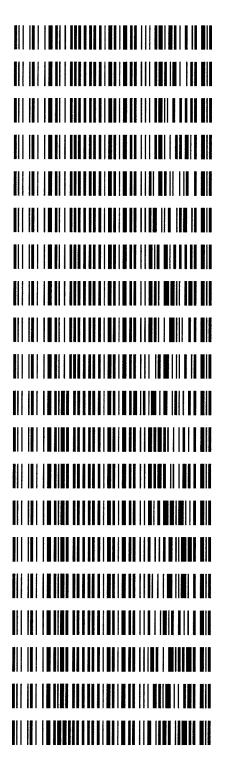
Worklist: 1660

.___.

. . _ _

LAB CASE	ITEM	TASK ID	DESCRIPTION
C2017-0556	1	81991	AM 28 Blood Multi-Drug Quant
C2017-0557	1	81992	AM 28 Blood Multi-Drug Quant
C2017-0558	1	81993	AM 28 Blood Multi-Drug Quant
C2017-0559	1	81994	AM 28 Blood Multi-Drug Quant
C2017-0584	1	81995	AM 28 Blood Multi-Drug Quant
C2017-0601	1	81996	AM 28 Blood Multi-Drug Quant
C2017-0608	1	81997	AM 28 Blood Multi-Drug Quant
C2017-0625	1	81998	AM 28 Blood Multi-Drug Quant
C2017-0626	1	81999	AM 28 Blood Multi-Drug Quant
C2017-0665	1	82000	AM 28 Blood Multi-Drug Quant
M2017-0869	1	82010	AM 28 Blood Multi-Drug Quant
M2017-1095	1	82001	AM 28 Blood Multi-Drug Quant
M2017-1096	1	82002	AM 28 Blood Multi-Drug Quant
M2017-1115	1	82003	AM 28 Blood Multi-Drug Quant
M2017-1122	1	82004	AM 28 Blood Multi-Drug Quant
M2017-1209	1	82005	AM 28 Blood Multi-Drug Quant
M2017-1223	1	82006	AM 28 Blood Multi-Drug Quant
M2017-1301	1	82007	AM 28 Blood Multi-Drug Quant
M2017-1308	2	82008	AM 28 Blood Multi-Drug Quant
P2017-0738	1	82009	AM 28 Blood Multi-Drug Quant



ISP Forensic Services: Loxicology Discipline

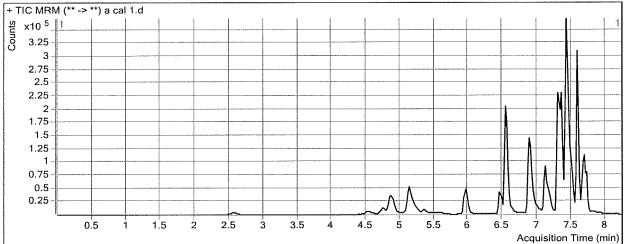
\$

Multi-Drug Quantitation in Blood by LC-MS/MS

)	Multi-Drug Quantitation in Blood by LC-MS/MS
Date: <u>4-7</u>	14-17 Analyst: Anne Norz
PRE-ANA	ALYTIC
	ate Lot# 0498367 Plate Exp. 1/26/2018
	Ensure all solutions are within expiration date.
	Mobile Phase A: 0.5M Ammonium Hydroxide
	5mM Amm Form +0.01% FA
	Mobile Phase B: Ethyl Acetate
	0.01% FA in MeOH
1	20% Methanol Column: <i>Agilent 120 EC-C18 (2.1x 100-4um)</i>
	Check levels of mobile phases and needle wash and refill as necessary. Ensure waste is not full.
	Begin mobile phase flow and allow system to equilibrate for approx. 30 minutes.
<u>↓</u> 4.	Create worklist. Data path name: <u>4/3/7 mda pl</u>
ANALYT	
1.	Remove standards plate, blood, and samples from cold storage. Allow to reach room temperature.
<u>√</u> 2.	Pipette 250 µL blood in wells of analytical (standards) plate. Mix via aspirate and dispense.
	• Blank blood for locations containing standards/QCs and internal standards
	Sample blood for locations containing only internal standards
$\frac{\sim}{2}$ 3.	Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID 66759
<u> </u>	Pipette 250 µL 0.5M ammonium hydroxide buffer in wells of analytical (standards) plate.
<u> </u>	Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
<u>5</u> 6.	Transfer 300 µL of blood+base mixture to corresponding wells of SLE+ plate.
$ \begin{array}{c} $	Apply positive pressure for approx. 4 seconds (or until no liquid remains on top of sorbent).
~J	(Load at 85-100PSI- Selector to Right) Wait 5 min.
<u>~</u> 8.	Add 900 μ L ethyl acetate and allow to flow for 5 minutes under gravity.
<u> </u>	Apply positive pressure for approx. 15 seconds. (~10-15 PSI – Selector to the left)
<u>~</u> 10.	Add 900 μ L ethyl acetate and allow to flow for 5 minutes under gravity.
<u>ح</u> 11.	Apply positive pressure for approx. 15 seconds. (~10-15 PSI – Selector to the left)
12.	Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
	SPE Dry ID 66819
	Reconstitute in 100 µL 20% MeOH and seal plate with foil. Place in autosampler and run worklist.
POST-A	ANALYTIC
I.	Open quantitation software and create a new quantitation batch. Batch name: <u>4-13-17 Mag Pla</u> , KA 4-13-17 mda Plb
<u>~</u> 2.	Make any necessary changes. Limit curves based on validated linear ranges.
$ \begin{array}{c} \hline \hline \\ $	Were all appropriate standards used in the curve for each analyte? 𝖅≁N Are r ² values ≥0.98 for each analyte 𝔅𝒱 N
4.	For unknown samples, are the response ratios for each analyte within $\pm 20\%$ of the average ratios of the standards and QC's? $(N)/N$
<u></u> 5.	Did all QCs pass for each analyte? (y/ N
<u></u> 6.	Central File Packet to include: \checkmark LIMS Worklist: \checkmark Method Checklist \checkmark Calibration and Control Reports
COMMEN	*

Batch Data Path	D:\2017 Data\41317 mc	lq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 12:21	Data File	a cal 1.d
Sample Type	Calibration	Sample Name	a cal 1
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-A1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.631	784	1264	0.6203	4.9450
Hydromorphone	Hydromorphone-D6	2.608	3999	22588	0.1771	5.0508
Codeine	Codeine-D6	4.593	2086	14173	0.1472	4.1477
Amphetamine	Amphetamine-D11	4.884	59591	49162	1.2121	4.8537
Oxycodone	Oxycodone-D6	4.910	11462	81252	0.1411	5,4260
Hydrocodone	Hydrocodone-D6	5.175	7615	70981	0.1073	4.2697
Norhydrocodone	Norhydrocodone-D3	5.199	735	26539	0.0277	4.9895
Methamphetamine	Methamphetamine-D11	5.223	32910	154607	0.2129	0.4492
6-MAM	6-MAM-D6	5.369	383	21173	0.0181	0.3794
Phentermine	Phentermine-D5	6.007	6126	165189	0.0371	4.8851
Dextrorphan	Dextrorphan-D3	6.463	8215	109978	0.0747	5.0900
7-aminoclonazepam	7-Aminoclonazepam-D4	6.555	8807	63479	0.1387	4.8455
Tramadol	Tramadol-13C-D3	6.560	73138	564358	0.1296	5.1037
Doxylamine	Doxylamine-D5	6.903	60621	530985	0.1142	5.2409
Bupropion	Bupropion-D9	7.152	32027	262995	0.1218	4.8484
Meprobamate	Meprobamate-D7	7.213	5158	37903	0.1361	4.0141
Venlafaxine	Venlafaxine-D6	7.306	96010	532299	0.1804	3.7750
Citalopram	Citalopram-D6	7.398	43537	331680	0.1313	5.0361
Zolpidem	Zolpidem-D6	7.364	49684	411100	0.1209	4.2376
Diphenhydramine	Diphenhydramine-D3	7.452	67527	561469	0.1203	5.0350
Dextromethorphan	Dextromethorphan-D3	7.428	10125	78218	0.1294	3.6351
Trazodone	Trazodone-D6	7.497	41485	298120	0.1392	4.7590
Clonazepam	Clonazepam-D4	7.603	3442	7843	0.4389	5.0659

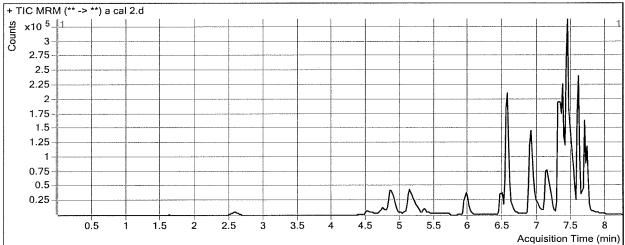
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.587	71039	629370	0.1129	4.8936
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.660	1694	12600	0.1344	5.3206
Carisoprodol	Carisoprodol-D7	7.693	21946	217326	0.1010	5.0320
Lorazepam	Alprazolam-D5	7.703	1524	126784	0.0120	5.2101
Alprazolam	Alprazolam-D5	7.727	16305	126784	0.1286	5.0194

a call

ISP FORENSICS - Cd'A Instrument # 62340 Multi-Drug Confirmatory Analysis Report

Batch Data Path	D:\2017 Data\41317 mo	dq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 12:47	Data File	a cal 2.d
Sample Type	Calibration	Sample Name	a cal 2
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-B1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram

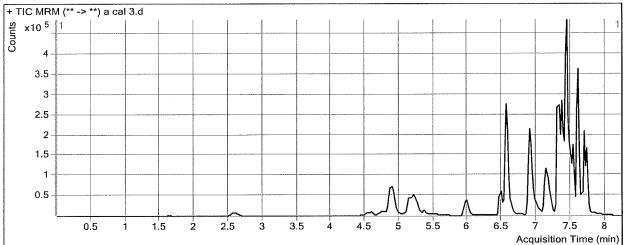


Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.631	1765	1452	1.2155	9,4128
Hydromorphone	Hydromorphone-D6	2.608	8678	25503	0.3403	9.5160
Codeine	Codeine-D6	4.573	4222	14233	0.2966	9,2693
Amphetamine	Amphetamine-D11	4.884	81449	45064	1.8074	10.1963
Oxycodone	Oxycodone-D6	4.910	20476	92574	0.2212	8.1731
Hydrocodone	Hydrocodone-D6	5.175	14492	70745	0.2048	8.8679
Norhydrocodone	Norhydrocodone-D3	5.219	1072	26593	0.0403	8.0610
Methamphetamine	Methamphetamine-D11	5.223	51157	99467	0.5143	9.9227
6-MAM	6-MAM-D6	5.369	736	21983	0.0335	0.9217
Phentermine	Phentermine-D5	6.007	10892	136041	0.0801	10.3884
Dextrorphan	Dextrorphan-D3	6.483	13282	95823	0.1386	9.1373
7-aminoclonazepam	7-Aminoclonazepam-D4	6.575	17060	65078	0.2621	9.1235
Tramadol	Tramadol-13C-D3	6.560	134527	566367	0.2375	9.1561
Doxylamine	Doxylamine-D5	6.903	102396	518424	0.1975	8.7786
Bupropion	Bupropion-D9	7.152	54552	211497	0.2579	10.0894
Meprobamate	Meprobamate-D7	7.213	9524	43611	0.2184	8.1189
Venlafaxine	Venlafaxine-D6	7.326	146314	454551	0.3219	9.2843
Citalopram	Citalopram-D6	7.418	68880	280136	0.2459	9.3179
Zolpidem	Zolpidem-D6	7.364	94833	448594	0.2114	8.2592
Diphenhydramine	Diphenhydramine-D3	7.452	105206	457700	0.2299	9.4657
Dextromethorphan	Dextromethorphan-D3	7.449	16751	70508	0.2376	8.1548
Trazodone	Trazodone-D6	7.517	63737	247815	0.2572	8.9436
Clonazepam	Clonazepam-D4	7.623	5948	7327	0.8117	9.6843

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.607	107863	490604	0.2199	9.7362
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.681	3034	13384	0.2267	8,4386
Carisoprodol	Carisoprodol-D7	7.693	41038	213593	0.1921	9.3902
Lorazepam	Alprazolam-D5	7.723	3181	134584	0.0236	9.4068
Alprazolam	Alprazolam-D5	7.727	36979	134584	0.2748	9.6253

Batch Data Path	D:\2017 Data\41317 m	dq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info Acg Time	2017-04-13 13:12	Data File	a cal 3.d
Sample Type	Calibration	Sample Name	a cal 3
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-C1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



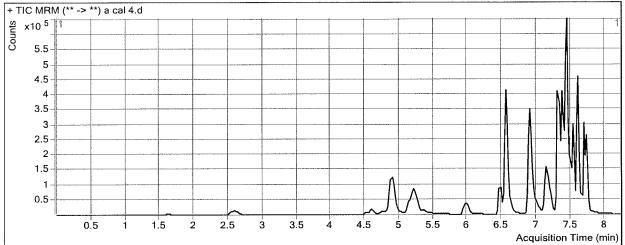
Results			_			Sinel Come
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.631	4184	1113	3.7592	28.5084
Hydromorphone	Hydromorphone-D6	2.608	21284	22871	0.9306	25.6652
Codeine	Codeine-D6	4.593	10264	13960	0.7352	24.3020
Amphetamine	Amphetamine-D11	4.884	164800	45859	3.5936	26.2274
Oxycodone	Oxycodone-D6	4.910	57386	84095	0.6824	23,9841
Hydrocodone	Hydrocodone-D6	5.195	38083	66291	0.5745	26.2894
Norhydrocodone	Norhydrocodone-D3	5.219	2590	24896	0.1040	23.5810
Methamphetamine	Methamphetamine-D11	5.243	118704	120952	0.9814	24.6022
6-MAM	6-MAM-D6	5.369	1668	20931	0.0797	2.5518
Phentermine	Phentermine-D5	6.026	26549	136181	0.1950	25.0974
Dextrorphan	Dextrorphan-D3	6.483	39581	94520	0.4188	26.8782
7-aminoclonazepam	7-Aminoclonazepam-D4	6.575	44150	60067	0.7350	25.5158
Tramadol	Tramadol-13C-D3	6.560	349077	495737	0.7042	26.6761
Doxylamine	Doxylamine-D5	6.924	303452	507870	0.5975	25.7558
Bupropion	Bupropion-D9	7.152	148502	209021	0.7105	27.5085
Meprobamate	Meprobamate-D7	7.213	21176	37687	0.5619	25.2496
Venlafaxine	Venlafaxine-D6	7.326	348342	451846	0.7709	26.7660
Citalopram	Citalopram-D6	7,418	175635	291642	0.6022	22.6296
Zolpidem	Zolpidem-D6	7.384	243366	360286	0.6755	28.8713
Diphenhydramine	Diphenhydramine-D3	7.452	298390	461912	0.6460	26.2902
Dextromethorphan	Dextromethorphan-D3	7.449	46114	74183	0.6216	24.2067
Trazodone	Trazodone-D6	7,517	188118	252415	0.7453	26,2466
Clonazepam	Clonazepam-D4	7.623	15326	7449	2.0574	25.1165

Â	cal	3
$\mathcal{O}($	04	

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.607	334579	550519	0.6078	27.2941
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.681	8450	11608	0.7279	25.3732
Carisoprodol	Carisoprodol-D7	7.693	101302	185602	0.5458	26.3011
Lorazepam	Alprazolam-D5	7.723	7553	116236	0.0650	24.3419
Alprazolam	Alprazolam-D5	7.727	92031	116236	0.7918	25.9174

Batch Data Path	D:\2017 Data\41317 mc	dq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 13:38	Data File	a cal 4.d
Sample Type	Calibration	Sample Name	a cal 4
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-D1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



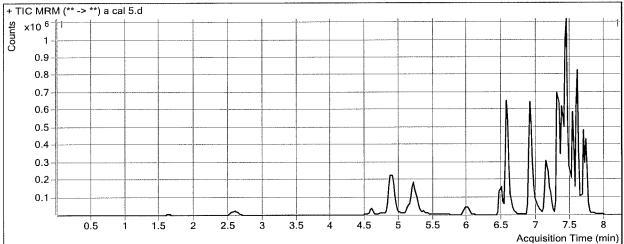
Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.631	8737	1167	7.4876	56.4971
Hydromorphone	Hydromorphone-D6	2.608	44541	23633	1.8847	51.7643
Codeine	Codeine-D6	4.593	20308	13872	1.4639	49.2770
Amphetamine	Amphetamine-D11	4.884	300962	44773	6.7220	54.3044
Oxycodone	Oxycodone-D6	4.910	126351	83604	1.5113	52.4011
Hydrocodone	Hydrocodone-D6	5.195	78566	68337	1.1497	53.3991
Norhydrocodone	Norhydrocodone-D3	5.219	5750	24917	0.2307	54.4411
Methamphetamine	Methamphetamine-D11	5.243	216100	115277	1.8746	52.6721
6-MAM	6-MAM-D6	5.369	3394	21633	0.1569	5.2730
Phentermine	Phentermine-D5	6.007	55508	143912	0.3857	49.5201
Dextrorphan	Dextrorphan-D3	6.463	82896	98989	0.8374	53.3902
7-aminoclonazepam	7-Aminoclonazepam-D4	6.575	90559	62841	1.4411	49.9918
Tramadol	Tramadol-13C-D3	6.560	724653	521425	1.3898	52.4173
Doxylamine	Doxylamine-D5	6.903	636532	516943	1.2313	52.6588
Bupropion	Bupropion-D9	7.152	227313	178782	1.2715	49.1026
Meprobamate	Meprobamate-D7	7.213	45874	38989	1.1766	55.9041
Venlafaxine	Venlafaxine-D6	7.306	649191	433141	1.4988	55.1026
Citalopram	Citalopram-D6	7.418	365554	259725	1.4075	52.7099
Zolpidem	Zolpidem-D6	7.364	518689	415708	1.2477	54.2878
Diphenhydramine	Diphenhydramine-D3	7.452	558393	426335	1.3098	53.1264
Dextromethorphan	Dextromethorphan-D3	7.428	84881	60778	1.3966	56.5974
Trazodone	Trazodone-D6	7.517	369841	252224	1.4663	51.8087
Clonazepam	Clonazepam-D4	7.623	30496	7421	4.1095	50.5366 >
						(

a caly

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.607	568954	459156	1.2391	55.8733
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.660	10786	11622	0.9280	32,1359
Carisoprodol	Carisoprodol-D7	7.693	212402	186273	1.1403	54.7255
Lorazepam	Alprazolam-D5	7.723	14449	118891	0.1215	44.7711
Alprazolam	Alprazolam-D5	7.727	190894	118891	1.6056	51.5648

Batch Data Path	D:\2017 Data\41317 mo	lq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 14:03	Data File	a cal 5.d
Sample Type	Calibration	Sample Name	a cal 5
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-E1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results

Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.631	17372	1297	13,3932	100,8304
Hydromorphone	Hydromorphone-D6	2.588	89116	22370	3.9837	109.1876
Codeine	Codeine-D6	4.593	46098	13448	3.4278	116.5858
Amphetamine	Amphetamine-D11	4.884	575518	46440	12.3927	105.1994
Oxycodone	Oxycodone-D6	4.910	262219	77831	3.3691	116.0902
Hydrocodone	Hydrocodone-D6	5.195	161490	67338	2.3982	112.2433
Norhydrocodone	Norhydrocodone-D3	5.219	10616	23666	0.4486	107.4843
Methamphetamine	Methamphetamine-D11	5.223	451468	132876	3.3977	100.5370
6-MAM	6-MAM-D6	5.369	6828	20952	0.3259	11.2327
Phentermine	Phentermine-D5	6.007	118816	137938	0.8614	110.4194
Dextrorphan	Dextrorphan-D3	6.483	164616	99244	1.6587	105.3981
7-aminoclonazepam	7-Aminoclonazepam-D4	6.575	180605	57564	3.1374	108.7974
Tramadol	Tramadol-13C-D3	6.560	1450647	497049	2.9185	109.8159
Doxylamine	Doxylamine-D5	6.903	1336433	537357	2.4870	105.9567
Bupropion	Bupropion-D9	7.152	586691	194401	3.0179	116.3300
Meprobamate	Meprobamate-D7	7.213	89946	38625	2.3287	113.3608
Venlafaxine	Venlafaxine-D6	7.306	1401431	457780	3.0614	115.9348
Citalopram	Citalopram-D6	7.418	790374	267948	2.9497	110.3225
Zolpidem	Zolpidem-D6	7.384	975274	409966	2.3789	104.5300
Diphenhydramine	Diphenhydramine-D3	7.452	1203476	458449	2.6251	106.3067
Dextromethorphan	Dextromethorphan-D3	7,428	197076	67865	2.9040	119.6013
Trazodone	Trazodone-D6	7.517	765201	257016	2.9773	105.3731
Clonazepam	Clonazepam-D4	7.623	64653	7692	8.4055	103.7550 >

A

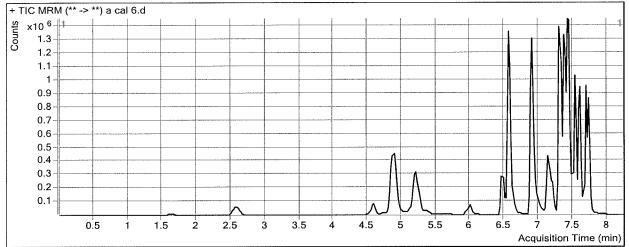
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.607	1313674	535846	2,4516	110.7548
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.681	33837	10496	3.2237	109.7030
Carisoprodol	Carisoprodol-D7	7.693	383351	166416	2.3036	110.3481
Lorazepam	Alprazolam-D5	7.723	29437	105838	0.2781	101.3397
Alprazolam	Alprazolam-D5	7.727	360137	105838	3.4027	108.1972





Batch Data Path	D:\2017 Data\41317 m	dq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 14:29	Data File	a cal 6.d
Sample Type	Calibration	Sample Name	a cal 6
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-F1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.631	43117	1279	33.7085	253.3365
Hydromorphone	Hydromorphone-D6	2.588	228400	23083	9.8948	270.8907
Codeine	Codeine-D6	4.593	115945	13894	8.3449	285.1164
Amphetamine	Amphetamine-D11	4.884	1120952	38570	29.0630	254.8151
Oxycodone	Oxycodone-D6	4.910	685688	82740	8.2873	284.6966
Hydrocodone	Hydrocodone-D6	5.175	386423	66351	5.8240	273.7029
Norhydrocodone	Norhydrocodone-D3	5.219	23798	21119	1.1269	272.6746
Methamphetamine	Methamphetamine-D11	5.223	761309	85813	8.8717	272.5670
6-MAM	6-MAM-D6	5.369	17359	20945	0.8288	28.9700
Phentermine	Phentermine-D5	6.007	230730	122344	1.8859	241.5935
Dextrorphan	Dextrorphan-D3	6.463	356763	82675	4.3153	273.6257
7-aminoclonazepam	7-Aminoclonazepam-D4	6.575	428324	56394	7.5952	263.3269
Tramadol	Tramadol-13C-D3	6.560	3447384	529105	6.5155	244.8669
Doxylamine	Doxylamine-D5	6.903	2701333	497235	5.4327	230.9836
Bupropion	Bupropion-D9	7.152	883364	126581	6.9786	268.7888
Meprobamate	Meprobamate-D7	7.213	232721	40846	5.6975	281.3645
Venlafaxine	Venlafaxine-D6	7.306	2853817	417086	6.8423	263.1290
Citalopram	Citalopram-D6	7.418	1170942	168837	6.9353	259.2083
Zolpidem	Zolpidem-D6	7.384	2422004	381952	6.3411	280.5125
Diphenhydramine	Diphenhydramine-D3	7.452	1847687	281951	6.5532	265.1228
Dextromethorphan	Dextromethorphan-D3	7.428	264101	36947	7.1482	296.9971
Trazodone	Trazodone-D6	7.517	1415066	189775	7.4566	264.1699
Clonazepam	Clonazepam-D4	7.623	150635	7052	21.3617	264.2542
						(

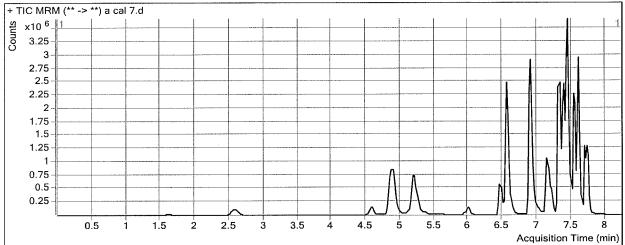


Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.607	1716098	288941	5.9393	268.6235
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.681	83805	11414	7.3423	248.8686
Carisoprodol	Carisoprodol-D7	7.693	872696	164343	5.3102	254.1095
Lorazepam	Alprazolam-D5	7.723	76540	97756	0.7830	283.7025
Alprazolam	Alprazolam-D5	7.727	822037	97756	8.4091	265.9627



Batch Data Path	D:\2017 Data\41317 m	dq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2017-04-13 14:54 Calibration 1 P1-G1 -1	Data File Sample Name Acq Method Sample Info Comment	a cal 7.d a cal 7 Quant Panel 1a 2-13-17.m

Sample Chromatogram



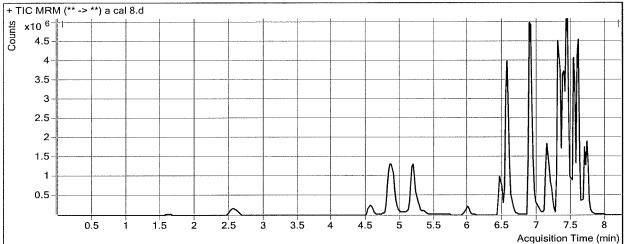
Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.608	85465	1359	62.8946	472.4354
Hydromorphone	Hydromorphone-D6	2.588	457304	25452	17.9670	491.7168
Codeine	Codeine-D6	4.573	210603	13640	15,4399	528,2924
Amphetamine	Amphetamine-D11	4.884	2208052	48617	45.4173	401.5948
Oxycodone	Oxycodone-D6	4.890	1370297	100260	13.6675	469.1416
Hydrocodone	Hydrocodone-D6	5.175	726732	74135	9.8028	461.2275
Norhydrocodone	Norhydrocodone-D3	5.199	44833	20546	2.1820	529.6376
Methamphetamine	Methamphetamine-D11	5.223	2204809	130324	16.9180	525.4341
6-MAM	6-MAM-D6	5.369	34907	23760	1.4692	51.5537
Phentermine	Phentermine-D5	6.007	512760	142873	3.5889	459.6302
Dextrorphan	Dextrorphan-D3	6.463	733837	95833	7.6575	485.2745
7-aminoclonazepam	7-Aminoclonazepam-D4	6.575	780445	56556	13.7994	478.3991
Tramadol	Tramadol-13C-D3	6.560	6846048	590792	11.5879	435.3139
Doxylamine	Doxylamine-D5	6.903	6628008	559141	11.8539	503.5284
Bupropion	Bupropion-D9	7.152	2015613	176423	11.4249	439.9365
Meprobamate	Meprobamate-D7	7.213	439513	39929	11.0073	546.1654
Venlafaxine	Venlafaxine-D6	7.326	5990438	496986	12.0535	466.0083
Citalopram	Citalopram-D6	7.418	2796459	217343	12.8666	480.7758
Zolpidem	Zolpidem-D6	7.384	4682681	451712	10.3665	459.3017
Diphenhydramine	Diphenhydramine-D3	7.452	4720461	403675	11.6937	472.9553
Dextromethorphan	Dextromethorphan-D3	7.428	742360	57012	13.0211	542.4678
Trazodone	Trazodone-D6	7.517	3756088	278065	13.507 9	478,6992
Clonazepam	Clonazepam-D4	7,623	263127	6886	38.2116	472.9892 >

a	cal	7

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.607	4695086	502475	9.3439	422.7339
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.681	145321	9990	14.5466	492.2961
Carisoprodol	Carisoprodol-D7	7.693	1367733	136496	10.0203	479.3218
Lorazepam	Alprazolam-D5	7.723	131087	90855	1.4428	522.0594
Alprazolam	Alprazolam-D5	7.747	1415161	90855	15.5761	491.8161

Batch Data Path Analysis Time Report Time Last Calib Update	D:\2017 Data\41317 md 4/15/2017 9:28 AM 4/15/2017 9:39 AM 4/15/2017 9:28 AM	q p1\QuantResults\ Analyst Name Reporter Name Batch State	4-13-17 mdq p1a.batch.bin ISP Tox ISP Tox Processed
Analysis Info			
Acq Time	2017-04-13 15:19	Data File	a cal 8.d
Sample Type	Calibration	Sample Name	a cal 8
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-H1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.608	146548	1321	110.9143	832.9178
Hydromorphone	Hydromorphone-D6	2.548	789739	26435	29.8750	817.4729
Codeine	Codeine-D6	4.553	377903	14019	26.9564	923.0094
Amphetamine	Amphetamine-D11	4.844	3598204	53653	67.0645	595.8786
Oxycodone	Oxycodone-D6	4.870	2495815	100479	24.8391	852.1281
Hydrocodone	Hydrocodone-D6	5.155	1176282	78740	14.9389	703.2973
Norhydrocodone	Norhydrocodone-D3	5.199	70491	18246	3.8635	939.1309
Methamphetamine	Methamphetamine-D11	5.203	4094740	155054	26.4085	823.6898
6-MAM	6-MAM-D6	5.349	63886	24129	2.6477	93.1177
Phentermine	Phentermine-D5	5.987	886556	156350	5.6703	726.1159
Dextrorphan	Dextrorphan-D3	6.463	1227126	96420	12.7269	806.3002
7-aminoclonazepam	7-Aminoclonazepam-D4	6.575	1179480	53830	21.9113	759.6028
Tramadol	Tramadol-13C-D3	6.560	11926022	615792	19.3670	727.3841
Doxylamine	Doxylamine-D5	6.903	10938096	649077	16.8518	715.6594
Bupropion	Bupropion-D9	7.152	3974761	186474	21.3154	820.6516
Meprobamate	Meprobamate-D7	7.213	724087	39743	18.2192	905.8227
Venlafaxine	Venlafaxine-D6	7.306	10792710	470834	22.9225	889.1482
Citalopram	Citalopram-D6	7.418	4238542	201982	20.9848	784.0376
Zolpidem	Zolpidem-D6	7.384	7604711	457994	16.6044	736.3585
Diphenhydramine	Diphenhydramine-D3	7.452	8506583	398686	21.3366	862.8208
Dextromethorphan	Dextromethorphan-D3	7.428	1147191	53868	21.2962	888.3397
Trazodone	Trazodone-D6	7.517	6374276	311574	20.4583	725,0 9 78
Clonazepam	Clonazepam-D4	7.623	353799	6672	53.0273	656.5235

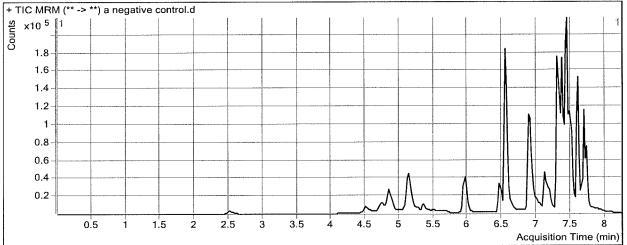


Compound Promethazine	ISTD Compound Promethazine-D3	RT 7.607	Response 9117028 127429	ISTD Resp 508766 7859	Resp Ratio 17.9199 16.2137	Final Conc 810.9225 548.6246
a-hydroxyalprazolam Carisoprodol	a-hydroxyalprazolam-D5 Carisoprodol-D7	7.660 7.693	1743274	100515	17.3433	829,4693
Lorazepam Alprazolam	Alprazolam-D5 Alprazolam-D5	7.723 7.727	237953 1986530	74956 74956	3.1746 26.5027	1147.6255 836.1489



Batch Data Path	D:\2017 Data\41317 m	dq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 15:57	Data File	a negative control.d
Sample Type	Sample	Sample Name	a negative control
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-F2	Sample Info	
Inj Vol	-1	Comment	

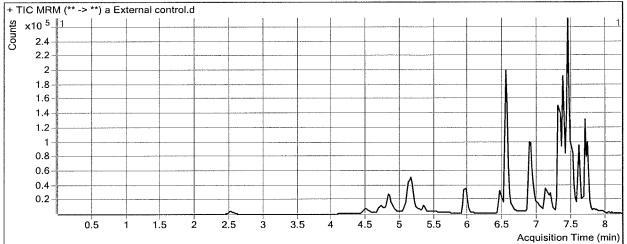
Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Amphetamine	Amphetamine-D11	4.844	27391	44837	0.6109	0.0000
Venlafaxine	Venlafaxine-D6	7.367	27626	447990	0.0617	0.0000

Batch Data Path	D:\2017 Data\41317 m	ndq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 16:23	Data File	a External control.d
Sample Type	Sample	Sample Name	a External control
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-G2	Sample Info	
Inj Vol	-1	Comment	lot 51017 50 ng hydrocodone, diphenhydramine, lorazepam

Sample Chromatogram

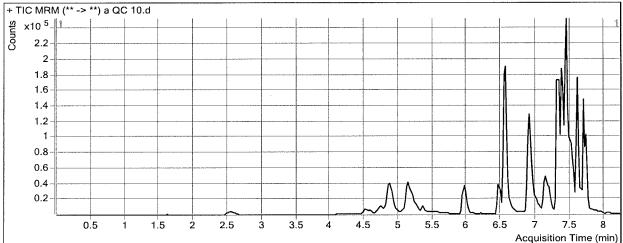


Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Amphetamine	Amphetamine-D11	4.824	26059	47631	0.5471	0.0000
Hydrocodone	Hydrocodone-D6	5.175	61992	69682	0.8896	41.1429
Diphenhydramine	Diphenhydramine-D3	7.452	254420	256831	0.9906	40.2236
Lorazepam	Alprazolam-D5	7.723	19282	151550	0.1272	46.8292



Batch Data Path	D:\2017 Data\41317 m	dq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 16:48	Data File	a QC 10.d
Sample Type	QC	Sample Name	a QC 10
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-A2	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



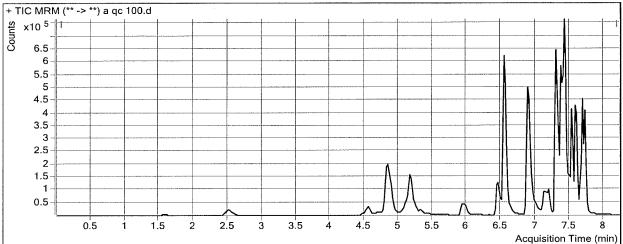
Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.631	1624	1222	1,3291	10,2655
Hydromorphone	Hydromorphone-D6	2.568	7932	22261	0.3563	9.9545
Codeine	Codeine-D6	4.593	3905	12805	0.3049	9.5541
Amphetamine	Amphetamine-D11	4.884	77311	40155	1.9253	11.2544
Oxycodone	Oxycodone-D6	4.910	21498	82046	0.2620	9.5731
Hydrocodone	Hydrocodone-D6	5.175	13367	63768	0.2096	9.0928
Norhydrocodone	Norhydrocodone-D3	5.219	1023	23536	0.0434	8.8279
Methamphetamine	Methamphetamine-D11	5.223	54827	98834	0.5547	11.1931
6-MAM	6-MAM-D6	5.369	612	20151	0.0304	0.8114
Phentermine	Phentermine-D5	6.007	9592	125803	0.0762	9.8988
Dextrorphan	Dextrorphan-D3	6.463	13335	86830	0.1536	10.0852
7-aminoclonazepam	7-Aminoclonazepam-D4	6.555	15383	60722	0.2533	8.8180
Tramadol	Tramadol-13C-D3	6.560	128121	517660	0.2475	9.5306
Doxylamine	Doxylamine-D5	6.924	98844	460505	0.2146	9.5055
Bupropion	Bupropion-D9	7.152	29894	117297	0.2549	9.9709
Meprobamate	Meprobamate-D7	7.213	8297	39484	0.2101	7.7079
Venlafaxine	Venlafaxine-D6	7.326	128347	404635	0.3172	9.1016
Citalopram	Citalopram-D6	7.418	49351	203924	0.2420	9.1732
Zolpidem	Zolpidem-D6	7.384	86887	373232	0.2328	9.2095
Diphenhydramine	Diphenhydramine-D3	7.452	77187	324981	0.2375	9.7753
Dextromethorphan	Dextromethorphan-D3	7.449	11876	43931	0.2703	9.5241
Trazodone	Trazodone-D6	7.537	55635	191435	0.2906	10.1286
Clonazepam	Clonazepam-D4	7.623	5606	6132	0.9143	10.9556



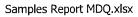
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.607	65388	320219	0.2042	9.0274
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.681	3276	12089	0.2710	9.9342
Carisoprodol	Carisoprodol-D7	7.693	38624	195808	0.1973	9.6353
Lorazepam	Alprazolam-D5	7.723	2604	116066	0.0224	8.9737
Alprazolam	Alprazolam-D5	7.727	34608	116066	0.2982	10.3631

Batch Data Path	D:\2017 Data\41317 m	dq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 19:20	Data File	a qc 100.d
Sample Type	QC	Sample Name	a qc 100
Dilution	1	Acq Method	Quant Panel 1a 2-13-17,m
Position	P1-B2	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.608	17189	1421	12.0976	91.1046
Hydromorphone	Hydromorphone-D6	2.528	83611	24933	3.3535	91.9459
Codeine	Codeine-D6	4.553	39815	15414	2.5831	87.6347
Amphetamine	Amphetamine-D11	4.844	520231	45886	11.3374	95.7283
Oxycodone	Oxycodone-D6	4.870	241151	94326	2.5566	88.2349
Hydrocodone	Hydrocodone-D6	5.155	146796	70554	2.0806	97.2754
Norhydrocodone	Norhydrocodone-D3	5.179	10475	25742	0.4069	97.3453
Methamphetamine	Methamphetamine-D11	5.203	418431	129471	3.2319	95.3258
6-MAM	6-MAM-D6	5.349	6378	23497	0.2715	9.3139
Phentermine	Phentermine-D5	5.987	99630	138002	0.7219	92.5690
Dextrorphan	Dextrorphan-D3	6.463	139007	93266	1.4904	94.7429
7-aminoclonazepam	7-Aminoclonazepam-D4	6.555	167113	67498	2.4758	85.8613
Tramadol	Tramadol-13C-D3	6.540	1335600	537623	2.4843	93.5116
Doxylamine	Doxylamine-D5	6.883	1099436	520839	2.1109	89.9910
Bupropion	Bupropion-D9	7.152	167051	73924	2.2598	87.1464
Meprobamate	Meprobamate-D7	7.193	89246	43944	2.0309	98.5095
Venlafaxine	Venlafaxine-D6	7.306	1119691	475040	2.3570	88.5149
Citalopram	Citalopram-D6	7.398	492683	202305	2.4353	91.1071
Zolpidem	Zolpidem-D6	7.384	903857	435117	2.0773	91.1323
Diphenhydramine	Diphenhydramine-D3	7.452	747042	328711	2.2726	92.0567
Dextromethorphan	Dextromethorphan-D3	7.428	103626	41315	2.5082	103.0608
Trazodone	Trazodone-D6	7.517	546065	218456	2,4997	88.4417
Clonazepam	Clonazepam-D4	7.623	63747	7490	8.5110	105.0618

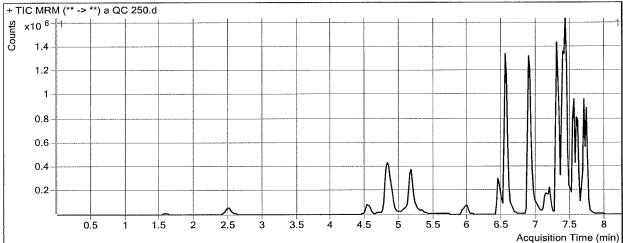


Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.587	650683	313579	2.0750	93.7098
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.660	33810	13177	2.5659	87.4764
Carisoprodol	Carisoprodol-D7	7.693	377181	169036	2.2314	106.8955
Lorazepam	Alprazolam-D5	7.703	28651	120962	0.2369	86.4303
Alprazolam	Alprazolam-D5	7.727	344301	120962	2.8464	90.6645



Batch Data Path	D:\2017 Data\41317 mdd	p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 23:21	Data File	a QC 250.d
Sample Type	QC	Sample Name	a QC 250
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-C2	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram

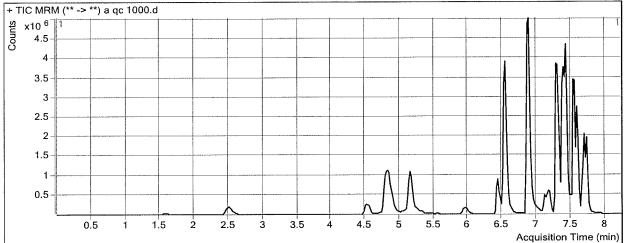


Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.588	44922	1401	32.0707	241.0417
Hydromorphone	Hydromorphone-D6	2,507	223690	25973	8.6123	235.8066
Codeine	Codeine-D6	4.553	115367	15212	7.5838	259.0291
Amphetamine	Amphetamine-D11	4.824	1211125	46928	25.8081	225.6027
Oxycodone	Oxycodone-D6	4.870	684257	101966	6.7106	230.6453
Hydrocodone	Hydrocodone-D6	5.155	406942	73741	5.5185	259.3060
Norhydrocodone	Norhydrocodone-D3	5.159	25679	24163	1.0627	257.0555
Methamphetamine	Methamphetamine-D11	5.182	989502	115661	8.5552	262.6197
6-MAM	6-MAM-D6	5.329	16318	23840	0.6845	23.8803
Phentermine	Phentermine-D5	5.987	229187	135766	1.6881	216.2671
Dextrorphan	Dextrorphan-D3	6.441	362157	96228	3.7635	238.6864
7-aminoclonazepam	7-Aminoclonazepam-D4	6.555	411672	64641	6.3686	220.8056
Tramadol	Tramadol-13C-D3	6.540	3492823	555093	6.2923	236.4873
Doxylamine	Doxylamine-D5	6.883	3119497	498534	6.2573	265.9850
Bupropion	Bupropion-D9	7.152	352134	57738	6.0988	234.9221
Meprobamate	Meprobamate-D7	7.193	238554	44119	5.4071	266.8783
Venlafaxine	Venlafaxine-D6	7.306	3010612	481387	6.2540	240.2285
Citalopram	Citalopram-D6	7.398	1078378	176985	6.0930	227.7439
Zolpidem	Zolpidem-D6	7.384	2471630	444989	5.5544	245.5679
Diphenhydramine	Diphenhydramine-D3	7.452	1856013	322344	5.7579	232,9657
Dextromethorphan	Dextromethorphan-D3	7.428	229788	36255	6.3382	263.1403
Trazodone	Trazodone-D6	7.537	1537313	232755	6.6048	233.9759 🧩
Clonazepam	Clonazepam-D4	7.623	167106	8292	20.1530	249.2809

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.587	1460364	269685	5.4151	244.8957
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.681	86663	12131	7.1442	242.1739
Carisoprodol	Carisoprodol-D7	7.693	902239	163414	5.5212	264.1976
Lorazepam	Alprazolam-D5	7.703	74271	112395	0.6608	239.5715
Alprazolam	Alprazolam-D5	7.727	835061	112395	7.4297	235.1002

Batch Data Path	D:\2017 Data\41317 m	ndq p1\QuantResults\	4-13-17 mdq p1a.batch.bir	n
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox	All of He ISSINGLY
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox	All of the highlighted
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed	numbers, 1000 calibrator
Analysis Info				dropped from curve.
Acq Time	2017-04-14 00:12	Data File	a qc 1000.d	
Sample Type	QC	Sample Name	a qc 1000	Do not enter for
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m	Uncertainty. GA
Position	P1-D2	Sample Info		uncertainty.
Inj Vol	-1	Comment		

Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.588	158829	1476	107.6256	808.2293
Hydromorphone	Hydromorphone-D6	2,507	806749	26474	30.4735	833.8478
Codeine	Codeine-D6	4.533	398158	15056	26.4456	905.5003
Amphetamine	Amphetamine-D11	4.804	3225136	49087	65.7024	583.6535
Oxycodone	Oxycodone-D6	4.850	2472769	92548	26.7187	916.5642
Hydrocodone	Hydrocodone-D6	5.135	1191721	78200	15.2394	717.4645
Norhydrocodone	Norhydrocodone-D3	5.159	78631	19201	4.0951	995.5475
Methamphetamine	Methamphetamine-D11	5.182	3244566	120400	26.9481	840.6485
6-MAM	6-MAM-D6	5.329	58118	24125	2.4090	84.6974
Phentermine	Phentermine-D5	5.966	691788	128286	5.3925	690.5511
Dextrorphan	Dextrorphan-D3	6.441	1144065	88146	12.9791	822.2705
7-aminoclonazepam	7-Aminoclonazepam-D4	6.534	1218598	56182	21.6904	751.9439
Tramadol	Tramadol-13C-D3	6.540	11288664	599283	18.8369	707.4839
Doxylamine	Doxylamine-D5	6.883	11201014	641201	17.4688	741.8494
Bupropion	Bupropion-D9	7.132	1069221	49970	21.3974	823.8085
Meprobamate	Meprobamate-D7	7.193	805708	4455 4	18.0840	899.0778
Venlafaxine	Venlafaxine-D6	7.286	9926272	475322	20.8833	809.7574
Citalopram	Citalopram-D6	7.398	2692424	123943	21.7231	811.6209
Zolpidem	Zolpidem-D6	7.384	7644987	452067	16.9112	749.9836
Diphenhydramine	Diphenhydramine-D3	7.432	5694108	268701	21.1913	856.9473
Dextromethorphan	Dextromethorphan-D3	7.428	709908	33526	21,1746	883.2601
Trazodone	Trazodone-D6	7.537	6156739	300205	20.5085	726.8769
Clonazepam	Clonazepam-D4	7.603	520599	7544	69.0113	854.5308

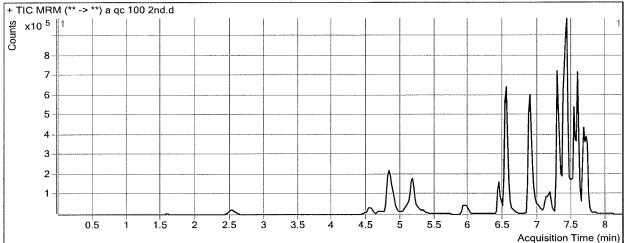
Q q C 1000

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.587	4286120	225262	19.0272	861.0467
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.660	259647	9921	26.1711	885.0763
Carisoprodol	Carisoprodol-D7	7.693	2325584	136503	17.0369	814.8146
Lorazepam	Alprazolam-D5	7.703	264129	83471	3.1643	1143.9212
Alprazolam	Alprazolam-D5	7.727	2137468	83471	25.6074	807.9340



Batch Data Path	D:\2017 Data\41317 mc	lq p1\QuantResults\	4-13-17 mdq p1a.batch.bin
Analysis Time	4/15/2017 9:28 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 9:39 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 9:28 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-14 00:37	Data File	a qc 100 2nd.d
Sample Type	QC	Sample Name	a qc 100 2nd
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	P1-E2	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.588	17881	1371	13.0406	98.1832
Hydromorphone	Hydromorphone-D6	2.528	87909	24837	3.5394	97.0315
Codeine	Codeine-D6	4.553	46677	14273	3.2703	111.1906
Amphetamine	Amphetamine-D11	4.844	599051	51687	11.5900	97.9950
Oxycodone	Oxycodone-D6	4.870	258592	97655	2.6480	91.3698
Hydrocodone	Hydrocodone-D6	5.155	157651	72354	2.1789	101.9061
Norhydrocodone	Norhydrocodone-D3	5.159	11080	26859	0.4125	98.7112
Methamphetamine	Methamphetamine-D11	5.182	442545	128954	3.4318	101.6100
6-MAM	6-MAM-D6	5.329	6203	22619	0.2743	9.4127
Phentermine	Phentermine-D5	5.966	106180	147026	0.7222	92,5996
Dextrorphan	Dextrorphan-D3	6.441	163108	102968	1.5841	100.6721
7-aminoclonazepam	7-Aminoclonazepam-D4	6.534	183655	66486	2.7623	95.7930
Tramadol	Tramadol-13C-D3	6.540	1461147	568988	2.5680	96.6543
Doxylamine	Doxylamine-D5	6.883	1314811	559547	2.3498	100.1303
Bupropion	Bupropion-D9	7.132	147103	59108	2.4887	95.9586
Meprobamate	Meprobamate-D7	7.173	98261	45371	2.1657	105.2319
Venlafaxine	Venlafaxine-D6	7.286	1229348	464762	2.6451	99.7297
Citalopram	Citalopram-D6	7.398	616540	240284	2.5659	95.9834
Zolpidem	Zolpidem-D6	7.364	1004478	458969	2.1886	96.0749
Diphenhydramine	Diphenhydramine-D3	7.432	940571	424810	2.2141	89.6897
Dextromethorphan	Dextromethorphan-D3	7.408	145105	55127	2.6322	108.2429
Trazodone	Trazodone-D6	7.517	730039	270688	2.6970	95.4368
Clonazepam	Clonazepam-D4	7.603	67466	7931	8.5064	105.0057

age 100 and

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Promethazine	Promethazine-D3	7.587	981127	432938	2.2662	102.3636
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.660	32927	12355	2.6652	90.8318
Carisoprodol	Carisoprodol-D7	7.672	403005	199573	2.0193	96.7573
Lorazepam	Alprazolam-D5	7.703	29528	122171	0.2417	88.1776
Alprazolam	Alprazolam-D5	7.727	378826	122171	3.1008	98.6822

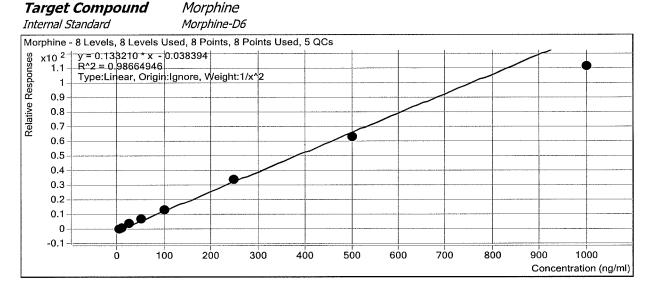
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	,1	\square	5	4.9	98.9
a cal 2	2	Ø	10	9.4	94.1
a QC 10	2	\square	10	10.3	102.7
a cal 3	3	\square	25	28.5	114.0
a cal 4	4	\square	50	56.5	113.0
a cal 5	5	\square	100	100.8	100.8
a qc 100	5	Ø	100	91.1	91.1
a qc 100 2nd	5	Ø	100	98.2	98.2
a cal 6	6	\square	250	253.3	101.3
a QC 250	6	Ø	250	241.0	96.4
a cal 7	7	V	500	472.4	94.5
a cal 8	8	\square	1000	832.9	83.3
a qc 1000	8	\square	1000	808.2	80.8

À

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Hydromorphone Internal Standard Hydromorphone-D6 Hydromorphone - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs y = 0.036555 * x - 0.007580 R^2 = 0.98997212 Relative Responses x10^{1⁻} Type:Linear, Origin:Ignore, Weight:1/x^2 2.75 2.5 2.25 2 1.75 1.5 1.25 1 ۲ 0.75 0.5 0.25 0 -0.25 ò 1**0**0 200 300 400 500 6Ò0 700 800 900 1000 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	5.1	101.0
a cal 2	2	\square	10	9.5	95.2
a QC 10	2		10	10.0	99.5
a cal 3	3	Ø	25	25.7	102.7
a cal 4	4	\square	50	51.8	103.5
a cal 5	5	\square	100	109.2	109.2
a qc 100	5	\square	100	91.9	91.9
a qc 100 2nd	5	\square	100	97.0	97.0
a cal 6	6	Ø	250	270.9	108.4
a QC 250	6		250	235.8	94.3
a cal 7	7	\mathbf{M}	500	491.7	98.3
a cal 8	8	\mathbf{N}	1000	817.5	81.7
a qc 1000	8	Ø	1000	833.8	83,4

D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin **Batch Data Path**

Last Calib Update

4/15/2017 9:28 AM

Codeine

Analyst Name

ISP TOX

Target Compound Internal Standard Codeine-D6 Codeine - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs x10¹ y = 0.029177 * x + 0.026186 R² = 0.99135308 Relative Responses -Type:Linear, Origin:Ignore, Weight:1/x 2.5 2.25 2 -1.75 1.5 1.25 1 0.75 0.5 0.25 0 -0.25 100 200 300 400 500 6Ó0 700 800 900 1000 Ò Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	4.1	83.0
a cal 2	2	Ø	10	9.3	92.7
a QC 10	2	\square	10	9.6	95.5
a cal 3	3	\square	25	24.3	97.2
a cal 4	4	\square	50	49.3	98.6
a cal 5	5	\square	100	116.6	116.6
a qc 100	5	\square	100	87.6	87.6
a qc 100 2nd	5	\square	100	111.2	111.2
a cal 6	6	Ø	250	285.1	114.0
a QC 250	6	\square	250	259.0	103.6
a cal 7	7	\square	500	528.3	105.7
a cal 8	8	\square	1000	923.0	92.3
a qc 1000	8		1000	905.5	90.6

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

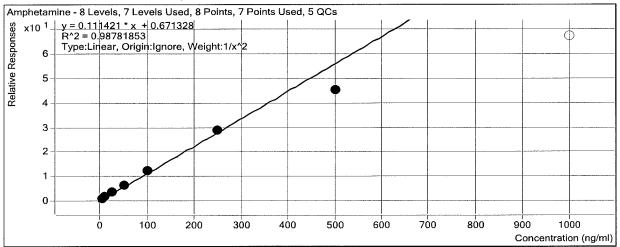
4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Amphetamine Internal Standard

Amphetamine-D11



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	4.9	97.1
a cal 2	2	\square	10	10.2	102.0
a QC 10	2	\square	10	11.3	112.5
a cal 3	3	\square	25	26.2	104.9
a cal 4	4	\square	50	54.3	108.6
a cal 5	5	\square	100	105.2	105.2
a qc 100	5	\square	100	95.7	95.7
a qc 100 2nd	5	\square	100	98.0	98.0
a cal 6	6	\square	250	254.8	101.9
a QC 250	6		250	225.6	90.2
a cal 7	7	\square	500	401.6	80.3
a cal 8	8		1000	595.9	59.6
a qc 1000	8		1000	583.7	58.4



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Oxycodone Internal Standard Oxycodone-D6 Oxycodone - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs x10¹ y=0.029170 * x - 0.017215 2.4 R^2 = 0.97858042 7ype:Linlear, Origin:Ignore, Weight:1/x^2 Relative Responses 2.2 2. 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 700 800 900 1000 ò 100 200 300 4**0**0 500 6Ò0 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	$\mathbf{\Sigma}$	5	5.4	108.5
a cal 2	2	\mathbf{N}	10	8.2	81.7
a QC 10	2	\mathbf{N}	10	9.6	95.7
a cal 3	3	$\mathbf{\nabla}$	25	24.0	95.9
a cal 4	4	Ø	50	52.4	104.8
a cal 5	5	$\mathbf{\nabla}$	100	116.1	116.1
a qc 100	5	\square	100	88.2	88.2
a qc 100 2nd	5	Ø	100	91.4	91.4
a cal 6	6	\square	250	284.7	113.9
a QC 250	6	Ø	250	230.6	92.3
a cal 7	7	\square	500	469.1	93.8
a cal 8	8	\square	1000	852.1	85.2
a qc 1000	8	\square	1000	916.6	91.7



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Φ

1000

Concentration (ng/ml)

 Target Compound Internal Standard
 Hydrocodone Hydrocodone-D6

 Hydrocodone - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs

 8
 x10¹ + y=0.02it217*x+0.016693 R^2 = 0.99108247

 0
 1.4

 Type:Linear, Origin:Ignore, Weight:1/x

 0
 0.8

 0.6
 0.4

 0.2
 0

400

500

6Ò0

700

800

900

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1		5	4.3	85.4
a cal 2	2	\square	10	8.9	88.7
a QC 10	2	Ø	10	9.1	90.9
a cal 3	3	Ø	25	26.3	105.2
a cal 4	4	\square	50	53.4	106.8
a cal 5	5	\square	100	112.2	112.2
a qc 100	5	\square	100	97.3	97.3
a qc 100 2nd	5	\square	100	101.9	101.9
a cal 6	6	\square	250	273.7	109.5
a QC 250	6	\square	250	259.3	103.7
a cal 7	7	\square	500	461.2	92.2
a cal 8	8		1000	703.3	70.3
a qc 1000	8	$\mathbf{\nabla}$	1000	717.5	71.7

200

100

Ò

300

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Norhydrocodone Internal Standard Norhydrocodone-D3 Norhydrocodone - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs 4 y = 0.00∦106 * x + 0.007200 R^2 = 0.99498106 5 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses 3.5 3 2.5 2 1.5 1 0.5 0 400 500 600 700 800 900 1000 100 200 300 0 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	5.0	99.8
a cal 2	2	\square	10	8.1	80.6
a QC 10	2	\square	10	8.8	88.3
a cal 3	3	\square	25	23.6	94.3
a cal 4	4		50	54.4	108.9
a cal 5	5	\square	100	107.5	107.5
a qc 100	5	Ø	100	97.3	97.3
a qc 100 2nd	5		100	98.7	98.7
a cal 6	6		250	272.7	109.1
a QC 250	6	Ø	250	257.1	102.8
a cal 7	7	Ø	500	529.6	105.9
a cal 8	8	\square	1000	939.1	93.9
a qc 1000	8		1000	995.5	99.6



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Methamphetamine Methamphetamine-D11 Internal Standard Methamphetamine - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs y = 0.031820 * x + 0.198571 R^2 = 0.98990682 Type:Lirear, Origin:Ignore, Weight:1/x^2 Relative Responses x10¹ 2.6-2.4 2.2-2 1.8 1.6 1.4 1.2 1 0 0.8 0.6 0.4 0.2 0 -0.2 700 800 900 1000 100 200 300 400 500 6**0**0 Ò Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1		5	0.4	9.0
a cal 2	2	\square	10	9.9	99.2
a QC 10	2	\square	10	11.2	111.9
a cal 3	3	\square	25	24.6	98.4
a cal 4	4	\square	50	52.7	105.3
a cal 5	5	\square	100	100.5	100.5
a qc 100	5	\square	100	95.3	95.3
a qc 100 2nd	5	\square	100	101.6	101.6
a cal 6	6	\square	250	272.6	109.0
a QC 250	6	\square	250	262.6	105.0
a cal 7	7	\square	500	525.4	105.1
a cal 8	8	\square	1000	823.7	82.4
a qc 1000	8	Ø	1000	840.6	84.1



Analyst Name

ISP TOX

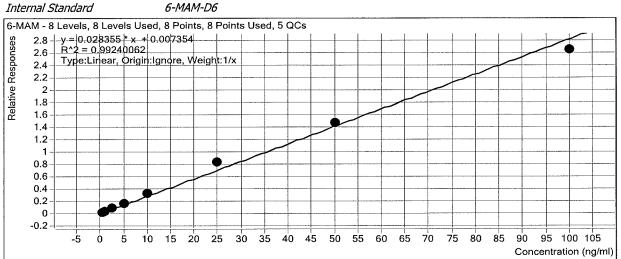
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

4/15/2017 9:28 AM

Last Calib Update

Target Compound 6-MAM

6-MAM-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	0.5	0.4	75.9
a cal 2	2	\square	1	0.9	92.2
a QC 10	2	\square	1	0.8	81.1
a cal 3	3	\square	2.5	2.6	102.1
a cal 4	4	\square	5	5.3	105.5
a cal 5	5	\square	10	11.2	112.3
a qc 100	5	\square	10	9.3	93.1
a qc 100 2nd	5	\square	10	9.4	94.1
a cal 6	6	\square	25	29.0	115.9
a QC 250	6	\square	25	23.9	95.5
a cal 7	7	$\mathbf{\Sigma}$	50	51.6	103.1
a cal 8	8	\square	100	93.1	93.1
a qc 1000	8	\square	100	84.7	84.7



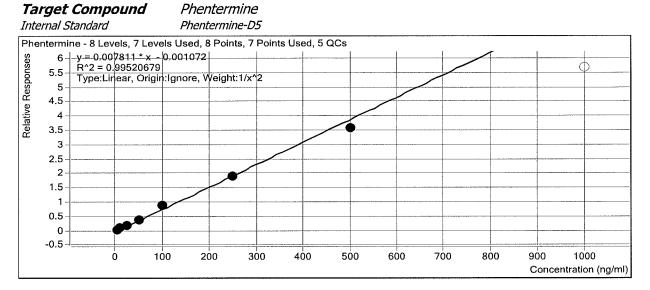
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	4.9	97.7
a cal 2	2	\square	10	10.4	103.9
a QC 10	2	\square	10	9.9	99.0
a cal 3	3	\square	25	25.1	100.4
a cal 4	4	\square	50	49.5	99.0
a cal 5	5		100	110.4	110.4
a qc 100	5	\square	100	92.6	92.6
a qc 100 2nd	5	\square	100	92.6	92.6
a cal 6	6	. 🖸	250	241.6	96.6
a QC 250	6	\square	250	216.3	86.5
a cal 7	7	Ø	500	459.6	91.9
a cal 8	8		1000	726.1	72.6
a qc 1000	8	\square	1000	690.6	69.1



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Dextrorphan

Analyst Name

ISP TOX

Target Compound Internal Standard Dextrorphan-D3 Dextrorphan - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs y = 0.015791 * x - 0.005682 R^2 = 0.98722426 Type:Linear, Origin:Ignore, Weight:1/x^2 x10¹ Relative Responses 1.2 1.1 1 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0. -0.1 700 800 900 1000 100 200 300 400 500 6Ó0 ò Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	5.1	101.8
a cal 2	2	\square	10	9.1	91.4
a QC 10	2	\square	10	10.1	100.9
a cal 3	3	$\mathbf{\nabla}$	25	26.9	107.5
a cal 4	4	\square	50	53.4	106.8
a cal 5	5	$\mathbf{\Sigma}$	100	105.4	105.4
a qc 100	5	\square	100	94.7	94.7
a qc 100 2nd	5	\checkmark	100	100.7	100.7
a cal 6	6	$\mathbf{\nabla}$	250	273.6	109.5
a QC 250	6	$\mathbf{\Sigma}$	250	238.7	95.5
a cal 7	7	$\mathbf{\nabla}$	500	485.3	97.1
a cal 8	8	$\mathbf{\nabla}$	1000	806.3	80.6
a qc 1000	8	Ø	1000	822.3	82.2



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

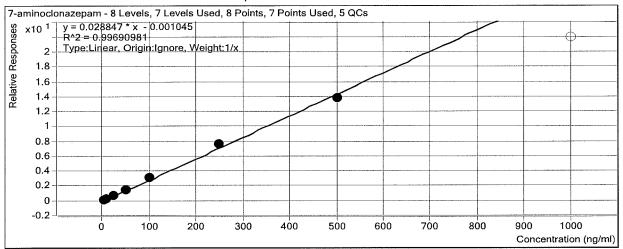
4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Internal Standard

7-aminoclonazepam 7-Aminoclonazepam-D4



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\mathbf{N}	5	4.8	96.9
a cal 2	2	\square	10	9.1	91.2
a QC 10	2	\square	10	8.8	88.2
a cal 3	3		25	25.5	102.1
a cal 4	4	V	50	50.0	100.0
a cal 5	5	$\mathbf{\nabla}$	100	108.8	108.8
a qc 100	5		100	85.9	85.9
a qc 100 2nd	5	\square	100	95.8	95.8
a cal 6	6	\square	250	263.3	105.3
a QC 250	6	Ø	250	220.8	88.3
a cal 7	7	\square	500	478.4	95.7
a cal 8	8		1000	759.6	76.0
a qc 1000	8	\square	1000	751.9	75.2



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Tramadol Target Compound Internal Standard Tramadol-13C-D3 Tramadol - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs x10 1 y = 0.026634 * x - 0.006339 R^2 = 0.99048718 1.8 - Type:Linear, Origin:Ignore, Weight:1/x^2 Relative Responses 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 100 200 зо́о 400 500 600 700 800 900 1000 ò Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	5.1	102.1
a cal 2	2	\square	10	9.2	91.6
a QC 10	2	\square	10	9.5	95.3
a cal 3	3	$\mathbf{\Sigma}$	25	26.7	106.7
a cal 4	4	\square	50	52.4	104.8
a cal 5	5	\square	100	109.8	109.8
a qc 100	5		100	93.5	93.5
a qc 100 2nd	5	\square	100	96.7	96.7
a cal 6	6	Ø	250	244.9	97.9
a QC 250	6	Ø	250	236.5	94.6
a cal 7	7	\square	500	435.3	87.1
a cal 8	8		1000	727.4	72.7
a qc 1000	8		1000	707.5	70.7



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

Target Compound

4/15/2017 9:28 AM

Doxylamine

Analyst Name

ISP TOX

Internal Standard Doxylamine-D5 Doxylamine - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs x10 1 + y = 0.028560 * x - 0.009310 R^2 = 0.99296735 1.6 + Type:Lirlear, Origin:Ignore, Weight:1/x^2 Relative Responses Φ 1.4 1.2 1 0.8 0.6 0.4 0.2 0 700 800 900 1000 Ó 100 200 300 400 5**0**0 6Ó0 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	5.2	104.8
a cal 2	2	\square	10	8.8	87.8
a QC 10	2	M	10	9.5	95.1
a cal 3	3	$\mathbf{\nabla}$	25	25.8	103.0
a cal 4	4	Ø	50	52.7	105.3
a cal 5	5	Ø	100	106.0	106.0
a qc 100	5	\square	100	90.0	90.0
a qc 100 2nd	5	\square	100	100.1	100.1
a cal 6	6	\square	250	231.0	92.4
a QC 250	6	Ø	250	266.0	106.4
a cal 7	7		500	503.5	100.7
a cal 8	8		1000	715.7	71.6
a qc 1000	8		1000	741.8	74.2



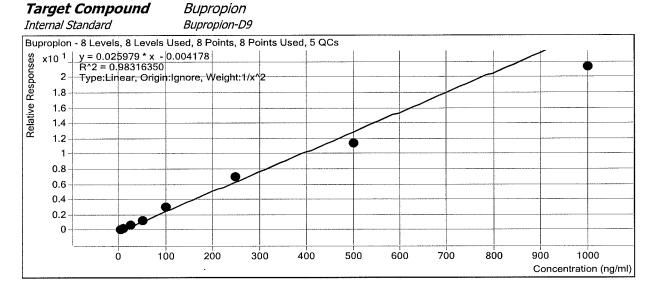
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	4.8	97.0
a cal 2	2	\square	10	10.1	100.9
a QC 10	2	Ø	10	10.0	99.7
a cal 3	3	\square	25	27.5	110.0
a cal 4	4	Ø	50	49.1	98.2
a cal 5	5	\square	100	116.3	116.3
a qc 100	5	\square	100	87.1	87.1
a qc 100 2nd	5	\square	100	96.0	96.0
a cal 6	6	\square	250	268.8	107.5
a QC 250	6	\square	250	234.9	94.0
a cal 7	7	\square	500	439.9	88.0
a cal 8	8	\square	1000	820.7	82.1
a qc 1000	8	\square	1000	823.8	82.4

A

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Meprobamate Internal Standard Meprobamate-D7 Meprobamate - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs y = 0.020052 * x + 0.055587 R^2 = 0.98877320 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses x10¹ 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 800 эòо 1000 100 200 300 400 5Ó0 600 700 0 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	4.0	80.3
a cal 2	2	\square	10	8.1	81.2
a QC 10	2	\square	10	7.7	77.1
a cal 3	3	$\mathbf{\nabla}$	25	25.2	101.0
a cal 4	4	\square	50	55.9	111.8
a cal 5	5	$\mathbf{\nabla}$	100	113.4	113.4
a qc 100	5	\square	100	98.5	98.5
a qc 100 2nd	5	\square	100	105.2	105.2
a cal 6	6	\square	250	281.4	112.5
a QC 250	6	$\mathbf{\nabla}$	250	266.9	106.8
a cal 7	7	\square	500	546.2	109.2
a cal 8	8	M	1000	905.8	90.6
a qc 1000	8	\mathbf{M}	1000	899.1	89.9

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Venlafaxine Internal Standard Venlafaxine-D6 Venlafaxine - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs x10¹ y = 0.025687 * x + 0.083404 R^2 = 0.99199187 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses 2-1.8-1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 500 600 700 800 900 1000 100 200 300 400 Ó Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\mathbf{M}	5	3.8	75.5
a cal 2	2		10	9.3	92.8
a QC 10	2	\square	10	9.1	91.0
a cal 3	3	\square	25	26.8	107.1
a cal 4	4	\square	50	55.1	110.2
a cal 5	5	\square	100	115.9	115.9
a qc 100	5	\square	100	88.5	88.5
a qc 100 2nd	5	\square	100	99.7	99.7
a cal 6	6	\square	250	263.1	105.3
a QC 250	6	\square	250	240.2	96.1
a cal 7	7	Ø	500	466.0	93.2
a cal 8	8		1000	889.1	88.9
a qc 1000	8	\mathbf{M}	1000	809.8	81.0



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

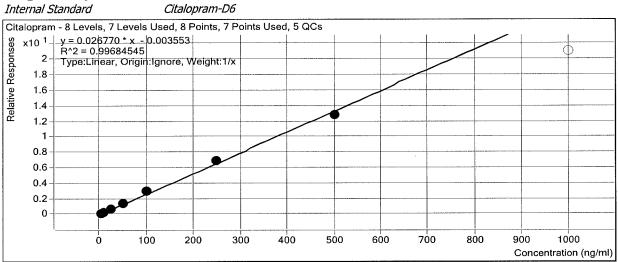
Citalopram

Analyst Name

ISP TOX

Target Compound

Citalopram-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\mathbf{M}	5	5.0	100.7
a cal 2	2	\square	10	9.3	93.2
a QC 10	2	\mathbf{M}	10	9.2	91.7
a cal 3	3	\square	25	22.6	90.5
a cal 4	4	$\mathbf{\nabla}$	50	52.7	105.4
a cal 5	5	\square	100	110.3	110.3
a qc 100	5	\square	100	91.1	91.1
a qc 100 2nd	5	\square	100	96.0	96.0
a cal 6	6	Ø	250	259.2	103.7
a QC 250	6	\square	250	227.7	91.1
a cal 7	7	Ø	500	480.8	96.2
a cal 8	8		1000	784.0	78.4
a qc 1000	8	Ø	1000	811.6	81.2



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

Target Compound

4/15/2017 9:28 AM

Zolpidem

Analyst Name

ISP TOX

Internal Standard Zolpidem-D6 Zolpidem - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs y = 0.022515 * x + 0.025447 R^2 = 0.98945577 x10 ¹⁻ Relative Responses φ 1.6 Type:Linear, Origin:Ignore, Weight:1/x 1.4 1.2 1 0.8 0.6 0.4 0.2 0 1000 800 900 Ò 100 200 300 400 500 6Ó0 700 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\mathbf{M}	5	4.2	84.8
a cal 2	2	\mathbf{N}	10	8.3	82.6
a QC 10	2	M	10	9.2	92.1
a cal 3	3	\square	25	28.9	115.5
a cal 4	4	\square	50	54.3	108.6
a cal 5	5	\square	100	104.5	104.5
a qc 100	5	\square	100	91.1	91.1
a qc 100 2nd	5	\square	100	96.1	96.1
a cal 6	6	\square	250	280.5	112.2
a QC 250	6	\square	250	245.6	98.2
a cal 7	7	\square	500	459.3	91.9
a cal 8	8		1000	736.4	73.6
a qc 1000	8	Ø	1000	750.0	75.0



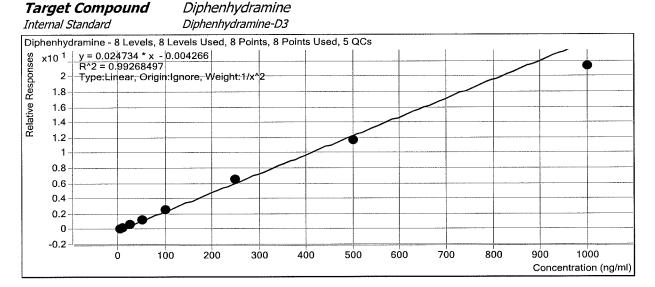
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	5.0	100.7
a cal 2	2	\square	10	9.5	94.7
a QC 10	2	\square	10	9.8	97.8
a cal 3	3	\square	25	26.3	105.2
a cal 4	4	\square	50	53.1	106.3
a cal 5	5		100	106.3	106.3
a qc 100	5	\square	100	92.1	92.1
a qc 100 2nd	5	\square	100	89.7	89.7
a cal 6	6	\square	250	265.1	106.0
a QC 250	6		250	233.0	93.2
a cal 7	7	\square	500	473.0	94.6
a cal 8	8	$\mathbf{\nabla}$	1000	862.8	86.3
a qc 1000	8	X	1000	856.9	85.7



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

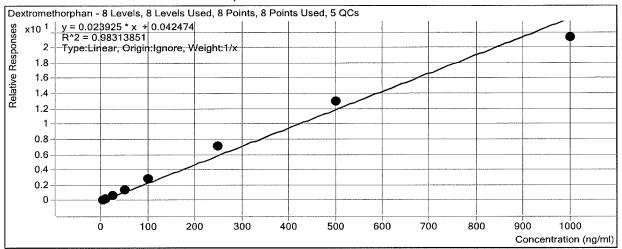
4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Internal Standard

d Dextromethorphan Dextromethorphan-D3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	3.6	72.7
a cal 2	2	\square	10	8.2	81.5
a QC 10	2	\square	10	9.5	95.2
a cal 3	3	M	25	24.2	96.8
a cal 4	4		50	56.6	113.2
a cal 5	5	\square	100	119.6	119.6
a qc 100	5	$\mathbf{\nabla}$	100	103.1	103.1
a qc 100 2nd	5	\square	100	108.2	108.2
a cal 6	6	$\mathbf{\nabla}$	250	297.0	118.8
a QC 250	6	\square	250	263.1	105.3
a cal 7	7	$\mathbf{\Sigma}$	500	542.5	108.5
a cal 8	8	$\mathbf{\nabla}$	1000	888.3	88.8
a qc 1000	8	$\mathbf{\Sigma}$	1000	883.3	88.3



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Trazodone Internal Standard Trazodone-D6 Trazodone - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs x10 1 y=0.028208 * x + 0.004917 2 R^2 = 0.99722872 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 700 800 900 1000 Ò 100 200 300 400 500 600 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	4.8	95.2
a cal 2	2	Ø	10	8.9	89.4
a QC 10	2	\square	10	10.1	101.3
a cal 3	3	\mathbf{N}	25	26.2	105.0
a cal 4	4	\square	50	51.8	103.6
a cal 5	5	$\mathbf{\nabla}$	100	105.4	105.4
a qc 100	5	\square	100	88.4	88.4
a qc 100 2nd	5	\square	100	95.4	95.4
a cal 6	6	\square	250	264.2	105.7
a QC 250	6	\square	250	234.0	93.6
a cal 7	7	Ø	500	478.7	95.7
a cal 8	8		1000	725.1	72.5
a qc 1000	8	\square	1000	726.9	72.7

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Clonazepam Internal Standard Clonazepam-D4 Clonazepam - 8 Levels, 6 Levels Used, 8 Points, 6 Points Used, 5 QCs x10¹ y = 0.080724 * x + 0.029934 R^2 = 0.99782182 Relative Responses Q 5 Type:Linear, Origin:Ignore, Weight:1/x^2 4.5 4 3.5 3 2.5 2 1.5 1 0.5 0 100 200 300 4**0**0 500 6**0**0 700 800 9Ó0 1000 ò Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1		5	5.1	101.3
a cal 2	2	\square	10	9.7	96.8
a QC 10	2	\square	10	11.0	109.6
a cal 3	3	Ø	25	25.1	100.5
a cal 4	4		50	50.5	101.1
a cal 5	5		100	103.8	103.8
a qc 100	5	\square	100	105.1	105.1
a qc 100 2nd	5	☑	100	105.0	105.0
a cal 6	6	☑	250	264.3	105.7
a QC 250	6	\square	250	249.3	99.7
a cal 7	7	☑	500	473.0	94.6
a cal 8	8		1000	656.5	65.7
a qc 1000	8		1000	854.5	85.5

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

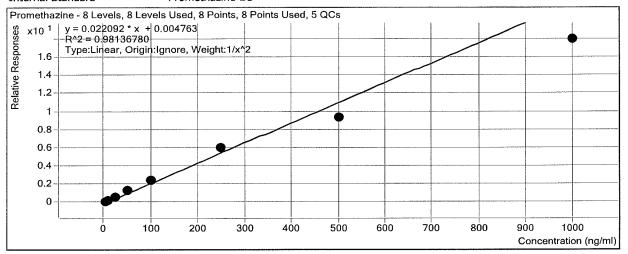
4/15/2017 9:28 AM

Analyst Name

ISP TOX

Target Compound Internal Standard

Promethazine Promethazine-D3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	4.9	97.9
a cal 2	2	Ø	10	9.7	97.4
a QC 10	2	Ø	10	9.0	90.3
a cal 3	3	Ø	25	27.3	109.2
a cal 4	4	Ø	50	55.9	111.7
a cal 5	5		100	110.8	110.8
a qc 100	5		100	93.7	93.7
a qc 100 2nd	5	Ø	100	102.4	102.4
a cal 6	6	Ø	250	268.6	107.4
a QC 250	6	\square	250	244.9	98.0
a cal 7	7	Ø	500	422.7	84.5
a cal 8	8	\square	1000	810.9	81.1
a qc 1000	8	Ø	1000	861.0	86.1



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

Target Compound

4/15/2017 9:28 AM

a-hydroxyalprazolam

Analyst Name

ISP TOX

Internal Standard a-hydroxyalprazolam-D5 a-hydroxyalprazolam - 8 Levels, 6 Levels Used, 8 Points, 6 Points Used, 5 QCs x10 1 | y = 0.029595 * x - 0.023024 1.6 - R^2 = 0.99831032 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses 1.4 1.2 1 0.8 0.6 0.4 0.2 0 800 1000 400 500 700 900 200 300 600 0 100 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	Ø	5	5.3	106.4
a cal 2	2	\mathbf{N}	10	8.4	84.4
a QC 10	2	\square	10	9.9	99.3
a cal 3	3	\square	25	25.4	101.5
a cal 4	4		50	32.1	64.3
a cal 5	5	\mathbf{M}	100	109.7	109.7
a qc 100	5	\square	100	87.5	87.5
a qc 100 2nd	5	\square	100	90.8	90.8
a cal 6	6	\square	250	248.9	99.5
a QC 250	6	\square	250	242.2	96.9
a cal 7	7	\square	500	492.3	98.5
a cal 8	8		1000	548.6	54.9
a qc 1000	8	\square	1000	885.1	88.5



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

Target Compound

4/15/2017 9:28 AM

Carisoprodol

Analyst Name

ISP TOX

Internal Standard Carisoprodol-D7 Carisoprodol - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs x10¹ y = 0.020914 * x - 0.004258 R^2 = 0.98927457 Relative Responses 1.6 _____Type:Linear,_Origin:Ignore, Weight:1/x^2 1.4 1.2 1 0.8 0.6 0.4 0.2 0 800 oòe 1000 300 400 500 700 1Ò0 200 6Ó0 0 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	5.0	100.6
a cal 2	2	\mathbf{M}	10	9.4	93.9
a QC 10	2	\square	10	9.6	96.4
a cal 3	3	\mathbf{M}	25	26.3	105.2
a cal 4	4	\square	50	54.7	109.5
a cal 5	5	\square	100	110.3	110.3
a qc 100	5	Ø	100	106.9	106.9
a qc 100 2nd	5	Ø	100	96.8	96.8
a cal 6	6	\square	250	254.1	101.6
a QC 250	6	Ø	250	264.2	105.7
a cal 7	7	\square	500	479.3	95.9
a cal 8	8	\square	1000	829.5	82.9
a qc 1000	8	\square	1000	814.8	81.5



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

Target Compound

4/15/2017 9:28 AM

Lorazepam

Analyst Name

ISP TOX

Internal Standard Alprazolam-D5 Lorazepam - 8 Levels, 6 Levels Used, 8 Points, 6 Points Used, 5 QCs y = 0.002768 * x - 0.002405 R^2 = 0.98947656 Type:Linear, Origin:Ignore, Weight:1/x^2 Relative Responses 3.25~ 3-2.75 2.5 2.25 2 1.75 1.5 1.25 1 0.75 0.5 0.25 0 -0.25 700 800 900 1000 100 200 зóо 400 5ò0 6Ó0 Ó Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\square	5	5.2	104.2
a cal 2	2	\square	10	9.4	94.1
a QC 10	2	\square	10	9.0	89.7
a cal 3	3		25	24.3	97.4
a cal 4	4	\square	50	44.8	89.5
a cal 5	5		100	101.3	101.3
a qc 100	5		100	86.4	86.4
a qc 100 2nd	5		100	88.2	88.2
a cal 6	6		250	283.7	113.5
a QC 250	6		250	239.6	95.8
a cal 7	7		500	522.1	104.4
a cal 8	8		1000	1147.6	114.8
a qc 1000	8	Ø	1000	1143.9	114.4

A

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1a.batch.bin

Last Calib Update

4/15/2017 9:28 AM

Alprazolam

Analyst Name

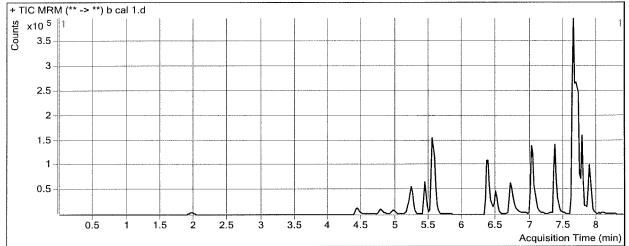
ISP TOX

Target Compound Internal Standard Alprazolam-D5 Alprazolam - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs x10¹ <u>y = 0.031733 * x - 0.030676</u> R^2 = 0.99216209 2.5 - Type:Linear, Origin:Ignore, Weight:1/x^2 Relative Responses 2.25 2 1.75 1.5 1.25 1 0.75 0.5 0.25 0 -0.25 700 800 900 1000 100 200 300 4**0**0 5**0**0 6Ó0 Ó Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1	1	\mathbf{N}	5	5.0	100.4
a cal 2	2	$\mathbf{\nabla}$	10	9.6	96.3
a QC 10	2	\square	10	10.4	103.6
a cal 3	3	\mathbf{M}	25	25.9	103.7
a cal 4	4	\square	50	51.6	103.1
a cal 5	5	\square	100	108.2	108.2
a qc 100	5	\square	100	90.7	90.7
a qc 100 2nd	5	\square	100	98.7	98.7
a cal 6	6	$\mathbf{\nabla}$	250	266.0	106.4
a QC 250	6	\square	250	235.1	94.0
a cal 7	7	\square	500	491.8	98.4
a cal 8	8	\square	1000	836.1	83.6
a qc 1000	8	Ø	1000	807.9	80.8

Batch Data Path	D:\2017 Data\41317 md	lq p1\QuantResults\	4-13-17 mdq p1b.batch.bin
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 12:34	Data File	b cal 1.d
Sample Type	Calibration	Sample Name	b cal 1
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m
Position	P1-A1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results

1000100						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.989	3139	22037	0.1425	4.6247
Dihydrocodeine	Dihydrocodeine-D6	4.496	7032	58697	0.1198	4.6422
Naloxone	Naloxone-D5	4.853	4100	51014	0.0804	3,8458
Noroxycodone	Noroxycodone-D3	4.997	6171	34211	0.1804	4.1146
Naltrexone	Naltrexone-D3	5.212	7711	61445	0.1255	4.9282
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.284	2497	189737	0.0132	0.4662
Naltrexol	Naltrexol-D3	5.430	26084	165940	0.1572	4.4744
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.559	62102	453563	0.1369	4.6113
Ketamine	Ketamine-D4	6.402	20760	150733	0.1377	4.9719
Norfentanyl	Norfentanyl-D5	6.404	3248	264358	0.0123	0.4592
alpha-PVP	alpha-PVP-d8	6.729	36247	278746	0.1300	5.0839
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	5487	476371	0.0115	0.3966
Norbuprenorphine	Norbuprenorphine-D3	7.295	167	7492	0.0222	0.6690
Fentanyl	Fentanyl-D5	7.359	5910	395803	0.0149	0.4771
EDDP	EDDP-D3	7.410	3584	31552	0.1136	5.0482
Cyclobenzaprine	Cyclobenzaprine-D3	7.633	25110	184918	0.1358	4.5172
Sufentanil	Sufentanil-D5	7.639	4142	274439	0.0151	0.5835
Quetiapine	Quetiapine-D8	7.640	63032	136346	0.4623	4.7831
Methadone	Methadone-D9	7.664	50086	437998	0.1144	4.5290
Fluoxetine	Fluoxetine-D6	7.705	68020	517074	0.1315	4,3065
Oxazepam	Oxazepam-D5	7.730	2581	16986	0.1519	5.3544
Sertraline	Sertraline-D3	7.767	15948	157284	0.1014	4.2165
Temazepam	Temazepam-D5	7.768	14525	115935	0.1253	0.8863

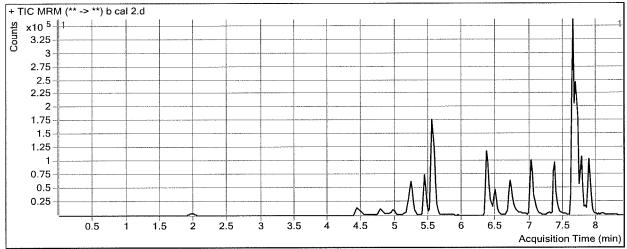
bcall

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.856	3467	17877	0.1940	4.5229
Diazepam	Diazepam-D5	7.891	17284	112732	0.1533	4.0301
Buprenorphine	Buprenorphine-D4	7.918	1265	89250	0.0142	0.5657



Batch Data Path	D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin						
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox				
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox				
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed				
Analysis Info							
Acq Time	2017-04-13 13:00	Data File	b cal 2.d				
Sample Type	Calibration	Sample Name	b cal 2				
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m				
Position	P1-B1	Sample Info					
Inj Vol	-1	Comment					

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.989	6306	22589	0.2791	9.3009
Dihydrocodeine	Dihydrocodeine-D6	4.496	13281	58951	0.2253	8.9225
Naloxone	Naloxone-D5	4.853	7872	53037	0.1484	8.7621
Noroxycodone	Noroxycodone-D3	4,997	9728	35408	0.2747	7.7168
Naltrexone	Naltrexone-D3	5.212	16349	61940	0.2639	10.0609
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.284	5058	199096	0.0254	0.9187
Naltrexol	Naltrexol-D3	5.430	50638	173777	0.2914	8.8306
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.559	118400	460086	0.2573	9.0173
Ketamine	Ketamine-D4	6.402	37633	145643	0.2584	9.3273
Norfentanyl	Norfentanyl-D5	6.384	6168	266871	0.0231	0.8969
alpha-PVP	alpha-PVP-d8	6.709	60445	238646	0.2533	9.4393
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	7239	342660	0.0211	0.8582
Norbuprenorphine	Norbuprenorphine-D3	7.275	113	6146	0.0183	0.5189
Fentanyl	Fentanyl-D5	7.359	7763	282245	0.0275	0.9390
EDDP	EDDP-D3	7.410	5434	22851	0.2378	9.8731
Cyclobenzaprine	Cyclobenzaprine-D3	7.633	32280	124076	0.2602	9.0278
Sufentanil	Sufentanil-D5	7.639	4359	194889	0.0224	0.8391
Quetiapine	Quetiapine-D8	7.640	95337	110320	0.8642	9.0612
Methadone	Methadone-D9	7,643	71520	316155	0.2262	9.5285
Fluoxetine	Fluoxetine-D6	7.705	95096	383202	0.2482	8.9531
Oxazepam	Oxazepam-D5	7.730	3806	16532	0.2302	8.2572
Sertraline	Sertraline-D3	7.767	24750	108604	0.2279	9.3239
Temazepam	Temazepam-D5	7.768	26101	72585	0.3596	10.4053

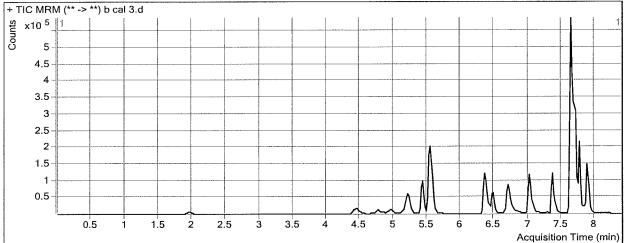
bcald

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.836	6343	16635	0.3813	9.0745
Diazepam	Diazepam-D5	7.891	31522	115974	0.2718	8.1018
Buprenorphine	Buprenorphine-D4	7.938	1820	58612	0.0310	1.0815



Batch Data Path Analysis Time Report Time	D:\2017 Data\41317 mo 4/15/2017 10:27 AM 4/15/2017 10:29 AM	dq p1\QuantResults\ Analyst Name Reporter Name	4-13-17 mdq p1b.batch.bin ISP Tox ISP Tox
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 13:25	Data File	b cal 3.d
Sample Type	Calibration	Sample Name	b cal 3
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m
Position	P1-C1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results

Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.968	15349	20161	0,7613	25.7974
Dihydrocodeine	Dihydrocodeine-D6	4.477	33671	52456	0.6419	25.8272
Naloxone	Naloxone-D5	4.853	18808	46365	0.4056	27,3483
Noroxycodone	Noroxycodone-D3	4.977	23589	32084	0.7352	25.2955
Naltrexone	Naltrexone-D3	5.192	38553	57037	0.6759	25.3337
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.284	11644	172322	0.0676	2.4774
Naltrexol	Naltrexol-D3	5.430	128916	156189	0.8254	26.1634
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.559	299230	413749	0.7232	26.0623
Ketamine	Ketamine-D4	6.382	99777	131849	0.7568	27.3161
Norfentanyl	Norfentanyl-D5	6.384	15316	240841	0.0636	2.5339
alpha-PVP	alpha-PVP-d8	6.709	165983	232990	0.7124	25.6638
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	20463	367214	0.0557	2.5209
Norbuprenorphine	Norbuprenorphine-D3	7.295	401	6535	0.0613	2.1775
Fentanyl	Fentanyl-D5	7.359	21505	306098	0.0703	2.5097
EDDP	EDDP-D3	7,431	15365	26611	0.5774	23.0633
Cyclobenzaprine	Cyclobenzaprine-D3	7.633	98265	136181	0.7216	25.7620
Sufentanil	Sufentanil-D5	7.639	13463	210494	0.0640	2,3005
Quetiapine	Quetiapine-D8	7,640	263645	108722	2,4249	25.6756
Methadone	Methadone-D9	7.664	206920	333477	0.6205	27.1490
Fluoxetine	Fluoxetine-D6	7.705	277076	407023	0.6807	26.1896
Oxazepam	Oxazepam-D5	7.730	9622	15719	0.6121	22.4137
Sertraline	Sertraline-D3	7.767	70858	101992	0.6947	28.1729
Temazepam	Temazepam-D5	7.768	66165	105298	0.6284	21.3244

7.938

ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam-D5	7.856	16212	15509	1.0453	25.2089
Diazepam-D5	7.891	81429	102928	0.7911	25.9484

5488

74209

0.0740



b cal 3

2.3937

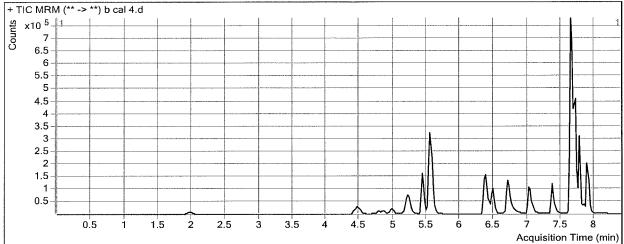
Compound Nordiazepam Diazepam

Buprenorphine

Buprenorphine-D4

Batch Data Path	D:\2017 Data\41317 m	dq p1\QuantResults\	4-13-17 mdq p1b.batch.bin
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 13:50	Data File	b cal 4.d
Sample Type	Calibration	Sample Name	b cal 4
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m
Position	P1-D1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results

Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.989	32938	21833	1.5087	51.3638
Dihydrocodeine	Dihydrocodeine-D6	4.477	71501	55549	1.2872	52.0110
Naloxone	Naloxone-D5	4.853	38058	48778	0.7802	54.4150
Noroxycodone	Noroxycodone-D3	4.997	48892	32794	1.4909	54.1441
Naltrexone	Naltrexone-D3	5,192	79261	54910	1.4435	53.7874
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.284	25333	185907	0.1363	5.0167
Naltrexol	Naltrexol-D3	5.430	268981	160633	1.6745	53.7250
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.559	628859	435054	1.4455	52.4878
Ketamine	Ketamine-D4	6.402	223564	138277	1.6168	58.3598
Norfentanyl	Norfentanyl-D5	6.384	33869	252284	0.1342	5.3910
alpha-PVP	alpha-PVP-d8	6.709	339331	230616	1.4714	52.4860
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	37464	322536	0.1162	5.4247
Norbuprenorphine	Norbuprenorphine-D3	7.275	585	5812	0.1007	3.6983
Fentanyl	Fentanyl-D5	7.359	38404	270447	0.1420	5.1459
EDDP	EDDP-D3	7.431	25753	20655	1.2468	49.0651
Cyclobenzaprine	Cyclobenzaprine-D3	7.653	173002	118784	1.4564	52.4138
Sufentanil	Sufentanil-D5	7.639	27310	184893	0.1477	5.2433
Quetiapine	Quetiapine-D8	7.640	491312	97349	5.0469	53.5867
Methadone	Methadone-D9	7.664	364719	293883	1.2410	54.8818
Fluoxetine	Fluoxetine-D6	7.705	521394	365550	1.4263	55.8985
Oxazepam	Oxazepam-D5	7.730	21970	15745	1.3954	51.4461
Sertraline	Sertraline-D3	7.767	121665	100961	1.2051	48.7780
Temazepam	Temazepam-D5	7.768	145975	105592	1.3825	51.9603

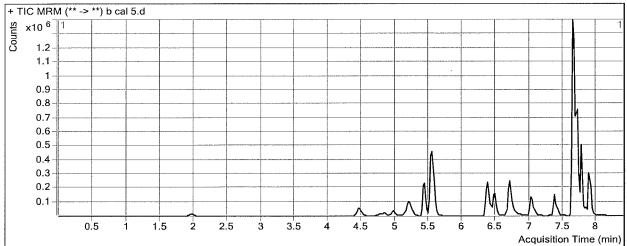


Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.856	36962	16398	2.2541	54.5774
Diazepam	Diazepam-D5	7.891	170771	105632	1.6167	54.3175
Buprenorphine	Buprenorphine-D4	7.938	8373	56015	0.1495	4.7030



Batch Data Path	D:\2017 Data\41317 mo	dq p1\QuantResults\	4-13-17 mdq p1b.batch.bin
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 14:16	Data File	b cal 5.d
Sample Type	Calibration	Sample Name	b cal 5
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m
Position	P1-E1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results

Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.968	66188	21161	3.1278	106.7554
Dihydrocodeine	Dihydrocodeine-D6	4.477	145888	53223	2.7411	111.0048
Naloxone	Naloxone-D5	4.833	74736	45812	1.6314	115.9126
Noroxycodone	Noroxycodone-D3	4.977	96622	30625	3.1550	117.6711
Naltrexone	Naltrexone-D3	5.192	166647	57908	2.8778	106.9586
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.284	51192	177554	0.2883	10.6367
Naltrexol	Naltrexol-D3	5.430	505234	147949	3.4149	110.2169
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.559	1226826	416663	2.9444	107.3299
Ketamine	Ketamine-D4	6.382	419444	134673	3.1145	112.4229
Norfentanyl	Norfentanyl-D5	6.384	69022	255302	0.2704	10.8947
alpha-PVP	alpha-PVP-d8	6.709	689607	237039	2.9093	103.2967
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	84900	352311	0.2410	11.4231
Norbuprenorphine	Norbuprenorphine-D3	7.275	1821	5791	0.3145	11.9552
Fentanyl	Fentanyl-D5	7.359	81116	280386	0.2893	10.5579
EDDP	EDDP-D3	7.431	67141	23533	2.8530	111.4571
Cyclobenzaprine	Cyclobenzaprine-D3	7.653	372340	119947	3.1042	112.1739
Sufentanil	Sufentanil-D5	7.639	51988	191025	0.2722	9.6158
Quetiapine	Quetiapine-D8	7.640	1025391	108008	9.4936	100.9219
Methadone	Methadone-D9	7.664	679395	311310	2.1824	96.9515
Fluoxetine	Fluoxetine-D6	7.705	1043013	368089	2.8336	111.9727
Oxazepam	Oxazepam-D5	7.730	41514	13449	3.0868	114.1431
Sertraline	Sertraline-D3	7.767	267105	92636	2.8834	116.5398
Temazepam	Temazepam-D5	7.768	264580	98416	2.6884	105.0149 (

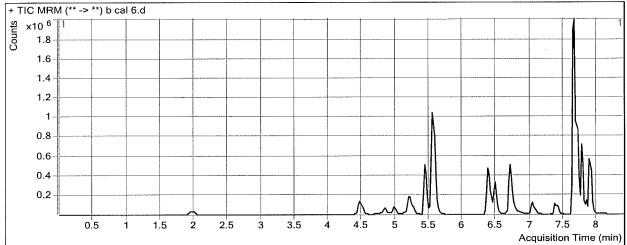
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.856	65800	14085	4.6716	113.3157
Diazepam	Diazepam-D5	7.891	329261	97798	3.3667	114.4587
Buprenorphine	Buprenorphine-D4	7.938	20287	63549	0.3192	9.8942



bcals

Batch Data Path	D:\2017 Data\41317 mc	iq p1\QuantResults\	4-13-17 mdq p1b.batch.bin
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 14:41	Data File	b cal 6.d
Sample Type	Calibration	Sample Name	b cal 6
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m
Position	P1-F1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.968	173348	22193	7.8108	266.9656
Dihydrocodeine	Dihydrocodeine-D6	4.477	365368	56889	6.4225	260.3871
Naloxone	Naloxone-D5	4.853	191032	49495	3.8596	276.9163
Noroxycodone	Noroxycodone-D3	4.977	232083	30361	7.6441	289.0398
Naltrexone	Naltrexone-D3	5.192	338791	55307	6.1257	227.3609
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.284	126837	170885	0.7422	27,4149
Naltrexol	Naltrexol-D3	5.430	1193800	147073	8.1171	262.8436
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.559	3091895	426652	7.2469	264.7467
Ketamine	Ketamine-D4	6.382	988644	143212	6.9034	249.1846
Norfentanyl	Norfentanyl-D5	6.384	157197	240907	0.6525	26.3486
alpha-PVP	alpha-PVP-d8	6.709	1525814	215533	7.0792	250.6574
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	129639	218431	0.5935	28.3632
Norbuprenorphine	Norbuprenorphine-D3	7.295	2562	3954	0.6479	24.8275
Fentanyl	Fentanyl-D5	7.359	107035	147834	0.7240	26.5302
EDDP	EDDP-D3	7.431	141899	22031	6.4410	250.8256
Cyclobenzaprine	Cyclobenzaprine-D3	7.653	465661	64720	7.1951	260.5378
Sufentanil	Sufentanil-D5	7.639	71127	90226	0.7883	27.7523
Quetiapine	Quetiapine-D8	7.640	1986662	78674	25.2520	268.6699
Methadone	Methadone-D9	7.664	991101	178791	5.5434	247.1580
Fluoxetine	Fluoxetine-D6	7.705	1132152	182407	6.2067	246.3801
Oxazepam	Oxazepam-D5	7.730	103386	13680	7.5575	279.8633
Sertraline	Sertraline-D3	7.767	307270	50612	6.0711	245.2477
Temazepam	Temazepam-D5	7.788	676371	103117	6.5593	262.2734 (

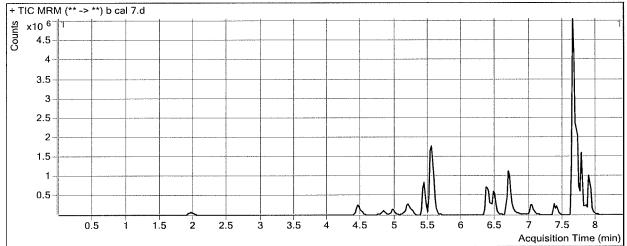
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.856	145680	14486	10.0564	244,1505
Diazepam	Diazepam-D5	7.891	760540	94091	8.0830	276,5314
Buprenorphine	Buprenorphine-D4	7.938	29462	36433	0.8087	24.8603



b cal b

Batch Data Path	D:\2017 Data\41317 mo	dq p1\QuantResults\	4-13-17 mdq p1b.batch.bin
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 15:07	Data File	b cal 7.d
Sample Type	Calibration	Sample Name	b cal 7
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m
Position	P1-G1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Results

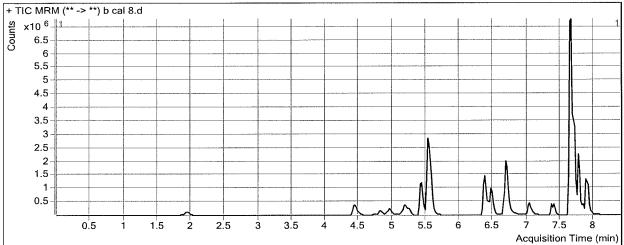
Commenced	ICTD Commound	DT	Despense	ISTD Resp	Resp Ratio	Final Conc
Compound	ISTD Compound	RT	Response	24537	13.8973	475.1922
Oxymorphone	Oxymorphone-D3	1.968	340997			
Dihydrocodeine	Dihydrocodeine-D6	4.457	706673	60061	11,7659	477.2053
Naloxone	Naloxone-D5	4.833	344214	54691	6.2938	452.7997
Noroxycodone	Noroxycodone-D3	4.977	446519	31650	14.1082	535.8042
Naltrexone	Naltrexone-D3	5.192	645190	50911	12.6728	470.0719
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.284	270490	190859	1.4172	52.3645
Naltrexol	Naltrexol-D3	5.430	2123126	145274	14.6146	473.7461
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.559	5936937	456202	13.0138	475.7448
Ketamine	Ketamine-D4	6.402	1821471	149462	12.1868	439.8967
Norfentanyl	Norfentanyl-D5	6.364	322404	274389	1.1750	47.4757
alpha-PVP	alpha-PVP-d8	6.688	3296087	251451	13.1083	463.7130
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	379938	344472	1.1030	52.8449
Norbuprenorphine	Norbuprenorphine-D3	7.275	6631	5117	1.2958	49.8415
Fentanyl	Fentanyl-D5	7.359	311008	238501	1.3040	47.8402
EDDP	EDDP-D3	7.410	339040	26875	12.6155	490.6675
Cyclobenzaprine	Cyclobenzaprine-D3	7.633	1287419	98096	13.1241	475.5675
Sufentanil	Sufentanil-D5	7.639	223574	164994	1.3550	47.6655
Quetiapine	Quetiapine-D8	7.640	4161785	92791	44.8509	477.3016
Methadone	Methadone-D9	7.664	3127551	279334	11.1965	499.8022
Fluoxetine	Fluoxetine-D6	7.705	3586191	293280	12.2279	486.2995
Oxazepam	Oxazepam-D5	7.730	192071	15518	12.3773	458.5223
Sertraline	Sertraline-D3	7.767	909705	75328	12.0766	487.7213
Temazepam	Temazepam-D5	7.768	1182432	98392	12.0175	484.0217

Ь	cal	7

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.856	298364	14814	20.1400	489.1501
Diazepam	Diazepam-D5	7.891	1329208	82536	16.1045	552.1906
Buprenorphine	Buprenorphine-D4	7.938	88502	51098	1.7320	53.0939

Batch Data Path	D:\2017 Data\41317 m	dq p1\QuantResults\	4-13-17 mdq p1b.batch.bin
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 15:32	Data File	b cal 8.d
Sample Type	Calibration	Sample Name	b cal 8
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m
Position	P1-H1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



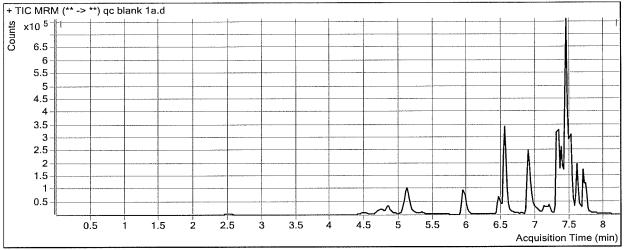
Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.948	611141	26279	23.2562	795.3688
Dihydrocodeine	Dihydrocodeine-D6	4.457	1174278	62341	18.8365	764.1100
Naloxone	Naloxone-D5	4.833	576431	56913	10.1283	729.8629
Noroxycodone	Noroxycodone-D3	4.957	741862	31156	23.8112	906.2138
Naltrexone	Naltrexone-D3	5.192	815634	46800	17.4280	646.3497
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.264	492330	192113	2.5627	94.7049
Naltrexol	Naltrexol-D3	5.430	3352988	142622	23.5097	762.4711
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.539	10127488	458420	22.0922	807.8971
Ketamine	Ketamine-D4	6.382	3456433	153595	22.5035	812.2866
Norfentanyl	Norfentanyl-D5	6.364	530153	286111	1.8530	74.8911
alpha-PVP	alpha-PVP-d8	6.688	5838677	279079	20.9212	739.8096
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	740056	385191	1.9213	92.1685
Norbuprenorphine	Norbuprenorphine-D3	7.275	11923	5458	2.1844	84.1483
Fentanyl	Fentanyl-D5	7.359	476584	230967	2.0634	75.7424
EDDP	EDDP-D3	7.410	644782	28862	22.3401	868.4044
Cyclobenzaprine	Cyclobenzaprine-D3	7.633	1974807	85696	23.0444	835.3517
Sufentanil	Sufentanil-D5	7.639	335075	157270	2.1306	74.9155
Quetiapine	Quetiapine-D8	7.640	6230291	96655	64.4593	686.0332
Methadone	Methadone-D9	7.664	5345335	285625	18.7145	835.7952
Fluoxetine	Fluoxetine-D6	7.705	5326949	258756	20.5867	819.3695
Oxazepam	Oxazepam-D5	7.730	334760	16469	20.3272	753.2048
Sertraline	Sertraline-D3	7.767	1295032	68260	18.9720	766.1271
Temazepam	Temazepam-D5	7.788	1948604	89871	21.6823	876.6635 (

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.856	484843	14653	33.0884	803.7552
Diazepam	Diazepam-D5	7.891	2048692	77737	26.3543	904.4216
Buprenorphine	Buprenorphine-D4	7.938	161960	50878	3.1833	97.4734

b cal8

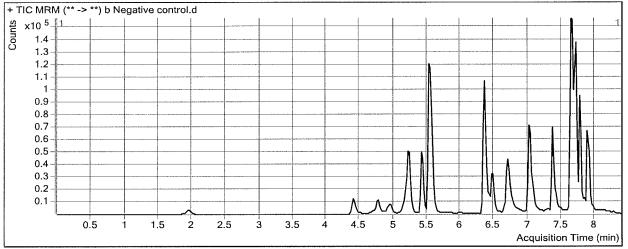
Batch Data Path Analysis Time	D:\2017 Data\41317 md 4/15/2017 10:27 AM	q p1\QuantResults\ Analyst Name	4-13-17 mdq p1b.batch.bin ISP Tox
Report Time	4/15/2017 10:29 AM	Reporter Name Batch State	
Last Calib Update	4/15/2017 10:27 AM	Batth State	Processeu
Analysis Info			
Acq Time	2017-04-13 15:45	Data File	qc blank 1a.d
Sample Type	Sample	Sample Name	qc blank 1a
Dilution	1	Acq Method	Quant Panel 1a 2-13-17.m
Position	Vial 1	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



Batch Data Path	D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin				
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox		
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox		
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed		
Analysis Info					
Acq Time	2017-04-13 16:10	Data File	b Negative control.d		
Sample Type	Sample	Sample Name	b Negative control		
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m		
Position	P1-F2	Sample Info			
Inj Vol	-1	Comment			

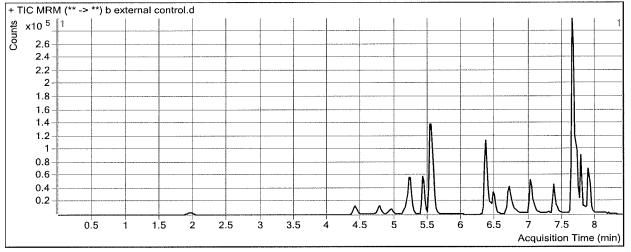
Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	789	251462	0.0031	0.0000
Sufentanil	Sufentanil-D5	7.639	703	117418	0.0060	0.2635 2,5

Batch Data Path	D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin					
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox			
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox			
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed			
Analysis Info						
Acq Time	2017-04-13 16:35	Data File	b external control.d			
Sample Type	Sample	Sample Name	b external control			
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m			
Position	P1-G2	Sample Info				
Inj Vol	-1	Comment	lot 51017 50 ng quetiapine			

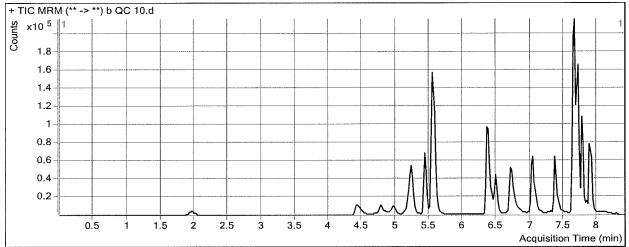
Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Quetiapine	Quetiapine-D8	7.640	322669	79933	4.0368	42.8334

Batch Data Path	D:\2017 Data\41317 mo	dq p1\QuantResults\	4-13-17 mdq p1b.batch.bin
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-04-13 17:01	Data File	b QC 10.d
Sample Type	QC	Sample Name	b QC 10
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m
Position	P1-A2	Sample Info	
Inj Vol	-1	Comment	

Sample Chromatogram



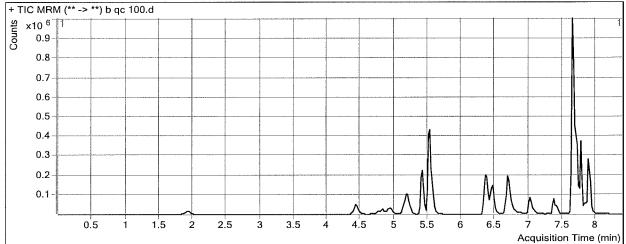
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.989	6066	21474	0.2825	9.4146
Dihydrocodeine	Dihydrocodeine-D6	4.477	12143	53114	0.2286	9.0576
Naloxone	Naloxone-D5	4.853	6846	48220	0.1420	8.2968
Noroxycodone	Noroxycodone-D3	4.997	8783	32742	0.2682	7.4690
Naltrexone	Naltrexone-D3	5.212	14027	56487	0.2483	9.4816
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.284	4371	176611	0.0248	0.8946
Naltrexol	Naltrexol-D3	5.451	46074	158525	0.2906	8.8062
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.559	108402	414863	0.2613	9.1618
Ketamine	Ketamine-D4	6.402	35880	131500	0.2728	9.8491
Norfentanyl	Norfentanyl-D5	6.384	5751	233435	0.0246	0.9586
alpha-PVP	alpha-PVP-d8	6.729	53502	213328	0.2508	9.3514
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.040	5109	211138	0.0242	1.0058
Fentanyl	Fentanyl-D5	7.380	4317	164036	0.0263	0.8954
EDDP	EDDP-D3	7.431	5118	20689	0.2474	10.2447
Cyclobenzaprine	Cyclobenzaprine-D3	7.653	19989	64742	0.3087	10.7896
Sufentanil	Sufentanil-D5	7.639	3044	104698	0.0291	1.0749
Quetiapine	Quetiapine-D8	7.660	81931	85222	0.9614	10.0959
Methadone	Methadone-D9	7.664	44681	180944	0.2469	10.4542
Fluoxetine	Fluoxetine-D6	7.705	59385	237164	0.2504	9.0420
Oxazepam	Oxazepam-D5	7.730	3832	15741	0.2434	8,7472
Sertraline	Sertraline-D3	7.767	15193	64251	0.2365	9.6700
Temazepam	Temazepam-D5	7.788	26023	111839	0.2327	5.2497
Nordiazepam	Nordiazepam-D5	7.856	6121	15813	0.3871	9.2150

Compound **ISTD** Compound RT Response ISTD Resp **Resp Ratio Final Conc** Diazepam Diazepam-D5 7.911 29206 98427 0.2967 8.9585 0.0319 1.1083 **Buprenorphine-D4** 7.938 1289 40391 Buprenorphine

b QC 10

Batch Data Path	D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin				
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox		
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox		
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed		
Analysis Info					
Acq Time	2017-04-13 19:33	Data File	b qc 100.d		
Sample Type	QC	Sample Name	b qc 100		
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m		
Position	P1-B2	Sample Info			
Inj Vol	-1	Comment			

Sample Chromatogram



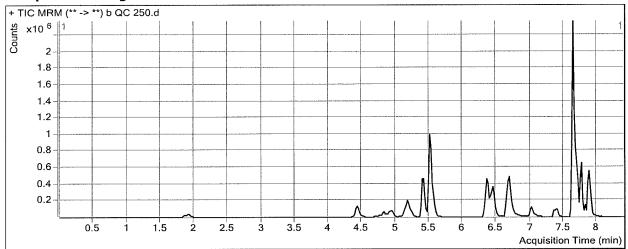
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.928	63116	24218	2.6062	88.9109
Dihydrocodeine	Dihydrocodeine-D6	4.437	135087	59320	2.2773	92.1861
Naloxone	Naloxone-D5	4.833	76582	54945	1.3938	98.7466
Noroxycodone	Noroxycodone-D3	4.937	90529	35240	2.5689	95.2977
Naltrexone	Naltrexone-D3	5.172	153955	59545	2.5855	96.1244
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.244	46023	192985	0.2385	8.7946
Naltrexol	Naltrexol-D3	5.410	468036	164636	2.8429	91.6482
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.539	1125848	455245	2.4731	90.0847
, Ketamine	Ketamine-D4	6.382	388068	145283	2.6711	96.4171
Norfentanyl	Norfentanyl-D5	6.364	59073	266955	0.2213	8.9105
alpha-PVP	alpha-PVP-d8	6.688	565606	213406	2.6504	94.1486
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.021	48218	233631	0.2064	9.7607
Norbuprenorphine	Norbuprenorphine-D3	7.275	921	4232	0.2177	8.2161
Fentanyl	Fentanyl-D5	7.359	40197	164363	0.2446	8.9140
EDDP	EDDP-D3	7.410	54673	26429	2.0687	80.9909
Cyclobenzaprine	Cyclobenzaprine-D3	7.633	186541	73665	2.5323	91.4316
Sufentanil	Sufentanil-D5	7.639	26777	108710	0.2463	8.7079
Quetiapine	Quetiapine-D8	7.640	807978	91857	8.7961	93.4965
Methadone	Methadone-D9	7.664	441023	211196	2.0882	92.7436
Fluoxetine	Fluoxetine-D6	7.705	479457	204208	2.3479	92.6193
Oxazepam	Oxazepam-D5	7.730	38946	16002	2.4337	89.9366
Sertraline	Sertraline-D3	7.767	108329	53682	2.0180	81.6001
Temazepam	Temazepam-D5	7.768	270764	110677	2.4464	95.1852

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.856	68247	17926	3.8071	92.3113
Diazepam	Diazepam-D5	7.891	283858	103409	2.7450	93.0925
Buprenorphine	Buprenorphine-D4	7.958	11114	42863	0.2593	8.0609



Batch Data Path	D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin						
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox				
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox				
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed				
Analysis Info							
Acq Time	2017-04-13 23:34	Data File	b QC 250.d				
Sample Type	QC	Sample Name	b QC 250				
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m				
Position	P1-C2	Sample Info					
Inj Vol	-1	Comment					

Sample Chromatogram



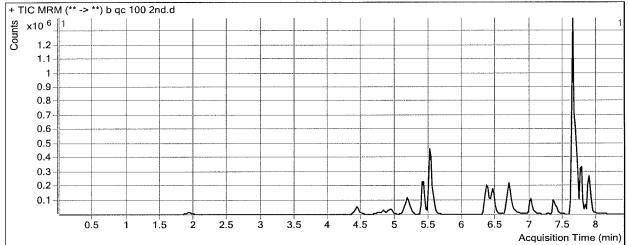
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.928	172028	24900	6,9088	236.1081
Dihydrocodeine	Dihydrocodeine-D6	4.437	360245	60980	5.9076	239.4928
Naloxone	Naloxone-D5	4.833	189282	56338	3.3598	240.7999
Noroxycodone	Noroxycodone-D3	4,937	232837	36050	6.4588	243,7907
Naltrexone	Naltrexone-D3	5.172	371071	59508	6.2357	231.4401
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.244	134781	201689	0.6683	24.6807
Naltrexol	Naltrexol-D3	5.410	1160521	161083	7.2045	233.2229
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.519	2943035	469954	6.2624	228.7264
Ketamine	Ketamine-D4	6.361	1054325	150358	7.0121	253.1087
Norfentanyl	Norfentanyl-D5	6.344	176098	297704	0.5915	23.8819
alpha-PVP	alpha-PVP-d8	6.688	1405214	239837	5.8590	207.5373
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.021	117498	217567	0.5401	25.7950
Norbuprenorphine	Norbuprenorphine-D3	7.275	2129	3610	0.5897	22.5779
Fentanyl	Fentanyl-D5	7.359	82027	130307	0.6295	23.0571
EDDP	EDDP-D3	7.410	158134	26325	6.0070	233.9705
Cyclobenzaprine	Cyclobenzaprine-D3	7.633	334764	50989	6.5655	237.7040
Sufentanil	Sufentanil-D5	7.639	56987	85784	0.6643	23.3948
Quetiapine	Quetiapine-D8	7.640	2143363	100187	21.3936	227.5980
Methadone	Methadone-D9	7.643	938571	174174	5.3887	240.2457
Fluoxetine	Fluoxetine-D6	7.685	901286	152045	5.9278	235.2643
Oxazepam	Oxazepam-D5	7.710	104312	17022	6.1280	226.8742
Sertraline	Sertraline-D3	7.746	238002	42707	5.5729	225.1318
Temazepam	Temazepam-D5	7.768	686419	115955	5.9197	236.2905

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.836	155786	15199	10,2499	248.8515
Diazepam	Diazepam-D5	7.891	774167	106329	7.2809	248.9667
Buprenorphine	Buprenorphine-D4	7.958	23922	34600	0.6914	21.2735



Batch Data Path	D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin					
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox			
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox			
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed			
Analysis Info						
Acq Time	2017-04-14 00:50	Data File	b qc 100 2nd.d			
Sample Type	QC	Sample Name	b qc 100 2nd			
Dilution	1	Acq Method	Quant Panel 1b 11-18-2016.m			
Position	P1-E2	Sample Info				
Inj Vol	-1	Comment				

Sample Chromatogram



Results

1.000100						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.928	67007	24143	2.7754	94.7010
Dihydrocodeine	Dihydrocodeine-D6	4.437	142276	57440	2.4770	100.2884
Naloxone	Naloxone-D5	4.833	81437	54014	1.5077	106.9787
Noroxycodone	Noroxycodone-D3	4.937	98870	36235	2.7286	101.3925
Naltrexone	Naltrexone-D3	5.172	170467	59116	2.8836	107.1744
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.244	51541	199919	0.2578	9.5091
Naltrexol	Naltrexol-D3	5.410	507564	168567	3.0110	97.1076
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.519	1188246	445818	2.6653	97.1187
Ketamine	Ketamine-D4	6.382	416189	143826	2.8937	104.4515
Norfentanyl	Norfentanyl-D5	6.364	68143	278706	0.2445	9.8491
alpha-PVP	alpha-PVP-d8	6.688	631335	235778	2.6777	95.1128
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.021	66577	286100	0.2327	11.0256
Norbuprenorphine	Norbuprenorphine-D3	7.255	1199	4634	0.2587	9.7997
Fentanyl	Fentanyl-D5	7.359	52976	213709	0.2479	9.0364
EDDP	EDDP-D3	7.410	68139	30154	2.2597	88.4101
Cyclobenzaprine	Cyclobenzaprine-D3	7,633	248872	90491	2.7502	99.3356
Sufentanil	Sufentanil-D5	7.639	38291	144132	0.2657	9.3880
Quetiapine	Quetiapine-D8	7.640	1013904	112610	9.0037	95.7063
Methadone	Methadone-D9	7.643	584263	240612	2.4282	107.9397
Fluoxetine	Fluoxetine-D6	7.685	621936	254438	2.4443	96.4629
Oxazepam	Oxazepam-D5	7.710	41412	15400	2.6892	99.4041
Sertraline	Sertraline-D3	7.746	162020	68179	2.3764	96.0709
Temazepam	Temazepam-D5	7.768	280823	114091	2.4614	95.7937

b QC 100

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.836	66306	13425	4.9388	119.8079
Diazepam	Diazepam-D5	7.891	333652	110897	3.0087	102.1534
Buprenorphine	Buprenorphine-D4	7.958	12542	51122	0.2453	7.6342



6 QC 100

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

Target Compound

4/15/2017 10:27 AM

Oxymorphone

Analyst Name

ISP TOX

Oxymorphone-D3 Internal Standard Oxymorphone - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs y = 0.029230 * x + 0.007275 R^2 = 0.99633522 Type:Lirlear, Origin:Ignore, Weight:1/x x10 ¹ Relative Responses 2.2-2 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 700 800 900 1000 100 200 300 400 500 6Ó0 0 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\mathbf{N}	5	4.6	92.5
b cal 2	2	\square	10	9.3	93.0
b QC 10	2	\mathbf{M}	10	9.4	94.1
b cal 3	3	\mathbf{M}	25	25.8	103.2
b cal 4	4	\square	50	51.4	102.7
b cal 5	5	M	100	106.8	106.8
b qc 100	5	$\mathbf{\nabla}$	100	88.9	88.9
b qc 100 2nd	5	\square	100	94.7	94.7
b cal 6	6	\mathbf{N}	250	267.0	106.8
b QC 250	6	M	250	236.1	94.4
b cal 7	7	\square	500	475.2	95.0
b cal 8	8		1000	795.4	79.5
b qc 1000	8	\square	1000	813.0	81.3

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

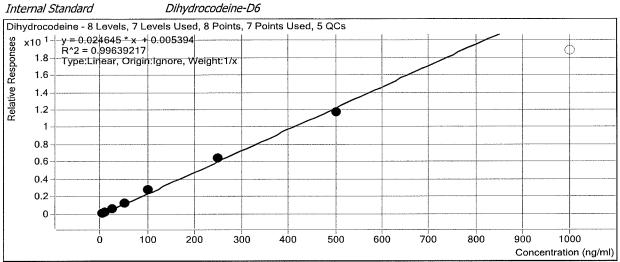
4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target Compound

Dihydrocodeine Dihydrocodeine-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.6	92.8
b cal 2	2	\square	10	8.9	89.2
b QC 10	2	\square	10	9.1	90.6
b cal 3	3	\square	25	25.8	103.3
b cal 4	4	\square	50	52.0	104.0
b cal 5	5	\square	100	111.0	111.0
b qc 100	5	\square	100	92.2	92.2
b qc 100 2nd	5	\square	100	100.3	100.3
b cal 6	6	Ø	250	260.4	104.2
b QC 250	6	$\mathbf{\nabla}$	250	239.5	95.8
b cal 7	7	\square	500	477.2	95.4
b cal 8	8		1000	764.1	76.4
b qc 1000	8		1000	724.7	72.5



D:\2017 Data\41317 mdg p1\QuantResults\4-13-17 mdg p1b.batch.bin **Batch Data Path**

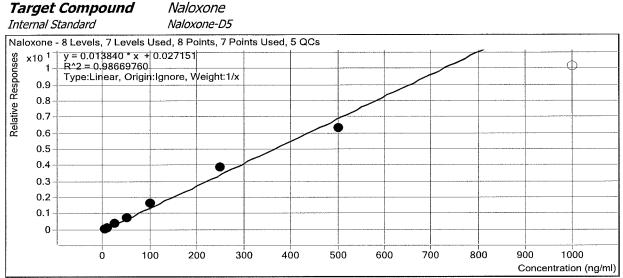
Last Calib Update

Target Compound

4/15/2017 10:27 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	3.8	76.9
b cal 2	2	\square	10	8.8	87.6
b QC 10	2	\square	10	8.3	83.0
b cal 3	3		25	27.3	109.4
b cal 4	4	\square	50	54.4	108.8
b cal 5	5	\square	100	115.9	115.9
b qc 100	5	\square	100	98.7	98.7
b qc 100 2nd	5	\square	100	107.0	107.0
b cal 6	6	\square	250	276.9	110.8
b QC 250	6	\square	250	240.8	96.3
b cal 7	7	\square	500	452.8	90.6
b cal 8	8		1000	729.9	73.0
b qc 1000	8	\square	1000	744.5	74.5

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

Target Compound

4/15/2017 10:27 AM

Noroxycodone

Analyst Name

ISP TOX

Internal Standard Noroxycodone-D3 Noroxycodone - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs y = 0.026195 * x + 0.072586 R^2 = 0.98794320 Type:Linear, Origin:Ignore, Weight:1/xx10 ¹ Relative Responses 2.2 2 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 зо́о 400 500 700 800 900 1000 100 200 600 Ó Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.1	82.3
b cal 2	2	\square	10	7.7	77.2
b QC 10	2	$\mathbf{\nabla}$	10	7.5	74.7
b cal 3	3	\square	25	25.3	101.2
b cal 4	4	\square	50	54.1	108.3
b cal 5	5	\square	100	117.7	117.7
b qc 100	5		100	95.3	95.3
b qc 100 2nd	5	\square	100	101.4	101.4
b cal 6	6	Ø	250	289.0	115.6
b QC 250	6	\square	250	243.8	97.5
b cal 7	7		500	535.8	107.2
b cal 8	8	\square	1000	906.2	90.6
b qc 1000	8	\square	1000	922.0	92.2

G-

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

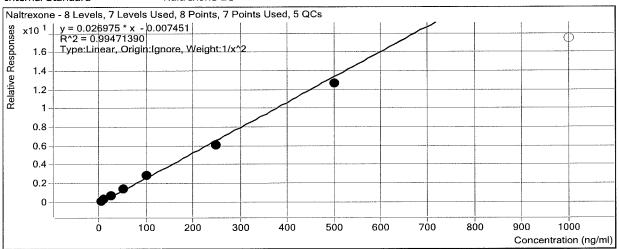
4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target Compound Internal Standard

d Naltrexone Naltrexone-D3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.9	98.6
b cal 2	2	\square	10	10.1	100.6
b QC 10	2		10	9.5	94.8
b cal 3	3	\square	25	25.3	101.3
b cal 4	4	\square	50	53.8	107.6
b cal 5	5		100	107.0	107.0
b qc 100	5	\square	100	96.1	96.1
b qc 100 2nd	5	\square	100	107.2	107.2
b cal 6	6	\square	250	227.4	90.9
b QC 250	6	\square	250	231.4	92.6
b cal 7	7	\square	500	470.1	94.0
b cal 8	8		1000	646.3	64.6
b qc 1000	8	Ø	1000	786.2	78.6

calibration report.xlsx

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target Compound Acetyl Norfentanyl Acetyl Norfentanyl-D5 Internal Standard Acetyl Norfentanyl - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs $\begin{array}{c} 2.8 \\ y = 0.027054 \times + 5.478350E-004 \\ 2.6 \\ R^{+}2 = 0.99620058 \\ \hline 0 2.4 \\ Turbular control in care of the track of the track$ Relative Responses 2.4 -Type:Linear, Origin:Ignore, Weight:1/x-2.2 2 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 50 55 60 65 70 75 80 95 100 105 25 30 35 85 90 15 20 40 45 -5 0 5 10 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	0.5	0.5	93.2
b cal 2	2		1	0.9	91.9
b QC 10	2		1	0.9	89.5
b cal 3	3	\square	2.5	2.5	99.1
b cal 4	4		5	5.0	100.3
b cal 5	5	\square	10	10.6	106.4
b qc 100	5	$\mathbf{\nabla}$	10	8.8	87.9
b qc 100 2nd	5	\square	10	9.5	95.1
b cal 6	6	\square	25	27.4	109.7
b QC 250	6	\square	25	24.7	98.7
b cal 7	7	\square	50	52.4	104.7
b cal 8	8	\square	100	94.7	94.7
b qc 1000	8	\square	100	97.0	97.0

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

Target Compound

4/15/2017 10:27 AM

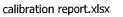
Naltrexol

Analyst Name

ISP TOX

Internal Standard Naltrexol-D3 Naltrexol - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs x10¹ y = 0.030808 * x + 0.019342 R^2 = 0.99556627 2.2 - Type:Linear, Origin:Ignore, Weight:1/x Relative Responses 2-1.8 1.6-1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 100 200 300 4**0**0 500 600 700 800 900 1000 ò Concentration (ng/ml)

Sample	Levei	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.5	89.5
b cal 2	2	\square	10	8.8	88.3
b QC 10	2	\square	10	8.8	88.1
b cal 3	3	\square	25	26.2	104.7
b cal 4	4	\square	50	53.7	107.4
b cal 5	5	\square	100	110.2	110.2
b qc 100	5	\square	100	91.6	91.6
b qc 100 2nd	5	\square	100	97.1	97.1
b cal 6	6	\square	250	262.8	105.1
b QC 250	6	\square	250	233.2	93.3
b cal 7	7	\square	500	473.7	94.7
b cal 8	8		1000	762.5	76.2
b qc 1000	8		1000	771.2	77.1



151

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target Compound O-desmethyl-tramadol Internal Standard O-desmethyl-tramadol-D6 O-desmethyl-tramadol - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs y = 0.027332 * x + 0.010887 R^2 = 0.99645628 Relative Responses x10⁻¹ Type:Linear, Origin:Ignore, Weight:1/x 2-1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 700 800 900 1000 Ó 100 200 300 400 500 600 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.6	92.2
b cal 2	2	Ø	10	9.0	90.2
b QC 10	2	\square	10	9.2	91.6
b cal 3	3	Ø	25	26.1	104.2
b cal 4	4	\square	50	52.5	105.0
b cal 5	5	\square	100	107.3	107.3
b qc 100	5	\square	100	90.1	90.1
b qc 100 2nd	5	\square	100	97.1	97.1
b cal 6	6	\square	250	264.7	105.9
b QC 250	6	Ø	250	228.7	91.5
b cal 7	7	\square	500	475.7	95.1
b cal 8	8		1000	807.9	80.8
b qc 1000	8	$\mathbf{\nabla}$	1000	796.5	79.7



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

Target Compound

4/15/2017 10:27 AM

Ketamine

Analyst Name

ISP TOX

Internal Standard Ketamine-D4 Ketamine - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 5 QCs x10¹ - y = 0.027704 * x - 1.075246E-005 2.2 R^2 = 0.98025348 7 Jupe:Linear, Origin:Ignore, Weight:1/x^2 Relative Responses 2 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 100 200 300 400 500 600 700 800 900 1000 Ó Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	5.0	99.4
b cal 2	2	Ø	10	9.3	93.3
b QC 10	2	\square	10	9.8	98.5
b cal 3	3	\square	25	27.3	109.3
b cal 4	4	\square	50	58.4	116.7
b cal 5	5	\square	100	112.4	112.4
b qc 100	5	\square	100	96.4	96.4
b qc 100 2nd	5	\square	100	104.5	104.5
b cal 6	6	\square	250	249.2	99.7
b QC 250	6	\square	250	253.1	101.2
b cal 7	7	\square	500	439.9	88.0
b cal 8	8	\square	1000	812.3	81.2
b qc 1000	8	\mathbf{V}	1000	804.5	80.4



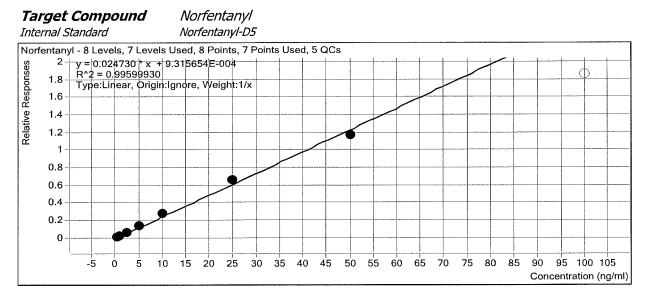
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	0.5	0.5	91.8
b cal 2	2		1	0.9	89.7
b QC 10	2	$\mathbf{\nabla}$	1	1.0	95.9
b cal 3	3		2.5	2.5	101.4
b cal 4	4		5	5.4	107.8
b cal 5	5	$\mathbf{\nabla}$	10	10.9	108. 9
b qc 100	5	\square	10	8.9	89.1
b qc 100 2nd	5	\square	10	9.8	98.5
b cal 6	6	\square	25	26.3	105.4
b QC 250	6	$\mathbf{\nabla}$	25	23.9	95.5
b cal 7	7	\square	50	47.5	95.0
b cal 8	8		100	74.9	74.9
b qc 1000	8	\square	100	75.6	75.6



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target Compound alpha-PVP Internal Standard alpha-PVP-d8 alpha-PVP - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs x10 ¹ _y=0.028298 * x - 0.013829 R^2 = 0.99698551 2 - Type:Linear, Origin:Ignore, Weight:1/x^2 Relative Responses Φ 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 100 200 3Ò0 4**0**0 500 6Ó0 700 800 900 1000 Ó Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	Ø	5	5.1	101.7
b cal 2	2	X	10	9.4	94.4
b QC 10	2	\square	10	9.4	93.5
b cal 3	3	$\mathbf{\nabla}$	25	25.7	102.7
b cal 4	4	\square	50	52.5	105.0
b cal 5	5	$\mathbf{\nabla}$	100	103.3	103.3
b qc 100	5	\square	100	94.1	94.1
b qc 100 2nd	5		100	95.1	95.1
b cal 6	6	\square	250	250.7	100.3
b QC 250	6	Ŋ	250	207.5	83.0
b cal 7	7	\square	500	463.7	92.7
b cal 8	8		1000	739.8	74.0
b qc 1000	8	Ø	1000	803.7	80.4

A

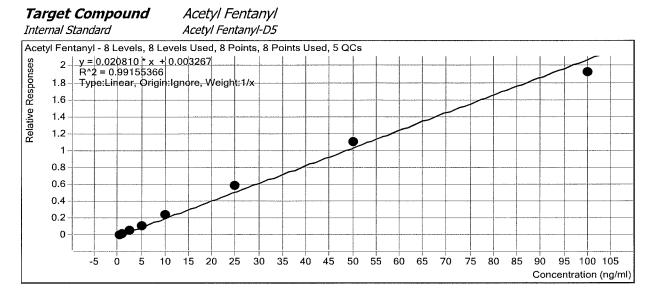
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	0.5	0.4	79.3
b cal 2	2	\square	1	0.9	85.8
b QC 10	2	Ø	1	1.0	100.6
b cal 3	3	Ø	2.5	2.5	100.8
b cal 4	4	\square	5	5.4	108.5
b cal 5	5	\square	10	11.4	114.2
b qc 100	5	\square	10	9.8	97.6
b qc 100 2nd	5	\square	10	11.0	110.3
b cal 6	6	Ø	25	28.4	113.5
b QC 250	6	\mathbf{M}	25	25.8	103.2
b cal 7	7	\square	50	52.8	105.7
b cal 8	8	\square	100	92.2	92.2
b qc 1000	8	Ø	100	93.2	93.2

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target Compound Norbuprenorphine Internal Standard Norbuprenorphine-D3 Norbuprenorphine - 8 Levels, 5 Levels Used, 8 Points, 5 Points Used, 4 QCs y =[0.025900 * x + 0.004897 R^2 = 0.99633944 Type:Linear, Origin:Ignore, Weight:None Relative Responses 2.2 2-1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -5 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 ò 5 10 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1		0.5	0.7	133.8
b cal 2	2		1	0.5	51.9
b cal 2	2		1	0.5	51.9
b cal 3	3	\square	2.5	2.2	87.1
b cal 4	4	\square	5	3.7	74.0
b cal 5	5	\square	10	12.0	119.6
b qc 100	5	\square	10	8.2	82.2
b qc 100 2nd	5	\square	10	9.8	98.0
b cal 6	6	$\mathbf{\nabla}$	25	24.8	99.3
b QC 250	6		25	22.6	90.3
b cal 7	7	V	50	49.8	99.7
b cal 8	8		100	84.1	84.1
b qc 1000	8	\square	100	68.2	68.2

A

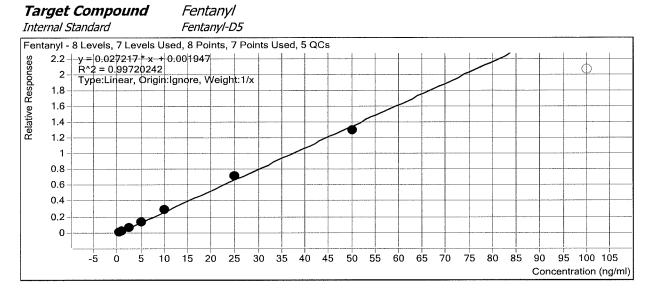
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	0.5	0.5	95.4
b cal 2	2	\square	1	0.9	93.9
b QC 10	2	\mathbf{N}	1	0.9	89.5
b cal 3	3	$\mathbf{\nabla}$	2.5	2.5	100.4
b cal 4	4	\square	5	5.1	102.9
b cal 5	5	\square	10	10.6	105.6
b qc 100	5	\square	10	8.9	89.1
b qc 100 2nd	5	\square	10	9.0	90.4
b cal 6	6		25	26.5	106.1
b QC 250	6	Ø	25	23.1	92.2
b cal 7	7	\square	50	47.8	95.7
b cal 8	8		100	75.7	75.7
b qc 1000	8	\mathbf{N}	100	75.0	75.0

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target Compound EDDP Internal Standard EDDP-D3 EDDP - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs y = 0.025744 * x - 0.016365 R^2 = 0.99795505 Type:Linear, Origin:Ignore, Weight:1/x x10¹ Relative Responses 2.2 2. 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 100 200 300 400 5**0**0 700 800 900 1000 ò 6Ó0 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	5.0	101.0
b cal 2	2	\square	10	9.9	98.7
b QC 10	2	\square	10	10.2	102.4
b cal 3	3	\square	25	23.1	92.3
b cal 4	4	\square	50	49.1	98.1
b cal 5	5	\square	100	111.5	111.5
b qc 100	5	Ø	100	81.0	81.0
b qc 100 2nd	5	\square	100	88.4	88.4
b cal 6	6	M	250	250.8	100.3
b QC 250	6	\square	250	234.0	93.6
b cal 7	7	\mathbf{N}	500	490.7	98.1
b cal 8	8		1000	868.4	86.8
b qc 1000	8		1000	814.7	81.5



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target Compound Cyclobenzaprine Internal Standard Cyclobenzaprine-D3 Cyclobenzaprine - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs x10¹ y = 0.027573 * x + 0.011240 R^2 = 0.99581713 2.2 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses 2 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 -0.2 800 1000 200 300 500 600 700 900 100 400 0 Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.5	90.3
b cal 2	2	\square	10	9.0	90.3
b QC 10	2	\square	10	10.8	107.9
b cal 3	3	\square	25	25.8	103.0
b cal 4	4	\square	50	52.4	104.8
b cal 5	5	\square	100	112.2	112.2
b qc 100	5	\square	100	91.4	91.4
b qc 100 2nd	5	\square	100	99.3	99.3
b cal 6	6	\square	250	260.5	104.2
b QC 250	6	\square	250	237.7	95.1
b cal 7	7	\square	500	475.6	95.1
b cal 8	8		1000	835.4	83.5
b qc 1000	8	\square	1000	769.6	77.0

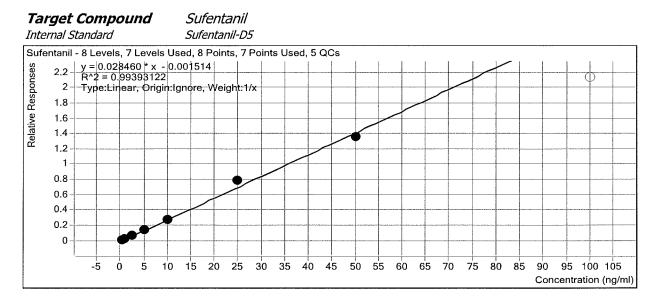
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	0.5	0.6	116.7
b cal 2	2	\square	1	0.8	83.9
b QC 10	2	\checkmark	1	1.1	107.5
b cal 3	3	\mathbf{Y}	2.5	2.3	92.0
b cal 4	4	$\mathbf{\nabla}$	5	5.2	104.9
b cal 5	5	\square	10	9.6	96.2
b qc 100	5		10	8.7	87.1
b qc 100 2nd	5	$\mathbf{\nabla}$	10	9.4	93.9
b cal 6	6	\square	25	27.8	111.0
b QC 250	6	\square	25	23.4	93.6
b cal 7	7	\square	50	47.7	95.3
b cal 8	8		100	74.9	74.9
b qc 1000	8	\square	100	72.2	72.2



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

Target Compound

4/15/2017 10:27 AM

Quetiapine

Analyst Name

ISP TOX

Internal Standard Quetiapine-D8 Quetiapine - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs y = 0.099941 * x + 0.012965 R^2 = 0.99654606 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses x10 ¹ 6 5.5 5 4.5 4 3.5 3-2.5 2 1.5 1 0.5 0 -0.5 100 200 зо́о 4**0**0 500 6Ó0 700 800 900 1000 ò Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.8	95.7
b cal 2	2	\square	10	9.1	90.6
b QC 10	2	\square	10	10.1	101.0
b cal 3	3	\square	25	25.7	102.7
b cal 4	4	\square	50	53.6	107.2
b cal 5	5	\square	100	100.9	100.9
b qc 100	5	\square	100	93.5	93.5
b qc 100 2nd	5	\square	100	95.7	95.7
b cal 6	6	\square	250	268.7	107.5
b QC 250	6	$\mathbf{\nabla}$	250	227.6	91.0
b cal 7	7	\square	500	477.3	95.5
b cal 8	8		1000	686.0	68.6
b qc 1000	8	\square	1000	682.9	68.3



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

Concentration (ng/ml)

Target Compound Methadone Internal Standard Methadone-D9 Methadone - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs x10 1 y = 0.022376 * x + 0.013013 R^2 = 0.99894724 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses 个 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 100 200 300 4**0**0 500 6Ó0 700 800 900 1000 Ó

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.5	90.6
b cal 2	2	\square	10	9.5	95.3
b QC 10	2	$\mathbf{\nabla}$	10	10.5	104.5
b cal 3	3	\square	25	27.1	108.6
b cal 4	4	$\mathbf{\nabla}$	50	54.9	109.8
b cal 5	5	\square	100	97.0	97.0
b qc 100	5	\square	100	92.7	92.7
b qc 100 2nd	5	\square	100	107.9	107.9
b cal 6	6	\mathbf{N}	250	247.2	98.9
b QC 250	6	\mathbf{V}	250	240.2	96.1
b cal 7	7	\square	500	499.8	100.0
b cal 8	8		1000	835.8	83.6
b qc 1000	8	\square	1000	843.4	84.3



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

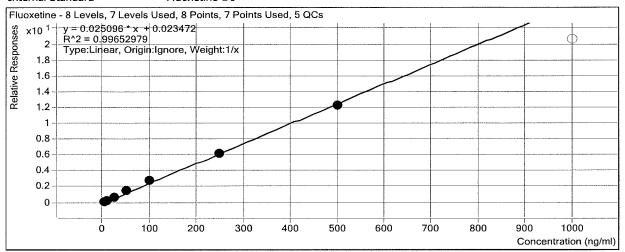
4/15/2017 10:27 AM

Analyst Name

ISP TOX



und Fluoxetine Fluoxetine-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.3	86.1
b cal 2	2	\square	10	9.0	89.5
b QC 10	2	\square	10	9.0	90.4
b cal 3	3	\square	25	26.2	104.8
b cal 4	4	\square	50	55.9	111.8
b cal 5	5	\square	100	112.0	112.0
b qc 100	5	Ø	100	92.6	92.6
b qc 100 2nd	5	\square	100	96.5	96.5
b cal 6	6	\square	250	246.4	98.6
b QC 250	6	$\mathbf{\nabla}$	250	235.3	94.1
b cal 7	7	\square	500	486.3	97.3
b cal 8	8		1000	819.4	81.9
b qc 1000	8	$\mathbf{\nabla}$	1000	831,1	83.1



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target Compound Oxazepam Internal Standard Oxazepam-D5 Oxazepam - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 5 QCs x10¹ y=0.026978*x+0.007468 2 R^2=0.98822622 Relative Responses 2-Type:Linear, Origin:Ignore, Weight:1/x 1.8 1.6 1.4 1.2 1 0.8 0.6 0.4 0.2 0 100 200 300 4**0**0 5**0**0 600 700 800 900 1000 Ó Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	5.4	107.1
b cal 2	2	\square	10	8.3	82.6
b QC 10	2	\square	10	8.7	87.5
b cal 3	3	\square	25	22.4	89.7
b cal 4	4	☑	50	51.4	102.9
b cal 5	5	\square	100	114.1	114.1
b qc 100	5	\square	100	89.9	89.9
b qc 100 2nd	5	\square	100	99.4	99.4
b cal 6	6	\square	250	279.9	111.9
b QC 250	6	\square	250	226.9	90.7
b cal 7	7	\square	500	458.5	91.7
b cal 8	8		1000	753.2	75.3
b qc 1000	8	\square	1000	792.2	79.2

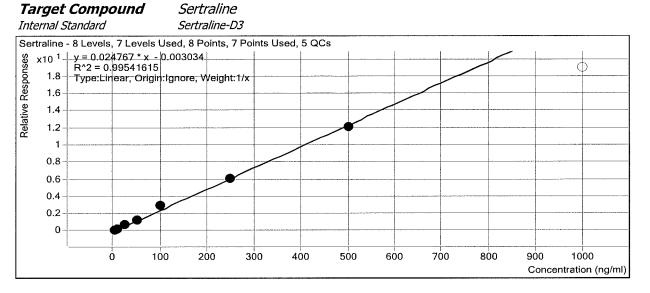
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.2	84.3
b cal 2	2	$\mathbf{\nabla}$	10	9.3	93.2
b QC 10	2	\mathbf{M}	10	9.7	96.7
b cal 3	3	\square	25	28.2	112.7
b cal 4	4	Ø	50	48.8	97.6
b cal 5	5	\square	100	116.5	116.5
b qc 100	5	\square	100	81.6	81.6
b qc 100 2nd	5	\square	100	96.1	96.1
b cal 6	6	\mathbf{M}	250	245.2	98.1
b QC 250	6	\square	250	225.1	90.1
b cal 7	7	\square	500	487.7	97.5
b cal 8	8		1000	766.1	76.6
b qc 1000	8	\square	1000	818.2	81.8



Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

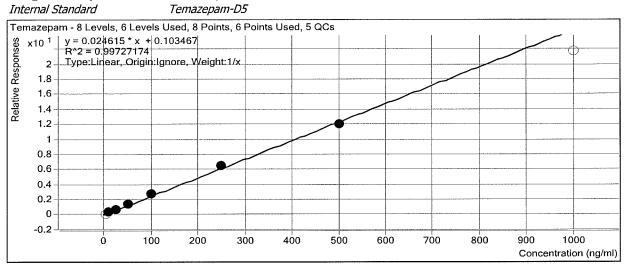
Last Calib Update

4/15/2017 10:27 AM

Analyst Name ISP TOX

Target Compound

d Temazepam Temazepam-D5



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1		5	0.9	17.7
b cal 2	2	\square	10	10.4	104.1
b QC 10	2	\square	10	5.2	52.5
b cal 3	3	\square	25	21.3	85.3
b cal 4	4	\square	50	52.0	103.9
b cal 5	5	Ø	100	105.0	105.0
b qc 100	5	\square	100	95.2	95.2
b qc 100 2nd	5	\square	100	95.8	95.8
b cal 6	6	\square	250	262.3	104.9
b QC 250	6	\square	250	236.3	94.5
b cal 7	7	M	500	484.0	96.8
b cal 8	8		1000	876.7	87.7
b qc 1000	8	\square	1000	829.1	82.9

 $\overline{\langle}$

Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

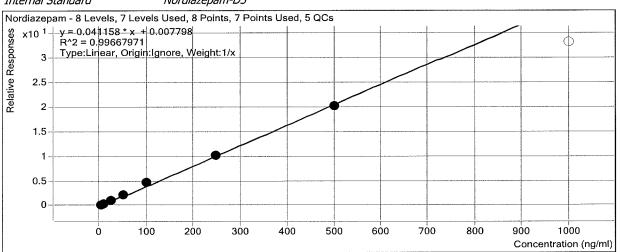
Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

Target CompoundNordiazepamInternal StandardNordiazepam-D5



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.5	90.5
b cal 2	2	\square	10	9.1	90.7
b QC 10	2	\square	10	9.2	92.2
b cal 3	3	\square	25	25.2	100.8
b cal 4	4	\square	50	54.6	109.2
b cal 5	5	$\mathbf{\Sigma}$	100	113.3	113.3
b qc 100	5	\square	100	92.3	92.3
b qc 100 2nd	5	\square	100	119.8	119.8
b cal 6	6	\square	250	244.2	97.7
b QC 250	6	\square	250	248.9	99.5
b cal 7	7	\square	500	489.2	97.8
b cal 8	8		1000	803.8	80.4
b qc 1000	8	\square	1000	810.2	81.0



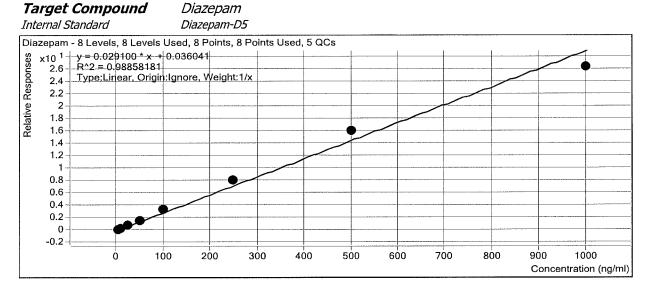
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1	\square	5	4.0	80.6
b cal 2	2	\square	10	8.1	81.0
b QC 10	2	\square	10	9.0	89.6
b cal 3	3	\square	25	25.9	103.8
b cal 4	4	\square	50	54.3	108.6
b cal 5	5	\square	100	114.5	114.5
b qc 100	5	\square	100	93.1	93.1
b qc 100 2nd	5	\square	100	102.2	102.2
b cal 6	6	\square	250	276.5	110.6
b QC 250	6	\square	250	249.0	99.6
b cal 7	7	\square	500	552.2	110.4
b cal 8	8	\Box	1000	904.4	90.4
b qc 1000	8	\square	1000	834.3	83.4



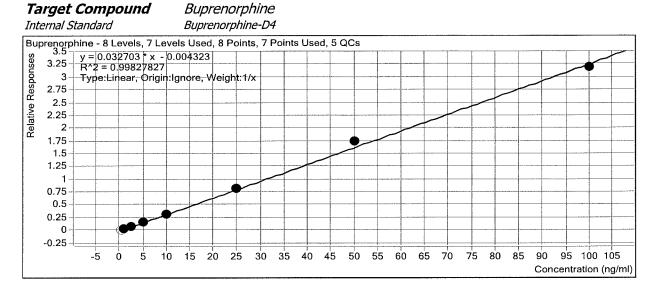
Batch Data Path D:\2017 Data\41317 mdq p1\QuantResults\4-13-17 mdq p1b.batch.bin

Last Calib Update

4/15/2017 10:27 AM

Analyst Name

ISP TOX

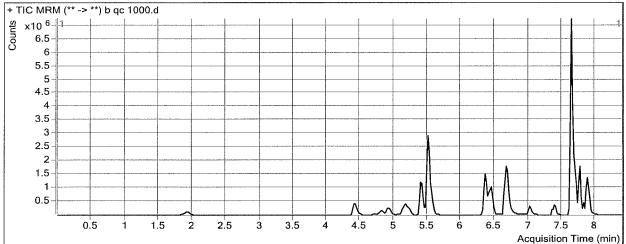


Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1	1		0.5	0.6	113.1
b cal 2	2	\square	1	1.1	108.1
b QC 10	2	\square	1	1.1	110.8
b cal 3	3	\square	2.5	2.4	95.7
b cal 4	4	\square	5	4.7	94.1
b cal 5	5	\square	10	9.9	98.9
b qc 100	5	\square	10	8.1	80.6
b qc 100 2nd	5	\square	10	7.6	76.3
b cal 6	6	Ø	25	24.9	99.4
b QC 250	6	\square	25	21.3	85.1
b cal 7	7	\square	50	53.1	106.2
b cal 8	8	\square	100	97.5	97.5
b qc 1000	8	\square	100	85.3	85.3



Batch Data Path	D:\2017 Data\41317 m	dq p1\QuantResults\	4-13-17 mdq p	1b.batch.bin
Analysis Time	4/15/2017 10:27 AM	Analyst Name	ISP Tox	
Report Time	4/15/2017 10:29 AM	Reporter Name	ISP Tox	1000 - cal 8 dropped from
Last Calib Update	4/15/2017 10:27 AM	Batch State	Processed	
				highlighted compounds. Do Not enter in uncertainty OF measurement.
Analysis Info				Not conter in uncertainty
Acq Time	2017-04-14 00:24	Data File	b qc 1000.d	0E
Sample Type	QC	Sample Name	b qc 1000	measurement.
Dilution	1	Acq Method	Quant Panel 1b	11-18-2016.m
Position	P1-D2	Sample Info		
Inj Vol	-1	Comment		

Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.928	640598	26947	23.7725	813.0321
Dihydrocodeine	Dihydrocodeine-D6	4.417	1199036	67112	17.8661	724.7336
Naloxone	Naloxone-D5	4.813	574454	55603	10.3313	744.5339
Noroxycodone	Noroxycodone-D3	4.937	762034	31457	24.2243	921.9843
Naltrexone	Naltrexone-D3	5.172	996629	47012	21.1993	786.1556
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	5.244	540162	205896	2.6235	96.9506
Naltrexol	Naltrexol-D3	5.390	3406999	143288	23.7773	771.1588
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.519	9906594	454807	21.7820	796.5482
Ketamine	Ketamine-D4	6.361	3488366	156521	22.2868	804.4665
Norfentanyl	Norfentanyl-D5	6.344	599455	320515	1.8703	75.5918
alpha-PVP	alpha-PVP-d8	6.668	5521658	242927	22.7297	803.7189
Acetyl Fentanyl	Acetyl Fentanyl-D5	7.021	515010	265099	1.9427	93.1988
Norbuprenorphine	Norbuprenorphine-D3	7.255	6712	3789	1.7714	68.2043
Fentanyl	Fentanyl-D5	7.359	272831	133589	2.0423	74.9668
EDDP	EDDP-D3	7.390	734063	35025	20.9583	814.7317
Cyclobenzaprine	Cyclobenzaprine-D3	7.633	944472	44483	21.2322	769.6272
Sufentanil	Sufentanil-D5	7.639	173358	84473	2.0522	72.1623
Quetiapine	Quetiapine-D8	7.640	6893752	107442	64.1624	682.8727
Methadone	Methadone-D9	7.643	3247353	171956	18.8848	843.4032
Fluoxetine	Fluoxetine-D6	7.685	2234551	107019	20.8800	831.0553
Oxazepam	Oxazepam-D5	7.710	376500	17611	21.3792	792.2028
Sertraline	Sertraline-D3	7.746	641538	31662	20.2622	818.2192
Temazepam	Temazepam-D5	7.768	2195984	107061	20.5115	829.0966 X

b QC 1000

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Nordiazepam	Nordiazepam-D5	7.836	485015	14542	33,3534	810.1926
Diazepam	Diazepam-D5	7.891	2202161	90576	24.3130	834.2712
Buprenorphine	Buprenorphine-D4	7.958	80549	28929	2.7843	85.2729

