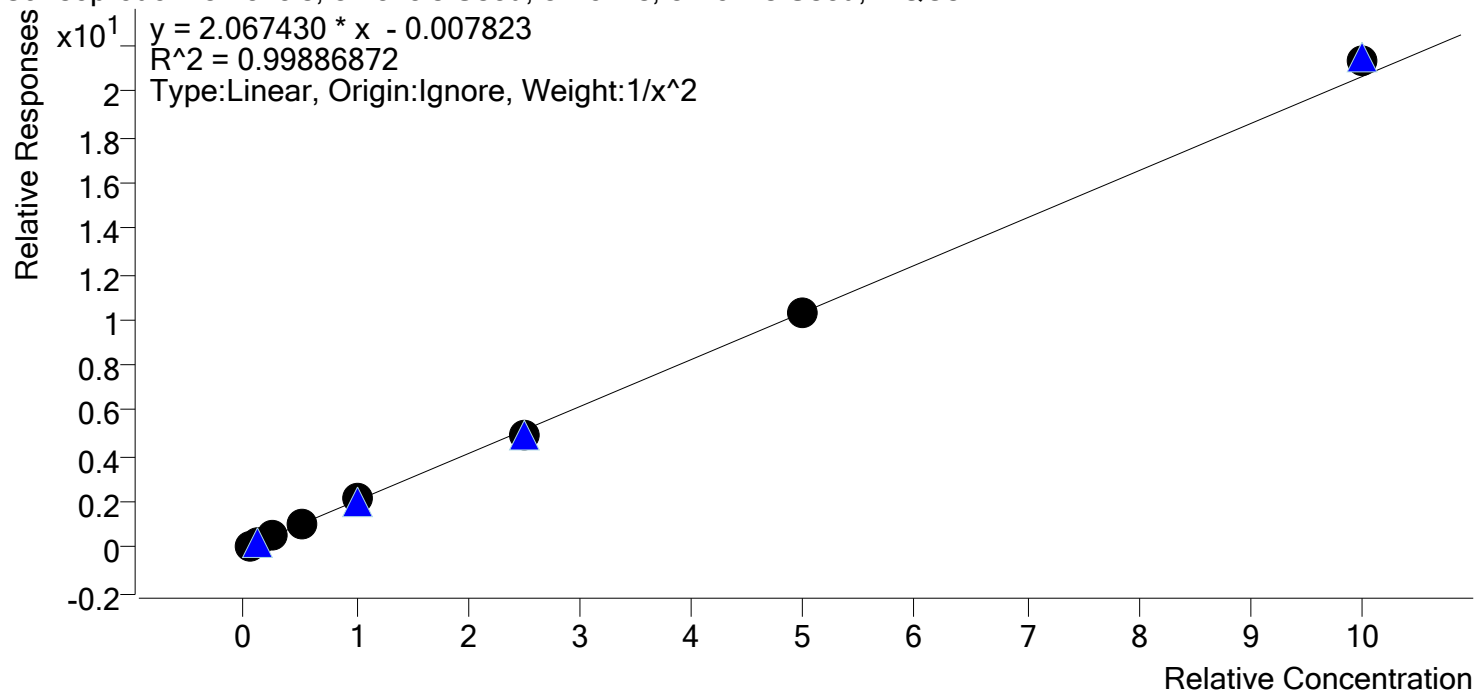
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.9	98.3
cal 2	2	✓	10.0	10.5	104.5
cal 3	3	✓	25.0	24.6	98.3
cal 4	4	✓	50.0	48.5	97.0
cal 5	5	✓	100.0	102.2	102.2
cal 6	6	✓	250.0	242.8	97.1
cal 7	7	✓	500.0	496.5	99.3
cal 8	8	✓	1000.0	1032.9	103.3

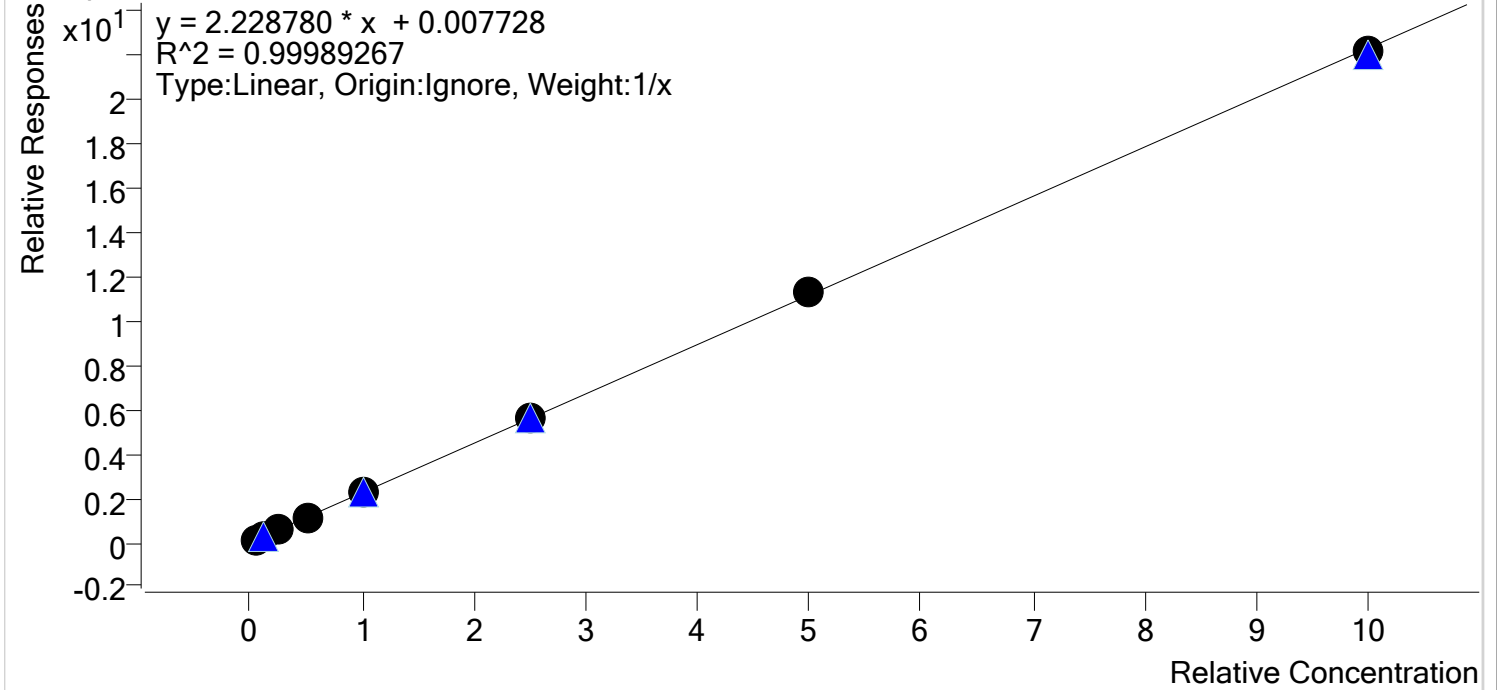
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.7	94.2
cal 2	2	✓	10.0	10.3	102.6
cal 3	3	✓	25.0	25.2	101.0
cal 4	4	✓	50.0	50.3	100.6
cal 5	5	✓	100.0	101.7	101.7
cal 6	6	✓	250.0	248.3	99.3
cal 7	7	✓	500.0	506.1	101.2
cal 8	8	✓	1000.0	993.3	99.3

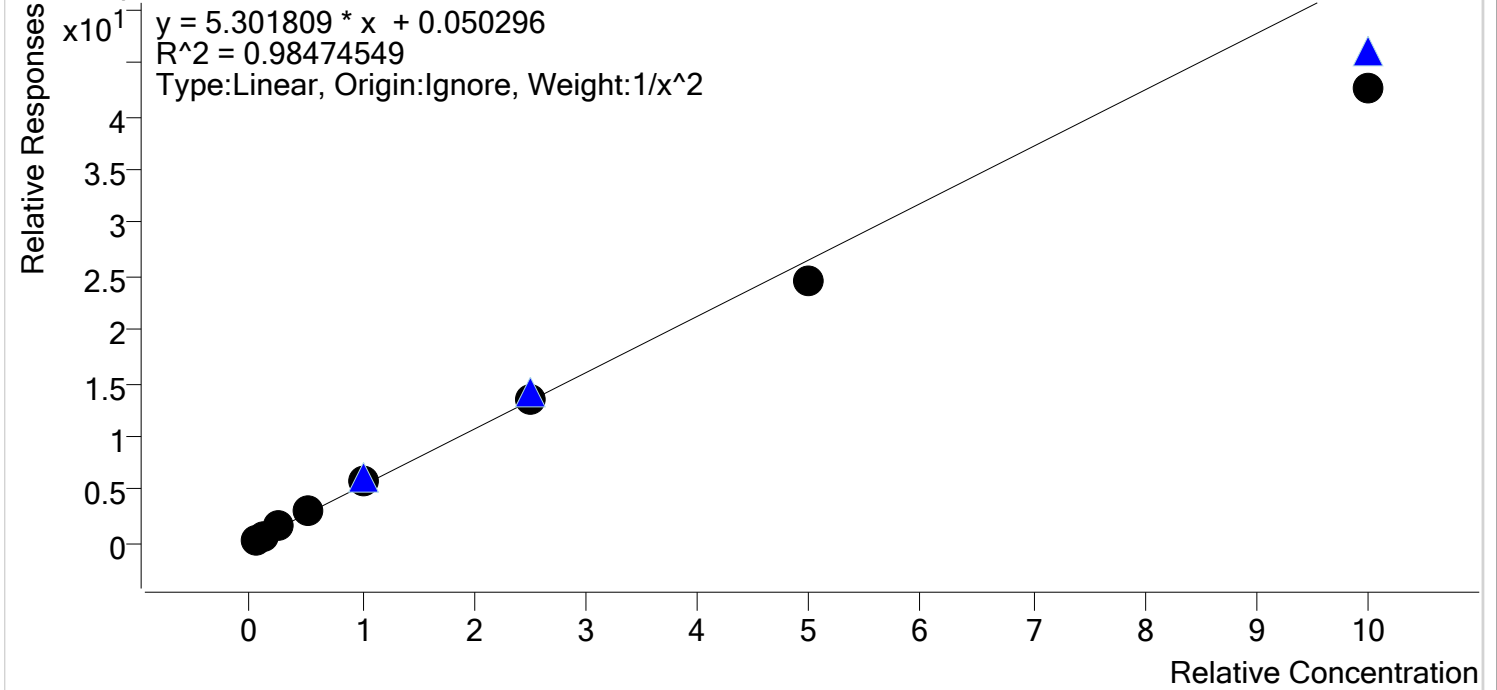


# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.6	91.5
cal 2	2	✓	10.0	11.2	112.0
cal 3	3	✓	25.0	27.0	108.0
cal 4	4	✓	50.0	53.8	107.7
cal 5	5	✓	100.0	105.7	105.7
cal 6	6	✓	250.0	254.8	101.9
cal 7	7	✓	500.0	465.5	93.1
cal 8	8	✓	1000.0	801.6	80.2

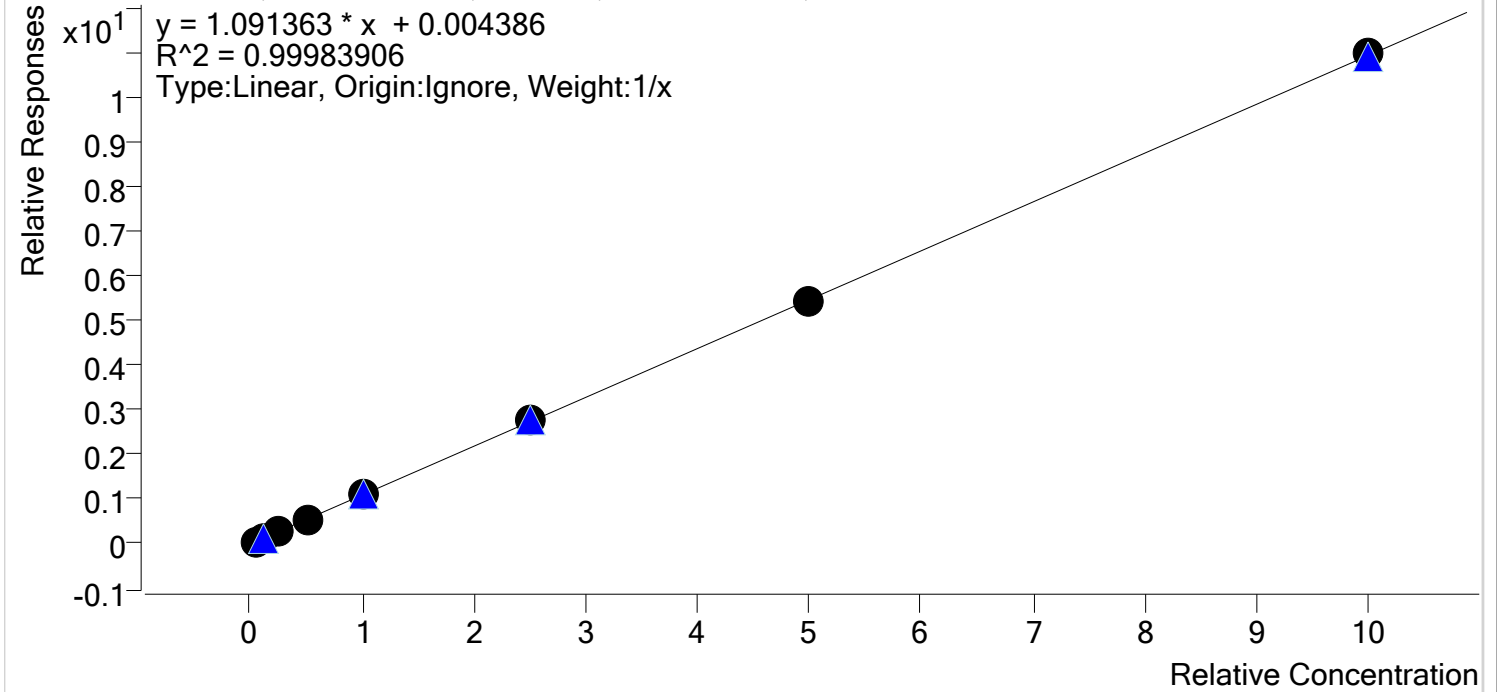
# Compound Calibration Report




**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.4	88.5
cal 2	2	✓	10.0	11.0	109.7
cal 3	3	✓	25.0	25.4	101.7
cal 4	4	✓	50.0	49.8	99.6
cal 5	5	✓	100.0	101.0	101.0
cal 6	6	✓	250.0	251.1	100.4
cal 7	7	✓	500.0	493.4	98.7
cal 8	8	✓	1000.0	1004.0	100.4

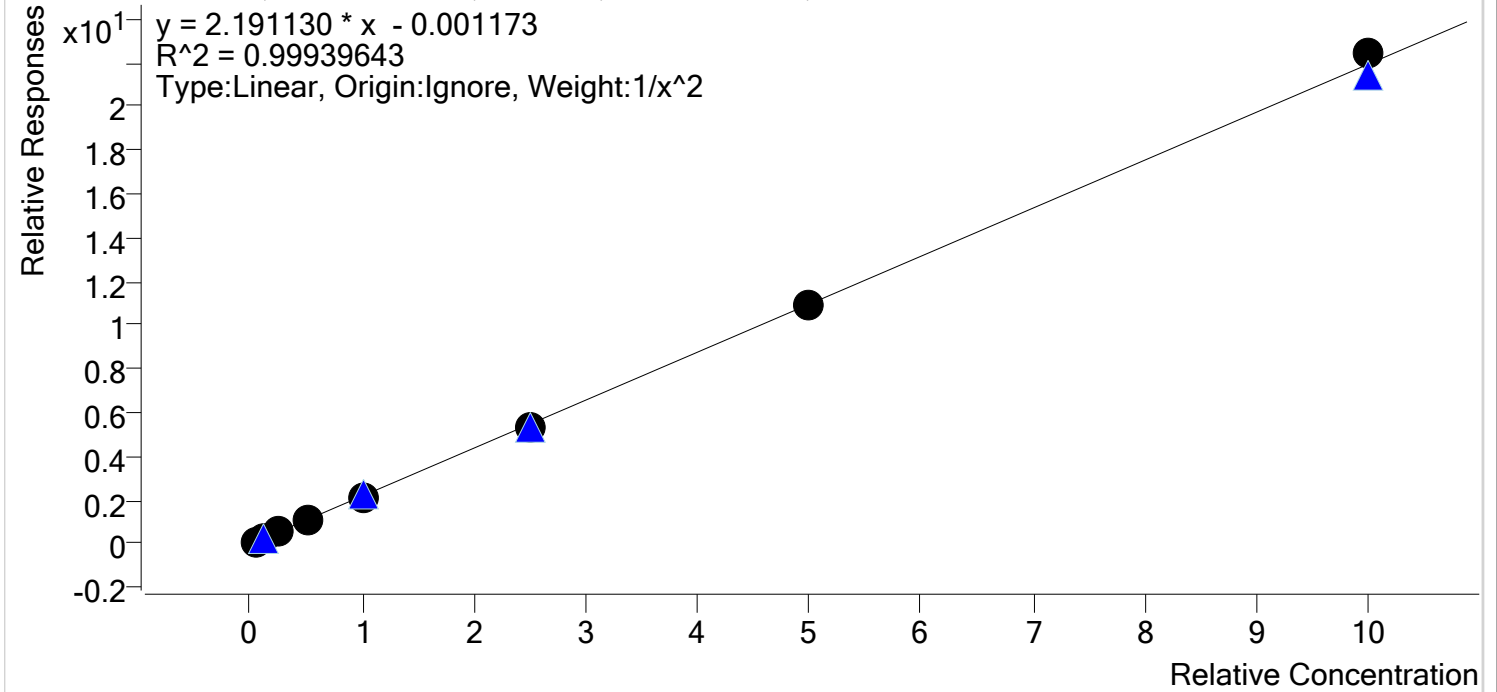
# Compound Calibration Report




**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Codeine

**Internal Standard** Codeine-D6

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



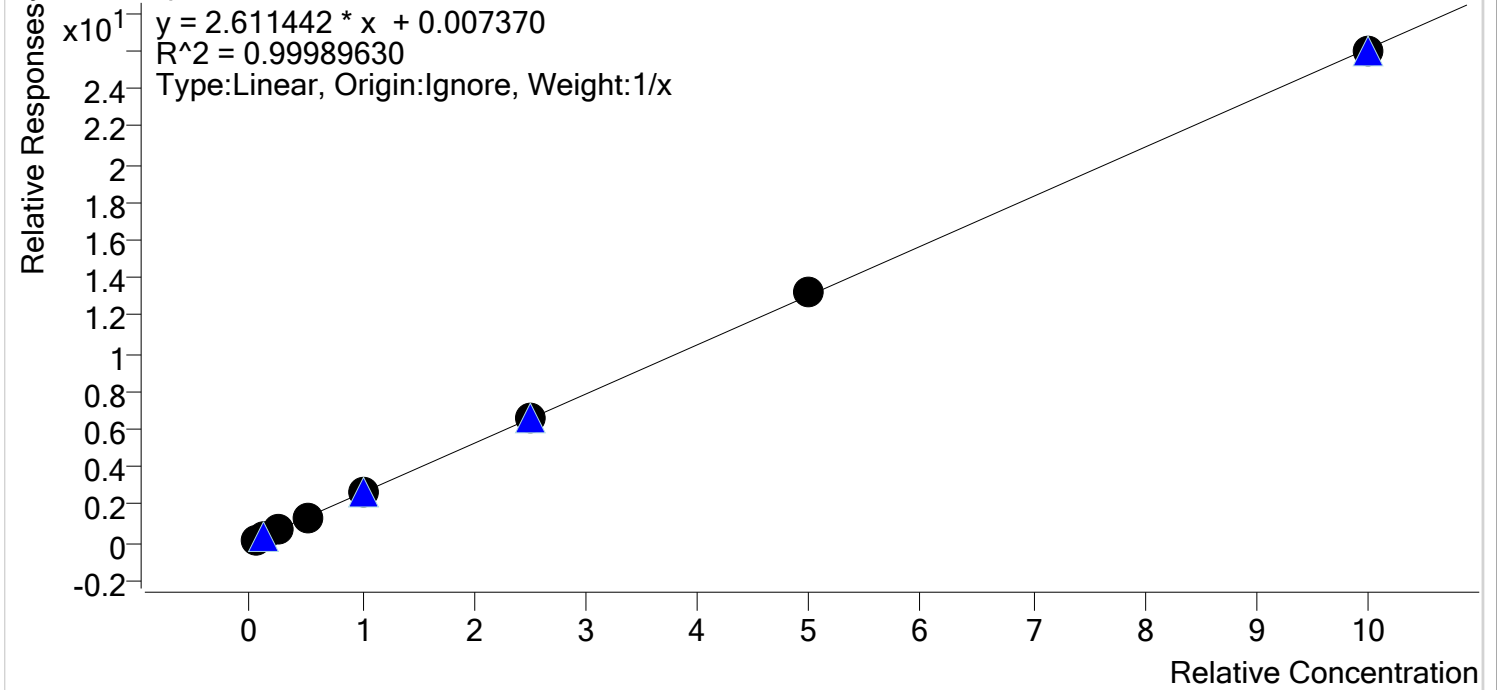
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.9	98.6
cal 2	2	✓	10.0	10.3	102.7
cal 3	3	✓	25.0	25.4	101.7
cal 4	4	✓	50.0	49.1	98.3
cal 5	5	✓	100.0	99.6	99.6
cal 6	6	✓	250.0	241.4	96.6
cal 7	7	✓	500.0	502.0	100.4
cal 8	8	✓	1000.0	1022.2	102.2

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.9	97.3
cal 2	2	✓	10.0	10.2	102.5
cal 3	3	✓	25.0	24.9	99.8
cal 4	4	✓	50.0	49.0	98.0
cal 5	5	✓	100.0	102.0	102.0
cal 6	6	✓	250.0	249.9	100.0
cal 7	7	✓	500.0	505.9	101.2
cal 8	8	✓	1000.0	993.2	99.3

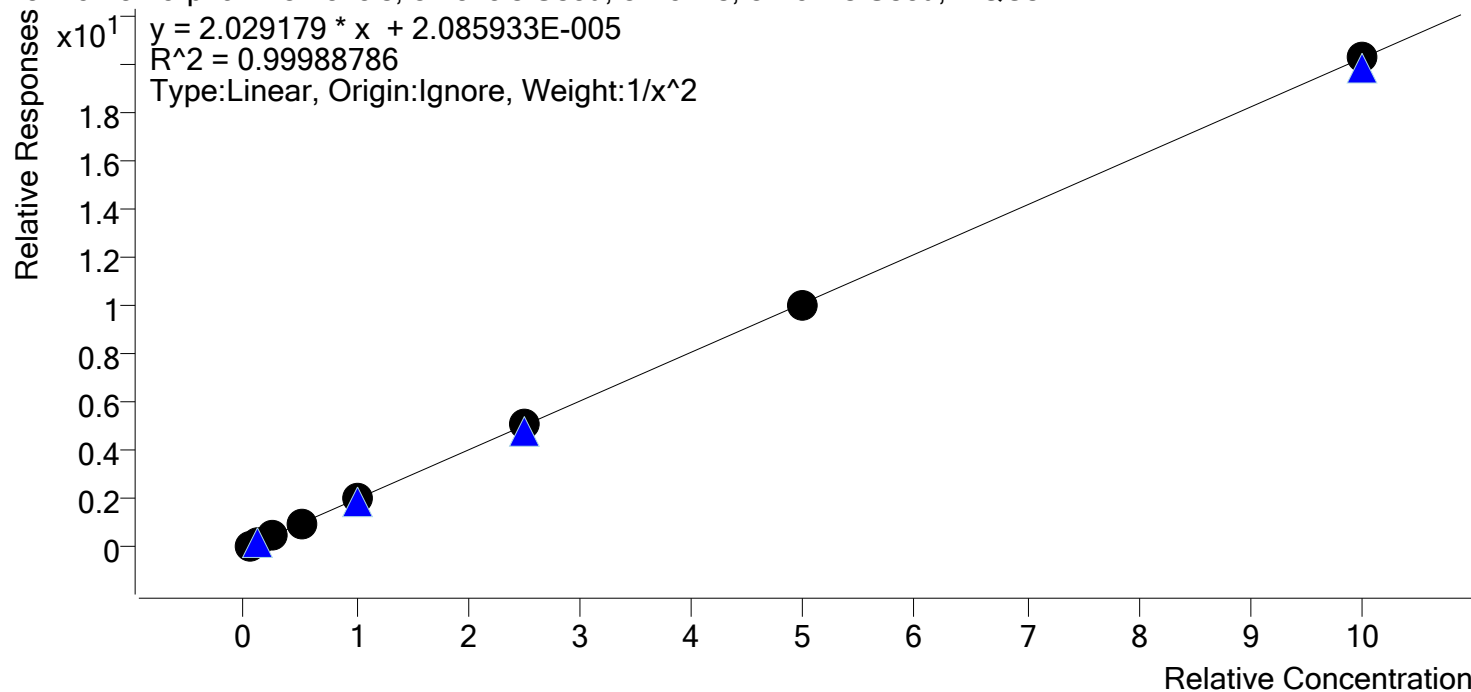
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	5.0	99.4
cal 2	2	✓	10.0	10.1	101.2
cal 3	3	✓	25.0	25.2	100.9
cal 4	4	✓	50.0	49.4	98.7
cal 5	5	✓	100.0	100.2	100.2
cal 6	6	✓	250.0	251.7	100.7
cal 7	7	✓	500.0	494.4	98.9
cal 8	8	✓	1000.0	1001.0	100.1

# Compound Calibration Report

A

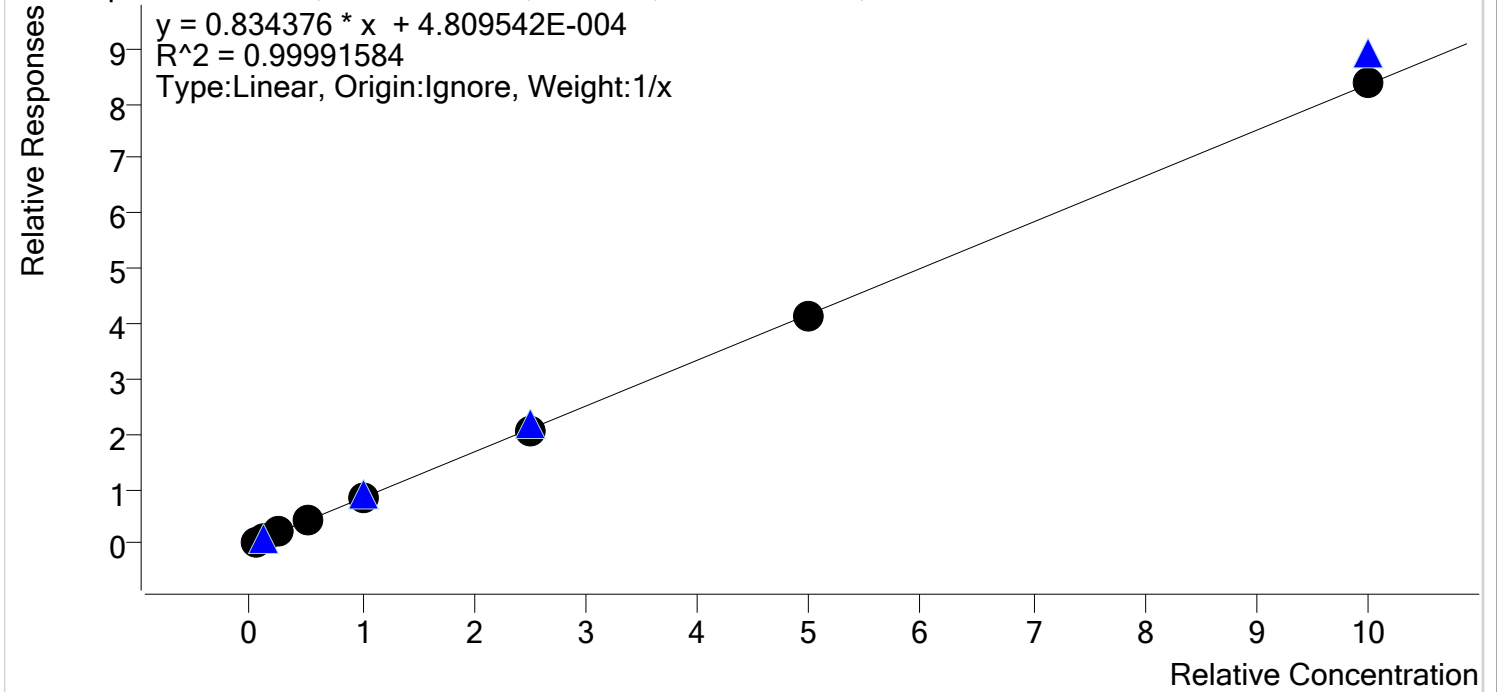


**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Dextrorphan

**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
cal 1	1	✓	5.0	4.9	98.3
cal 2	2	✓	10.0	10.3	103.2
cal 3	3	✓	25.0	25.1	100.3
cal 4	4	✓	50.0	49.5	99.0
cal 5	5	✓	100.0	100.2	100.2
cal 6	6	✓	250.0	248.6	99.4
cal 7	7	✓	500.0	494.1	98.8
cal 8	8	✓	1000.0	1007.3	100.7

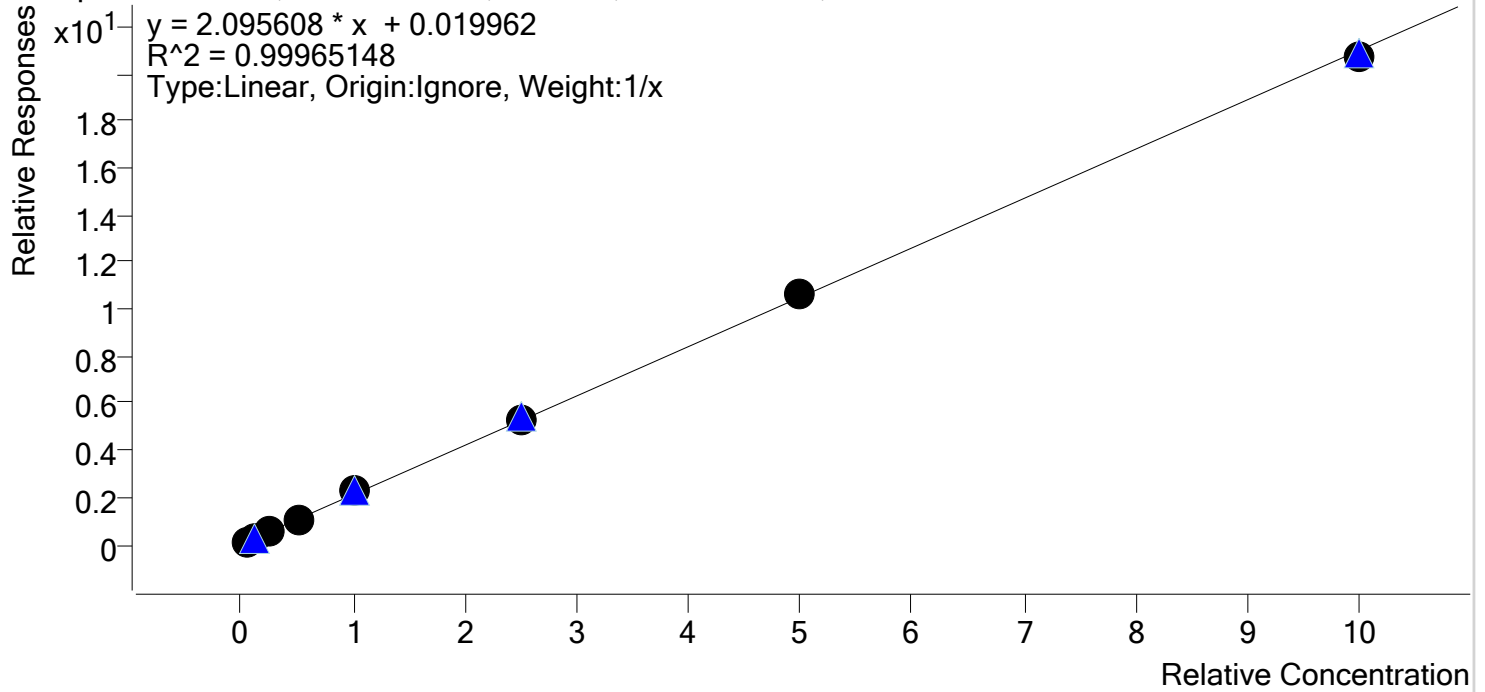
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.6	92.8
cal 2	2	✓	10.0	9.9	99.1
cal 3	3	✓	25.0	25.1	100.3
cal 4	4	✓	50.0	50.8	101.6
cal 5	5	✓	100.0	105.1	105.1
cal 6	6	✓	250.0	254.2	101.7
cal 7	7	✓	500.0	504.7	100.9
cal 8	8	✓	1000.0	985.7	98.6

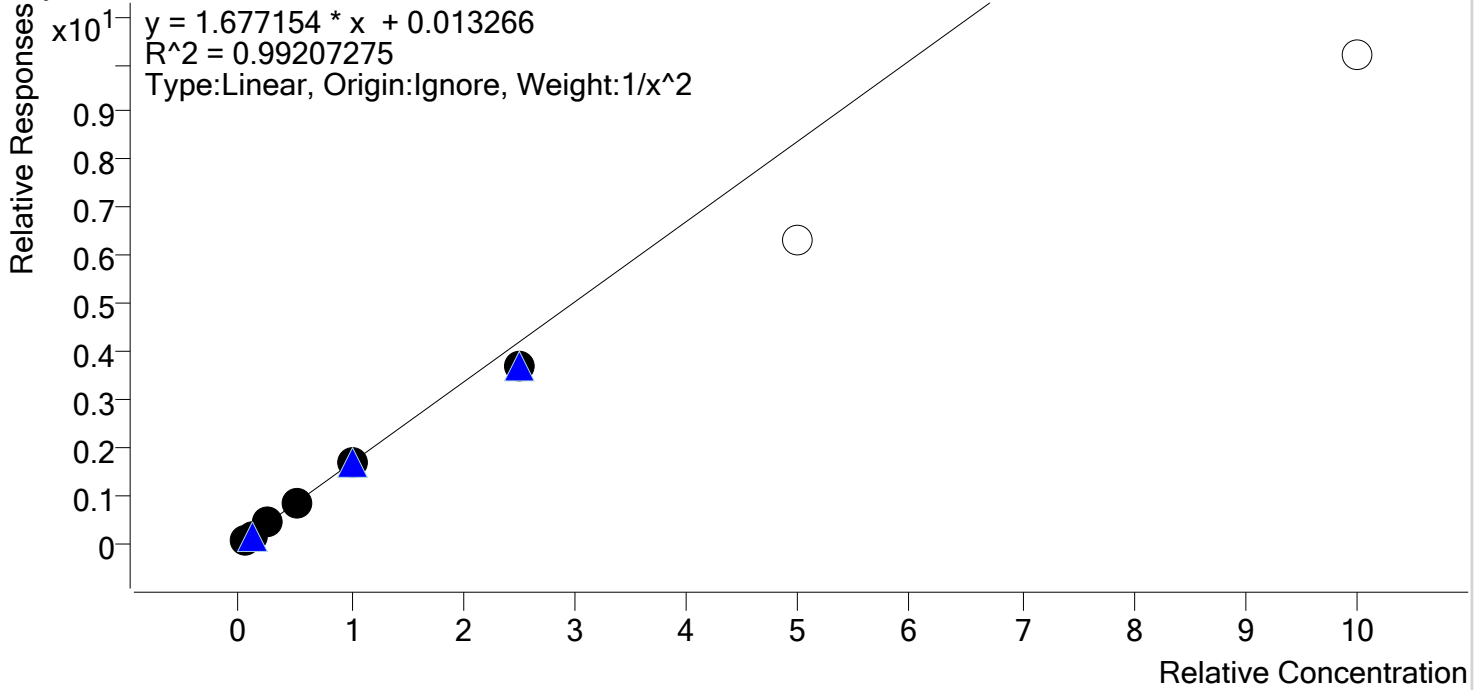
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Dihydrocodeine **Internal Standard** Dihydrocodeine-D6

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.8	95.5
cal 2	2	✓	10.0	10.6	106.3
cal 3	3	✓	25.0	26.5	106.0
cal 4	4	✓	50.0	51.7	103.4
cal 5	5	✓	100.0	101.3	101.3
cal 6	6	✓	250.0	218.8	87.5
cal 7	7	✗	500.0	378.2	75.6
cal 8	8	✗	1000.0	607.8	60.8



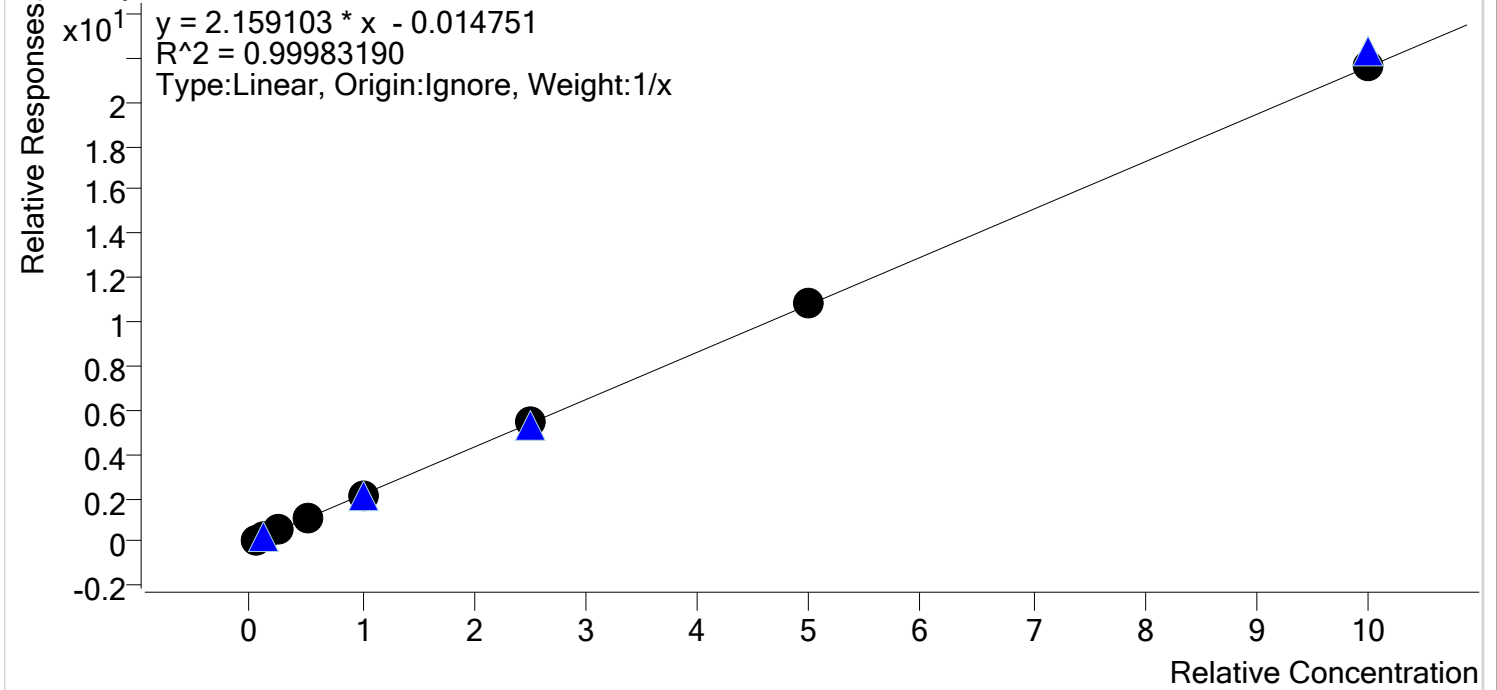
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	5.4	107.4
cal 2	2	✓	10.0	10.3	102.7
cal 3	3	✓	25.0	24.0	96.1
cal 4	4	✓	50.0	47.9	95.7
cal 5	5	✓	100.0	97.0	97.0
cal 6	6	✓	250.0	250.7	100.3
cal 7	7	✓	500.0	504.4	100.9
cal 8	8	✓	1000.0	1000.4	100.0

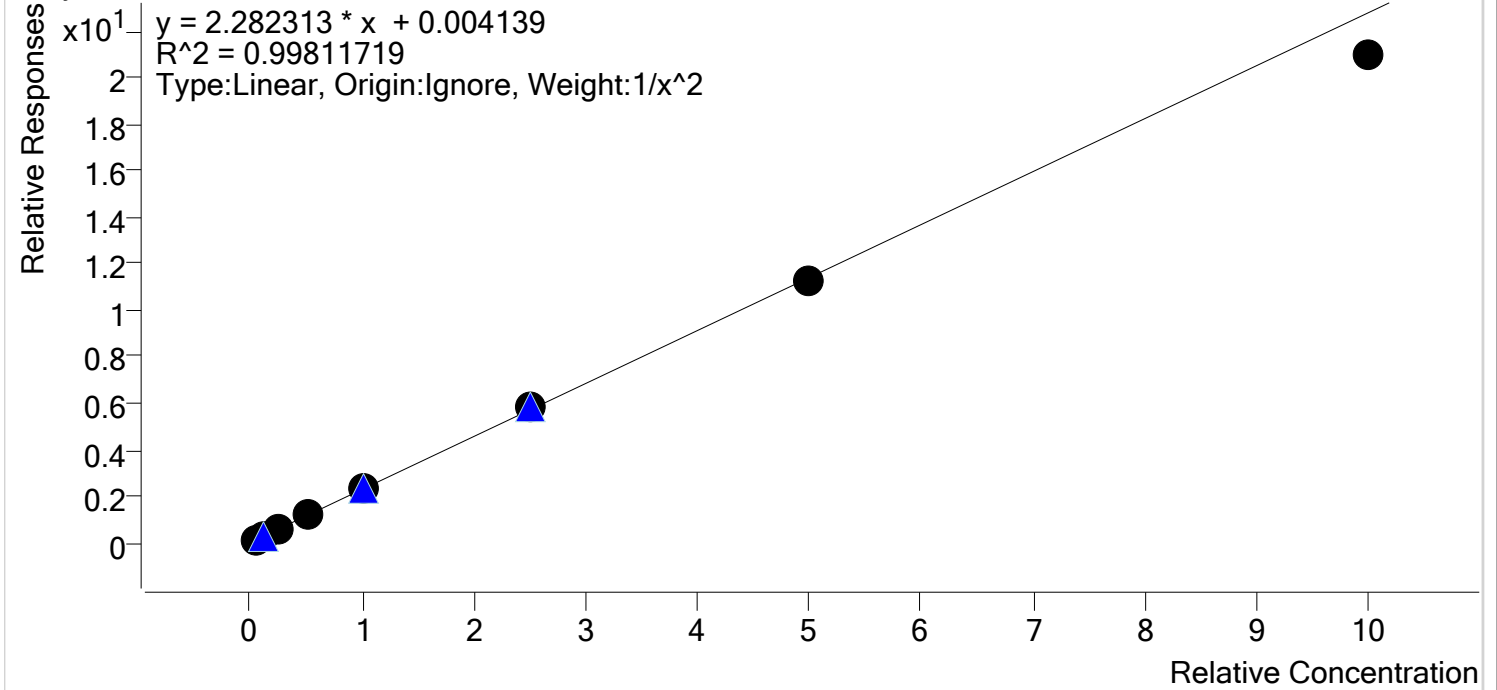
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.9	98.1
cal 2	2	✓	10.0	10.3	103.2
cal 3	3	✓	25.0	25.1	100.2
cal 4	4	✓	50.0	50.6	101.2
cal 5	5	✓	100.0	103.3	103.3
cal 6	6	✓	250.0	256.9	102.8
cal 7	7	✓	500.0	496.3	99.3
cal 8	8	✓	1000.0	919.4	91.9

# Compound Calibration Report

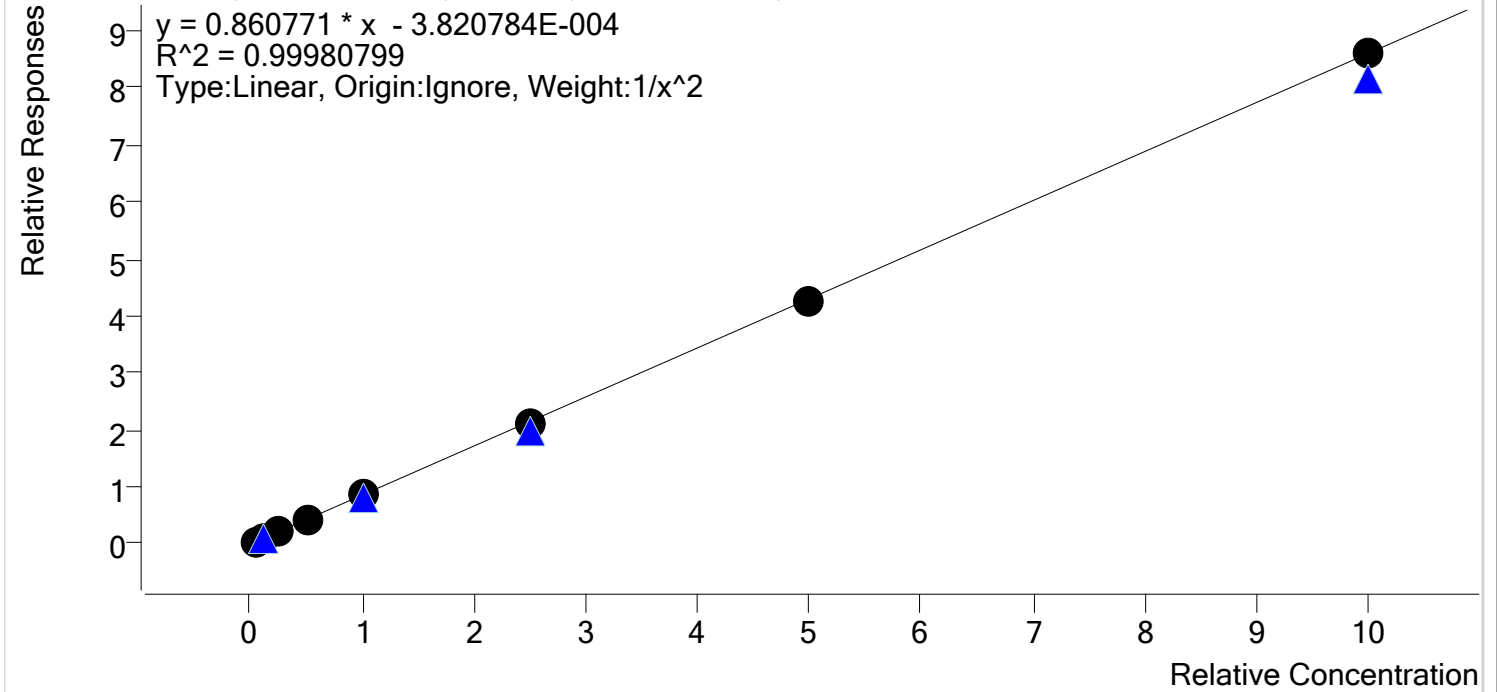
A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	5.0	99.1
cal 2	2	✓	10.0	10.2	102.0
cal 3	3	✓	25.0	24.9	99.6
cal 4	4	✓	50.0	49.5	98.9
cal 5	5	✓	100.0	101.7	101.7
cal 6	6	✓	250.0	248.2	99.3
cal 7	7	✓	500.0	496.9	99.4
cal 8	8	✓	1000.0	999.7	100.0

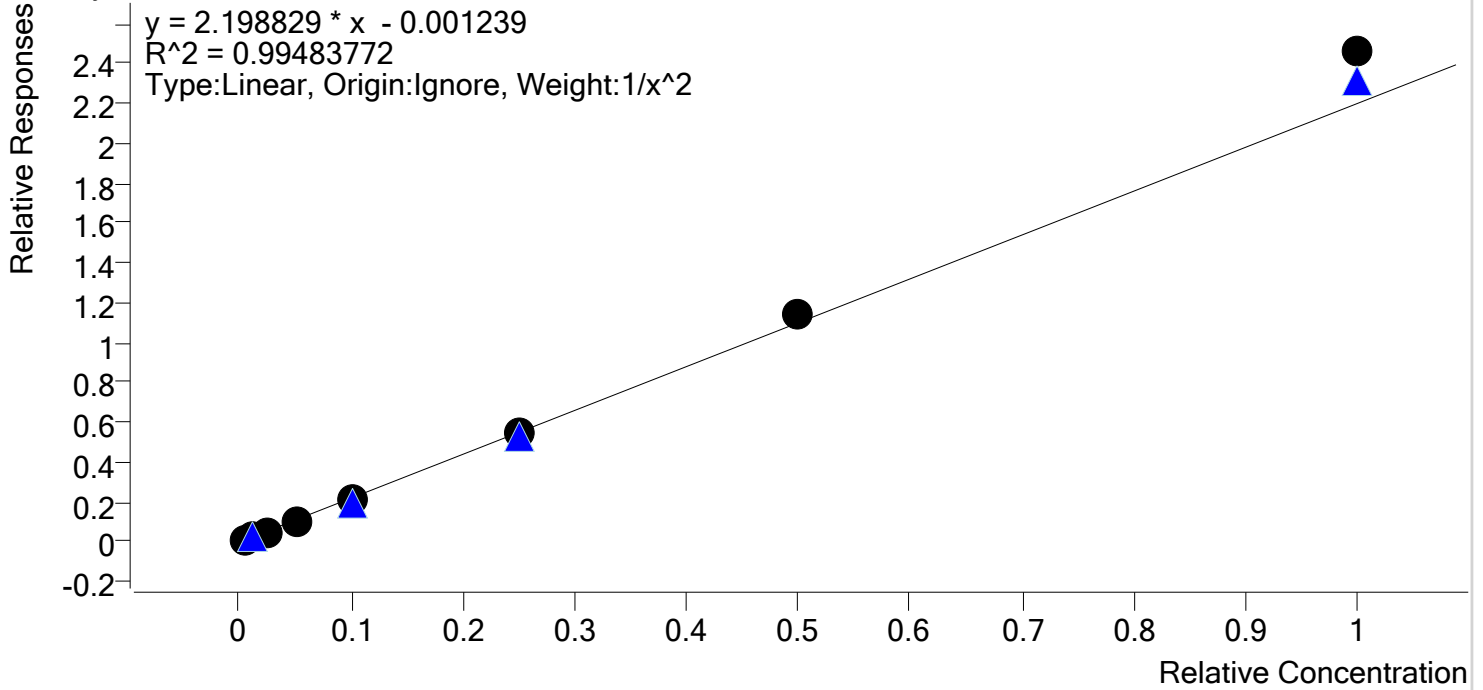
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Fentanyl **Internal Standard** Fentanyl-D5

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



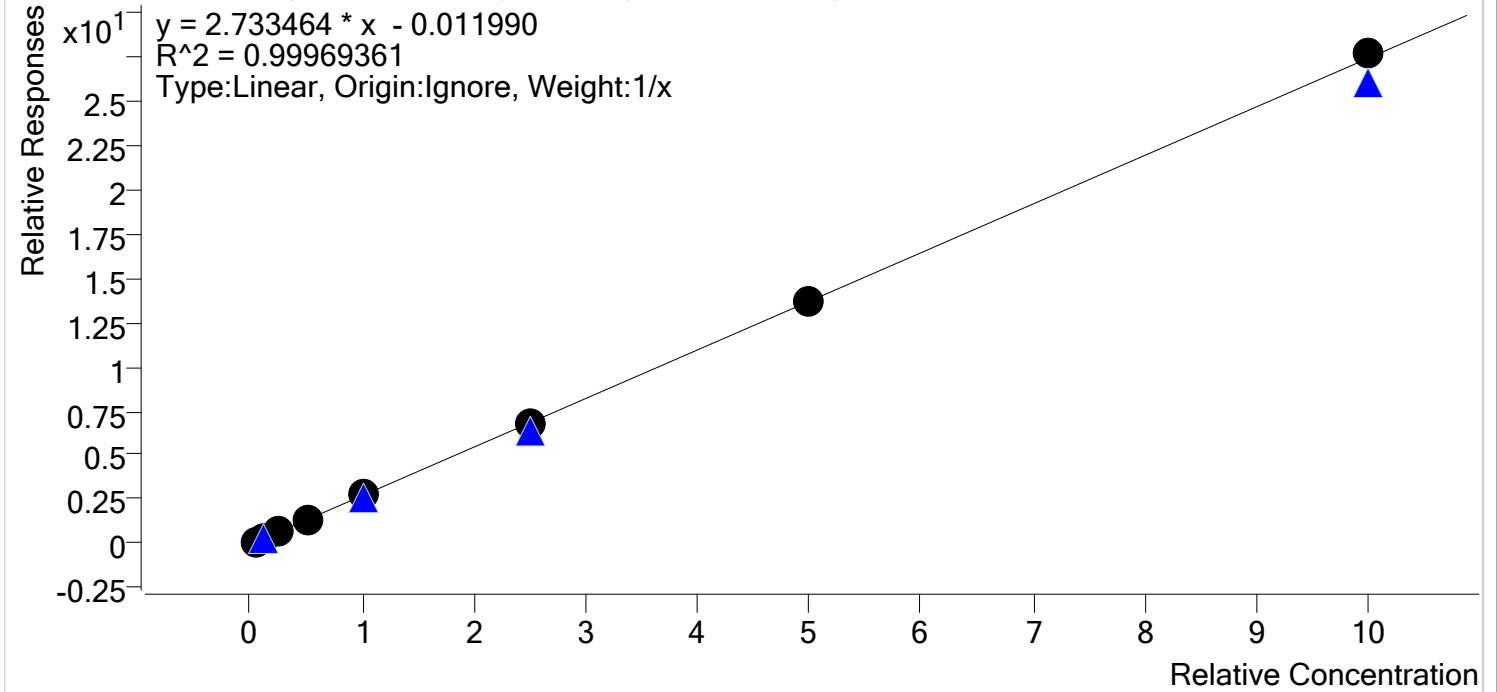
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	0.5	0.5	101.8
cal 2	2	✓	1.0	1.0	101.0
cal 3	3	✓	2.5	2.3	91.7
cal 4	4	✓	5.0	4.7	94.6
cal 5	5	✓	10.0	9.7	96.8
cal 6	6	✓	25.0	24.5	98.2
cal 7	7	✓	50.0	52.0	104.1
cal 8	8	✓	100.0	111.8	111.8

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	5.3	106.8
cal 2	2	✓	10.0	10.3	103.1
cal 3	3	✓	25.0	24.6	98.3
cal 4	4	✓	50.0	46.1	92.2
cal 5	5	✓	100.0	100.9	100.9
cal 6	6	✓	250.0	245.4	98.2
cal 7	7	✓	500.0	497.7	99.5
cal 8	8	✓	1000.0	1009.6	101.0

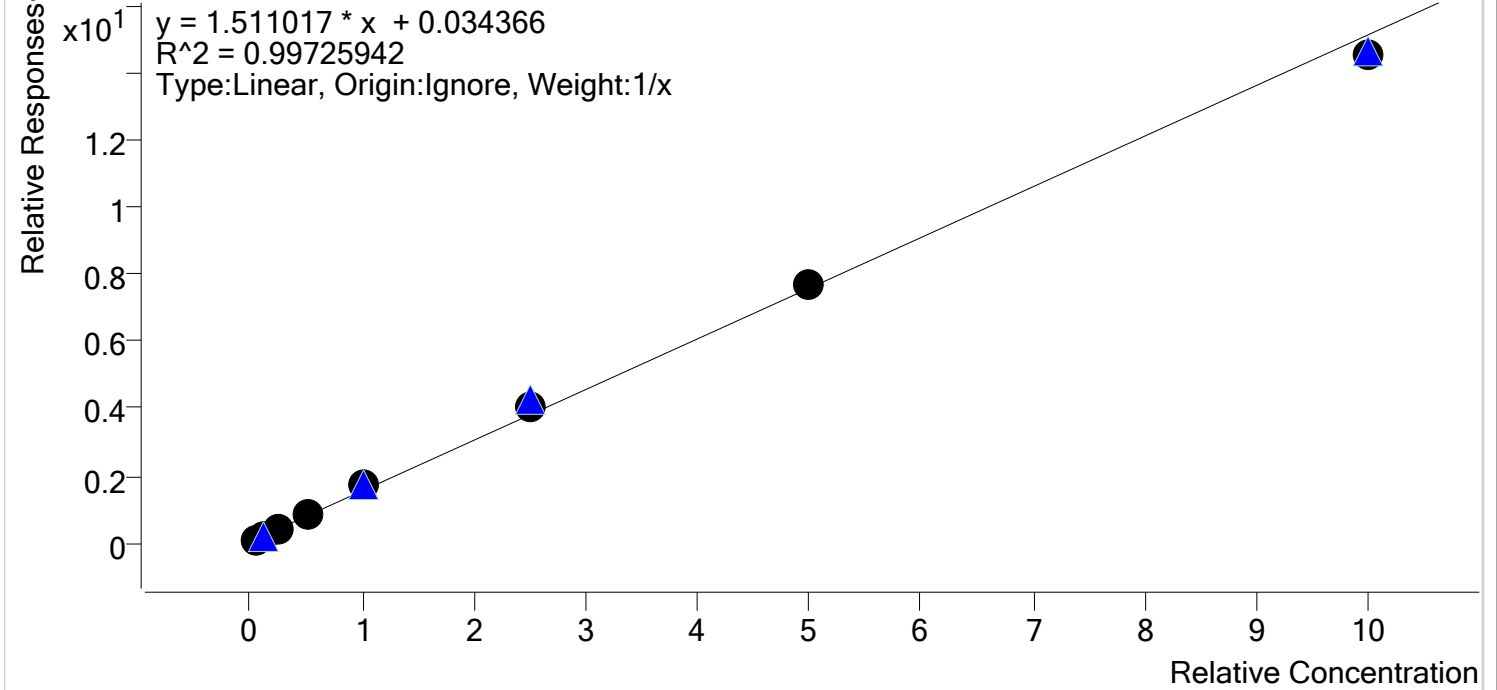
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	3.7	74.1
cal 2	2	✓	10.0	9.6	96.0
cal 3	3	✓	25.0	26.4	105.5
cal 4	4	✓	50.0	54.3	108.6
cal 5	5	✓	100.0	111.7	111.7
cal 6	6	✓	250.0	266.6	106.6
cal 7	7	✓	500.0	506.4	101.3
cal 8	8	✓	1000.0	961.2	96.1

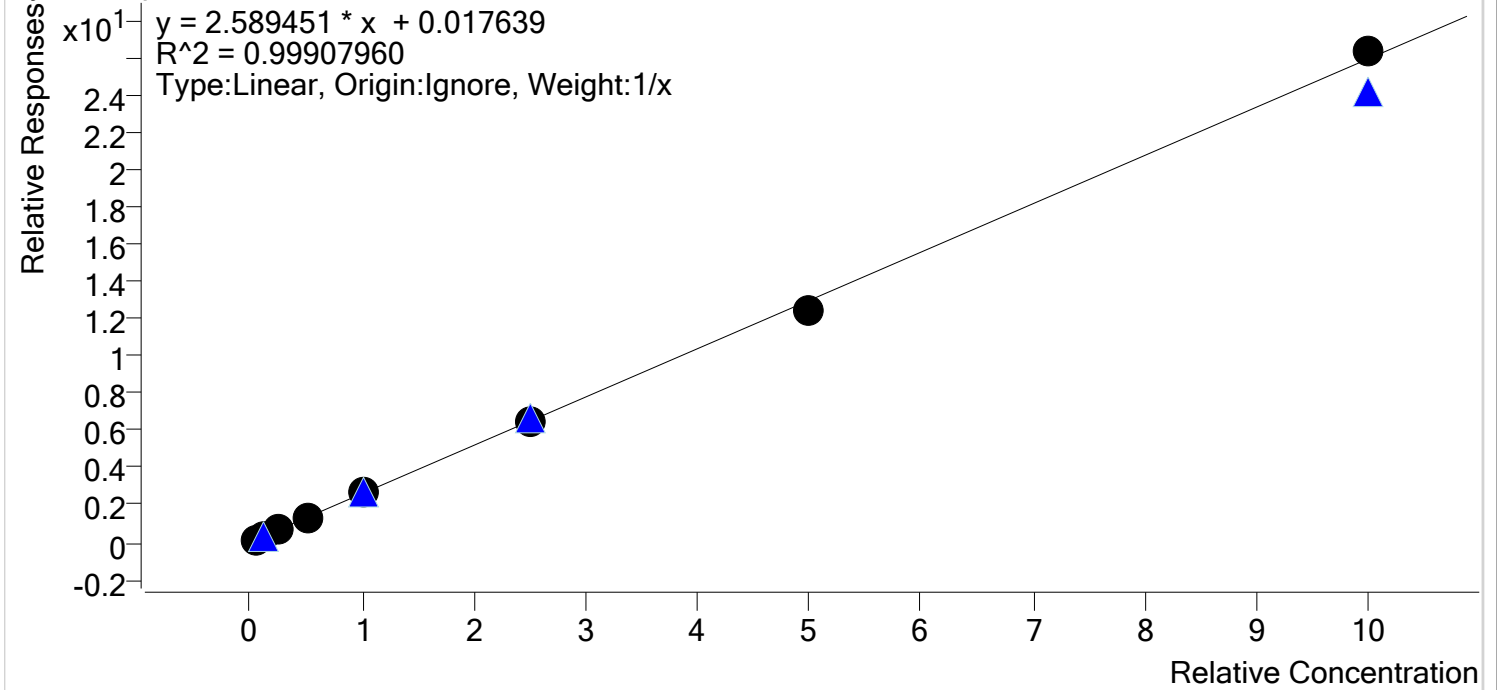
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.5	89.8
cal 2	2	✓	10.0	10.0	100.0
cal 3	3	✓	25.0	26.1	104.6
cal 4	4	✓	50.0	51.7	103.3
cal 5	5	✓	100.0	106.3	106.3
cal 6	6	✓	250.0	246.0	98.4
cal 7	7	✓	500.0	480.3	96.1
cal 8	8	✓	1000.0	1015.1	101.5

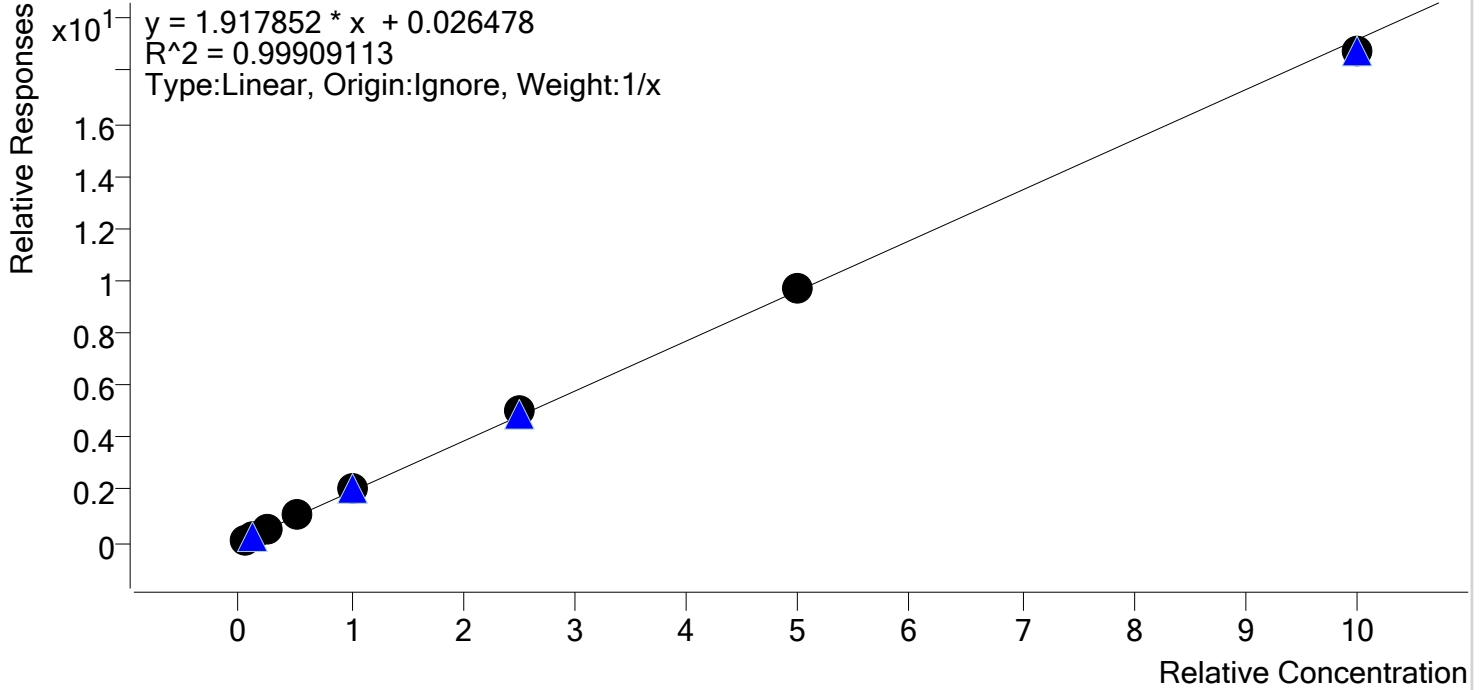
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.2	83.9
cal 2	2	✓	10.0	10.0	99.5
cal 3	3	✓	25.0	25.8	103.1
cal 4	4	✓	50.0	52.5	105.0
cal 5	5	✓	100.0	105.8	105.8
cal 6	6	✓	250.0	259.2	103.7
cal 7	7	✓	500.0	506.5	101.3
cal 8	8	✓	1000.0	976.1	97.6



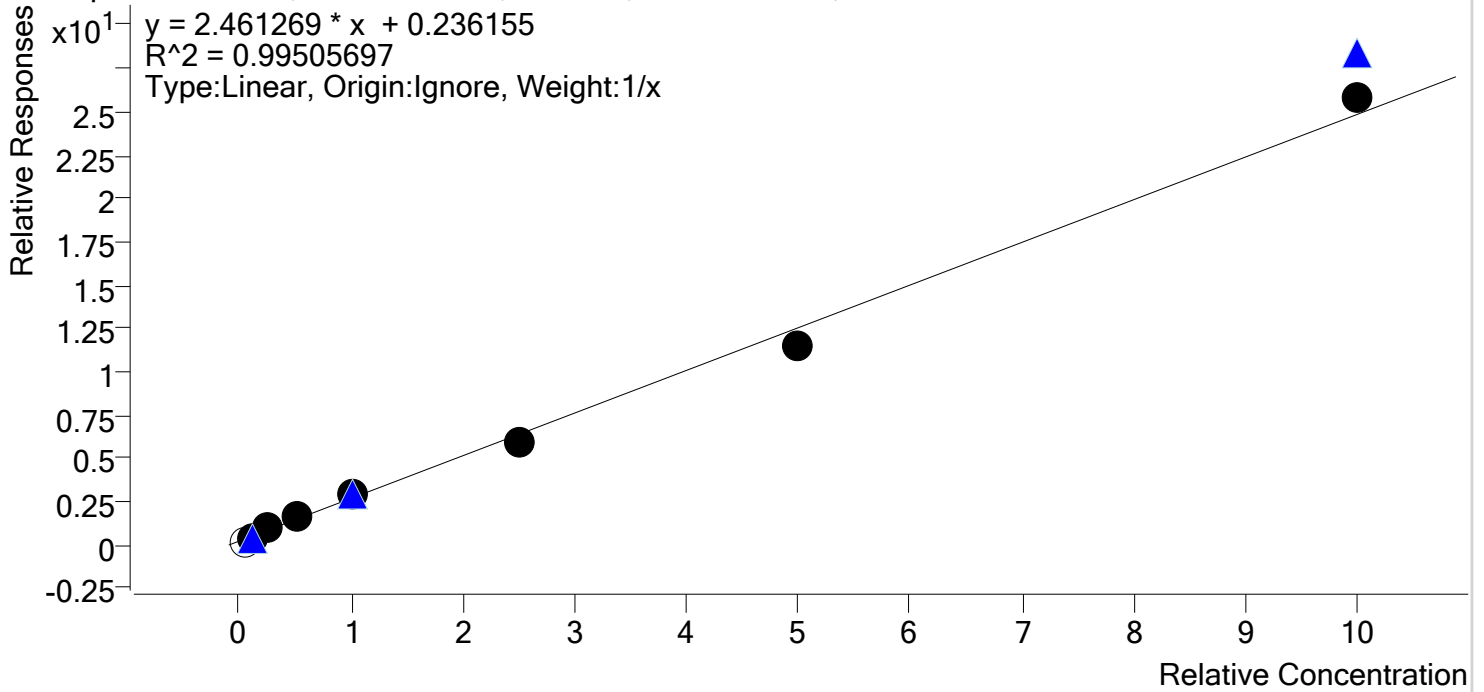
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Lorazepam **Internal Standard** Clonazepam-D4

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	x	5.0	0.0	0.0
cal 2	2	✓	10.0	7.7	76.8
cal 3	3	✓	25.0	27.8	111.4
cal 4	4	✓	50.0	57.6	115.3
cal 5	5	✓	100.0	106.5	106.5
cal 6	6	✓	250.0	234.8	93.9
cal 7	7	✓	500.0	460.0	92.0
cal 8	8	✓	1000.0	1040.5	104.1

# Compound Calibration Report

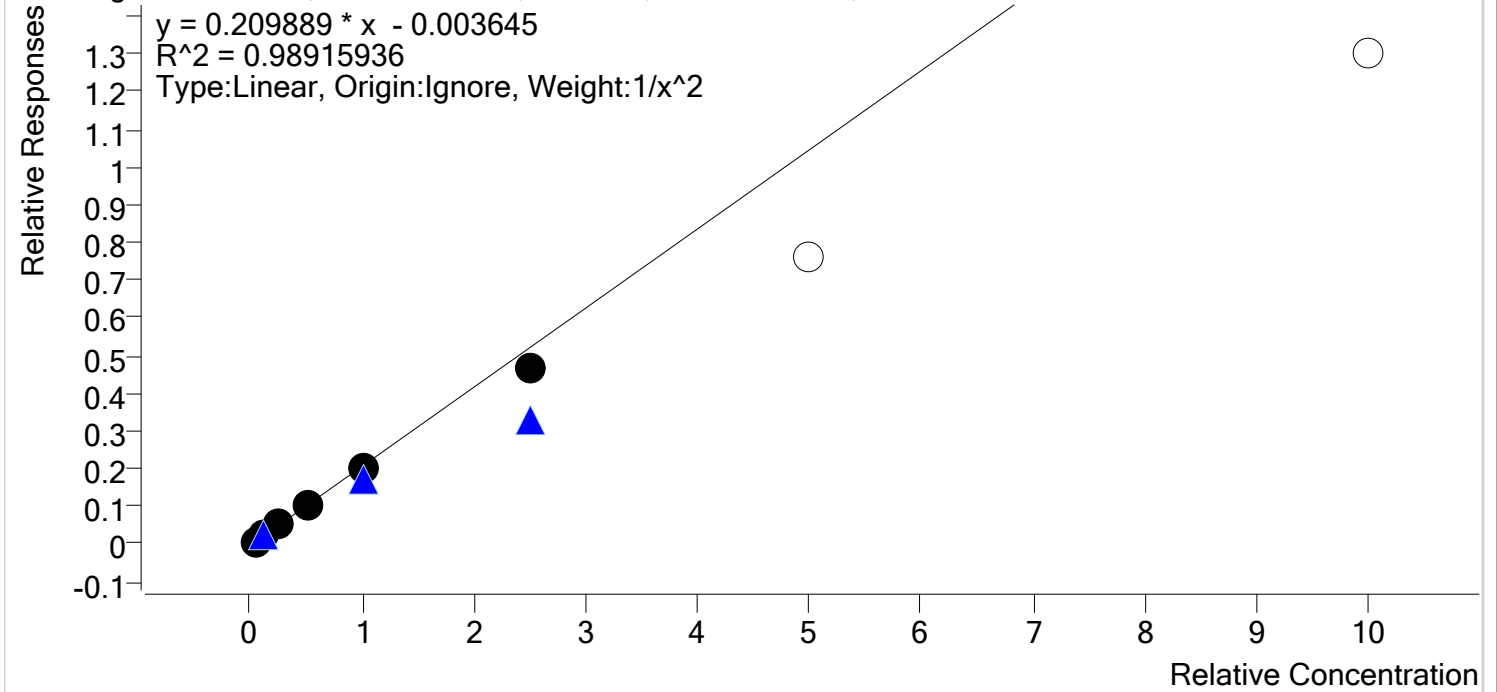
A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Lamotrigine

**Internal Standard** EDDP-D3

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.7	93.0
cal 2	2	✓	10.0	11.2	112.2
cal 3	3	✓	25.0	25.9	103.6
cal 4	4	✓	50.0	52.6	105.3
cal 5	5	✓	100.0	96.6	96.6
cal 6	6	✓	250.0	223.3	89.3
cal 7	7	x	500.0	364.7	72.9
cal 8	8	x	1000.0	621.7	62.2

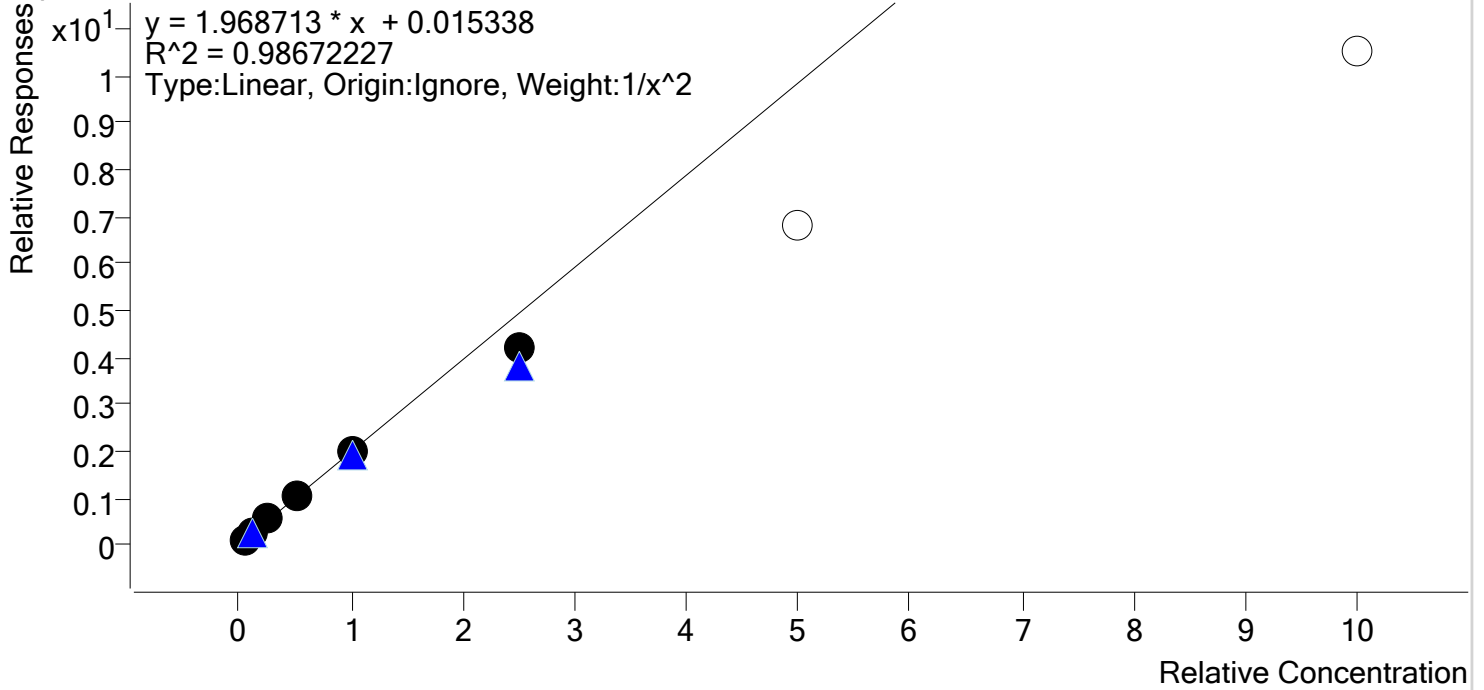
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Meprobamate **Internal Standard** Meprobamate-D7

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.7	93.5
cal 2	2	✓	10.0	11.0	109.6
cal 3	3	✓	25.0	27.0	108.1
cal 4	4	✓	50.0	52.5	105.0
cal 5	5	✓	100.0	98.6	98.6
cal 6	6	✓	250.0	213.0	85.2
cal 7	7	✗	500.0	343.8	68.8
cal 8	8	✗	1000.0	533.8	53.4

# Compound Calibration Report

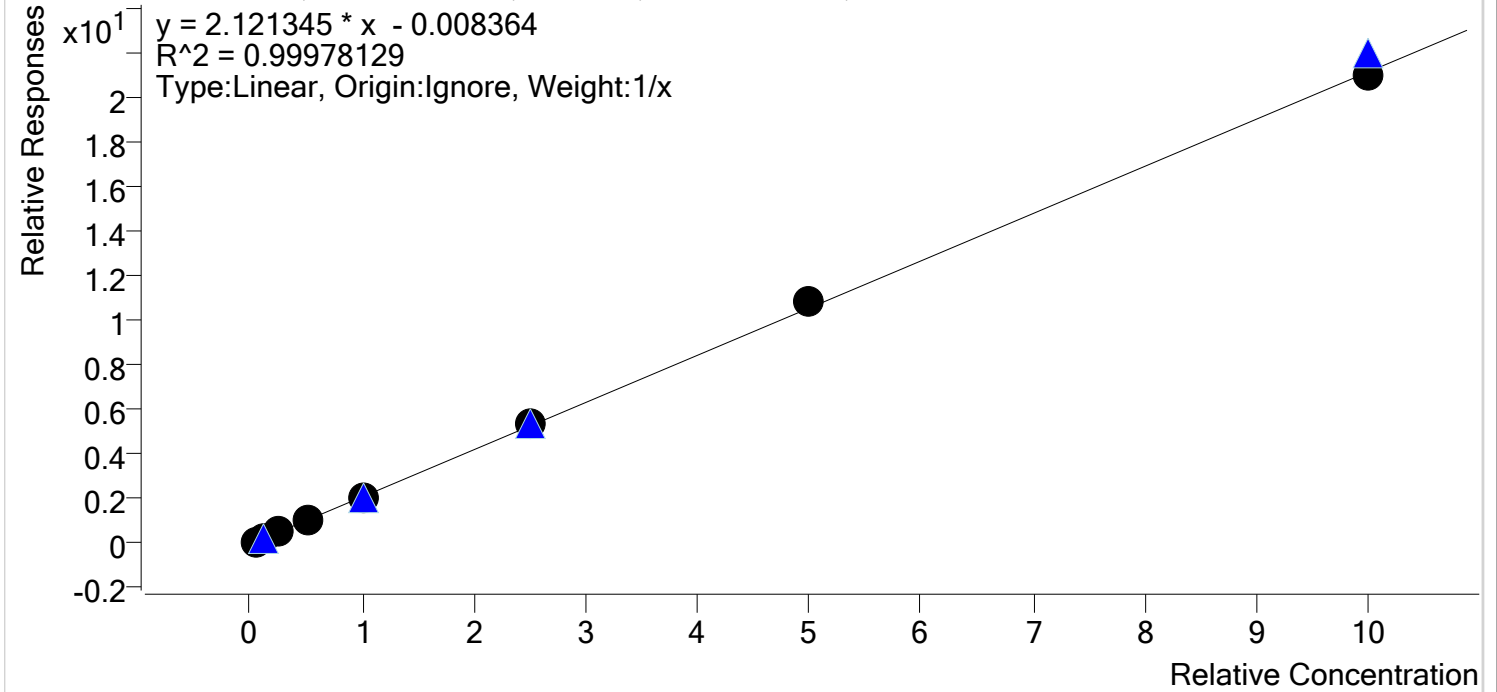
A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	5.1	102.0
cal 2	2	✓	10.0	10.1	101.5
cal 3	3	✓	25.0	24.3	97.2
cal 4	4	✓	50.0	48.7	97.4
cal 5	5	✓	100.0	100.3	100.3
cal 6	6	✓	250.0	251.1	100.5
cal 7	7	✓	500.0	510.5	102.1
cal 8	8	✓	1000.0	989.8	99.0

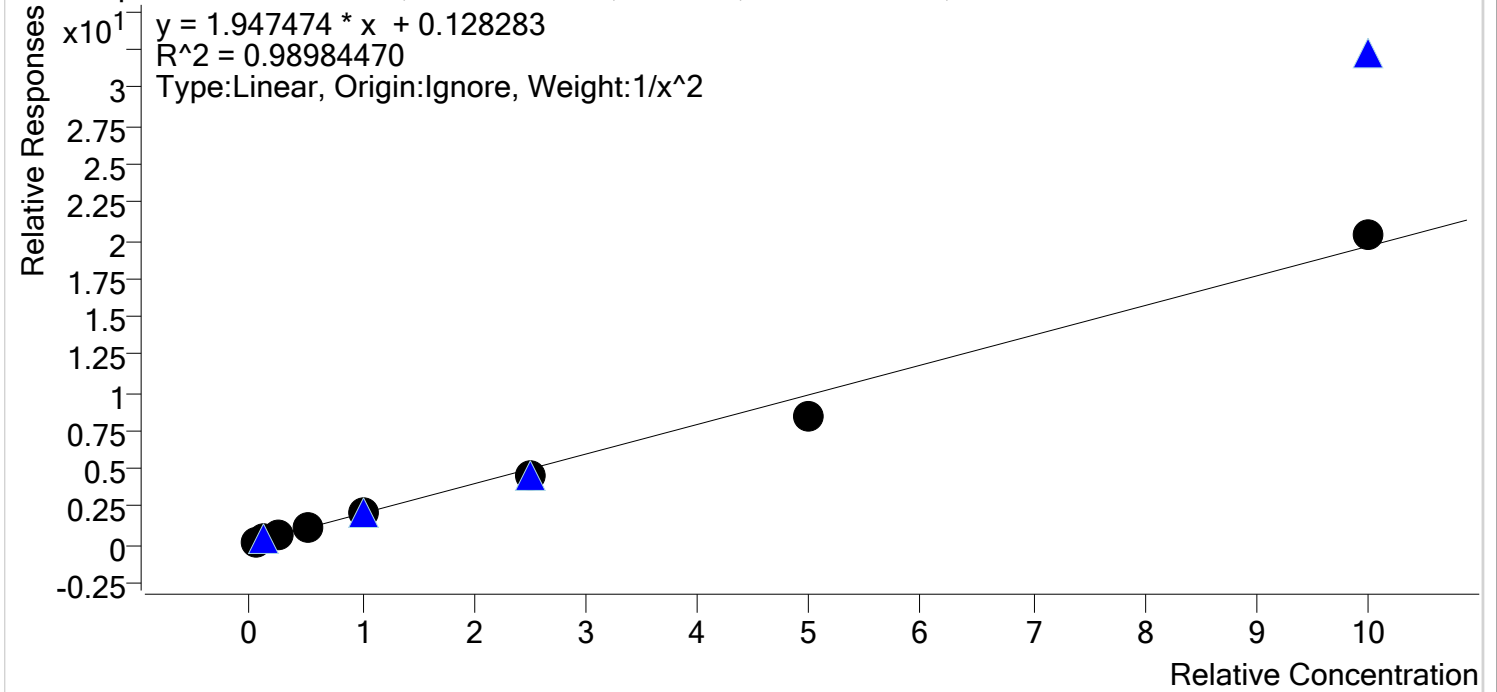
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.9	97.3
cal 2	2	✓	10.0	9.9	99.0
cal 3	3	✓	25.0	28.1	112.2
cal 4	4	✓	50.0	54.7	109.4
cal 5	5	✓	100.0	101.0	101.0
cal 6	6	✓	250.0	228.9	91.5
cal 7	7	✓	500.0	428.0	85.6
cal 8	8	✓	1000.0	1038.1	103.8

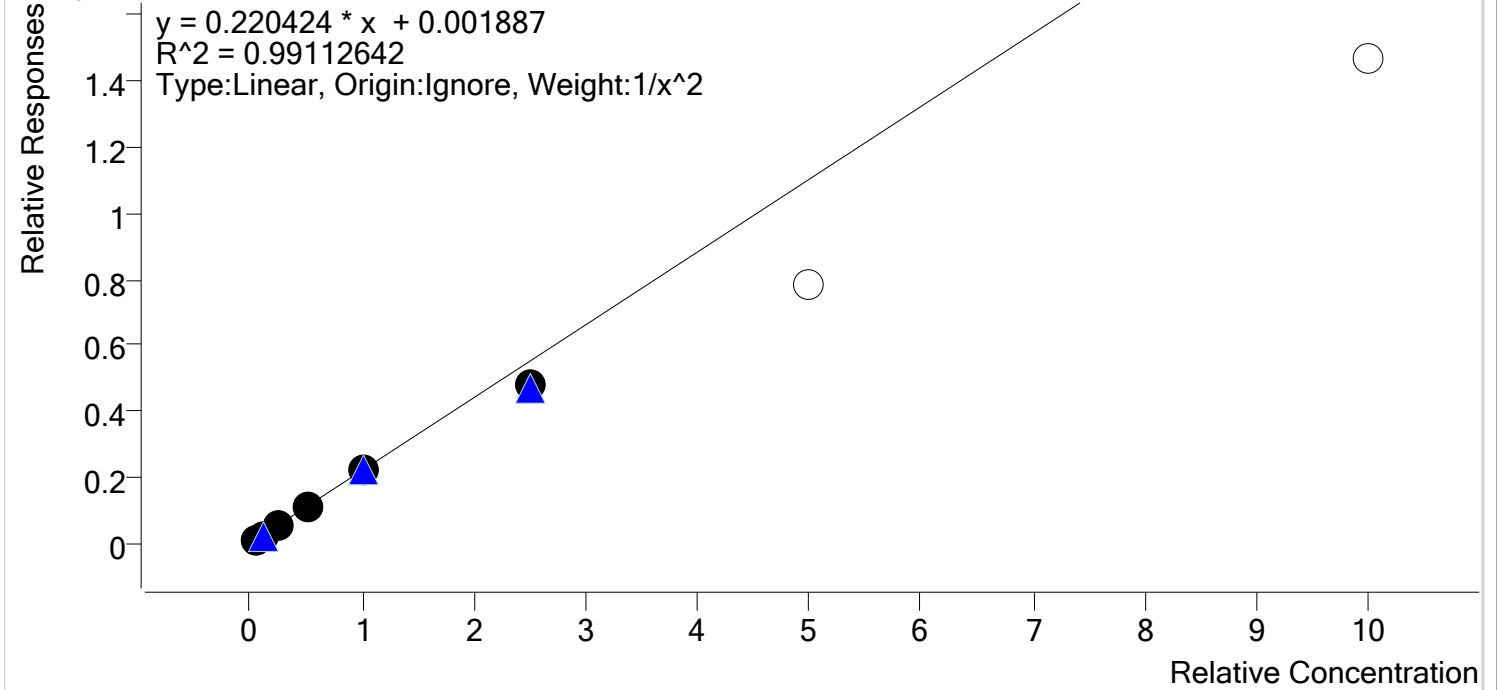
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Metoprolol **Internal Standard** Tramadol-13C-D3

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.8	95.5
cal 2	2	✓	10.0	10.6	105.8
cal 3	3	✓	25.0	26.7	106.9
cal 4	4	✓	50.0	51.9	103.7
cal 5	5	✓	100.0	101.4	101.4
cal 6	6	✓	250.0	216.5	86.6
cal 7	7	✗	500.0	356.9	71.4
cal 8	8	✗	1000.0	663.6	66.4

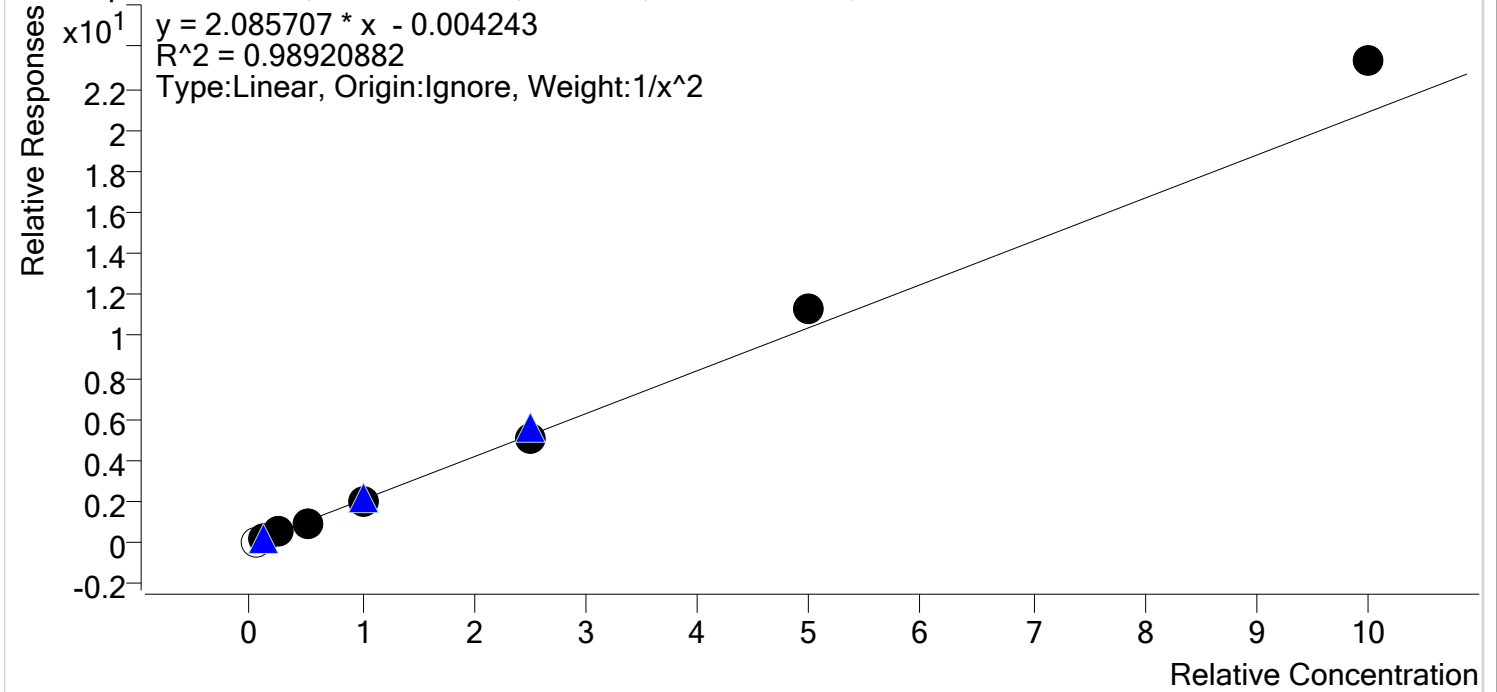
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	x	5.0	2.8	56.8
cal 2	2	✓	10.0	10.6	105.5
cal 3	3	✓	25.0	23.3	93.1
cal 4	4	✓	50.0	44.0	88.1
cal 5	5	✓	100.0	94.2	94.2
cal 6	6	✓	250.0	245.7	98.3
cal 7	7	✓	500.0	543.8	108.8
cal 8	8	✓	1000.0	1121.4	112.1

# Compound Calibration Report

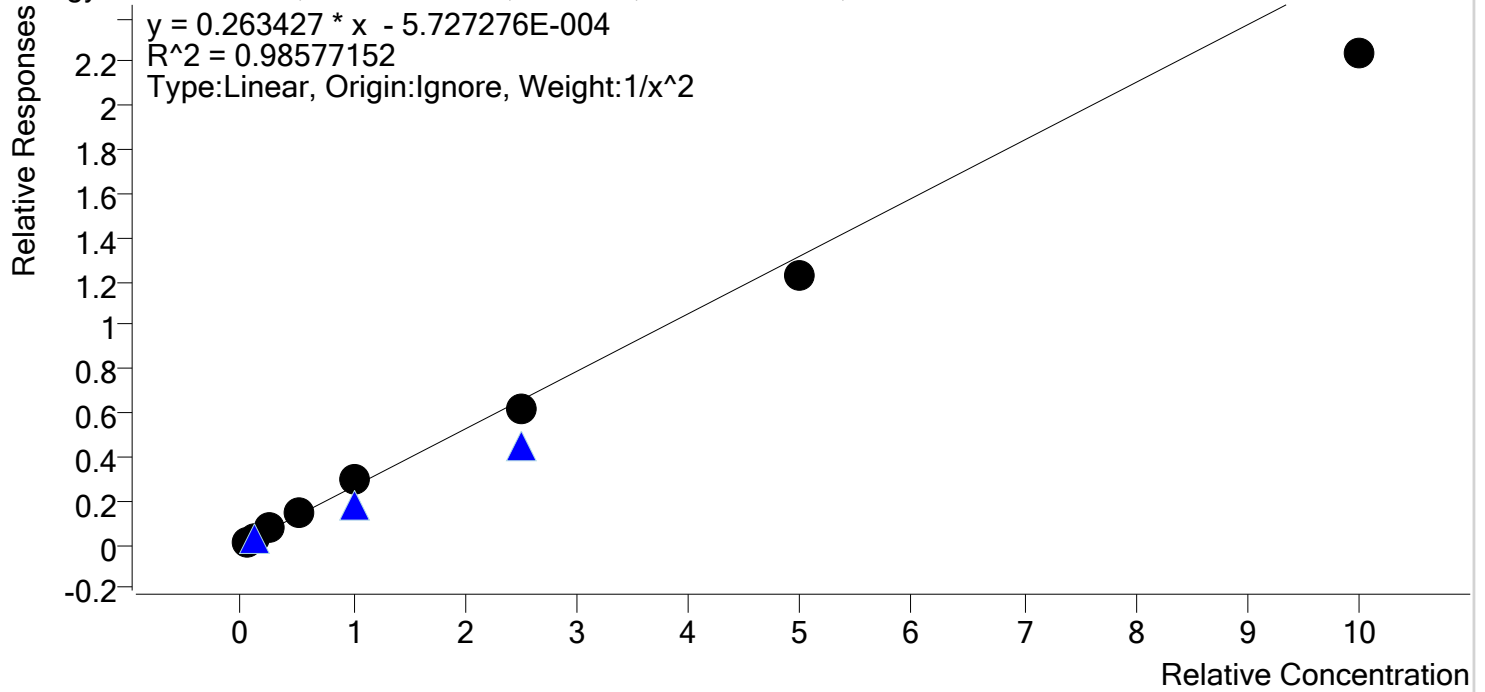
A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	5.0	99.8
cal 2	2	✓	10.0	9.4	94.2
cal 3	3	✓	25.0	26.9	107.6
cal 4	4	✓	50.0	55.7	111.3
cal 5	5	✓	100.0	115.2	115.2
cal 6	6	✓	250.0	233.3	93.3
cal 7	7	✓	500.0	468.1	93.6
cal 8	8	✓	1000.0	850.2	85.0



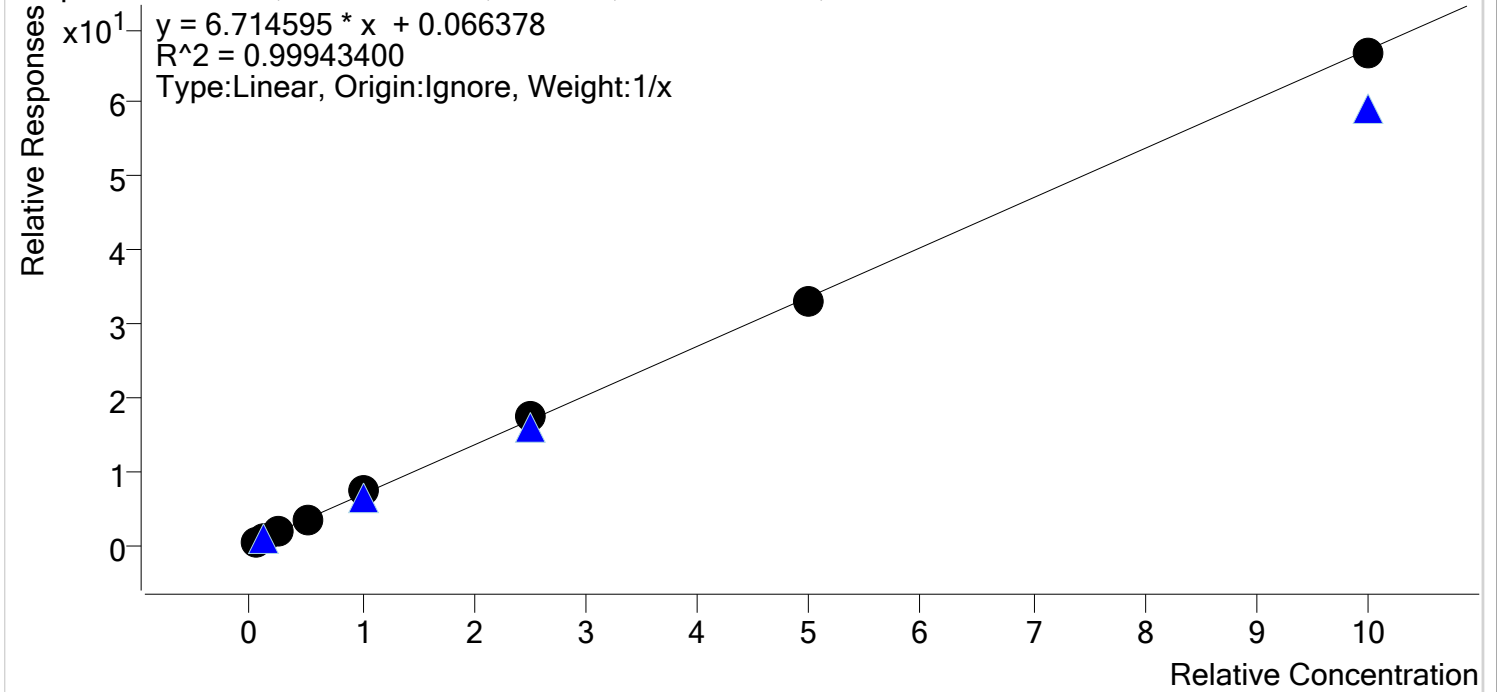
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Morphine

**Internal Standard** Morphine-D6

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



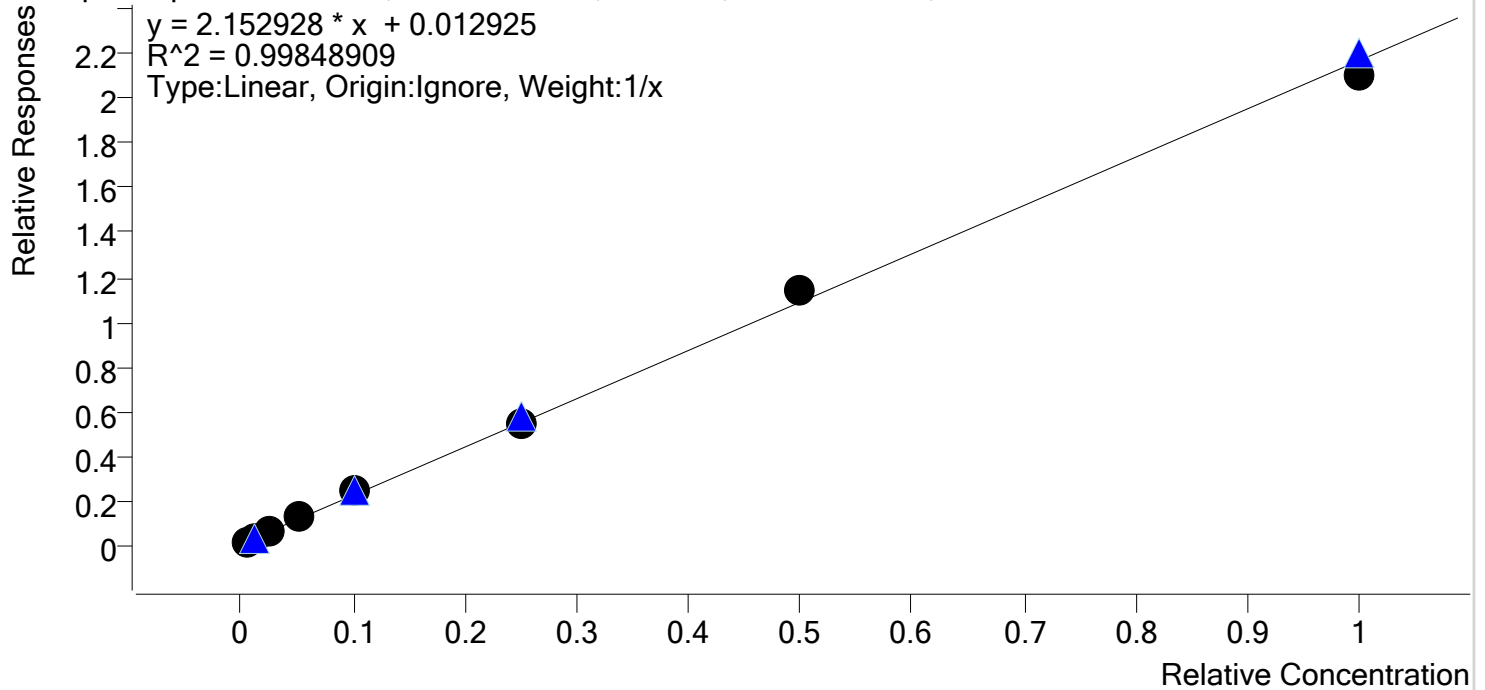
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.4	87.8
cal 2	2	✓	10.0	10.0	99.8
cal 3	3	✓	25.0	25.3	101.3
cal 4	4	✓	50.0	51.9	103.8
cal 5	5	✓	100.0	106.7	106.7
cal 6	6	✓	250.0	257.4	103.0
cal 7	7	✓	500.0	492.1	98.4
cal 8	8	✓	1000.0	992.2	99.2

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Norbuprenorphine **Internal Standard** Norbuprenorphine-D3

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



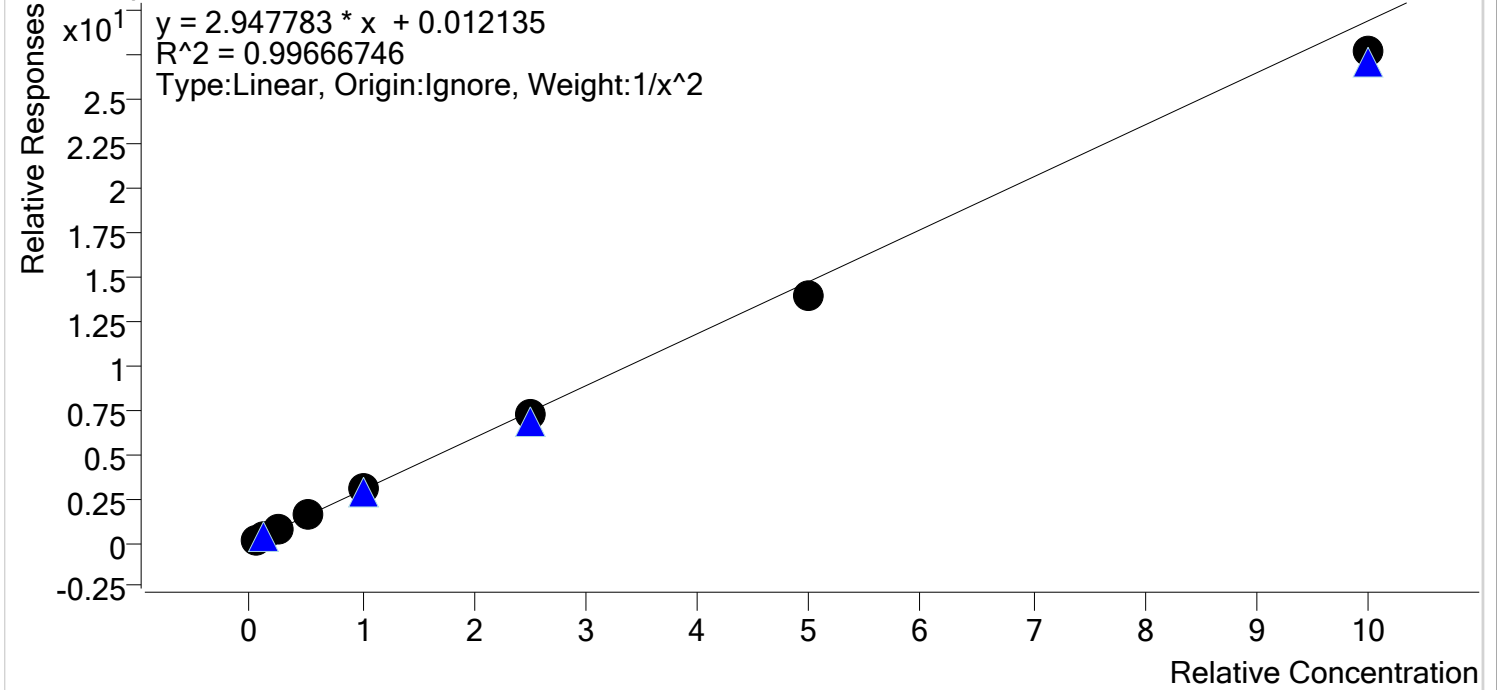
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	0.5	0.4	80.1
cal 2	2	✓	1.0	1.0	103.8
cal 3	3	✓	2.5	2.6	103.0
cal 4	4	✓	5.0	5.3	105.3
cal 5	5	✓	10.0	10.7	106.9
cal 6	6	✓	25.0	24.9	99.6
cal 7	7	✓	50.0	52.1	104.3
cal 8	8	✓	100.0	97.0	97.0

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.8	95.0
cal 2	2	✓	10.0	10.8	107.9
cal 3	3	✓	25.0	26.1	104.2
cal 4	4	✓	50.0	50.8	101.7
cal 5	5	✓	100.0	102.7	102.7
cal 6	6	✓	250.0	248.8	99.5
cal 7	7	✓	500.0	474.4	94.9
cal 8	8	✓	1000.0	941.0	94.1

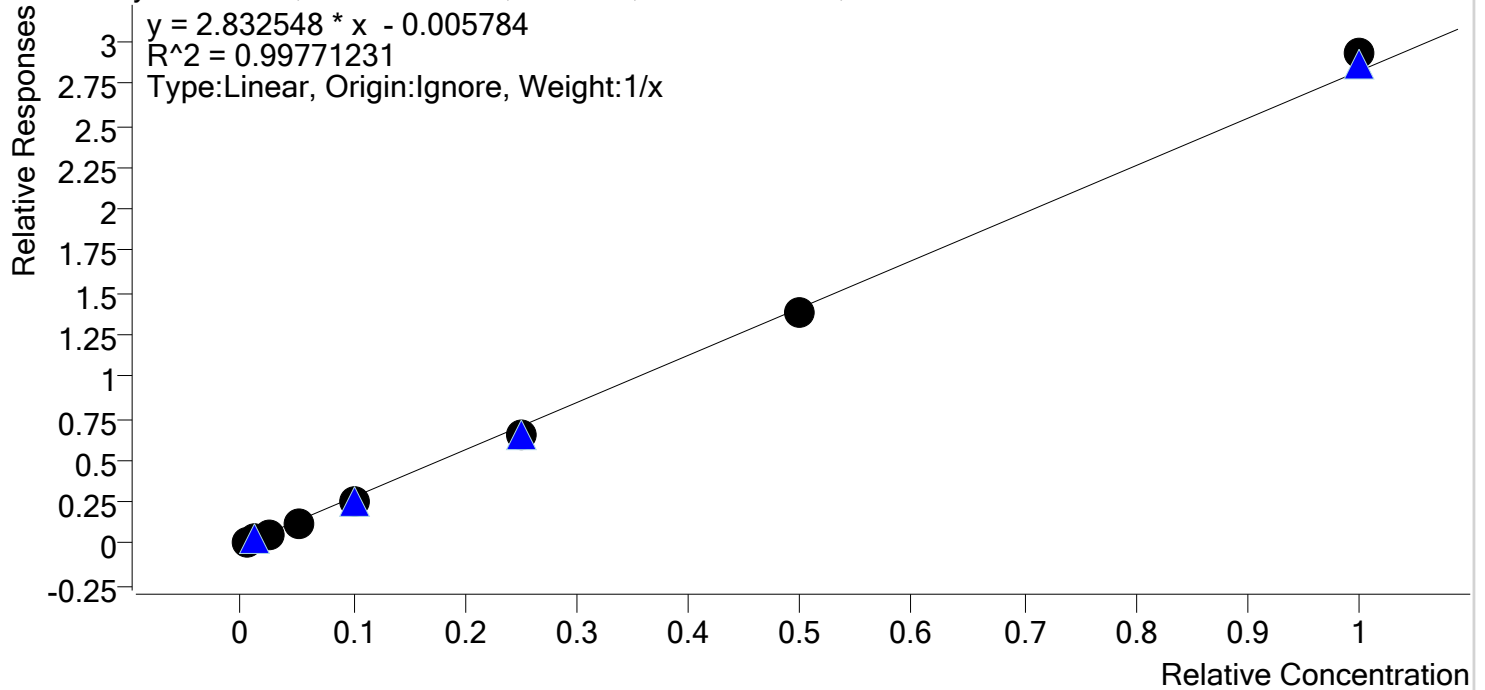
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	0.5	0.6	123.0
cal 2	2	✓	1.0	1.1	107.3
cal 3	3	✓	2.5	2.3	92.2
cal 4	4	✓	5.0	4.5	89.5
cal 5	5	✓	10.0	9.2	92.0
cal 6	6	✓	25.0	23.5	94.0
cal 7	7	✓	50.0	49.1	98.3
cal 8	8	✓	100.0	103.7	103.7

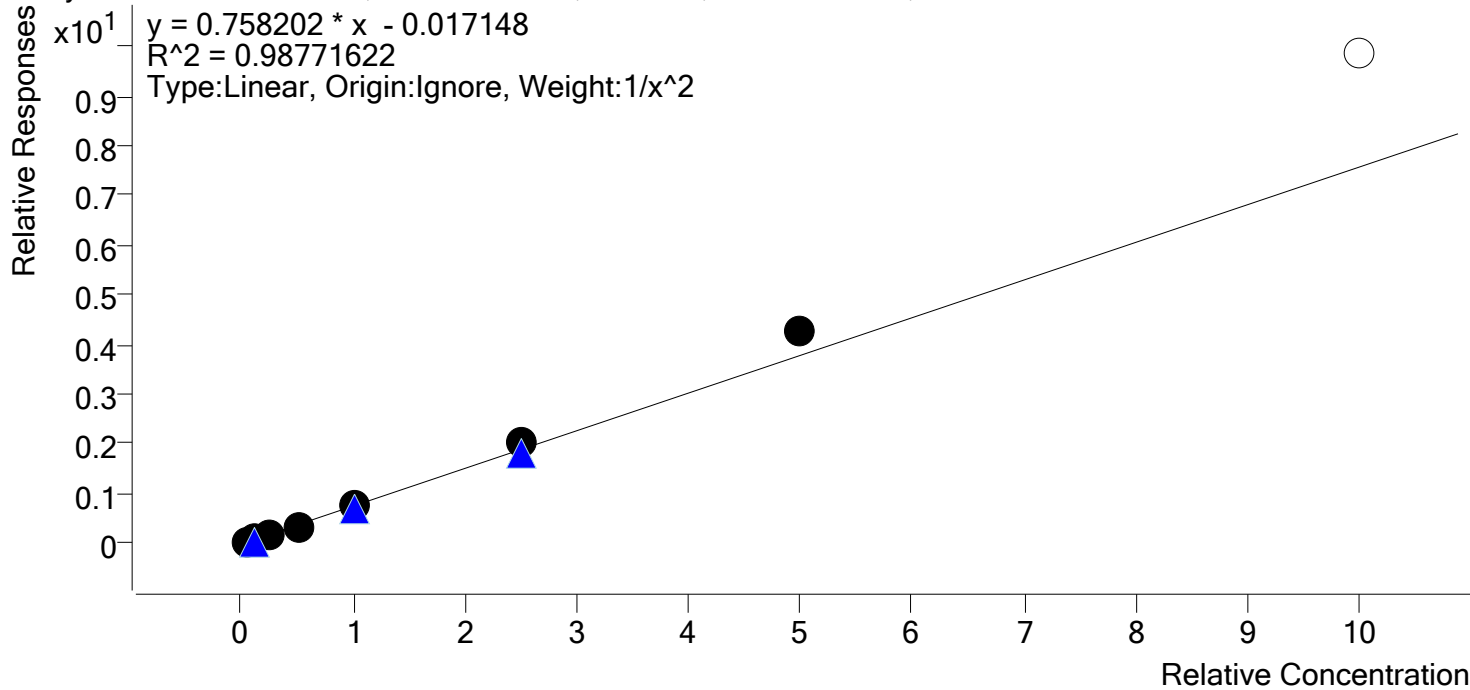
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Norhydrocodone **Internal Standard** Norhydrocodone-D3

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



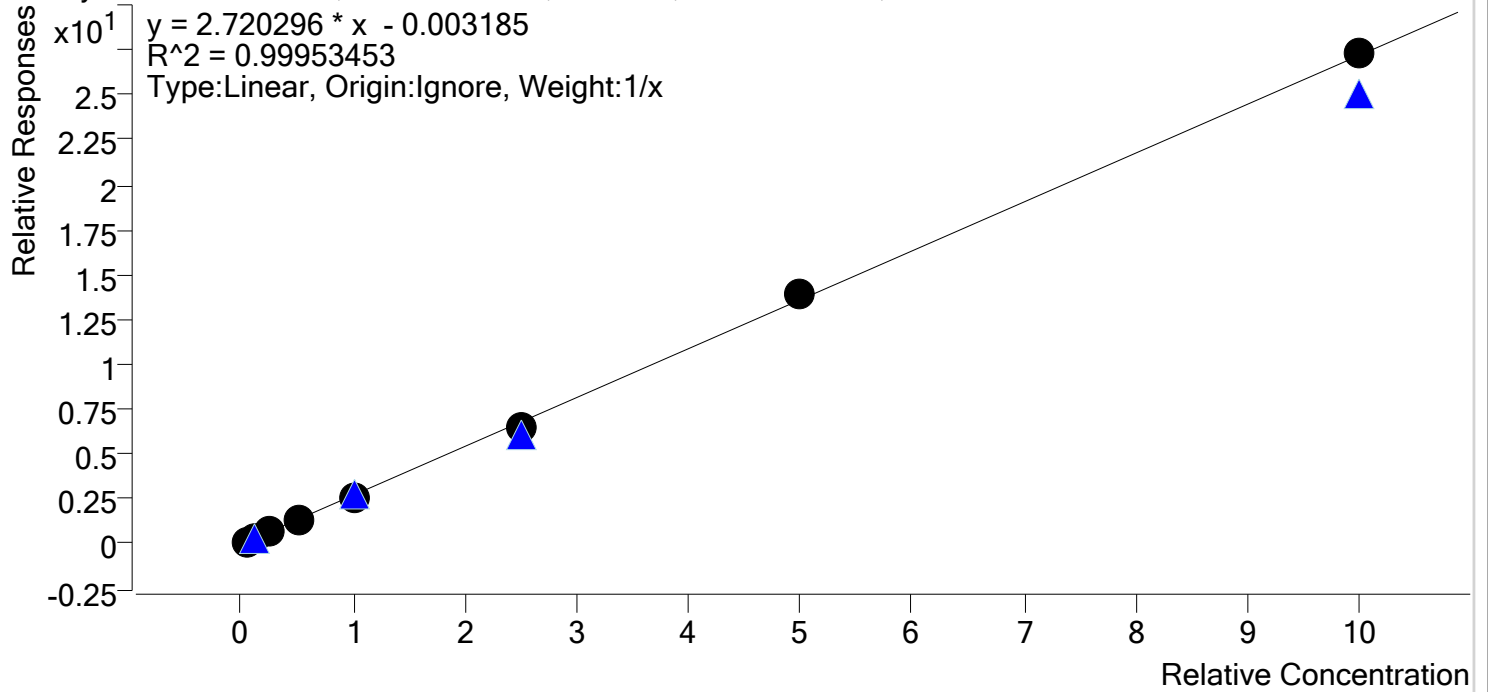
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	5.3	106.0
cal 2	2	✓	10.0	9.4	94.1
cal 3	3	✓	25.0	21.9	87.6
cal 4	4	✓	50.0	45.3	90.7
cal 5	5	✓	100.0	101.3	101.3
cal 6	6	✓	250.0	268.6	107.5
cal 7	7	✓	500.0	564.0	112.8
cal 8	8	x	1000.0	1301.4	130.1

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Noroxycodone **Internal Standard** Noroxycodone-D3

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

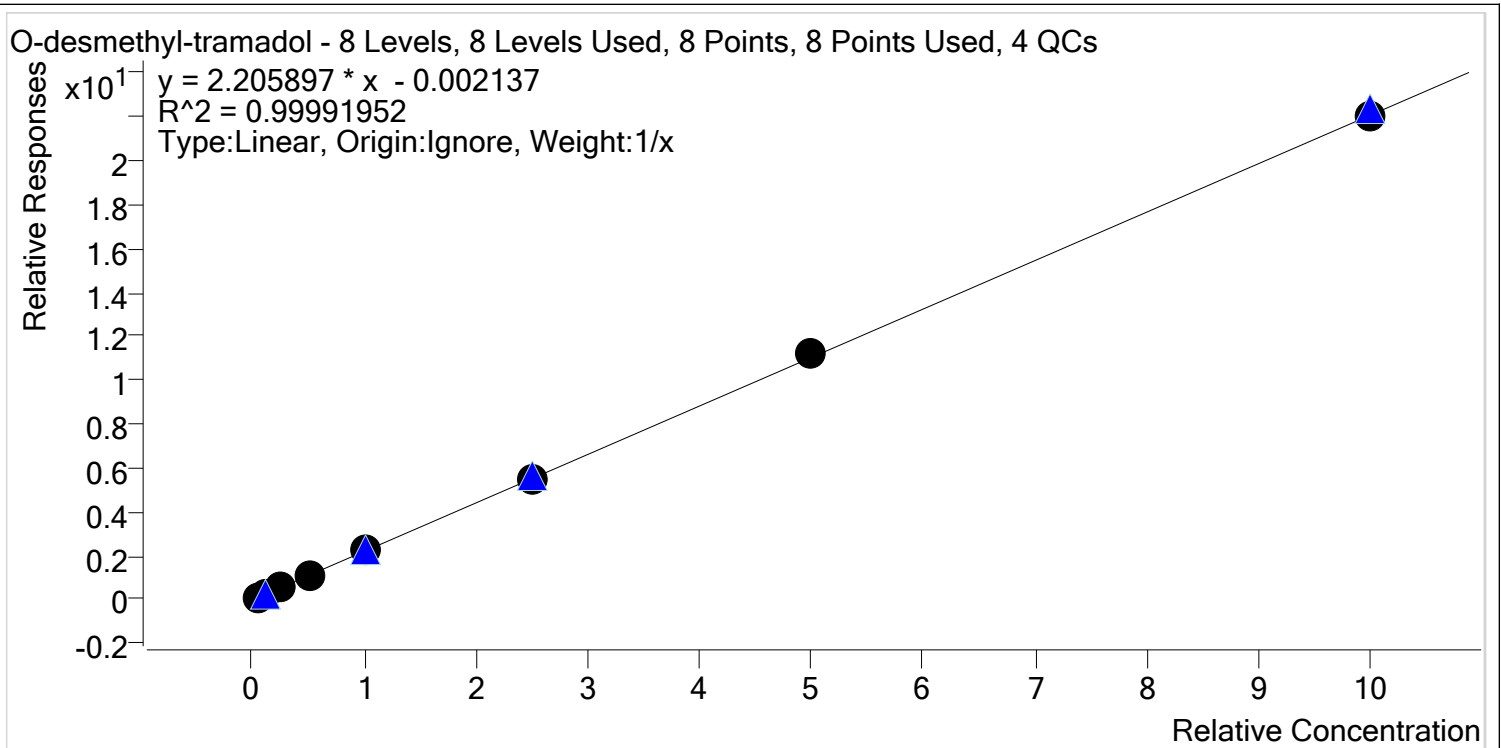


Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.9	98.4
cal 2	2	✓	10.0	10.7	107.4
cal 3	3	✓	25.0	25.0	99.8
cal 4	4	✓	50.0	49.6	99.1
cal 5	5	✓	100.0	97.3	97.3
cal 6	6	✓	250.0	239.0	95.6
cal 7	7	✓	500.0	509.8	102.0
cal 8	8	✓	1000.0	1003.8	100.4

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** O-desmethyl-tramadol **Internal Standard** O-desmethyl-tramadol-D6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	5.1	101.4
cal 2	2	✓	10.0	10.2	102.2
cal 3	3	✓	25.0	24.6	98.2
cal 4	4	✓	50.0	48.8	97.6
cal 5	5	✓	100.0	99.7	99.7
cal 6	6	✓	250.0	250.5	100.2
cal 7	7	✓	500.0	506.1	101.2
cal 8	8	✓	1000.0	995.2	99.5

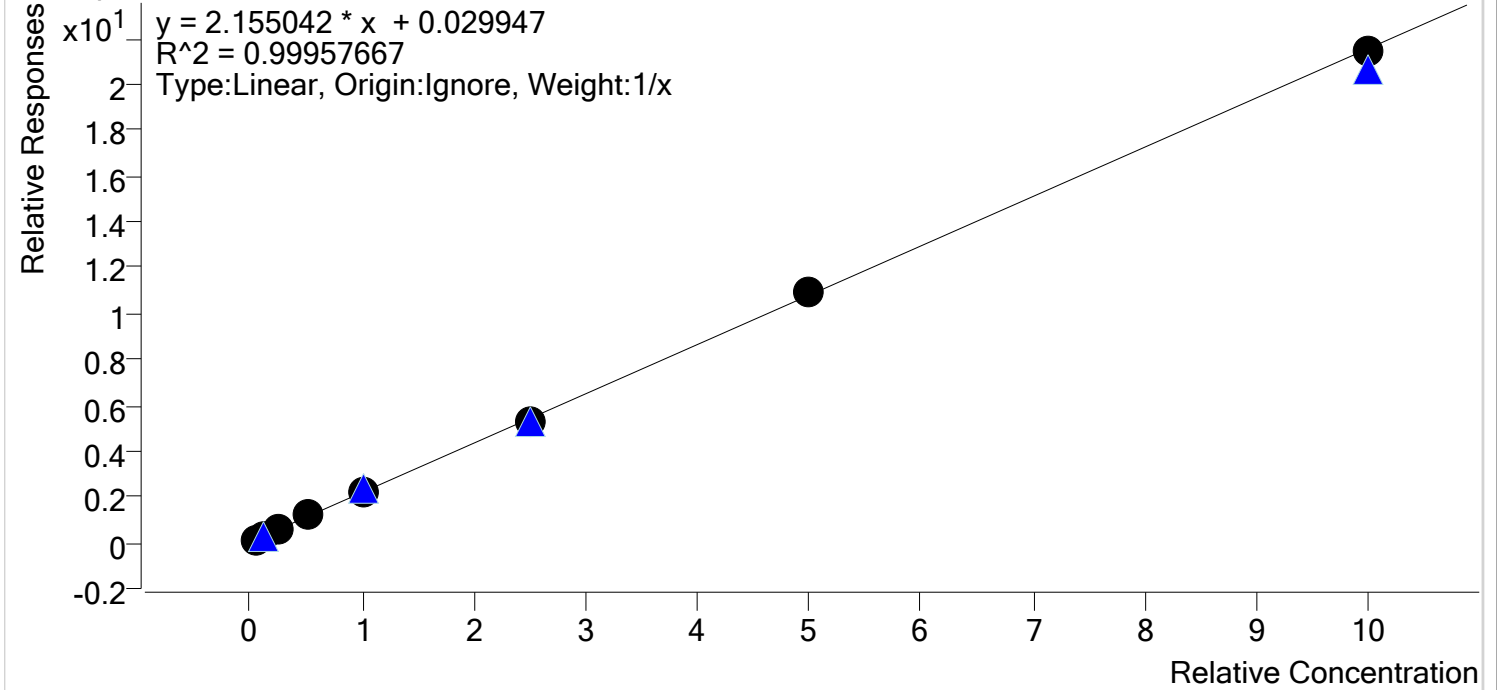
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.1	81.7
cal 2	2	✓	10.0	10.5	104.5
cal 3	3	✓	25.0	26.5	105.9
cal 4	4	✓	50.0	52.9	105.9
cal 5	5	✓	100.0	103.8	103.8
cal 6	6	✓	250.0	245.1	98.0
cal 7	7	✓	500.0	503.2	100.6
cal 8	8	✓	1000.0	993.9	99.4



# Compound Calibration Report

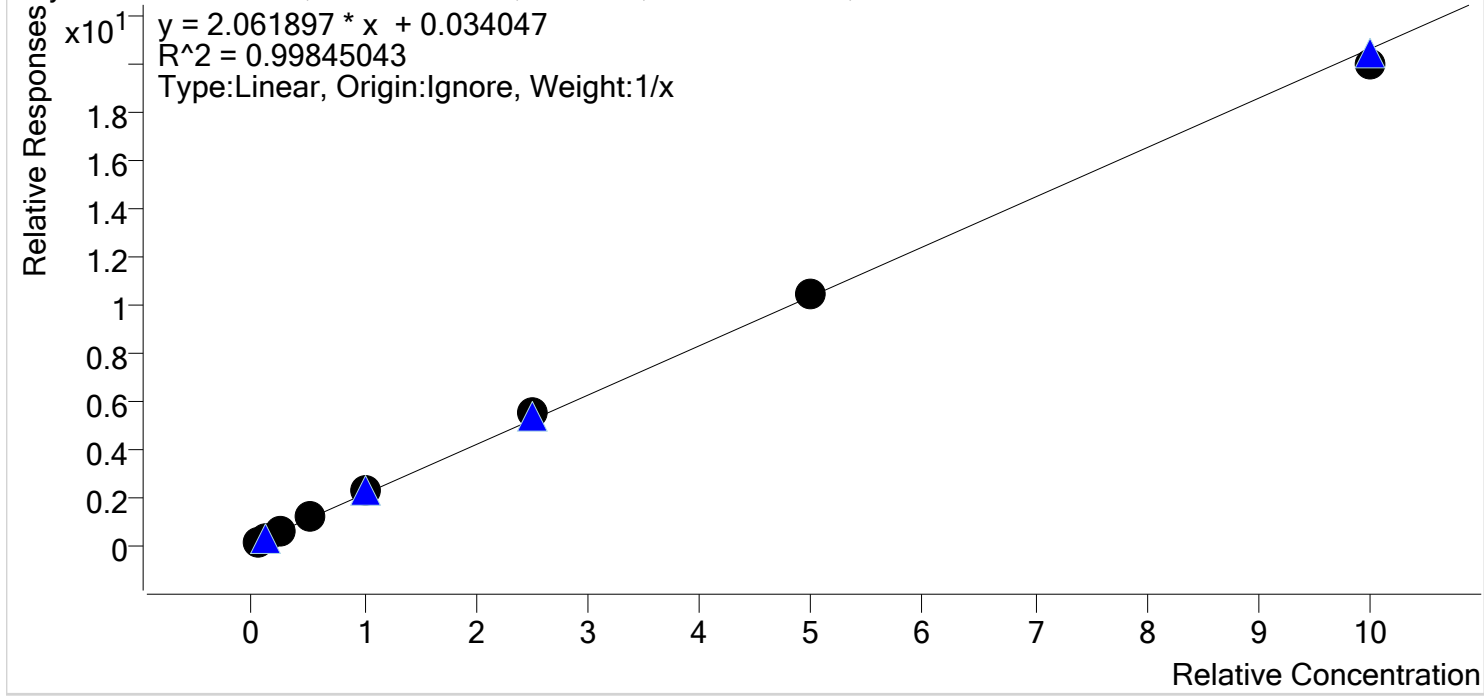
A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Oxycodone

**Internal Standard** Oxycodone-D6

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



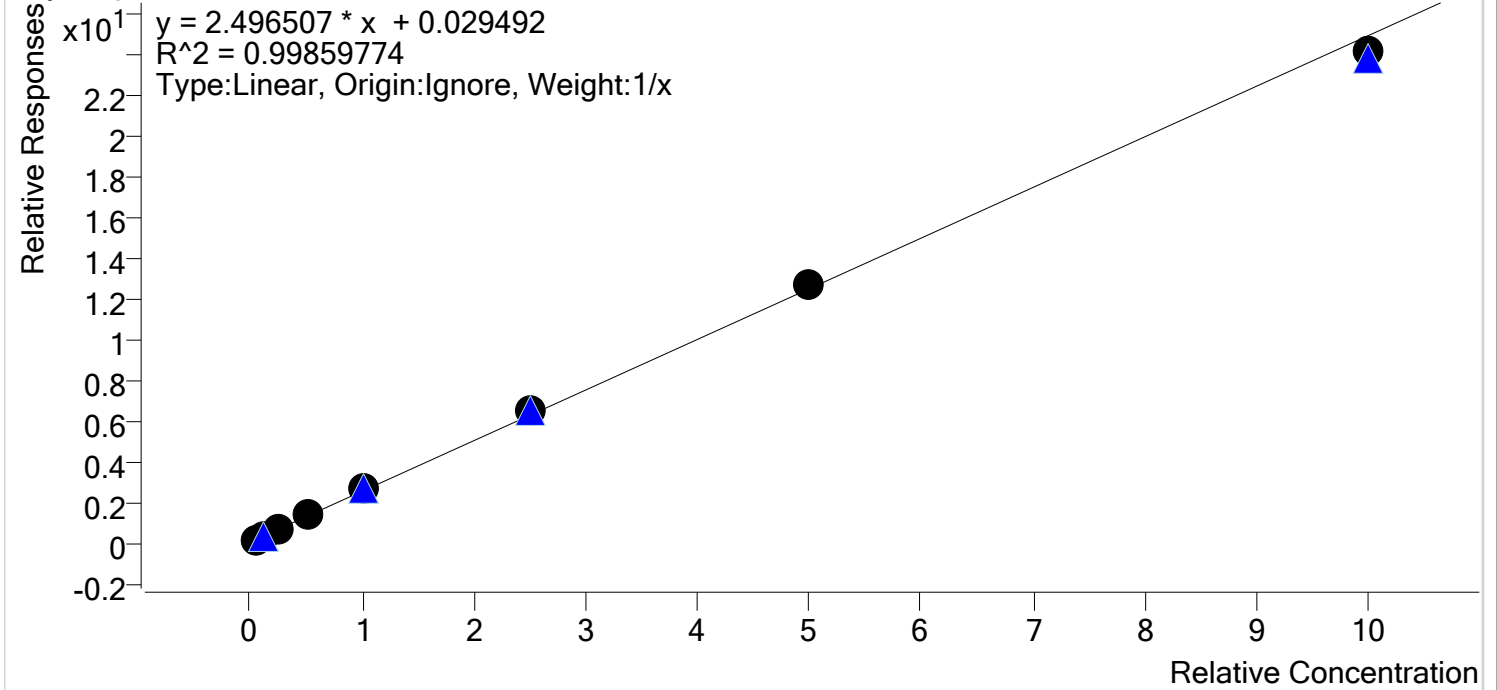
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	3.8	76.6
cal 2	2	✓	10.0	10.0	100.0
cal 3	3	✓	25.0	26.5	105.9
cal 4	4	✓	50.0	53.2	106.4
cal 5	5	✓	100.0	108.1	108.1
cal 6	6	✓	250.0	262.5	105.0
cal 7	7	✓	500.0	505.1	101.0
cal 8	8	✓	1000.0	970.8	97.1

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.2	84.2
cal 2	2	✓	10.0	9.9	98.7
cal 3	3	✓	25.0	25.5	101.9
cal 4	4	✓	50.0	52.4	104.8
cal 5	5	✓	100.0	106.4	106.4
cal 6	6	✓	250.0	262.1	104.9
cal 7	7	✓	500.0	510.9	102.2
cal 8	8	✓	1000.0	968.5	96.9

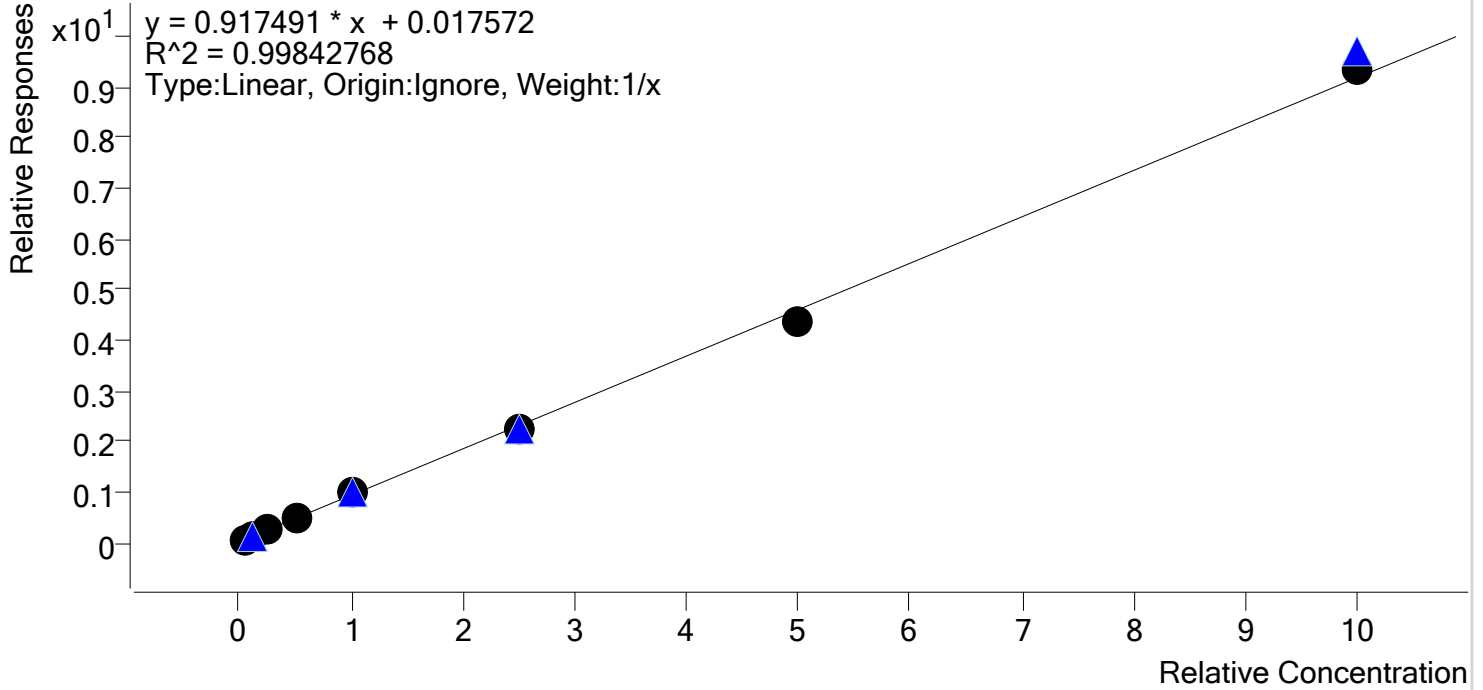
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Phentermine **Internal Standard** Phentermine-D5

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



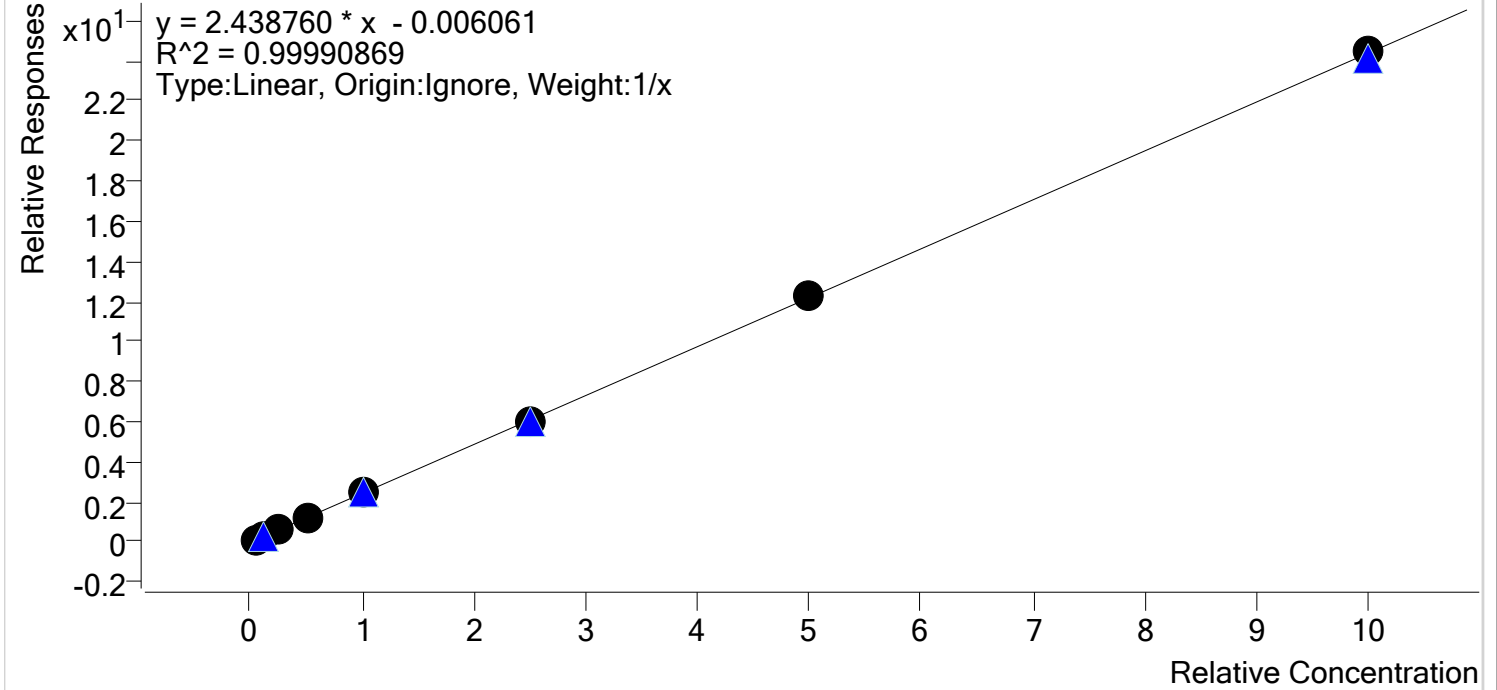
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.1	81.3
cal 2	2	✓	10.0	10.2	102.1
cal 3	3	✓	25.0	26.8	107.2
cal 4	4	✓	50.0	54.5	109.0
cal 5	5	✓	100.0	105.6	105.6
cal 6	6	✓	250.0	244.8	97.9
cal 7	7	✓	500.0	474.7	94.9
cal 8	8	✓	1000.0	1019.4	101.9

# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	5.2	104.3
cal 2	2	✓	10.0	10.3	103.0
cal 3	3	✓	25.0	24.5	98.2
cal 4	4	✓	50.0	47.8	95.7
cal 5	5	✓	100.0	98.8	98.8
cal 6	6	✓	250.0	248.4	99.3
cal 7	7	✓	500.0	501.7	100.3
cal 8	8	✓	1000.0	1003.2	100.3

# Compound Calibration Report

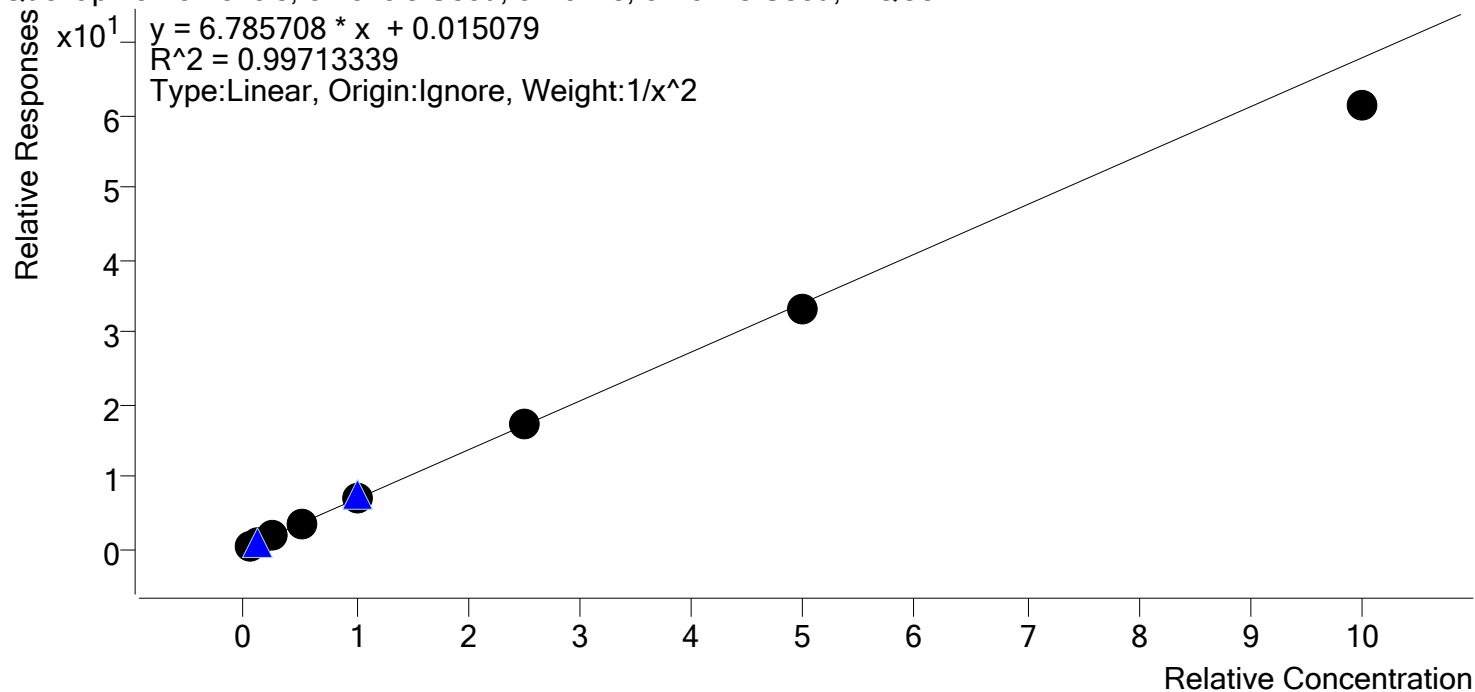
✶



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.9	97.4
cal 2	2	✓	10.0	10.3	103.4
cal 3	3	✓	25.0	25.6	102.6
cal 4	4	✓	50.0	51.3	102.6
cal 5	5	✓	100.0	104.7	104.7
cal 6	6	✓	250.0	252.4	101.0
cal 7	7	✓	500.0	490.4	98.1
cal 8	8	✓	1000.0	903.6	90.4

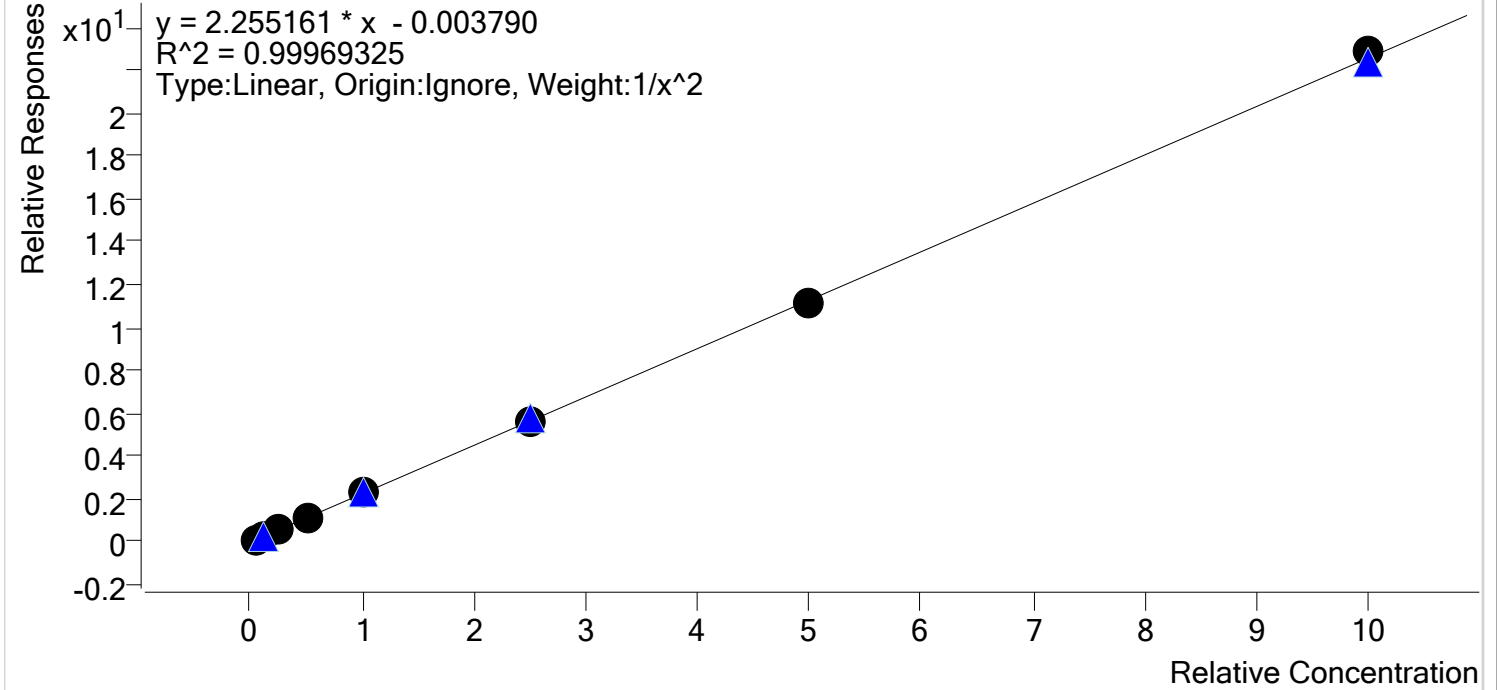
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	5.1	101.1
cal 2	2	✓	10.0	9.7	97.3
cal 3	3	✓	25.0	25.3	101.1
cal 4	4	✓	50.0	49.8	99.5
cal 5	5	✓	100.0	101.5	101.5
cal 6	6	✓	250.0	247.7	99.1
cal 7	7	✓	500.0	494.6	98.9
cal 8	8	✓	1000.0	1013.6	101.4

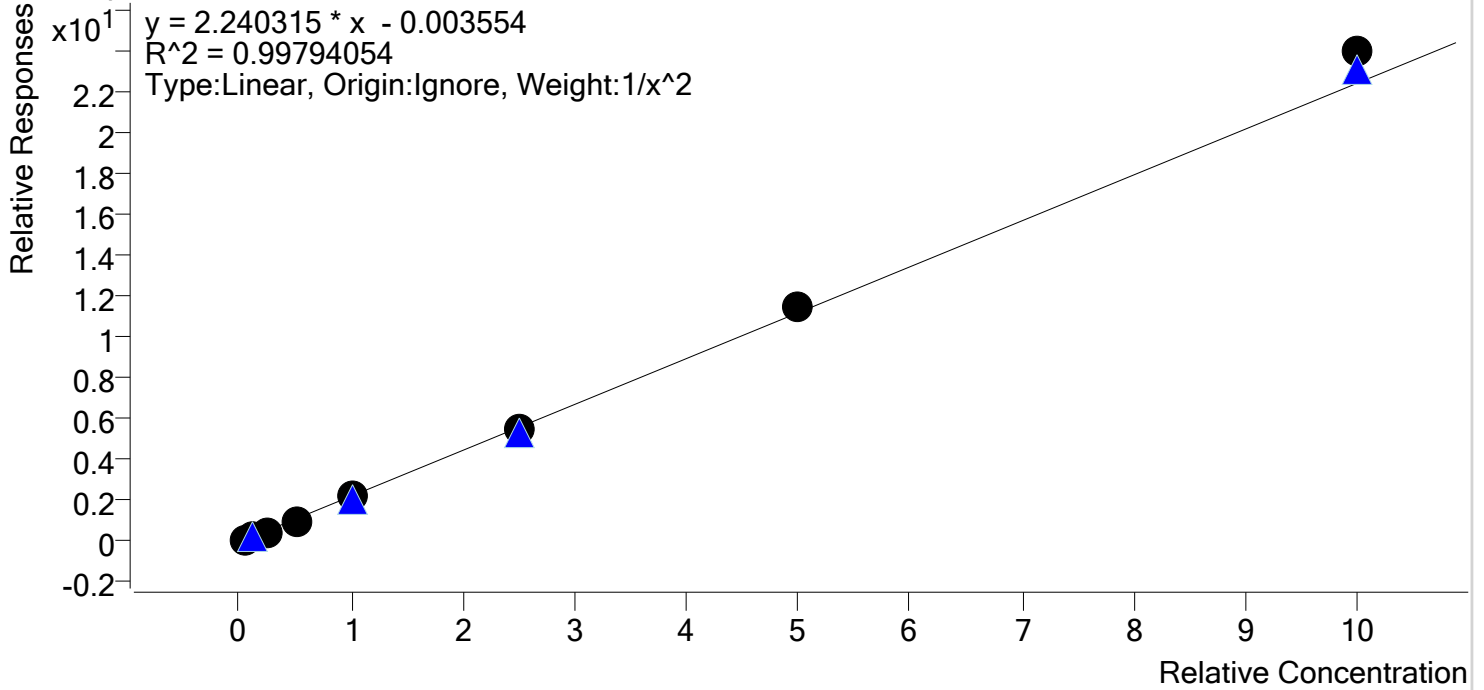
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	5.1	102.6
cal 2	2	✓	10.0	9.7	97.4
cal 3	3	✓	25.0	23.9	95.5
cal 4	4	✓	50.0	48.0	95.9
cal 5	5	✓	100.0	99.4	99.4
cal 6	6	✓	250.0	247.8	99.1
cal 7	7	✓	500.0	515.9	103.2
cal 8	8	✓	1000.0	1068.9	106.9

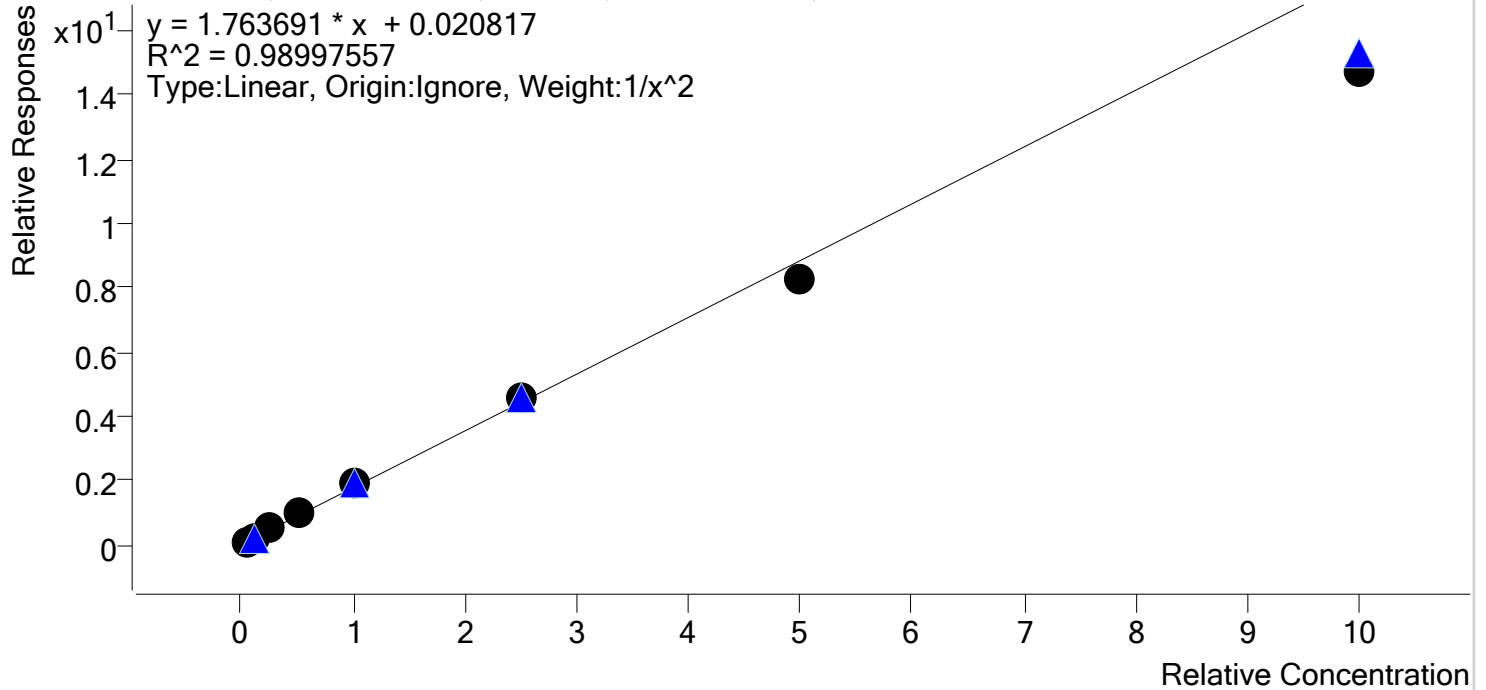
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 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
cal 1	1	✓	5.0	4.8	95.2
cal 2	2	✓	10.0	10.5	104.9
cal 3	3	✓	25.0	26.8	107.2
cal 4	4	✓	50.0	53.0	105.9
cal 5	5	✓	100.0	108.2	108.2
cal 6	6	✓	250.0	255.8	102.3
cal 7	7	✓	500.0	464.5	92.9
cal 8	8	✓	1000.0	833.5	83.4



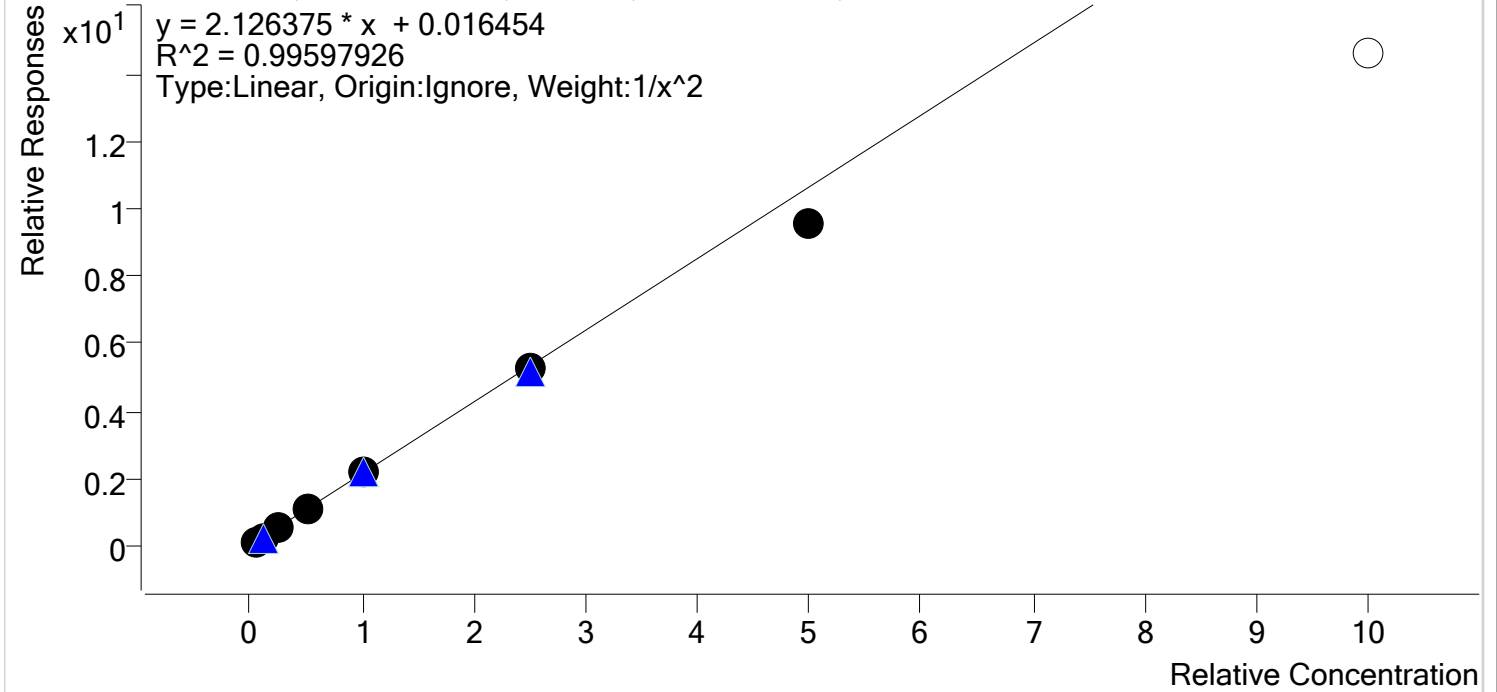
# Compound Calibration Report



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Trazodone

**Internal Standard** Trazodone-D6

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



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.9	97.2
cal 2	2	✓	10.0	10.4	103.6
cal 3	3	✓	25.0	25.7	102.9
cal 4	4	✓	50.0	51.9	103.8
cal 5	5	✓	100.0	104.0	104.0
cal 6	6	✓	250.0	247.8	99.1
cal 7	7	✓	500.0	447.0	89.4
cal 8	8	✗	1000.0	685.9	68.6

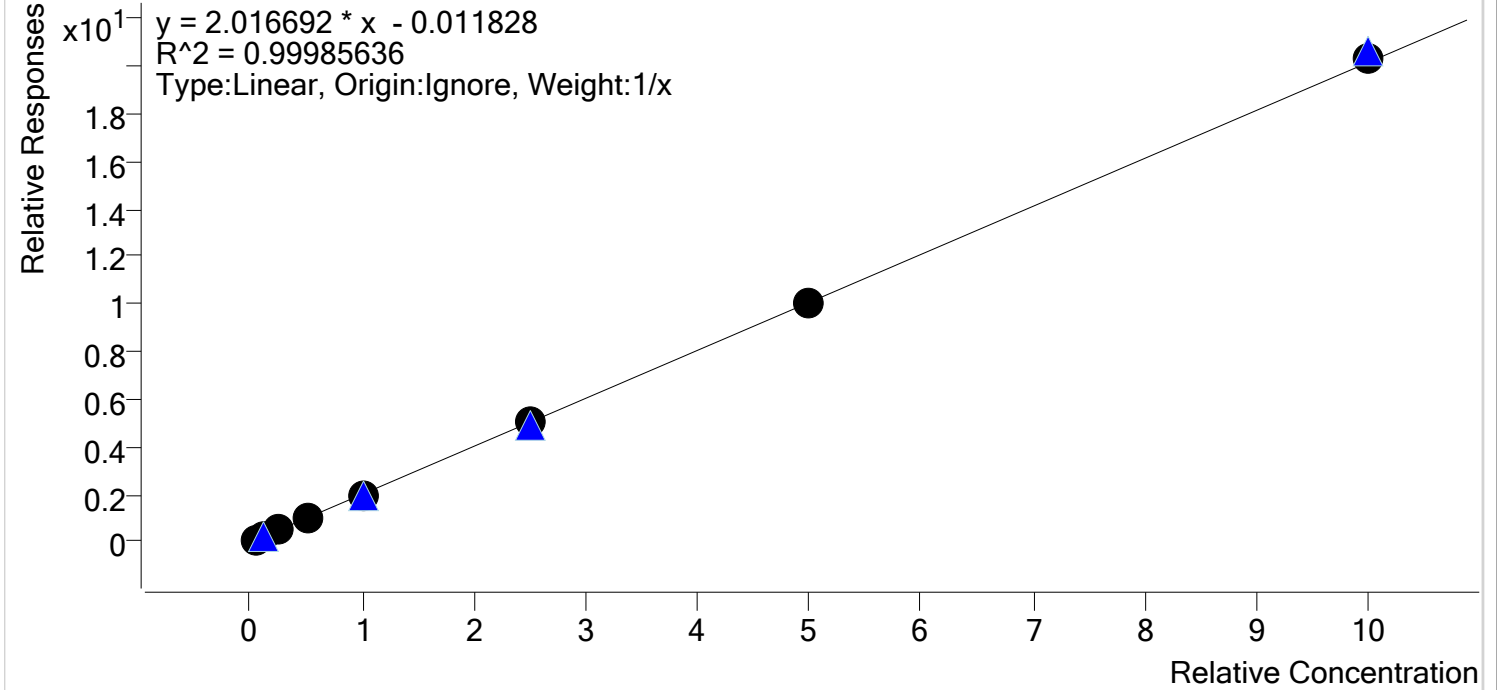
# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Venlafaxine **Internal Standard** Venlafaxine-D6

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



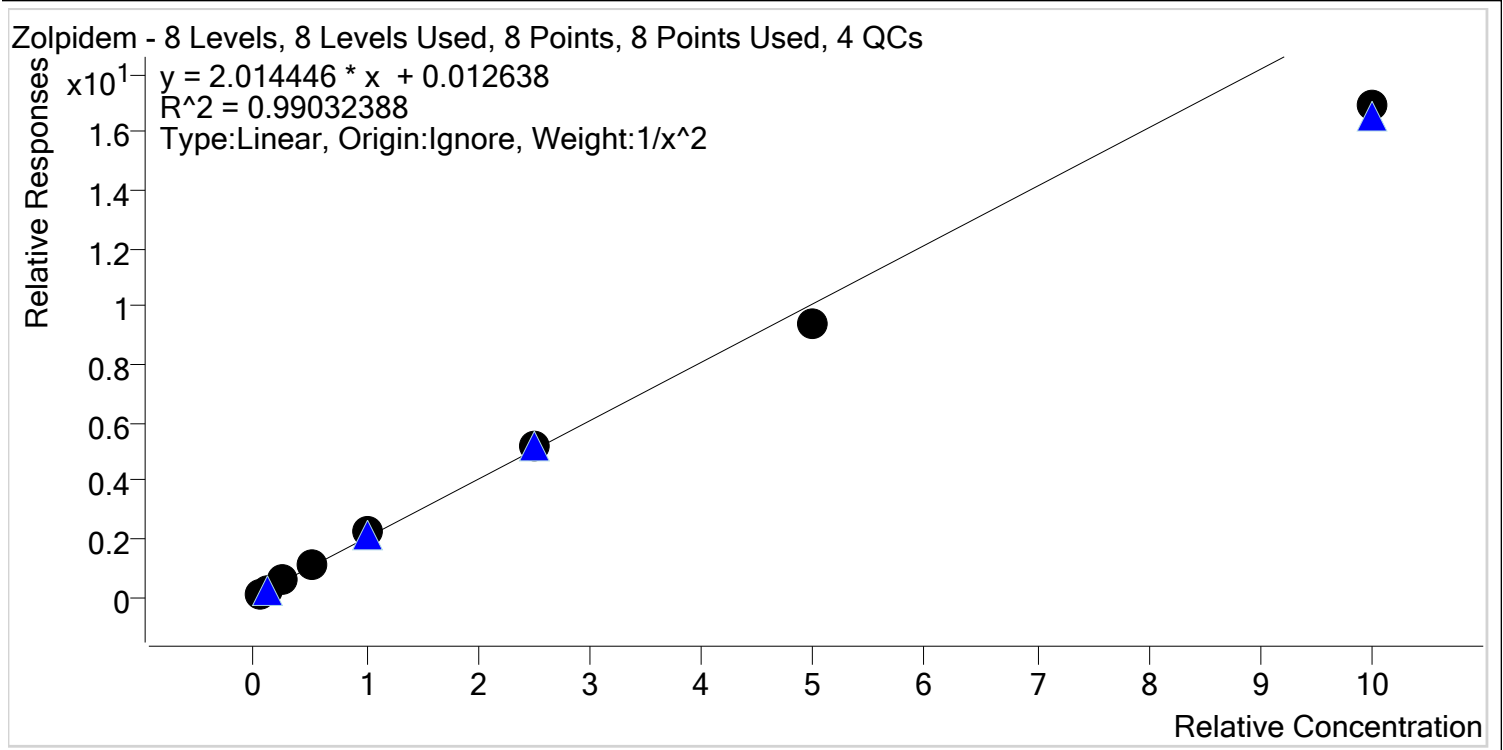
Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	5.3	106.0
cal 2	2	✓	10.0	10.4	104.0
cal 3	3	✓	25.0	24.1	96.5
cal 4	4	✓	50.0	47.9	95.8
cal 5	5	✓	100.0	97.5	97.5
cal 6	6	✓	250.0	249.6	99.8
cal 7	7	✓	500.0	499.1	99.8
cal 8	8	✓	1000.0	1006.1	100.6

# Compound Calibration Report

A



**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Last Cal. Update** 4/10/2019 10:19 AM  
**Analyst Name** ISP\datastor  
**Analyte** Zolpidem **Internal Standard** Zolpidem-D6



Sample	Level	Enabled	Expected Concentration	Final Concentration	Accuracy
cal 1	1	✓	5.0	4.7	95.0
cal 2	2	✓	10.0	10.6	105.9
cal 3	3	✓	25.0	26.5	105.9
cal 4	4	✓	50.0	52.9	105.7
cal 5	5	✓	100.0	108.4	108.4
cal 6	6	✓	250.0	255.8	102.3
cal 7	7	✓	500.0	464.9	93.0
cal 8	8	✓	1000.0	838.1	83.8

# ISPFS AM #28 Multi-Drug Quant. Results

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**Batch results**

D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin

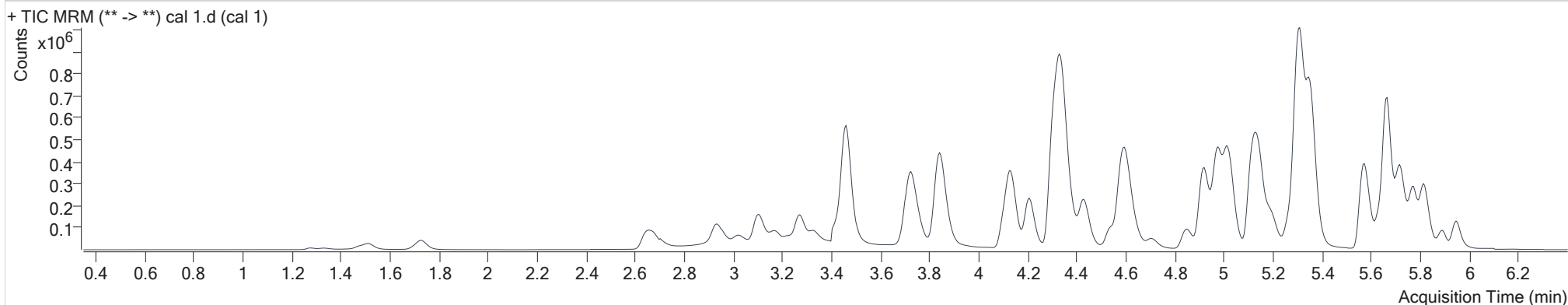
**Calibration Last Update**

4/10/2019 10:19:46 AM

**Instrument** 069697  
**Type** Cal  
**Acq. Method** mdq p1 cda 121818.m  
**Sample Position** P2-A1  
**Injection Volume** 2.5  
**Acq. Date-Time** 4/9/2019 2:41:36 PM  
**Sample Info.**

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

**Sample Chromatogram**



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.282	3693	∞	22.2	48	10222	4.39 ng/ml
Oxymorphone	1.515	14549	1623	44.6	402	108113	4.21 ng/ml
Hydromorphone	1.738	14733	2110	76.1	2867	109996	4.49 ng/ml
Dihydrocodeine	2.682	21181	6579	62.4	3064	226893	4.78 ng/ml
Codeine	2.719	7645	12332	112.9	11794	71567	4.93 ng/ml
Oxycodone	2.960	37641	1288	29.7	686	333191	3.83 ng/ml
Noroxycodone	3.043	15213	108	40.9	73	116399	4.92 ng/ml
Hydrocodone	3.129	20629	568	38.1	290	228340	3.70 ng/ml
Norhydrocodone	3.176	1402	38	43.6	5 Low	60852	5.30 ng/ml
Amphetamine	3.178	65938	750	53.4	391	178531	4.55 ng/ml
6-MAM	3.239	1137	∞	76.5	2038	72633	0.51 ng/ml
Methamphetamine	3.334	82815	∞	40.2	44	371266	4.87 ng/ml
O-desmethyl-tramadol	3.465	124155	294	6.6	1028	1131513	5.07 ng/ml
Phentermine	3.874	22066	206	4.7	46	402086	4.07 ng/ml
Benzoylcegonine	3.972	1432	34	9.4	15	9027	4.80 ng/ml
Ketamine	4.122	44579	1261	35.8	996	416722	4.20 ng/ml
Norfentanyl	4.158	8547	2471	40.3	33	734856	0.61 ng/ml
Dextrorphan	4.207	22617	∞	210.9	3113	544871	4.92 ng/ml

cal 1

# ISPFS AM #28 Multi-Drug Quant. Results

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Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	124498	∞	3.6	35	1188216	4.76 ng/ml
Cocaine	4.337	54492	39	42.6	64	1034029	4.43 ng/ml
7-aminoclonazepam	4.348	13467	223	88.4	171	114398	4.93 ng/ml
Metoprolol	4.389	14753	490	96.2	865	1188216	4.78 ng/ml
Lamotrigine	4.401	5147	696	92.0	2266	841019	4.65 ng/ml
alpha-PVP	4.438	49823	2115	52.7	955	477679	3.93 ng/ml
Doxylamine	4.609	158019	2199	95.5	11097	1361551	4.90 ng/ml
Mirtazapine	4.706	75830	621	46.4	∞	1378256	2.84 ng/ml
Bupropion	4.870	31889	1339	55.4	422	236500	4.87 ng/ml
Zolpidem	4.995	130028	2805	30.8	1775	1200751	4.75 ng/ml
Meprobamate	4.998	10275	68	27.0	23	95733	4.67 ng/ml
Norbuprenorphine	5.050	380	435	84.1	∞	17625	0.40 ng/ml
Venlafaxine	5.120	100532	3004	41.1	751	1058110	5.30 ng/ml
Fentanyl	5.158	6166	1036	76.6	5585	619646	0.51 ng/ml
Trazodone	5.245	78845	255	76.7	∞	658437	4.86 ng/ml
Mitragynine	5.291	17326	24336	37.2	∞	1378256	4.99 ng/ml
Citalopram	5.287	73183	3528	47.5	4430	649227	4.71 ng/ml
EDDP	5.315	35552	1737	239.6	1665	841019	4.96 ng/ml
Dextromethorphan	5.326	52649	374	75.3	7067	522191	4.97 ng/ml
Diphenhydramine	5.358	252482	2357	33.4	1289	2496158	5.37 ng/ml
Promethazine	5.573	79401	2346	32.7	692	655371	5.22 ng/ml
Quetiapine	5.591	86611	6467	59.1	3095	250754	4.87 ng/ml
Clonazepam	5.628	14855	733	35.1	131	50735	4.57 ng/ml
Cyclobenzaprine	5.640	45977	2490	9.8	413	342102	4.86 ng/ml
Methadone	5.664	137636	1518	46.0	1753	1378256	5.10 ng/ml
a-hydroxyalprazolam	5.704	5786	497	56.5	1150	63597	4.78 ng/ml
Fluoxetine	5.710	32733	1082	9.4	357	244287	5.34 ng/ml
Carisoprodol	5.728	47455	2891	58.6	282	505872	4.92 ng/ml
Oxazepam	5.757	14286	180	76.8	94	121037	4.09 ng/ml
Alprazolam	5.777	50216	994	108.3	1179	352196	4.75 ng/ml
Sertraline	5.782	12718	424	106.8	507	115386	5.06 ng/ml
Buprenorphine	5.857	1663	121	17.9	523	96791	0.54 ng/ml
Temazepam	5.819	57984	561	31.4	183	520767	5.13 ng/ml
Nordiazepam	5.897	23069	∞	60.5	1207	151609	4.75 ng/ml
Diazepam	5.952	29856	1029	85.4	561	254677	4.64 ng/ml

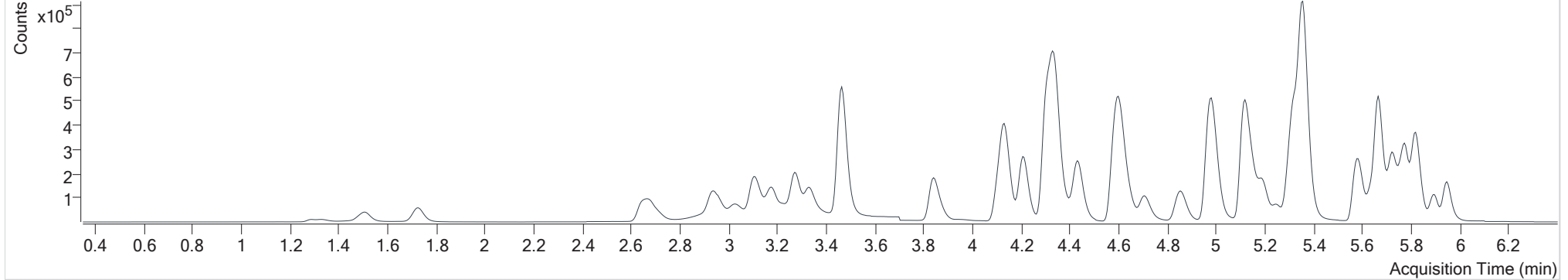
# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results**  
**Calibration Last Update**

 D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
 4/10/2019 10:19:46 AM

**Instrument** 069697  
**Type** Cal  
**Acq. Method** mdq p1 cda 121818.m  
**Sample Position** P2-B1  
**Injection Volume** 2.5  
**Acq. Date-Time** 4/9/2019 2:52:23 PM  
**Sample Info.**
**Data File** cal 2.d  
**Sample** cal 2  
**Operator** Anne Nord  
**Comment**
**Sample Chromatogram**

+ TIC MRM (\*\* -&gt; \*\*) cal 2.d (cal 2)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	7921	64	23.9	∞	10756	9.98 ng/ml
Oxymorphone	1.510	31803	1608	44.0	1669	115225	9.87 ng/ml
Hydromorphone	1.733	34130	432	72.6	5430	123402	10.00 ng/ml
Dihydrocodeine	2.682	44842	46816	64.5	11849	234124	10.63 ng/ml
Codeine	2.719	16437	77180	106.4	∞	73455	10.27 ng/ml
Oxycodone	2.960	83809	2875	29.5	1341	348924	10.00 ng/ml
Noroxycodone	3.043	34486	398	42.5	76	119349	10.74 ng/ml
Hydrocodone	3.129	44216	545	39.4	797	246510	9.60 ng/ml
Norhydrocodone	3.181	3622	87	41.3	218	66811	9.41 ng/ml
Amphetamine	3.183	169203	595	52.4	346	227854	11.17 ng/ml
6-MAM	3.239	2394	∞	80.5	2872	79096	0.96 ng/ml
Methamphetamine	3.334	161003	120	40.0	273	501310	9.90 ng/ml
O-desmethyl-tramadol	3.470	269505	46687	6.5	2688	1206657	10.22 ng/ml
Phentermine	3.879	56643	∞	5.2	148	509086	10.21 ng/ml
Benzoylcegonine	3.977	3106	3850	8.1	175	9527	10.82 ng/ml
Ketamine	4.127	97439	2732	37.3	616	448235	9.95 ng/ml
Norfentanyl	4.158	19850	5630	41.0	71	806388	1.07 ng/ml
Dextroprphan	4.212	49836	∞	212.2	342	575542	10.32 ng/ml

cal 2

Generated at 10:20 AM on 4/10/2019

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# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	269462	20207	3.6	322	1308898	10.49 ng/ml
Cocaine	4.337	137596	194	42.6	6431	1108761	10.97 ng/ml
7-aminoclonazepam	4.348	33115	4071	82.3	256	131585	10.30 ng/ml
Metoprolol	4.389	33000	5241	98.2	∞	1308898	10.58 ng/ml
Lamotrigine	4.401	11691	537	87.1	711	587446	11.22 ng/ml
alpha-PVP	4.443	115221	6028	53.5	3248	528397	10.15 ng/ml
Doxylamine	4.609	344204	25934	96.7	262	1436676	10.32 ng/ml
Mirtazapine	4.706	191428	17185	46.7	8389	886976	10.55 ng/ml
Bupropion	4.870	80422	8979	56.9	2447	286754	11.08 ng/ml
Zolpidem	4.995	267779	15962	30.3	5993	1184655	10.59 ng/ml
Meprobamate	4.998	34645	10141	29.4	648	149942	10.96 ng/ml
Norbuprenorphine	5.075	455	632	83.7	492	12909	1.04 ng/ml
Venlafaxine	5.120	225684	5569	39.8	1138	1140547	10.40 ng/ml
Fentanyl	5.168	6758	576	73.9	∞	322136	1.01 ng/ml
Trazodone	5.250	94245	2116	77.9	3616	398020	10.36 ng/ml
Mitragynine	5.296	21492	∞	38.7	9278	886976	9.42 ng/ml
Citalopram	5.303	100103	220	46.5	1547	423516	10.26 ng/ml
EDDP	5.326	51368	47618	233.9	6949	587446	10.20 ng/ml
Dextromethorphan	5.337	65137	8268	75.1	14293	317269	10.12 ng/ml
Diphenhydramine	5.363	334833	9471	35.4	13482	1617988	10.27 ng/ml
Promethazine	5.578	76140	1529	32.5	1135	310598	10.30 ng/ml
Quetiapine	5.591	124480	6174	58.8	102417	173752	10.34 ng/ml
Clonazepam	5.638	44893	2373	33.8	1698	69706	11.20 ng/ml
Cyclobenzaprine	5.645	45645	∞	10.2	169	165985	10.25 ng/ml
Methadone	5.669	183480	3998	46.8	7022	886976	10.15 ng/ml
a-hydroxyalprazolam	5.709	11473	360	56.9	1061	60937	10.62 ng/ml
Fluoxetine	5.715	23208	1075	8.9	8908	85999	10.31 ng/ml
Carisoprodol	5.733	82713	4486	57.5	1461	397064	10.45 ng/ml
Lorazepam	5.755	29639	4150	58.7	237	69706	7.68 ng/ml
Oxazepam	5.768	48971	681	72.5	519	191877	10.45 ng/ml
Alprazolam	5.782	92077	1829	108.8	2085	297589	10.48 ng/ml
Sertraline	5.782	5873	173	107.9	∞	27236	9.73 ng/ml
Buprenorphine	5.857	1897	∞	16.7	354	71577	0.89 ng/ml
Temazepam	5.824	134034	5702	31.2	297	624201	9.74 ng/ml
Nordiazepam	5.897	56488	∞	59.4	1704	171107	10.79 ng/ml
Diazepam	5.952	62343	3176	82.4	2950	273912	9.91 ng/ml

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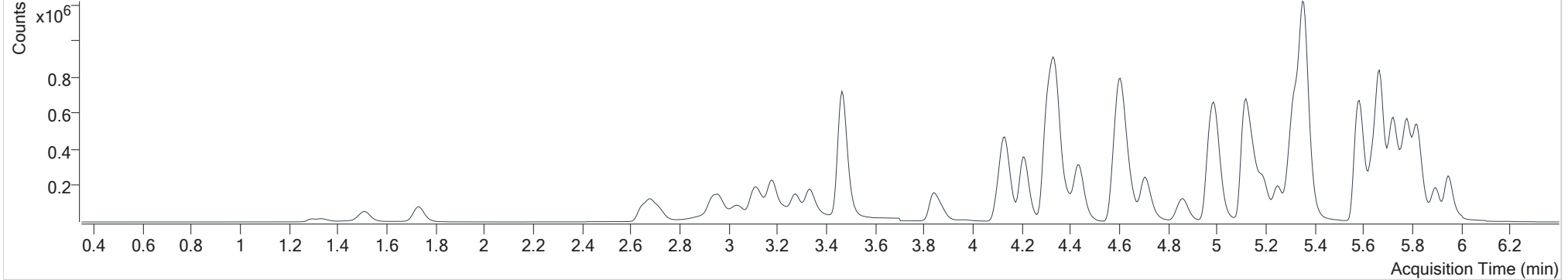
# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results**  
**Calibration Last Update**

 D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
 4/10/2019 10:19:46 AM

**Instrument** 069697  
**Type** Cal  
**Acq. Method** mdq p1 cda 121818.m  
**Sample Position** P2-C1  
**Injection Volume** 2.5  
**Acq. Date-Time** 4/9/2019 3:03:12 PM  
**Sample Info.**
**Data File** cal 3.d  
**Sample** cal 3  
**Operator** Anne Nord  
**Comment**
**Sample Chromatogram**

+ TIC MRM (\*\* -&gt; \*\*) cal 3.d (cal 3)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	19618	∞	22.2	57	11106	25.32 ng/ml
Oxymorphone	1.515	77103	2261	43.9	1698	115859	25.48 ng/ml
Hydromorphone	1.738	84308	11726	74.3	∞	121386	26.14 ng/ml
Dihydrocodeine	2.687	111308	28667	63.5	∞	243252	26.49 ng/ml
Codeine	2.719	40762	23891	104.5	∞	73330	25.42 ng/ml
Oxycodone	2.965	203932	1304	29.3	2400	351774	26.46 ng/ml
Noroxycodone	3.043	79470	1040	41.6	332	117602	24.96 ng/ml
Hydrocodone	3.129	106123	1521	39.0	903	245112	26.38 ng/ml
Norhydrocodone	3.181	10100	573	39.7	91	67853	21.89 ng/ml
Amphetamine	3.183	329583	2213	52.9	1335	193262	28.24 ng/ml
6-MAM	3.239	6582	∞	75.0	∞	82693	2.49 ng/ml
Methamphetamine	3.334	229361	∞	38.8	213	339955	28.06 ng/ml
O-desmethyl-tramadol	3.470	671807	39573	6.6	8517	1245354	24.55 ng/ml
Phentermine	3.879	114910	275	5.0	205	436169	26.80 ng/ml
Benzoylcegonine	3.972	7214	∞	7.9	20	9999	25.05 ng/ml
Ketamine	4.122	219301	26007	37.6	12277	420929	25.78 ng/ml
Norfentanyl	4.158	49845	60210	40.7	674	837735	2.30 ng/ml
Dextrorphan	4.212	123487	59124	216.1	225534	589123	25.06 ng/ml

cal 3

Generated at 10:20 AM on 4/10/2019



# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	656460	41986	3.5	3821	1330583	26.79 ng/ml
Cocaine	4.337	319403	∞	42.8	30872	1133460	25.42 ng/ml
7-aminoclonazepam	4.348	79145	174	84.1	4185	129374	24.74 ng/ml
Metoprolol	4.389	80882	2750	96.1	7192	1330583	26.72 ng/ml
Lamotrigine	4.401	29584	1047	86.2	1002	583527	25.89 ng/ml
alpha-PVP	4.443	251821	17037	53.2	11668	487127	26.49 ng/ml
Doxylamine	4.609	874297	1484	96.7	5697	1517742	25.06 ng/ml
Mirtazapine	4.706	467695	98736	45.3	12967	972165	23.27 ng/ml
Bupropion	4.870	130391	20536	59.2	7115	207607	25.90 ng/ml
Zolpidem	4.995	671460	55375	30.7	12547	1229760	26.48 ng/ml
Meprobamate	4.998	83424	448290	29.1	2832	152423	27.02 ng/ml
Norbuprenorphine	5.075	958	941	102.1	1568	14016	2.57 ng/ml
Venlafaxine	5.120	558535	36965	39.4	3408	1176872	24.12 ng/ml
Fentanyl	5.168	27350	2393	74.9	33322	556463	2.29 ng/ml
Trazodone	5.245	294280	11497	78.4	34212	522220	25.73 ng/ml
Mitragynine	5.296	68310	∞	39.0	∞	972165	26.89 ng/ml
Citalopram	5.303	241565	12578	47.0	∞	423584	25.24 ng/ml
EDDP	5.321	124835	172259	235.8	4653	583527	24.90 ng/ml
Dextromethorphan	5.337	180059	19293	74.8	∞	351823	25.22 ng/ml
Diphenhydramine	5.358	809464	10227	34.7	17288	1606920	24.01 ng/ml
Promethazine	5.578	470812	∞	32.0	6296	794532	24.55 ng/ml
Quetiapine	5.591	297128	∞	59.4	313857	169252	25.65 ng/ml
Clonazepam	5.638	99755	3027	33.5	4323	67314	27.00 ng/ml
Cyclobenzaprine	5.645	277222	1397	10.4	∞	420745	24.95 ng/ml
Methadone	5.669	493255	25072	47.0	1345	972165	24.31 ng/ml
a-hydroxyalprazolam	5.709	25247	886	58.6	3930	56195	26.30 ng/ml
Fluoxetine	5.715	298794	∞	8.9	33061	452889	24.57 ng/ml
Carisoprodol	5.733	190548	13172	58.5	2229	381054	24.57 ng/ml
Lorazepam	5.755	62035	1234	56.3	347	67314	27.85 ng/ml
Oxazepam	5.768	98167	793	71.5	1190	163413	26.49 ng/ml
Alprazolam	5.782	208950	1718	111.7	2634	290147	24.59 ng/ml
Sertraline	5.787	138687	∞	99.4	∞	244873	25.28 ng/ml
Buprenorphine	5.857	4917	∞	16.4	1523	75343	2.33 ng/ml
Temazepam	5.824	315545	8168	31.0	1093	593816	23.88 ng/ml
Nordiazepam	5.897	128022	9938	61.4	∞	164084	26.06 ng/ml
Diazepam	5.952	148122	2747	85.4	5645	271676	25.06 ng/ml

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# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results**

D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin

**Calibration Last Update**

4/10/2019 10:19:46 AM

**Instrument**

069697

**Type**

Cal

**Acq. Method**

mdq p1 cda 121818.m

**Sample Position**

P2-D1

**Injection Volume**

2.5

**Acq. Date-Time**

4/9/2019 3:13:59 PM

**Sample Info.**
**Data File**

cal 4.d

**Sample**

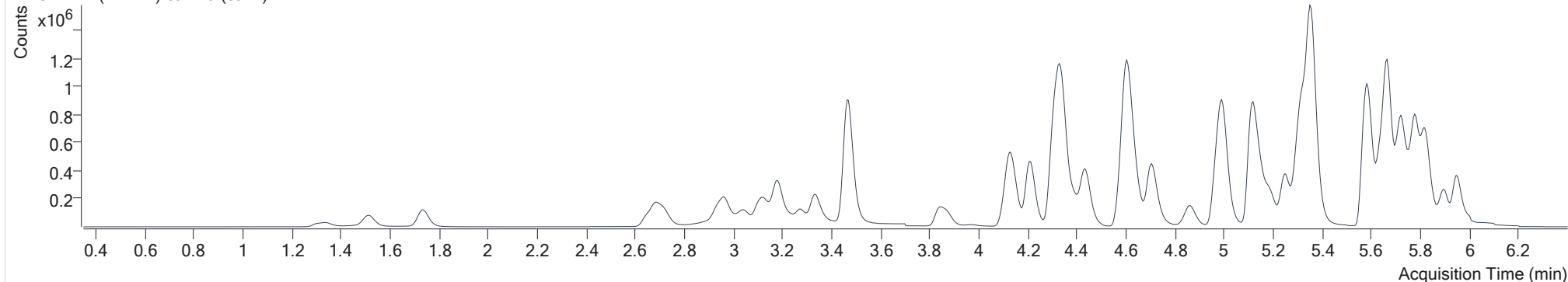
cal 4

**Operator**

Anne Nord

**Comment**
**Sample Chromatogram**

+ TIC MRM (\*\* -&gt; \*\*) cal 4.d (cal 4)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	37175	∞	21.7	42	10470	51.89 ng/ml
Oxymorphone	1.515	142364	5771	44.1	7240	106385	52.42 ng/ml
Hydromorphone	1.738	153669	7513	74.5	534	113369	51.66 ng/ml
Dihydrocodeine	2.687	206184	∞	63.7	20482	234161	51.71 ng/ml
Codeine	2.724	74467	3306	105.5	2066	69223	49.15 ng/ml
Oxycodone	2.965	380181	1397	29.5	1427	336090	53.21 ng/ml
Noroxycodone	3.048	149315	1549	41.0	196	111014	49.56 ng/ml
Hydrocodone	3.134	197981	1642	39.4	1385	231508	54.32 ng/ml
Norhydrocodone	3.186	20827	∞	40.4	∞	63759	45.34 ng/ml
Amphetamine	3.183	512400	2477	53.2	1387	163469	53.59 ng/ml
6-MAM	3.244	12010	∞	77.7	∞	76873	4.85 ng/ml
Methamphetamine	3.334	290727	∞	40.0	164	243510	54.72 ng/ml
O-desmethyl-tramadol	3.470	1258284	129349	6.5	13476	1171613	48.78 ng/ml
Phentermine	3.879	189887	575	4.7	557	366896	54.49 ng/ml
Benzoylcegonine	3.972	13472	26438	7.6	23	9484	50.21 ng/ml
Ketamine	4.122	399042	461049	37.3	2271	386159	52.50 ng/ml
Norfentanyl	4.158	94601	3452	40.5	1349	781773	4.48 ng/ml
Dextrophan	4.212	230515	50067	215.4	1348	557444	49.50 ng/ml

cal 4

Generated at 10:20 AM on 4/10/2019

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# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	1211754	54906	3.5	2119	1269035	52.96 ng/ml
Cocaine	4.337	576688	51894	42.9	20265	1052064	49.82 ng/ml
7-aminoclonazepam	4.348	148469	5397	82.6	268	119344	50.09 ng/ml
Metoprolol	4.389	147464	∞	96.3	6014	1269035	51.86 ng/ml
Lamotrigine	4.401	54508	1343	86.5	1468	510144	52.64 ng/ml
alpha-PVP	4.438	444828	56910	52.9	6019	437599	53.81 ng/ml
Doxylamine	4.609	1652895	∞	96.4	2553	1425466	50.62 ng/ml
Mirtazapine	4.706	862886	67549	45.3	145423	943783	44.04 ng/ml
Bupropion	4.870	195760	94888	59.2	2667	160118	51.26 ng/ml
Zolpidem	4.995	1277927	85354	30.7	23616	1186156	52.85 ng/ml
Meprobamate	4.998	147532	67971	29.4	1939	140587	52.52 ng/ml
Norbuprenorphine	5.070	1716	∞	102.2	1746	13583	5.27 ng/ml
Venlafaxine	5.120	1061760	35442	39.5	5407	1112409	47.91 ng/ml
Fentanyl	5.168	59612	∞	73.7	∞	580365	4.73 ng/ml
Trazodone	5.250	591280	23486	78.8	21012	527852	51.91 ng/ml
Mitragynine	5.296	137873	251887	37.6	52763	943783	55.67 ng/ml
Citalopram	5.303	447033	∞	46.9	∞	395965	50.31 ng/ml
EDDP	5.321	217010	43397	236.0	9285	510144	49.46 ng/ml
Dextromethorphan	5.337	342432	45170	75.8	81288	341811	49.37 ng/ml
Diphenhydramine	5.358	1488266	16528	34.4	∞	1460820	47.87 ng/ml
Promethazine	5.578	979541	5934	33.1	2590	844034	47.84 ng/ml
Quetiapine	5.591	551091	65571	59.4	249046	157704	51.28 ng/ml
Clonazepam	5.638	170324	2472	33.6	5797	58630	53.85 ng/ml
Cyclobenzaprine	5.645	591227	346113	10.6	3569	459275	49.01 ng/ml
Methadone	5.669	967071	3374449	45.9	11816	943783	48.70 ng/ml
a-hydroxyalprazolam	5.709	43793	612	59.1	1732	50411	51.50 ng/ml
Fluoxetine	5.715	620011	∞	8.2	25313	496826	46.09 ng/ml
Carisoprodol	5.733	333515	8428	58.9	2026	335214	48.50 ng/ml
Lorazepam	5.755	97036	∞	56.4	368	58630	57.65 ng/ml
Oxazepam	5.763	148540	6432	72.8	604	126884	52.93 ng/ml
Alprazolam	5.782	387254	2226	108.9	3668	261911	50.64 ng/ml
Sertraline	5.787	269004	∞	99.6	∞	240466	49.77 ng/ml
Buprenorphine	5.857	9443	1146	16.8	∞	75507	4.56 ng/ml
Temazepam	5.824	571613	5174	30.0	623	533761	47.96 ng/ml
Nordiazepam	5.902	220471	∞	62.0	∞	145924	50.84 ng/ml
Diazepam	5.952	274289	17055	85.4	6889	253001	50.78 ng/ml

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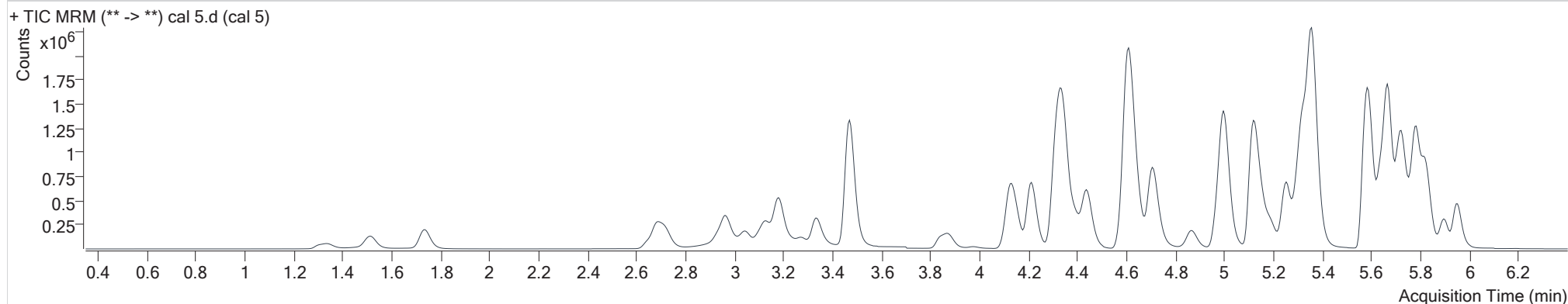
# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Calibration Last Update** 4/10/2019 10:19:46 AM

**Instrument** 069697  
**Type** Cal  
**Acq. Method** mdq p1 cda 121818.m  
**Sample Position** P2-E1  
**Injection Volume** 2.5  
**Acq. Date-Time** 4/9/2019 3:24:47 PM  
**Sample Info.**

**Data File** cal 5.d  
**Sample** cal 5  
**Operator** Anne Nord  
**Comment**

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	73106	∞	22.5	35	10112	106.69 ng/ml
Oxymorphone	1.515	281000	9804	44.3	3487	104586	106.44 ng/ml
Hydromorphone	1.738	287420	6278	77.3	27330	103728	106.33 ng/ml
Dihydrocodeine	2.687	394494	81166	63.8	25846	230370	101.31 ng/ml
Codeine	2.724	138677	13494	106.0	6200	63587	99.59 ng/ml
Oxycodone	2.965	750278	9407	29.7	3696	331557	108.10 ng/ml
Noroxycodone	3.043	277625	4735	41.4	2868	105013	97.30 ng/ml
Hydrocodone	3.129	388107	997	39.2	1952	225282	111.74 ng/ml
Norhydrocodone	3.186	46390	987	41.1	379	61754	101.34 ng/ml
Amphetamine	3.183	863546	5871	54.6	1891	148349	101.23 ng/ml
6-MAM	3.244	24408	5336	73.8	∞	76113	9.93 ng/ml
Methamphetamine	3.334	426874	∞	41.8	∞	203728	101.00 ng/ml
O-desmethyl-tramadol	3.470	2481568	∞	6.5	21535	1129803	99.67 ng/ml
Phentermine	3.879	326716	587	4.9	1928	331299	105.57 ng/ml
Benzoylcegonine	3.977	25420	77666	8.3	∞	9276	97.71 ng/ml
Ketamine	4.127	748859	108416	38.0	1331	364381	105.78 ng/ml
Norfentanyl	4.163	191985	8265	40.9	2443	753240	9.20 ng/ml
Dextrophan	4.212	443033	∞	216.7	12953	529566	100.21 ng/ml

cal 5

Generated at 10:20 AM on 4/10/2019

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# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	2310491	136025	3.5	2228	1197629	108.21 ng/ml
Cocaine	4.343	1091956	129552	42.7	49239	987198	100.95 ng/ml
7-aminoclonazepam	4.353	274900	4084	84.4	4904	109689	100.70 ng/ml
Metoprolol	4.389	270047	21313	97.0	10109	1197629	101.44 ng/ml
Lamotrigine	4.406	100622	6079	86.6	8563	505315	96.61 ng/ml
alpha-PVP	4.443	813216	13771	53.6	6647	399135	109.64 ng/ml
Doxylamine	4.609	3343167	∞	96.6	66131	1415529	103.30 ng/ml
Mirtazapine	4.706	1660373	143895	45.3	116470	847288	94.16 ng/ml
Bupropion	4.870	284910	4144	59.4	4071	120691	99.79 ng/ml
Zolpidem	5.000	2497243	221311	29.9	63787	1137323	108.37 ng/ml
Meprobamate	5.003	255161	58874	29.7	∞	130371	98.64 ng/ml
Norbuprenorphine	5.075	3192	12290	96.8	∞	13129	10.69 ng/ml
Venlafaxine	5.120	2090478	401171	39.3	102748	1069597	97.50 ng/ml
Fentanyl	5.168	118586	∞	74.8	4038	560174	9.68 ng/ml
Trazodone	5.250	1115542	62356	79.2	37895	500858	103.97 ng/ml
Mitragynine	5.296	256641	8322	37.4	157022	847288	115.20 ng/ml
Citalopram	5.303	772235	471	48.5	9526	339380	101.75 ng/ml
EDDP	5.326	442266	9368	236.3	9985	505315	101.72 ng/ml
Dextromethorphan	5.337	622042	14025	75.9	∞	305859	100.22 ng/ml
Diphenhydramine	5.363	2752285	∞	34.5	148253	1324028	96.96 ng/ml
Promethazine	5.578	1959958	∞	32.2	7489	815467	98.80 ng/ml
Quetiapine	5.596	991105	∞	59.3	9733	139146	104.75 ng/ml
Clonazepam	5.638	274437	10498	34.3	3260	48552	105.66 ng/ml
Cyclobenzaprine	5.645	1100666	37310	10.4	2737	412264	101.95 ng/ml
Methadone	5.669	1796348	23748	45.9	∞	847288	100.34 ng/ml
a-hydroxyalprazolam	5.709	70862	6601	58.6	1674	41444	102.02 ng/ml
Fluoxetine	5.715	1282172	12867	9.0	4955	466787	100.93 ng/ml
Carisoprodol	5.733	588178	10117	57.7	8347	279525	102.16 ng/ml
Lorazepam	5.755	138791	1580	58.1	1210	48552	106.55 ng/ml
Oxazepam	5.763	194796	1991	72.4	1319	85892	103.85 ng/ml
Alprazolam	5.782	649868	4337	107.4	5030	220134	101.26 ng/ml
Sertraline	5.782	569085	9185	100.9	574	248954	101.53 ng/ml
Buprenorphine	5.857	18556	1596	16.2	415	71630	9.56 ng/ml
Temazepam	5.824	1019665	4051	30.7	7308	458832	99.35 ng/ml
Nordiazepam	5.902	379411	∞	61.0	∞	124809	102.71 ng/ml
Diazepam	5.952	495239	6809	84.8	10484	222828	105.10 ng/ml

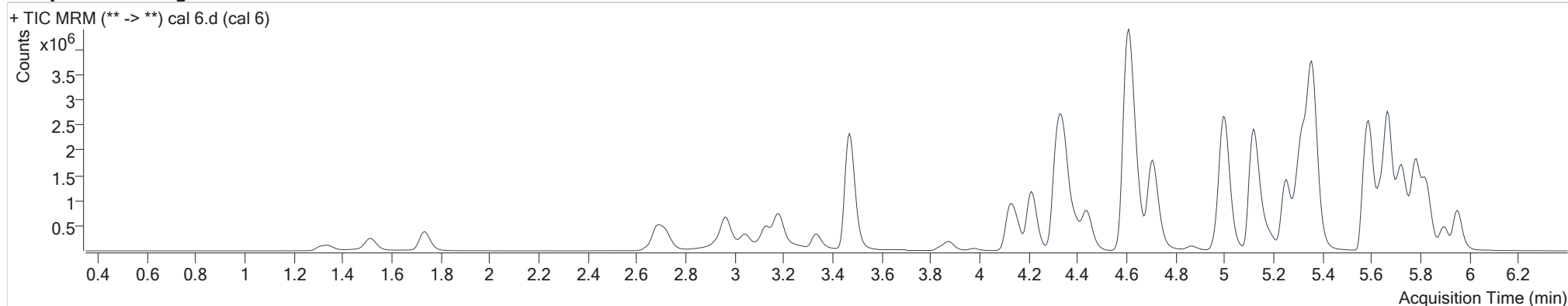
A

# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results** D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin  
**Calibration Last Update** 4/10/2019 10:19:46 AM

<b>Instrument</b>	069697	<b>Data File</b>	cal 6.d
<b>Type</b>	Cal	<b>Sample</b>	cal 6
<b>Acq. Method</b>	mdq p1 cda 121818.m	<b>Operator</b>	Anne Nord
<b>Sample Position</b>	P2-F1	<b>Comment</b>	
<b>Injection Volume</b>	2.5		
<b>Acq. Date-Time</b>	4/9/2019 3:35:35 PM		
<b>Sample Info.</b>			

## Sample Chromatogram



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	155453	∞	21.9	41	8959	257.44 ng/ml
Oxymorphone	1.515	607727	1391	43.8	4937	92449	262.13 ng/ml
Hydromorphone	1.738	608572	17313	78.1	13365	95286	245.97 ng/ml
Dihydrocodeine	2.682	806708	75734	65.4	447022	219082	218.76 ng/ml
Codeine	2.719	276867	22539	104.0	∞	52347	241.44 ng/ml
Oxycodone	2.960	1683210	3233	29.6	1509	309097	262.45 ng/ml
Noroxycodone	3.043	600008	5797	41.9	3452	92342	238.98 ng/ml
Hydrocodone	3.129	851562	6152	38.5	1380	209616	266.58 ng/ml
Norhydrocodone	3.186	112642	508	41.3	1440	55772	268.64 ng/ml
Amphetamine	3.183	1254606	3350	52.0	3403	93988	234.73 ng/ml
6-MAM	3.244	57253	2794	74.2	∞	70578	25.08 ng/ml
Methamphetamine	3.334	440752	∞	39.9	∞	96121	228.87 ng/ml
O-desmethyl-tramadol	3.470	5464575	378684	6.3	27694	989441	250.47 ng/ml
Phentermine	3.879	457016	∞	4.9	1524	201883	244.82 ng/ml
Benzoylcegonine	3.977	64280	4553	7.7	54	9253	249.12 ng/ml
Ketamine	4.127	1375286	85339	37.1	6821	275171	259.22 ng/ml
Norfentanyl	4.163	450681	5098	40.7	8608	682903	23.50 ng/ml
Dextrophan	4.212	923995	117030	218.5	∞	445386	248.58 ng/ml

cal 6

Generated at 10:20 AM on 4/10/2019

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# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.319	4770912	256297	3.5	5455	1052654	255.80 ng/ml
Cocaine	4.343	2245158	264052	42.6	178580	818057	251.07 ng/ml
7-aminoclonazepam	4.353	487922	11320	84.6	6397	79654	245.81 ng/ml
Metoprolol	4.389	504295	7305	96.0	∞	1052654	216.48 ng/ml
Lamotrigine	4.406	197687	2586	86.8	14497	425184	223.26 ng/ml
alpha-PVP	4.443	1146244	14693	53.9	14602	249807	249.13 ng/ml
Doxylamine	4.609	7616096	21296	97.2	∞	1297811	256.94 ng/ml
Mirtazapine	4.706	3540532	317733	45.8	358702	691506	245.69 ng/ml
Bupropion	4.870	127372	18507	57.9	2031	23796	227.38 ng/ml
Zolpidem	5.000	5467683	114995	30.0	47741	1058383	255.82 ng/ml
Meprobamate	5.003	445043	83908	29.3	18999	105743	213.00 ng/ml
Norbuprenorphine	5.075	6640	5985	98.4	9232	12097	24.89 ng/ml
Venlafaxine	5.120	4603955	∞	39.5	42307	916899	249.57 ng/ml
Fentanyl	5.168	223821	162166	72.3	1205962	415598	24.55 ng/ml
Trazodone	5.250	2319292	69245	78.3	70995	438710	247.85 ng/ml
Mitragynine	5.296	424518	∞	38.8	157688	691506	233.26 ng/ml
Citalopram	5.303	1543269	44916	47.3	∞	278484	248.30 ng/ml
EDDP	5.326	908155	30813	237.2	17475	425184	248.18 ng/ml
Dextromethorphan	5.337	1129092	∞	75.2	332762	221102	251.66 ng/ml
Diphenhydramine	5.363	5597266	121615	33.4	34984	1036846	250.71 ng/ml
Promethazine	5.578	3163023	503531	31.9	5414	522742	248.36 ng/ml
Quetiapine	5.596	2139775	84180	58.5	15753	124824	252.40 ng/ml
Clonazepam	5.638	481067	55095	33.8	6519	35481	254.78 ng/ml
Cyclobenzaprine	5.640	1698702	106804	10.4	10080	259982	249.92 ng/ml
Methadone	5.669	3678179	272447	45.2	65970	691506	251.14 ng/ml
a-hydroxyalprazolam	5.709	131304	2631	58.5	2333	33003	238.29 ng/ml
Fluoxetine	5.715	1847402	∞	9.0	∞	275918	245.38 ng/ml
Carisoprodol	5.733	1083147	13625	58.6	6115	216101	242.82 ng/ml
Lorazepam	5.755	213394	1707	57.3	3872	35481	234.76 ng/ml
Oxazepam	5.763	255139	1861	73.2	1079	48036	245.08 ng/ml
Alprazolam	5.782	1249712	4749	109.9	2501	170784	251.22 ng/ml
Sertraline	5.787	754424	1951	100.1	887	135126	247.74 ng/ml
Buprenorphine	5.857	40749	5411	16.5	8951	59757	25.33 ng/ml
Temazepam	5.824	1983000	78061	30.5	2046	357395	247.82 ng/ml
Nordiazepam	5.902	670976	∞	61.0	18873	91342	248.78 ng/ml
Diazepam	5.952	994126	11955	85.0	9420	185951	254.16 ng/ml

# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results**

D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin

**Calibration Last Update**

4/10/2019 10:19:46 AM

**Instrument**

069697

**Type**

Cal

**Acq. Method**

mdq p1 cda 121818.m

**Sample Position**

P2-G1

**Injection Volume**

2.5

**Acq. Date-Time**

4/9/2019 3:46:22 PM

**Sample Info.**
**Data File**

cal 7.d

**Sample**

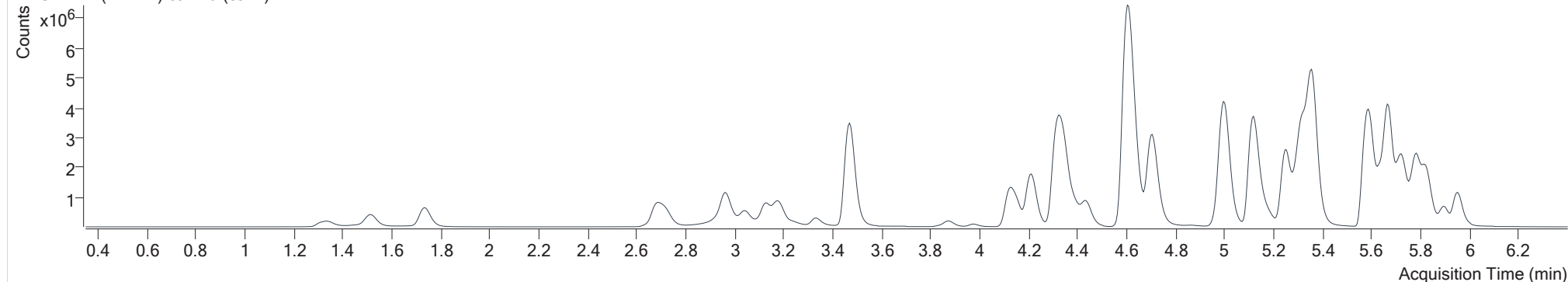
cal 7

**Operator**

Anne Nord

**Comment**
**Sample Chromatogram**

+ TIC MRM (\*\* -&gt; \*\*) cal 7.d (cal 7)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	268531	13737	22.2	24	8110	492.14 ng/ml
Oxymorphone	1.515	1105548	3502	43.9	6849	86475	510.92 ng/ml
Hydromorphone	1.738	1097431	11052	79.2	8650	88116	480.28 ng/ml
Dihydrocodeine	2.682	1362319	43318	64.5	∞	214306	378.24 ng/ml
Codeine	2.719	461488	5420	101.8	16097	41962	501.97 ng/ml
Oxycodone	2.960	3148173	1494	29.2	2044	301277	505.14 ng/ml
Noroxycodone	3.043	1054649	5951	40.1	2852	76068	509.79 ng/ml
Hydrocodone	3.129	1538248	1450	40.0	1077	200118	506.44 ng/ml
Norhydrocodone	3.186	213891	2671	41.5	1289	50216	564.04 ng/ml
Amphetamine	3.183	1408523	3237	51.9	2928	55683	446.59 ng/ml
6-MAM	3.239	107114	64278	75.0	∞	65145	50.81 ng/ml
Methamphetamine	3.334	384170	∞	41.6	∞	45393	427.99 ng/ml
O-desmethyl-tramadol	3.470	9285741	348368	6.3	59058	831968	506.07 ng/ml
Phentermine	3.874	514391	2334	5.0	1081	117638	474.67 ng/ml
Benzoylcegonine	3.972	134798	722045	8.0	5950	9769	495.69 ng/ml
Ketamine	4.122	2262319	298326	37.0	16978	232260	506.50 ng/ml
Norfentanyl	4.158	847747	2793	40.5	15090	611615	49.14 ng/ml
Dextrophan	4.212	1536049	∞	219.8	1699	372561	494.08 ng/ml

cal 7



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# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.314	7468112	277887	3.4	11898	909281	464.50 ng/ml
Cocaine	4.343	3451872	236882	43.0	205115	640574	493.36 ng/ml
7-aminoclonazepam	4.353	643302	20685	84.4	7323	51150	504.46 ng/ml
Metoprolol	4.389	717098	10045	96.9	23863	909281	356.93 ng/ml
Lamotrigine	4.406	299143	44746	85.3	7643	392699	364.67 ng/ml
alpha-PVP	4.438	1219944	45187	53.0	61299	137542	483.23 ng/ml
Doxylamine	4.604	13535509	1078083	97.0	∞	1194451	496.33 ng/ml
Mirtazapine	4.708	6432665	470186	44.6	95575	567353	543.81 ng/ml
Bupropion	4.870	39283	2869	56.6	2311	3890	429.75 ng/ml
Zolpidem	4.995	9414506	∞	30.1	53181	1004003	464.86 ng/ml
Meprobamate	5.003	600492	58483	28.9	15271	88508	343.84 ng/ml
Norbuprenorphine	5.070	11770	23704	97.0	40892	10366	52.14 ng/ml
Venlafaxine	5.120	7899526	3275	38.5	126140	785822	499.05 ng/ml
Fentanyl	5.168	415719	121786	74.8	661526	363728	52.04 ng/ml
Trazodone	5.250	4345144	931957	77.2	328748	456365	446.99 ng/ml
Mitragynine	5.291	699251	∞	39.5	∞	567353	468.08 ng/ml
Citalopram	5.297	2239426	∞	47.1	∞	198381	506.14 ng/ml
EDDP	5.321	1679365	308152	241.2	90774	392699	496.86 ng/ml
Dextromethorphan	5.337	1610908	14616	76.0	29336	160581	494.37 ng/ml
Diphenhydramine	5.363	8414227	315658	33.3	93915	773636	504.42 ng/ml
Promethazine	5.579	5358487	12525	31.7	70124	438154	501.72 ng/ml
Quetiapine	5.596	3487182	39858	58.6	335255	104750	490.38 ng/ml
Clonazepam	5.633	604799	∞	33.1	16416	24457	465.47 ng/ml
Cyclobenzaprine	5.640	2780615	47763	10.3	3436	210361	505.89 ng/ml
Methadone	5.669	6139145	49241	44.3	22970	567353	510.48 ng/ml
a-hydroxyalprazolam	5.709	187111	450	58.9	1520	23748	472.58 ng/ml
Fluoxetine	5.715	3074361	35048	8.9	∞	226168	497.73 ng/ml
Carisoprodol	5.733	1516746	59183	57.5	∞	147881	496.48 ng/ml
Lorazepam	5.755	282665	2702	57.2	1101	24457	459.98 ng/ml
Oxazepam	5.763	296417	2123	70.8	3603	27260	503.19 ng/ml
Alprazolam	5.782	1903415	3423	109.2	3179	133146	490.94 ng/ml
Sertraline	5.793	1169450	23603	102.2	56660	104883	494.59 ng/ml
Buprenorphine	5.857	71970	1857	15.8	35425	51745	51.77 ng/ml
Temazepam	5.824	2973026	88733	30.0	10484	257302	515.92 ng/ml
Nordiazepam	5.897	959565	32113	61.0	51357	68553	474.43 ng/ml
Diazepam	5.952	1557185	3126	84.9	7117	146964	504.66 ng/ml

# ISPFS AM #28 Multi-Drug Quant. Results

**Batch results**

D:\MassHunter\Data\am 28\040919\QuantResults\mdq p1.batch.bin

**Calibration Last Update**

4/10/2019 10:19:46 AM

**Instrument**

069697

**Type**

Cal

**Acq. Method**

mdq p1 cda 121818.m

**Sample Position**

P2-H1

**Injection Volume**

2.5

**Acq. Date-Time**

4/9/2019 4:07:54 PM

**Sample Info.**
**Data File**

cal 8.d

**Sample**

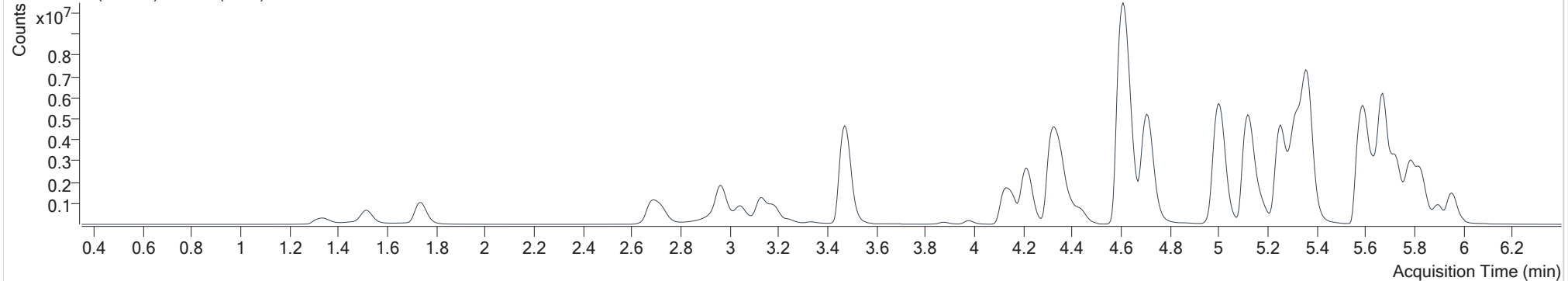
cal 8

**Operator**

Anne Nord

**Comment**
**Sample Chromatogram**

+ TIC MRM (\*\* -&gt; \*\*) cal 8.d (cal 8)



Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Morphine	1.337	429291	∞	22.9	∞	6438	992.16 ng/ml
Oxymorphone	1.515	1919067	4914	43.8	1461	79271	968.53 ng/ml
Hydromorphone	1.738	2020268	∞	74.1	25562	76805	1015.13 ng/ml
Dihydrocodeine	2.682	2027663	59446	65.2	37079	198641	607.84 ng/ml
Codeine	2.724	687166	41072	101.9	11471	30682	1022.20 ng/ml
Oxycodone	2.960	5505758	8335	29.3	3232	274585	970.81 ng/ml
Noroxycodone	3.043	1771651	4569	41.6	7551	64891	1003.76 ng/ml
Hydrocodone	3.129	2671567	974	40.1	1225	183501	961.24 ng/ml
Norhydrocodone	3.186	416298	4458	41.1	∞	42264	1301.37 ng/ml
Amphetamine	3.183	1258527	2587	51.3	2980	24036	926.56 ng/ml
6-MAM	3.244	193053	114487	76.1	∞	57526	103.68 ng/ml
Methamphetamine	3.334	119762	∞	39.1	∞	5886	1038.12 ng/ml
O-desmethyl-tramadol	3.470	14073365	367779	6.3	56279	641147	995.17 ng/ml
Phentermine	3.879	250645	782	4.8	1363	26749	1019.37 ng/ml
Benzoylcegonine	3.977	272110	95820	8.0	35113	9912	987.11 ng/ml
Ketamine	4.127	3264061	248197	37.3	16315	174121	976.06 ng/ml
Norfentanyl	4.163	1503222	166494	40.5	483328	512833	103.69 ng/ml
Dextrophan	4.212	2564183	279705	220.4	141235	305065	1007.33 ng/ml

cal 8

Generated at 10:20 AM on 4/10/2019

# ISPFS AM #28 Multi-Drug Quant. Results

Name	RT	Resp.	S/N	Ratio	S/N	ISTD Resp.	Final Conc.
Tramadol	4.314	10195462	516916	3.5	13508	692560	833.51 ng/ml
Cocaine	4.346	4894760	214605	42.2	429120	446543	1003.98 ng/ml
7-aminoclonazepam	4.358	698310	196	84.7	572	28218	992.41 ng/ml
Metoprolol	4.389	1014395	166459	96.6	∞	692560	663.64 ng/ml
Lamotrigine	4.411	395292	17691	87.3	16818	303806	621.65 ng/ml
alpha-PVP	4.443	755335	6886	53.8	10832	41081	1003.62 ng/ml
Doxylamine	4.609	20723193	∞	97.1	18121	987429	919.37 ng/ml
Mirtazapine	4.706	11798959	638306	44.8	281525	504556	1121.40 ng/ml
Bupropion	4.870	25452	9533	53.9	∞	995	1089.98 ng/ml
Zolpidem	5.000	14467676	∞	29.9	145563	856323	838.07 ng/ml
Meprobamate	5.008	713307	∞	29.3	41469	67771	533.84 ng/ml
Norbuprenorphine	5.075	24935	∞	99.4	57870	11867	97.00 ng/ml
Venlafaxine	5.120	12402210	656104	38.8	22777	611578	1006.14 ng/ml
Fentanyl	5.168	926311	19958	74.8	804818	376841	111.85 ng/ml
Trazodone	5.251	8114390	2124	78.3	2106	555728	685.90 ng/ml
Mitragynine	5.291	1129791	225030	39.0	413451	504556	850.24 ng/ml
Citalopram	5.297	3241063	∞	46.9	∞	146348	993.30 ng/ml
EDDP	5.321	2614220	103349	242.8	66654	303806	999.72 ng/ml
Dextromethorphan	5.337	2433525	310635	75.6	65416	119810	1000.97 ng/ml
Diphenhydramine	5.368	12809270	473694	34.2	12102	593442	1000.39 ng/ml
Promethazine	5.573	8535745	∞	30.8	10093	348967	1003.22 ng/ml
Quetiapine	5.601	5478148	13119	58.5	∞	89324	903.58 ng/ml
Clonazepam	5.633	573627	44081	34.8	7345	13482	801.56 ng/ml
Cyclobenzaprine	5.640	3874918	70034	10.0	5224	149361	993.17 ng/ml
Methadone	5.669	10589878	19772	46.3	28420	504556	989.79 ng/ml
a-hydroxyalprazolam	5.709	252904	1069	57.5	1378	15473	981.11 ng/ml
Fluoxetine	5.715	4423960	354706	8.8	∞	160369	1009.64 ng/ml
Carisoprodol	5.738	1835558	∞	57.4	71544	85984	1032.95 ng/ml
Lorazepam	5.755	348463	∞	58.1	4300	13482	1040.53 ng/ml
Oxazepam	5.763	355835	8510	71.1	4472	16589	993.93 ng/ml
Alprazolam	5.782	2601947	140	109.1	1288	88826	1006.11 ng/ml
Sertraline	5.793	1588883	∞	101.4	35770	69520	1013.63 ng/ml
Buprenorphine	5.857	162778	91002	15.8	119979	51262	118.32 ng/ml
Temazepam	5.824	4034298	476433	29.9	33612	168489	1068.94 ng/ml
Nordiazepam	5.902	1275767	10012	61.7	417415	45975	940.95 ng/ml
Diazepam	5.952	2181269	10453	84.9	3268	105498	985.68 ng/ml