reviewed 3/6/18

2/23/2018

Worklist: 2213

LAB CASE P2018-0056 **ITEM** 

1

TASK ID DESCRIPTION

108457

AM 28 Blood Multi-Drug Quant



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

13

Extraction Date: 02/20/18

Analyst: Tamara Salazar

Plate lot#: 0507680

Plate Expiration: 06/05/2018

**Mobile phase A:** 5 mM Amm Form + 0.01% FA

Mobile phase B: 0.01% Formic Acid in MeOH

0.5M Ammonium Hydroxide

Ethyl Acetate

20% Methanol in Water

Blank Blood Lot: Hemostat 361331-2

**Column:** Agilent 120 EC-C18 (2.1x 100-4um)

**LCMS-QQQ ID**: 59740

### Pre-Analytic:

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

### Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- Pipette 250μL blood (calibrated pipette) Pipette ID: 3 in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID:067105
- 4. Pipette 250μL 00.5M ammonium hydroxide in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer 300μL of blood+base mixture to corresponding wells of SLE+ plate.
- Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).
   (Load at 85-100 PSI- Selector to the right) Manifold ID: 067104
- ☑ 8. Wait 5 minutes.
- 2 9. Add 900uL ethyl acetate.
- □ 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- ☑ 12. Add 900uL ethyl acetate.
- ☑ 13. Wait 5 minutes.
- 14. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. SPE Dry ID: 067103
- 🗹 16. Reconstitute in 100μL 20% MeOH and heat seal plate with foil. Place in autosampler and run worklist.

### Post-Analytic

1. Create batch and process data.

Worklist path: C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP Batch Name: MDQ P1b 022018 TS.batch.bin

- 2. Make necessary changes to integration limits
- $\square$  3. Integration linear and  $r^2$  values  $\ge 0.98$  for each analyte.
- 4. For unknown samples and controls: response ratio within 20% of average of controls and standards, RT within +/-5%, S/N for primary and secondary transitions >10.
- ☑ 5. Did all QCs pass for each analyte? Y / N
- 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

### **Comments**

Not evaluated: Buprenorphine, Norbuprenorphine Curves limited: Norfentanyl: 2.5-100, Fentanyl: 1-100

\* Extraction performed with Sorah Pickle. I pipethed my own samples, and then witnessed all work performed. - TS

Extraction was performed with Saah Pickli acting as the primary technician. I withese and approved of all work. - To

Toxicology AM method 28 panel 1 external prep information

Working Solution 10000 ng/ml in MeOH trazodone, ketamine, morphine, quetiapine Stock Solution 1mg/ml 100 ul each in 9600 ul MeOH (Fisher Lot # 172516)

Prepared: 12/12/17

ē

Expires: 06/12/17 By:TNS
06/12/18 TS

Quetiapine Morphine Trazodone Ketamine FN02021502 FE08141515 FE01131504 FN12151403 Expiration 1/1/2020 11/1/2020 2/1/2020 2/1/2020

Prepared: 12/12/17 AM 28 control 50 ul working solution lot (WS121217) in 9950ul blood (Hemostat Lot# 361331-2) Expires: 0<del>6/12/17</del> *OU |* 12/18 By: TNS

Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

AM 28

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:41 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

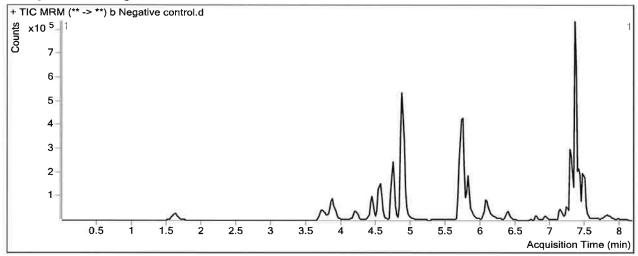
**Analysis Info** 

Inj Vol

Acq Time2018-02-21 08:52Data Fileb Negative control.dSample TypeSampleSample Nameb Negative controlDilution1Acq MethodMD Quant Panel 1b 12-12-17.mPositionP1-E2Sample Info

#### **Sample Chromatogram**

-1



Comment

Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Naltrexol	Naltrexol-D3	4.429	11477	769324	0.0149	1.1584 くち
Fluoxetine	Fluoxetine-D6	7.304	1682	86014	0.0196	2.6158 (25
Buprenorphine	Buprenorphine-D4	7.516	2704	30690	0.0881	4.3978 - Met evaluated



Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

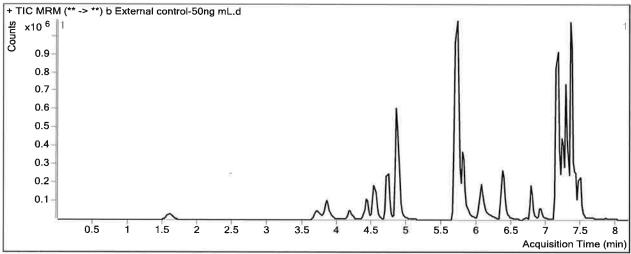
Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:42 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

Acq Time2018-02-21 09:24Data Fileb External control-50ng mL.dSample TypeSampleSample Nameb External control-50ng mLDilution1Acq MethodMD Quant Panel 1b 12-12-17.mPositionP1-F2Sample Info

Inj Vol -1 Comment AM 28; WS121217 50 ng trazodone, ketamine, morphine, quetiapine

#### **Sample Chromatogram**



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Naltrexol	Naltrexol-D3	4.429	11748	855828	0.0137	1.1108 25
Ketamine	Ketamine-D4	5.701	1572564	1181835	1.3306	57.4484
Quetiapine	Quetiapine-D8	7.159	1518713	355713	4.2695	41.0845
Sufentanil	Sufentanil-D5	7.158	677	380320	0.0018	0.2711 40.5
Fluoxetine	Fluoxetine-D6	7.304	2562	962444	0.0027	1.9092 < 25
Buprenorphine	Buprenorphine-D4	7.496	2148	270375	0.0079	3.1828 -Not eval.



Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:42 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

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 b QC 10 ( QC1).d

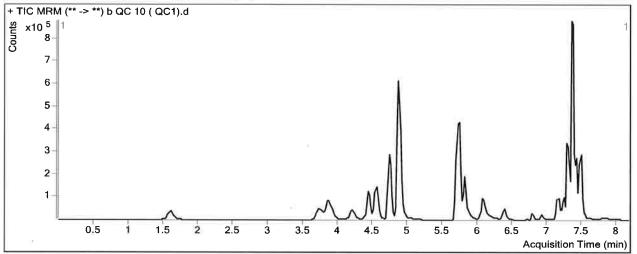
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 QC
 Sample Name
 b QC 10 ( QC1)

**Dilution** 1 **Acq Method** MD Quant Panel 1b 12-12-17.m

**Position** P1-A2 **Sample Info** 

Inj Vol -1 Comment AM 28

#### **Sample Chromatogram**



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.608	51206	193890	0.2641	9.8018
Dihydrocodeine	Dihydrocodeine-D6	3.775	35226	223797	0.1574	9.0924
Naloxone	Naloxone-D5	3.930	70681	487888	0.1449	9.2652
Noroxycodone	Noroxycodone-D3	4.239	39793	152292	0.2613	8.7002
Naltrexone	Naltrexone-D3	4.452	76306	383233	0.1991	9.7415
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.603	11979	541963	0.0221	0.9026
Naltrexol	Naltrexol-D3	4.749	171420	748580	0.2290	9.7118
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.878	355074	1726835	0.2056	9.6128
Ketamine	Ketamine-D4	5.719	175548	850537	0.2064	9.3974
Norfentanyl	Norfentanyl-D5	5.762	12926	<del>799182</del>	0.0162	9.3974 1.2677 Not evaluated 9.1462* Peok and all 9.1462* Outside converge
alpha-PVP	alpha-PVP-d8	6.087	72580	388922	0.1866	9.1462 1000
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.378	2160	168849	0.0128	0.9203
Norbuprenorphine	Norbuprenorphine-D3	_6.712	164	4764	0.0345	1.4083 Not evaluated
Fentanyl	Fentanyl-D5	6.800	1649	96835	0.0170	1.2784
EDDP	EDDP-D3	6.930	10168	50755	0.2003	10.4605
Quetiapine	Quetiapine-D8	7.159	105079	102565	1.0245	10.3934
Sufentanil	Sufentanil-D5	7.158	1630	61522	0.0265	1.3321
Cyclobenzaprine	Cyclobenzaprine-D3	7.212	9605	49306	0.1948	8.2468
Methadone	Methadone-D9	7.242	41836	187299	0.2234	9.1662



Compound	<b>ISTD Compound</b>	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Fluoxetine	Fluoxetine-D6	7.284	38416	178282	0.2155	10.8130
Oxazepam	Oxazepam-D5	7.308	99818	656684	0.1520	9.6088
Sertraline	Sertraline-D3	7.345	17361	82855	0.2095	9.2952
Temazepam	Temazepam-D5	7.367	334575	1964679	0.1703	10.2174
Buprenorphine	Buprenorphine-D4	7.396	1209	44338	0.0273	_3.4757 Not excluded
Nordiazepam	Nordiazepam-D5	7.434	142027	446949	0.3178	9.5454
Diazepam	Diazepam-D5	7.490	107753	444628	0.2423	9.4266



Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:42 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

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 b QC 100 (QC2).d

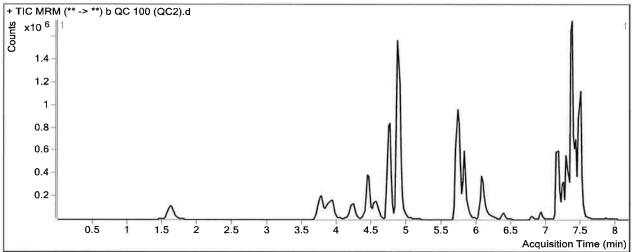
 Sample Type
 QC
 Sample Name
 b QC 100 (QC2)

 Dilution
 1
 Acq Method
 MD Quant Panel 1b 1

Dilution1Acq MethodMD Quant Panel 1b 12-12-17.mPositionP1-B2Sample Info

Inj Vol -1 Comment AM 28

#### **Sample Chromatogram**



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.628	539171	177366	3.0399	99.6249
Dihydrocodeine	Dihydrocodeine-D6	3.775	383845	217665	1.7635	101.2147
Naloxone	Naloxone-D5	3.930	696927	420055	1.6591	95.1324
Noroxycodone	Noroxycodone-D3	4.239	388828	131156	2.9646	86.4603
Naltrexone	Naltrexone-D3	4.452	752777	337995	2.2272	103.5346
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.603	134661	533771	0.2523	9.2968
Naltrexol	Naltrexol-D3	4.749	1709065	707403	2.4160	97.0917
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.878	3627382	1661202	2.1836	97.4815
Ketamine	Ketamine-D4	5.719	1872050	832982	2.2474	96.6338
Norfentanyl	Norfentanyl-D5	5.762	176599	841852	0.2098	10.0854
alpha-PVP	alpha-PVP-d8	6.067	905186	403722	2.2421	100.2007
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.378	22583	147496	0.1531	10.1467
Norbuprenorphine	Norbuprenorphine-D3	6.712	883	4699	0.1879	9.6742 Not evaluated
Fentanyl	Fentanyl-D5	6.800	17056	89148	0.1913	9.4534
EDDP	EDDP-D3	6.930	122055	54779	2.2281	96.6498
Quetiapine	Quetiapine-D8	7.159	1193168	108747	10.9719	104.4761
Sufentanil	Sufentanil-D5	7.158	10930	53620	0.2038	8.9462
Cyclobenzaprine	Cyclobenzaprine-D3	7.212	113251	50579	2.2391	85.1246
Methadone	Methadone-D9	7.242	472641	181113	2.6096	102.1182

TS

# ISP FORENSICS - Pocatello Instrument # 59740 Multi-Drug Confirmatory Analysis Report り (マン 160 (なこ)

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Fluoxetine	Fluoxetine-D6	7.284	316647	137855	2.2970	97.8980
Oxazepam	Oxazepam-D5	7.308	455345	319285	1.4261	79.2617
Sertraline	Sertraline-D3	7.345	139677	64381	2.1695	88.0039
Temazepam	Temazepam-D5	7.367	2589053	1447187	1.7890	92.5969
Buprenorphine	Buprenorphine-D4	7.396	16013	37552	0.4264	- 9.5261 Not evaluated
Nordiazepam	Nordiazepam-D5	7.434	1137969	347351	3.2761	90.7410
Diazepam	Diazepam-D5	7.490	1029386	405305	2.5398	93.9706

Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:42 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

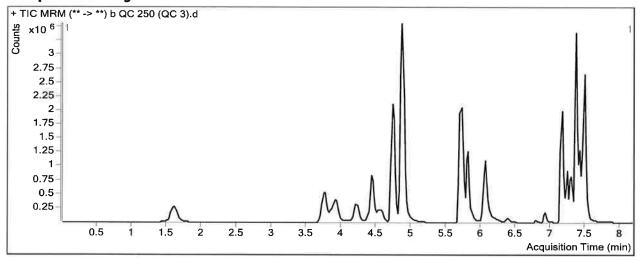
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 Data File
 b QC 250 (QC 3).d

 Sample Type
 QC
 Sample Name
 b QC 250 (QC 3)

Dilution1Acq MethodMD Quant Panel 1b 12-12-17.mPositionP1-C2Sample Info

Inj Vol -1 Comment AM 28

#### **Sample Chromatogram**



Results						
Compound	<b>ISTD Compound</b>	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.608	1515933	194432	7.7967	253.5547
Dihydrocodeine	Dihydrocodeine-D6	3.775	1067501	243121	4.3908	251.9174
Naloxone	Naloxone-D5	3.909	1813942	426420	4.2539	242.2701
Noroxycodone	Noroxycodone-D3	4.219	1021178	134406	7.5977	219.7289
Naltrexone	Naltrexone-D3	4.432	1847714	346435	5.3335	247.1939
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.603	397211	598615	0.6636	24.2949
Naltrexol	Naltrexol-D3	4.729	4799127	788907	6.0833	243.6172
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.878	10358271	1842666	5.6214	250.1995
Ketamine	Ketamine-D4	5.701	5386912	906632	5.9417	254.5334
Norfentanyl	Norfentanyl-D5	5.742	517247	1009044	0.5126	23.8783
alpha-PVP	alpha-PVP-d8	6.067	2657356	481694	5.5167	245.2597
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.378	61711	161329	0.3825	25.2320
Norbuprenorphine	Norbuprenorphine-D3	6.712	2395	4435	0.5402	_28.6542 Not evaluated
Fentanyl	Fentanyl-D5	6.800	39042	85225	0.4581	21.9663
EDDP	EDDP-D3	6.930	370129	64944	5.6992	244.1850
Quetiapine	Quetiapine-D8	7.159	3655077	135578	26.9592	255.6840
Sufentanil	Sufentanil-D5	7.158	27875	48758	0.5717	24.7385
Cyclobenzaprine	Cyclobenzaprine-D3	7.212	306737	4814 <del>4</del>	6.3713	240.5193
Methadone	Methadone-D9	7.242	1373722	208804	6.5790	256.7355

TS

# ISP FORENSICS - Pocatello Instrument # 59740 Multi-Drug Confirmatory Analysis Report b QC 250 (QC3)

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Fluoxetine	Fluoxetine-D6	7.284	766482	129407	5.9230	249.6058
Oxazepam	Oxazepam-D5	7.308	770007	191253	4.0261	221.3940
Sertraline	Sertraline-D3	7.345	379518	60139	6.3107	254.2987
Temazepam	Temazepam-D5	7.367	5502982	1232955	4.4632	228.6920
Buprenorphine	Buprenorphine-D4	7.396	42900	36516	1.1748	_20.8698 North evaluated
Nordiazepam	Nordiazepam-D5	7.434	2043900	273086	7.4845	206.2432
Diazepam	Diazepam-D5	7.490	2566656	405616	6.3278	233.3668



Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:42 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

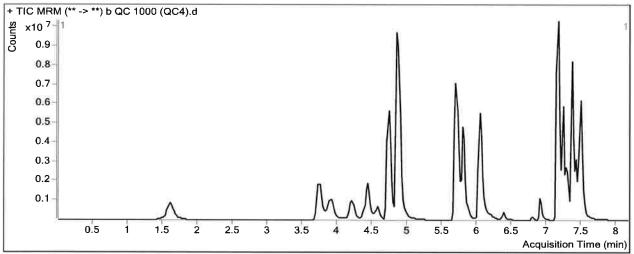
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 b QC 1000 (QC4).d

 Sample Type
 QC
 Sample Name
 b QC 1000 (QC4)

Dilution1Acq MethodMD Quant Panel 1b 12-12-17.mPositionP1-D2Sample Info

Inj Vol -1 Comment AM 28

#### **Sample Chromatogram**



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.608	5230717	163413	32.0092	1037.0602
Dihydrocodeine	Dihydrocodeine-D6	3.755	3900560	228360	17.0808	979.8013
Naloxone	Naloxone-D5	3.909	5263425	280769	18.7464	1064.0815
Noroxycodone	Noroxycodone-D3	4.219	4100506	106354	38.5554	1110.2108
Naltrexone	Naltrexone-D3	4.432	4766107	227788	20.9234	968.1854
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.583	1655701	551303	3.0033	109.6192
Naltrexol	Naltrexol-D3	4.729	15337023	644208	23.8076	951.7865
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.858	36784011	1632137	22.5373	1001.6702
Ketamine	Ketamine-D4	5.701	21487414	860946	24.9579	1067.3213
Norfentanyl	Norfentanyl-D5	5.742	2189323	895578	2.4446	111.8723
alpha-PVP	alpha-PVP-d8	6.047	13003639	562633	23.1121	1024.7090
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.378	527439	303863	1.7358	114.2172
Norbuprenorphine	Norbuprenorphine-D3	6.712	11092	5526	2.0073	107.7085 Not evaluely
Fentanyl	Fentanyl-D5	6.800	285821	137261	2.0823	98.1470
EDDP	EDDP-D3	6.910	2327592	103180	22.5586	960.7758
Quetiapine	Quetiapine-D8	7.159	20097237	207625	96.7958	916.1990
Sufentanil	Sufentanil-D5	7.158	225926	99159	2.2784	98.0116
Cyclobenzaprine	Cyclobenzaprine-D3	7.212	1997515	73782	27.0733	1019.0375
Methadone	Methadone-D9	7.242	9567251	362994	26.3565	1027.1205

15

# ISP FORENSICS - Pocatello Instrument # 59740 Multi-Drug Confirmatory Analysis Report

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc	
Fluoxetine	Fluoxetine-D6	7.284	3428317	146725	23.3656	979.3719	
Oxazepam	Oxazepam-D5	7.308	1775641	102998	17.2396	943.7345	
Sertraline	Sertraline-D3	7.345	1701001	71215	23.8853	960.0463	
Temazepam	Temazepam-D5	7.367	13920763	745328	18.6774	952.0691	4 / 1
Buprenorphine	Buprenorphine-D4	7.396	240913	41067	5.8663	-91.9808 Not	evalualed,
Nordiazepam	Nordiazepam-D5	7.434	4698658	147660	31.8207	874.1798	
Diazepam	Diazepam-D5	7.490	6673985	287613	23.2047	854.4246	



**Batch Data Path** 

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P1b 022018 TS.batch.bin

**Last Calib Update** 

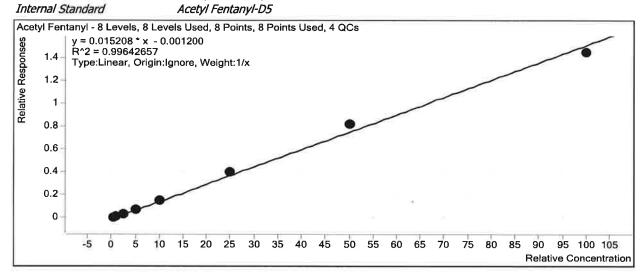
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target Compound

Acetyl Fentanyl



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\overline{\mathbf{v}}$	0.5	0.6	110.9
b cal 2-10ng	2		1	0.9	85.1
b QC 10 ( QC1)	2		1	0.9	92.0
b cal 3-25ng	3	♂	2.5	2.5	98.7
b cal 4-50ng	4		5	4.9	98.6
b cal 5-100ng	5		10	9.9	98.8
b QC 100 (QC2)	5	$\square$	10	10.1	101.5
b cal 6-250ng	6	$\square$	25	26.3	105.1
b QC 250 (QC 3)	6	Ø	25	25.2	100.9
b cal 7-500ng	7	$\square$	50	53.9	107.8
b cal 8-1000ng	8	$\square$	100	95.1	95.1
b QC 1000 (QC4)	8	☑	100	114.2	114.2

istdnew1.xlsx



**Batch Data Path** 

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P1b 022018 TS.batch.bin

**Last Calib Update** 

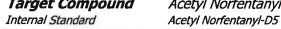
2/26/2018 8:38 AM

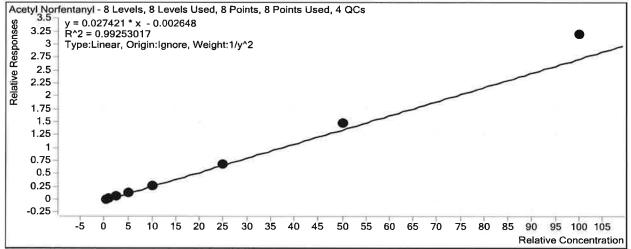
**Analyst Name** 

**ISP TOX** 

Target Compound

Acetyl Norfentanyl





Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	Ø	0.5	0.5	103.2
b cal 2-10ng	2	$\square$	1	1.0	96.5
b QC 10 ( QC1)	2	$\square$	1	0.9	90.3
b cal 3-25ng	3	$\square$	2.5	2.4	94.2
b cal 4-50ng	4	$\square$	5	4.7	94.2
b cal 5-100ng	5	$\square$	10	9.5	95.4
b QC 100 (QC2)	5	$\square$	10	9.3	93.0
b cal 6-250ng	6	Ø	25	24.9	99.5
b QC 250 (QC 3)	6	Ø	25	24.3	97.2
b cal 7-500ng	7	Ø	50	54.4	108.8
b cal 8-1000ng	8	$\square$	100	116.5	116.5
b QC 1000 (QC4)	8	$\square$	100	109.6	109.6

istdnew1.xlsx Page 6 of 26



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

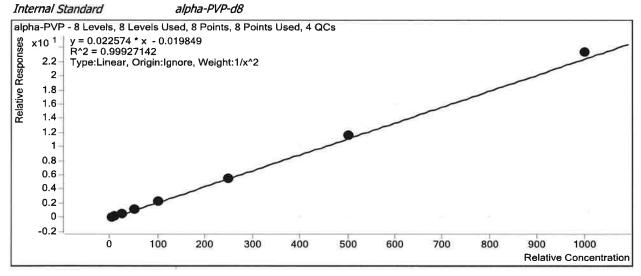
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target Compound

alpha-PVP alpha-PVP-d8



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\square$	5	5.0	100.9
b cal 2-10ng	2	$\square$	10	9.9	99.5
b QC 10 ( QC1)	2	Ø	10	9.1	91.5
b cal 3-25ng	3	☑	25	24.6	98.2
b cal 4-50ng	4	Ø	50	48.6	97.2
b cal 5-100ng	5	$\square$	100	100.2	100.2
b QC 100 (QC2)	5	$\square$	100	100.2	100.2
b cal 6-250ng	6	$   \overline{\square} $	250	244.1	97.7
b QC 250 (QC 3)	6	☑	250	245.3	98.1
b cal 7-500ng	7	$\square$	500	514.5	102.9
b cal 8-1000ng	8	$\overline{\mathbf{Q}}$	1000	1035.1	103.5
b QC 1000 (QC4)	8	☑	1000	1024.7	102.5

istdnew1.xlsx

**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

2/26/2018 8:38 AM

**Analyst Name** 

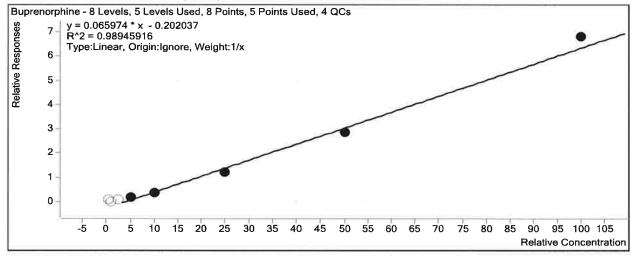
**ISP TOX** 

Target Compound

Buprenorphine

Internal Standard

Buprenorphine-D4



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1		0.5	4.2	834.2
b cal 2-10ng	2		1	3.4	336.0
b QC 10 ( QC1)	2		1	3.5	347.6
b cal 3-25ng	3		2.5	4.4	176.9
b cal 4-50ng	4	$\square$	5	6.1	122.4
b cal 5-100ng	5		10	9.0	90.1
b QC 100 (QC2)	5	$\overline{\mathbf{Z}}$	10	9.5	95.3
b cal 6-250ng	6	$\square$	25	22.0	87.8
b QC 250 (QC 3)	6		25	20.9	83.5
b cal 7-500ng	7	Ø	50	46.8	93.6
b cal 8-1000ng	8	☑	100	106.1	106.1
b QC 1000 (QC4)	8	Ø	100	92.0	92.0

\* Compound not evaluated - TS



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

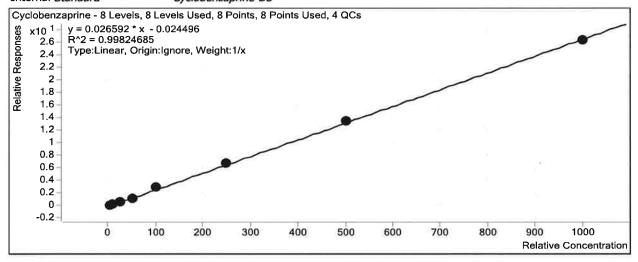
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target Compound
Internal Standard

Cyclobenzaprine Cyclobenzaprine-D3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\square$	5	5.5	110.0
b cal 2-10ng	2	Ø	10	10.4	104.3
b QC 10 ( QC1)	2	☑	10	8.2	82.5
b cal 3-25ng	3	☑	25	23.4	93.7
b cal 4-50ng	4	$\square$	50	40.5	81.1
b cal 5-100ng	5	$\square$	100	108.6	108.6
b QC 100 (QC2)	5	$\square$	100	85.1	85.1
b cal 6-250ng	6		250	254.0	101.6
b QC 250 (QC 3)	6	☑	250	240.5	96.2
b cal 7-500ng	7		500	509.8	102.0
b cal 8-1000ng	8	☑	1000	987.7	98.8
b QC 1000 (QC4)	8	◩	1000	1019.0	101.9

istdnew1.xlsx Page 18 of 26

**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

2/26/2018 8:38 AM

**Analyst Name** 

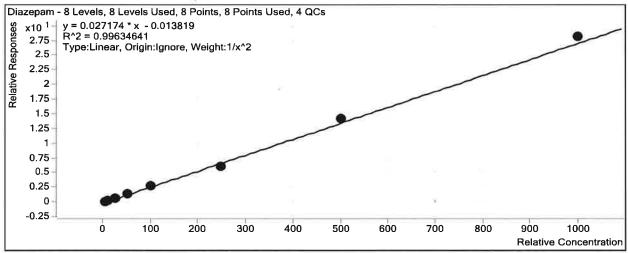
**ISP TOX** 

Target Compound

Diazepam

Internal Standard

Diazepam-D5



Sample	Level	Enabled	<b>Exp Conc</b>	Final Conc	Accuracy
b cal 1-5ng	1		5	5.0	99.3
b cal 2-10ng	2	$\square$	10	10.3	103.1
b QC 10 ( QC1)	2	☑	10	9.4	94.3
b cal 3-25ng	3		25	23.9	95.5
b cal 4-50ng	4	☑	50	50.1	100.2
b cal 5-100ng	5	Ø	100	104.0	104.0
b QC 100 (QC2)	5	☑	100	94.0	94.0
b cal 6-250ng	6	☑	250	223.8	89.5
b QC 250 (QC 3)	6	Ø	250	233.4	93.3
b cal 7-500ng	7		500	525.0	105.0
b cal 8-1000ng	8	$\square$	1000	1035.0	103.5
b QC 1000 (QC4)	8	Ø	1000	854.4	85.4

istdnew1.xlsx



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

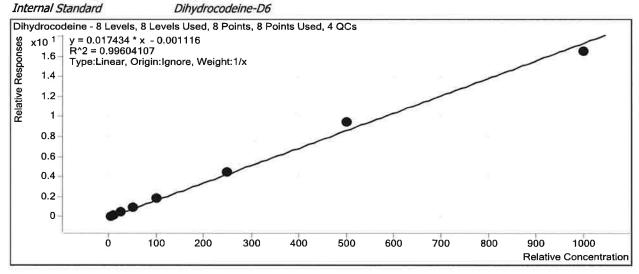
**Last Calib Update** 

2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target CompoundDihydrocodeineInternal StandardDihydrocodeine-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1		5	4.6	91.4
b cal 2-10ng	2	$\square$	10	9.4	94.2
b QC 10 ( QC1)	2		10	9.1	90.9
b cal 3-25ng	3		25	25.3	101.1
b cal 4-50ng	4	$\square$	50	51.0	102.1
b cal 5-100ng	5		100	105.5	105.5
b QC 100 (QC2)	5		100	101.2	101.2
b cal 6-250ng	6	$\square$	250	256.8	102.7
b QC 250 (QC 3)	6	$\square$	250	251.9	100.8
b cal 7-500ng	7	☑	500	541.8	108.4
b cal 8-1000ng	8	☑	1000	945.6	94.6
b QC 1000 (QC4)	8	☑	1000	979.8	98.0

istdnew1.xlsx



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

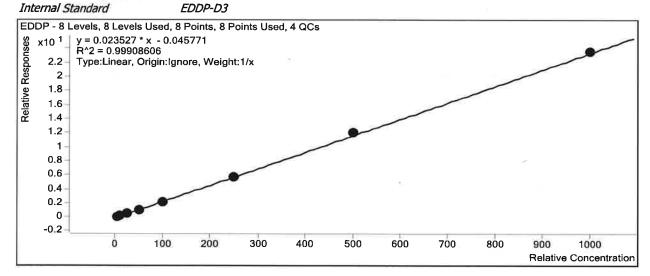
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target Compound

**EDDP** 



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1		5	5.8	116.7
b cal 2-10ng	2	$\square$	10	10.2	102.1
b QC 10 ( QC1)	2	$\square$	10	10.5	104.6
b cal 3-25ng	3	☑	25	24.5	97.9
b cal 4-50ng	4	☑	50	43.1	86.2
b cal 5-100ng	5	$\square$	100	96.0	96.0
b QC 100 (QC2)	5	$\square$	100	96.6	96.6
b cal 6-250ng	6	Ø	250	246.6	98.6
b QC 250 (QC 3)	6		250	244.2	97.7
b cal 7-500ng	7	Ø	500	512.1	102.4
b cal 8-1000ng	8	$\square$	1000	1001.8	100.2
b QC 1000 (QC4)	8	Ø	1000	960.8	96.1



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

2/26/2018 8:38 AM

**Analyst Name** 

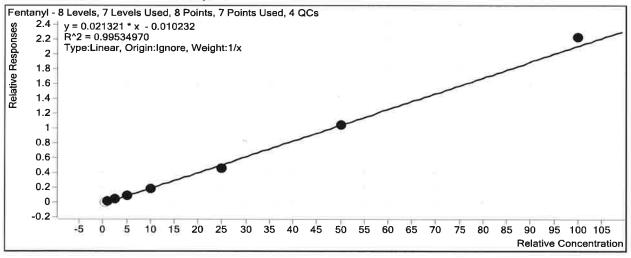
ISP TOX

Target Compound

Fentanyl

Internal Standard

Fentanyl-D5



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1		0.5	0.8	150.6
b cal 2-10ng	2	☑	1	1.3	127.5
b QC 10 ( QC1)	2	☑	1	1.3	127.8
b cal 3-25ng	3	☑	2.5	2.6	102.0
b cal 4-50ng	4	☑	5	4.4	88.6
b cal 5-100ng	5	$\square$	10	8.9	89.3
b QC 100 (QC2)	5	☑	10	9.5	94.5
b cal 6-250ng	6	☑	25	22.3	89.3
b QC 250 (QC 3)	6	☑	25	22.0	87.9
b cal 7-500ng	7	☑	50	49.3	98.6
b cal 8-1000ng	8	$   \overline{\mathbf{Z}} $	100	104.7	104.7
b QC 1000 (QC4)	8	$\square$	100	98.1	98.1



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

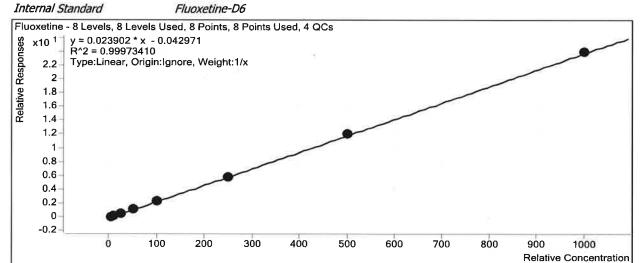
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target Compound

Fluoxetine



Sample	Level	<b>Enabled</b>	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	Ø	5	5.1	103.0
b cal 2-10ng	2	Ø	10	10.0	99.7
b QC 10 ( QC1)	2		10	10.8	108.1
b cal 3-25ng	3		25	25.3	101.3
b cal 4-50ng	4		50	49.4	98.8
b cal 5-100ng	5	☑	100	98.9	98.9
b QC 100 (QC2)	5	☑	100	97.9	97.9
b cal 6-250ng	6	$\square$	250	241.2	96.5
b QC 250 (QC 3)	6	☑	250	249.6	99.8
b cal 7-500ng	7	☑	500	508.0	101.6
b cal 8-1000ng	8	$\square$	1000	1002.1	100.2
b QC 1000 (QC4)	8		1000	979.4	97.9

**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

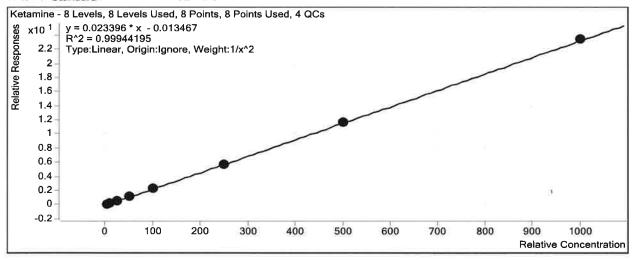
**Last Calib Update** 

2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target CompoundKetamineInternal StandardKetamine-D4



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1		5	5.0	100.2
b cal 2-10ng	2	$\square$	10	9.8	98.2
b QC 10 ( QC1)	2		10	9.4	94.0
b cal 3-25ng	3	Ø	25	25.9	103.7
b cal 4-50ng	4	$\square$	50	49.7	99.4
b cal 5-100ng	5	$\square$	100	100.7	100.7
b QC 100 (QC2)	5	$\square$	100	96.6	96.6
b cal 6-250ng	6	$\square$	250	241.6	96.7
b QC 250 (QC 3)	6		250	254.5	101.8
b cal 7-500ng	7	$\square$	500	504.0	100.8
b cal 8-1000ng	8	$\square$	1000	1003.1	100.3
b QC 1000 (QC4)	8		1000	1067.3	106.7

istdnew1.xlsx Page 9 of 26



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

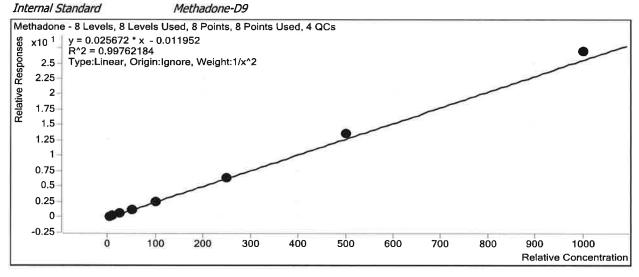
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target Compound

Methadone



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	☑	5	5.1	101.0
b cal 2-10ng	2	$\square$	10	10.1	101.2
b QC 10 ( QC1)	2	☑	10	9.2	91.7
b cal 3-25ng	3	☑	25	23.8	95.2
b cal 4-50ng	4	Ø	50	46.5	93.0
b cal 5-100ng	5	☑	100	99.1	99.1
b QC 100 (QC2)	5	$\overline{\mathbf{Q}}$	100	102.1	102.1
b cal 6-250ng	6	☑	250	251.2	100.5
b QC 250 (QC 3)	6	☑	250	256.7	102.7
b cal 7-500ng	7	☑	500	526.3	105.3
b cal 8-1000ng	8	☑	1000	1047.3	104.7
b QC 1000 (QC4)	8		1000	1027.1	102.7

istdnew1.xlsx Page 19 of 26

**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

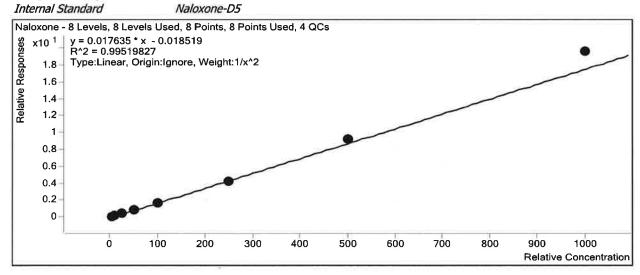
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target Compound

Naloxone



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\square$	5	5.2	103.9
b cal 2-10ng	2	$\square$	10	9.5	94.8
b QC 10 ( QC1)	2	$\square$	10	9.3	92.7
b cal 3-25ng	3	$\square$	25	24.3	97.2
b cal 4-50ng	4	$\square$	50	47.0	94.0
b cal 5-100ng	5	$\square$	100	97.7	97.7
b QC 100 (QC2)	5	$\square$	100	95.1	95.1
b cal 6-250ng	6	$\square$	250	240.7	96.3
b QC 250 (QC 3)	6		250	242.3	96.9
b cal 7-500ng	7	☑	500	525.3	105.1
b cal 8-1000ng	8	☑	1000	1111.3	111.1
b QC 1000 (QC4)	8	☑	1000	1064.1	106.4

istdnew1.xlsx Page 3 of 26



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

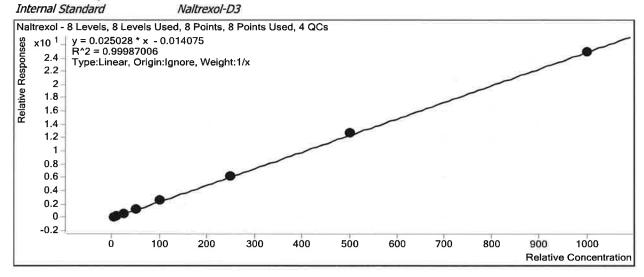
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target Compound

Naltrexol Naltrexol-D3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\square$	5	4.9	99.0
b cal 2-10ng	2	$ \mathbf{Z} $	10	9.9	99.4
b QC 10 ( QC1)	2	$\square$	10	9.7	97.1
b cal 3-25ng	3	Ø	25	25.3	101.3
b cal 4-50ng	4	$\square$	50	49.2	98.4
b cal 5-100ng	5	$\square$	100	102.3	102.3
b QC 100 (QC2)	5	Ø	100	97.1	97.1
b cal 6-250ng	6		250	246.9	98.8
b QC 250 (QC 3)	6	♂	250	243.6	97.4
b cal 7-500ng	7	☑	500	506.7	101.3
b cal 8-1000ng	8	$\square$	1000	994.6	99.5
b QC 1000 (QC4)	8	$\square$	1000	951.8	95.2

istdnew1.xlsx



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

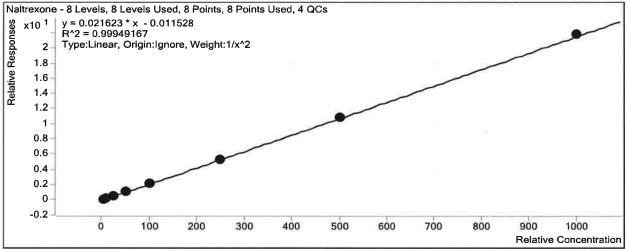
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Naltrexone





Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1		5	5.0	100.6
b cal 2-10ng	2	$\square$	10	9.8	98.1
b QC 10 ( QC1)	2		10	9.7	97.4
b cal 3-25ng	3		25	25.5	102.2
b cal 4-50ng	4		50	49.1	98.1
b cal 5-100ng	5	$\overline{\square}$	100	102.5	102.5
b QC 100 (QC2)	5	$\square$	100	103.5	103.5
b cal 6-250ng	6		250	243.1	97.2
b QC 250 (QC 3)	6	☑	250	247.2	98.9
b cal 7-500ng	7		500	502.4	100.5
b cal 8-1000ng	8	☑	1000	1007.7	100.8
b QC 1000 (QC4)	8	$\square$	1000	968.2	96.8

istdnew1.xlsx Page 5 of 26

15

**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

2/26/2018 8:38 AM

**Analyst Name** 

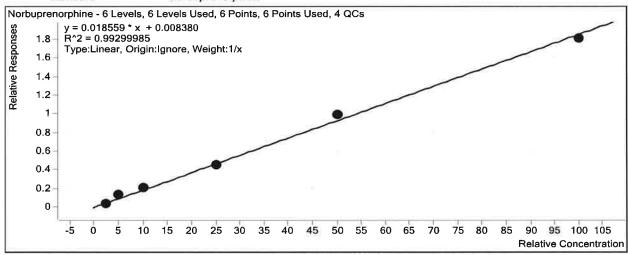
**ISP TOX** 

Target Compound

Norbuprenorphine

Internal Standard

Norbuprenorphine-D3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1		0.5	0.0	0.0
b cal 2-10ng	2		1	0.0	0.0
b QC 10 ( QC1)	2		1	1.4	140.8
b cal 3-25ng	3	$\square$	2.5	1.7	68.3
b cal 4-50ng	4	Ø	5	6.4	128.5
b cal 5-100ng	5	$\square$	10	10.5	104.9
b QC 100 (QC2)	5	$\square$	10	9.7	96.7
b cal 6-250ng	6	$\square$	25	23.8	95.1
b QC 250 (QC 3)	6	☑	25	28.7	114.6
b cal 7-500ng	7	$\square$	50	53.1	106.2
b cal 8-1000ng	8	$\square$	100	97.0	97.0
b QC 1000 (QC4)	8	$\square$	100	107.7	107.7

\* Compound not evaluated - TS



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

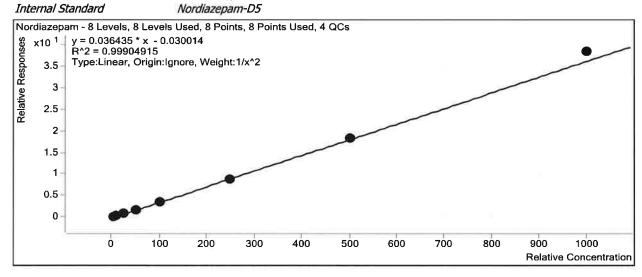
2/26/2018 8:38 AM

**Analyst Name** 

ISP TOX

Target Compound

Nordiazepam



Sample	Level	<b>Enabled</b>	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\square$	5	5.0	100.8
b cal 2-10ng	2		10	9.9	99.2
b QC 10 ( QC1)	2		10	9.5	95.5
b cal 3-25ng	3	$\mathbf{V}$	25	25.0	99.8
b cal 4-50ng	4	Ø	50	48.1	96.3
b cal 5-100ng	5	₫	100	99.4	99.4
b QC 100 (QC2)	5	$\square$	100	90.7	90.7
b cal 6-250ng	6	$\square$	250	245.0	98.0
b QC 250 (QC 3)	6	₫	250	206.2	82.5
b cal 7-500ng	7	☑	500	505.0	101.0
b cal 8-1000ng	8		1000	1054.5	105.4
b QC 1000 (QC4)	8	$\square$	1000	874.2	87.4

istdnew1.xlsx



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

2/26/2018 8:38 AM

**Analyst Name** 

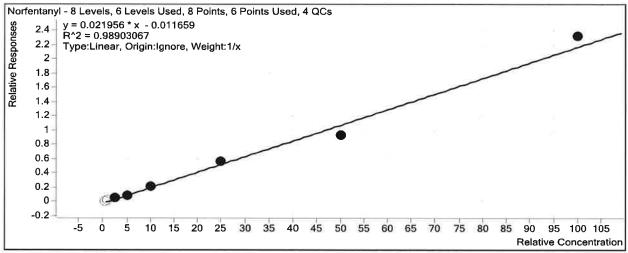
**ISP TOX** 

Target Compound

Norfentanyl

Internal Standard

Norfentanyl-D5



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1		0.5	0.9	183.8
b cal 2-10ng	2		1	1.4	135.2
b QC 10 ( QC1)	2		1	1.3	126.8
b cal 3-25ng	3	$\square$	2.5	2.9	114.3
b cal 4-50ng	4		5	4.3	86.0
b cal 5-100ng	5	$\square$	10	10.4	103.7
b QC 100 (QC2)	5	$\square$	10	10.1	100.9
b cal 6-250ng	6	$\square$	25	26.1	104.3
b QC 250 (QC 3)	6	$\square$	25	23.9	95.5
b cal 7-500ng	7	Ø	50	42.8	85.6
b cal 8-1000ng	8	$\square$	100	106.1	106.1
b QC 1000 (QC4)	8		100	111.9	111.9



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

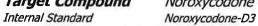
2/26/2018 8:38 AM

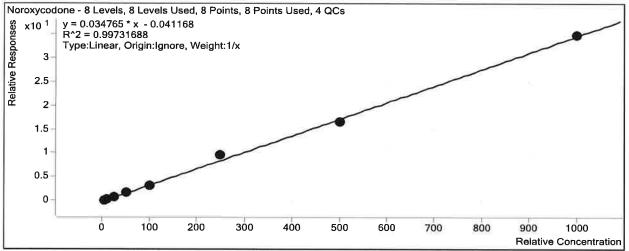
**Analyst Name** 

**ISP TOX** 

Target Compound

Noroxycodone





Sample	Level	Enabled	<b>Exp Conc</b>	Final Conc	Accuracy
b cal 1-5ng	1	Ø	5	5.3	105.8
b cal 2-10ng	2	Ø	10	10.0	100.5
b QC 10 ( QC1)	2	$\square$	10	8.7	87.0
b cal 3-25ng	3	☑	25	23.8	95.2
b cal 4-50ng	4	Ø	50	47.8	95.7
b cal 5-100ng	5	$\square$	100	95.2	95.2
b QC 100 (QC2)	5	☑	100	86.5	86.5
b cal 6-250ng	6	Ø	250	279.8	111.9
b QC 250 (QC 3)	6	☑	250	219.7	87.9
b cal 7-500ng	7	Ø	500	479.8	96.0
b cal 8-1000ng	8		1000	998.3	99.8
b QC 1000 (QC4)	8	Ø	1000	1110.2	111.0



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

2/26/2018 8:38 AM

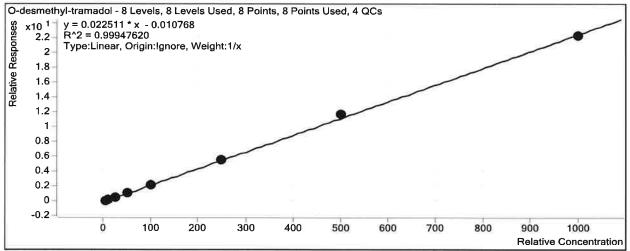
**Analyst Name** 

**ISP TOX** 

Target Compound

O-desmethyl-tramadol

Internal Standard O-desmethyl-tramadol-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	Ø	5	4.9	98.6
b cal 2-10ng	2	Ø	10	10.2	101.6
b QC 10 ( QC1)	2		10	9.6	96.1
b cal 3-25ng	3	☑	25	25.5	102.1
b cal 4-50ng	4		50	48.3	96.6
b cal 5-100ng	5		100	100.0	100.0
b QC 100 (QC2)	5		100	97.5	97.5
b cal 6-250ng	6	☑	250	247.4	99.0
b QC 250 (QC 3)	6	<b></b> ✓	250	250.2	100.1
b cal 7-500ng	7		500	517.8	103.6
b cal 8-1000ng	8		1000	985.9	98.6
b QC 1000 (QC4)	8		1000	1001.7	100.2

istdnew1.xlsx



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

Last Calib Update

2/26/2018 8:38 AM

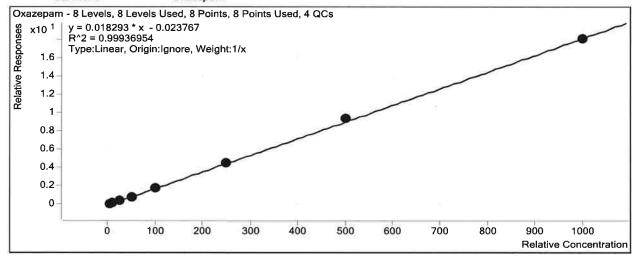
**Analyst Name** 

**ISP TOX** 

Target Compound

Oxazepam

Internal Standard Oxazepam-D5



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\square$	5	5.4	108.2
b cal 2-10ng	2	$\square$	10	10.2	102.1
b QC 10 ( QC1)	2	$\square$	10	9.6	96.1
b cal 3-25ng	3		25	24.6	98.6
b cal 4-50ng	4	$\square$	50	46.7	93.4
b cal 5-100ng	5	$\square$	100	95.8	95.8
b QC 100 (QC2)	5	$\square$	100	79.3	79.3
b cal 6-250ng	6		250	248.6	99.4
b QC 250 (QC 3)	6	☑	250	221.4	88.6
b cal 7-500ng	7	$\square$	500	517.3	103.5
b cal 8-1000ng	8	$\square$	1000	991.5	99.1
b QC 1000 (QC4)	8	☑	1000	943.7	94.4

istdnew1.xlsx Page 21 of 26



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

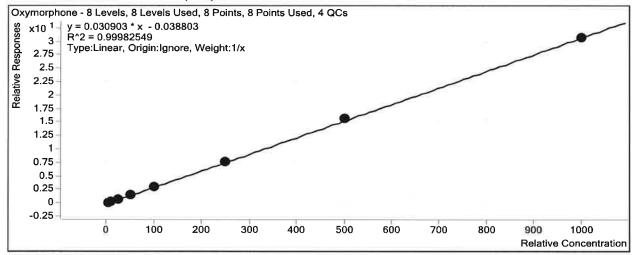
**Last Calib Update** 

2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target CompoundOxymorphoneInternal StandardOxymorphone-D3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1		5	5.4	108.6
b cal 2-10ng	2	$\square$	10	9.8	98.4
b QC 10 ( QC1)	2	$\square$	10	9.8	98.0
b cal 3-25ng	3	☑	25	23.9	95.6
b cal 4-50ng	4	$\square$	50	48.6	97.3
b cal 5-100ng	5	$\square$	100	98.6	98.6
b QC 100 (QC2)	5	函	100	99.6	99.6
b cal 6-250ng	6	Ø	250	251.3	100.5
b QC 250 (QC 3)	6	✓	250	253.6	101.4
b cal 7-500ng	7	☑	500	508.0	101.6
b cal 8-1000ng	8		1000	994.3	99.4
b QC 1000 (QC4)	8	☑	1000	1037.1	103.7

istdnew1.xlsx Page 1 of 26

**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

2/26/2018 8:38 AM

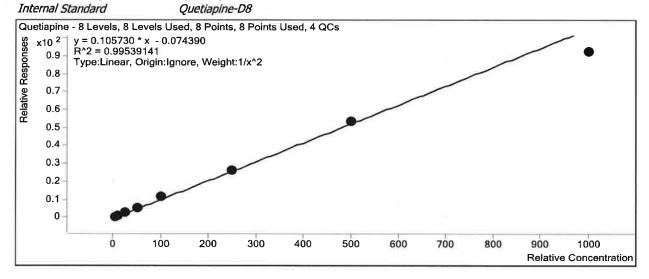
**Analyst Name** 

**ISP TOX** 

Target Compound

Quetiapine

Internal Standard



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\overline{\mathbf{A}}$	5	5.0	100.0
b cal 2-10ng	2	$\square$	10	9.8	98.4
b QC 10 ( QC1)	2	$\square$	10	10.4	103.9
b cal 3-25ng	3	☑	25	25.2	100.7
b cal 4-50ng	4	$\square$	50	51.5	102.9
b cal 5-100ng	5		100	108.3	108.3
b QC 100 (QC2)	5	$\square$	100	104.5	104.5
b cal 6-250ng	6	☑	250	251.9	100.8
b QC 250 (QC 3)	6	Ø	250	255.7	102.3
b cal 7-500ng	7	☑	500	508.2	101.6
b cal 8-1000ng	8	☑	1000	873.4	87.3
b QC 1000 (QC4)	8	$\square$	1000	916.2	91.6

### ISP Forensics Calibration Curve Report



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

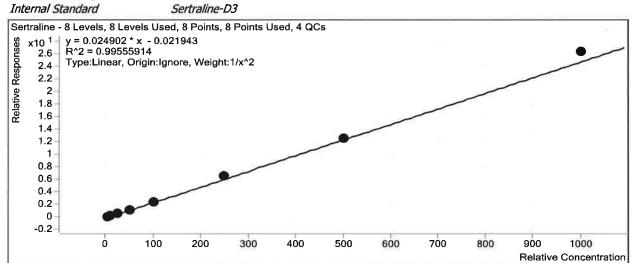
2/26/2018 8:38 AM

**Analyst Name** 

ISP TOX

Target Compound

Sertraline



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\square$	5	5.3	105.3
b cal 2-10ng	2	$\square$	10	9.1	91.3
b QC 10 ( QC1)	2	Ø	10	9.3	93.0
b cal 3-25ng	3		25	24.6	98.4
b cal 4-50ng	4	$\square$	50	46.0	92.1
b cal 5-100ng	5	☑	100	100.5	100.5
b QC 100 (QC2)	5	$\square$	100	88.0	88.0
b cal 6-250ng	6		250	264.5	105.8
b QC 250 (QC 3)	6	₫	250	254.3	101.7
b cal 7-500ng	7	$\square$	500	504.9	101.0
b cal 8-1000ng	8	☑	1000	1056.7	105.7
b QC 1000 (QC4)	8	$\square$	1000	960.0	96.0

#### **ISP Forensics Calibration Curve Report**



**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

2/26/2018 8:38 AM

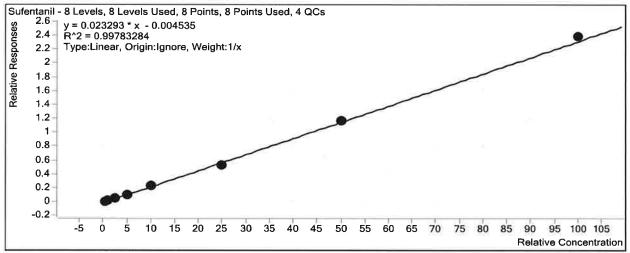
**Analyst Name** 

ISP TOX

Target Compound

Sufentanil





Sample	Level	Enabled	<b>Exp Conc</b>	Final Conc	Accuracy
b cal 1-5ng	1	Ø	0.5	0.6	112.8
b cal 2-10ng	2		1	1.1	109.6
b QC 10 ( QC1)	2	Ø	1	1.3	133.2
b cal 3-25ng	3	☑	2.5	2.4	94.1
b cal 4-50ng	4	₫	5	4.4	89.0
b cal 5-100ng	5	Ø	10	10.1	100.8
b QC 100 (QC2)	5	$\square$	10	8.9	89.5
b cal 6-250ng	6	$\square$	25	22.6	90.3
b QC 250 (QC 3)	6	☑	25	24.7	99.0
b cal 7-500ng	7	$\square$	50	50.6	101.2
b cal 8-1000ng	8	☑	100	102.3	102.3
b QC 1000 (QC4)	8	☑	100	98.0	98.0

istdnew1.xlsx

### ISP Forensics Calibration Curve Report

**Batch Data Path** 

C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ

P1b 022018 TS.batch.bin

**Last Calib Update** 

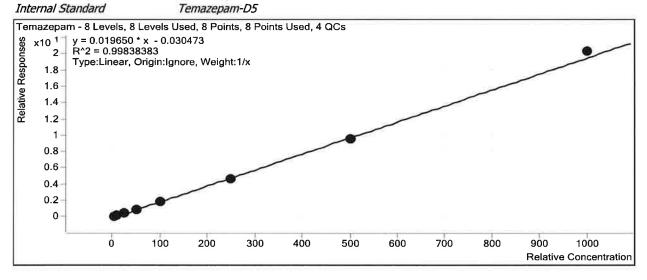
2/26/2018 8:38 AM

**Analyst Name** 

**ISP TOX** 

Target Compound

Temazepam



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng	1	$\square$	5	5.7	113.6
b cal 2-10ng	2	$\square$	10	10.2	101.6
b QC 10 ( QC1)	2	☑	10	10.2	102.2
b cal 3-25ng	3		25	25.6	102.4
b cal 4-50ng	4	☑	50	46.1	92.3
b cal 5-100ng	5	$\square$	100	94.7	94.7
b QC 100 (QC2)	5	$\square$	100	92.6	92.6
b cal 6-250ng	6	$\square$	250	236.6	94.7
b QC 250 (QC 3)	6	Ø	250	228.7	91.5
b cal 7-500ng	7	☑	500	487.3	97.5
b cal 8-1000ng	8	$\square$	1000	1033.8	103.4
b QC 1000 (QC4)	8	$\square$	1000	952.1	95.2

istdnew1.xlsx Page 23 of 26



Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:40 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

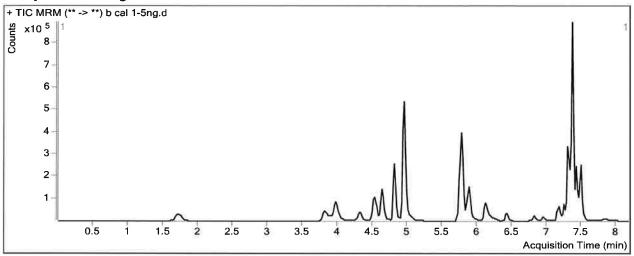
**Analysis Info** 

Acq Time2018-02-21 04:24Data Fileb cal 1-5ng.dSample TypeCalibrationSample Nameb cal 1-5ng

**Dilution** 1 **Acq Method** MD Quant Panel 1b 12-12-17.m

**Position** P1-A1 **Sample Info** 

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.728	23993	186014	0.1290	5.4295
Dihydrocodeine	Dihydrocodeine-D6	3.877	16955	215834	0.0786	4.5700
Naloxone	Naloxone-D5	4.030	32989	451570	0.0731	5.1927
Noroxycodone	Noroxycodone-D3	4.359	21207	148549	0.1428	5.2906
Naltrexone	Naltrexone-D3	4.531	35630	366387	0.0972	5.0306
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.683	6118	532082	0.0115	0.5159
Naltrexol	Naltrexol-D3	4.810	79196	721262	0.1098	4.9495
0 4	0. dansa athad ana ara dal DC	4.050	460400	1670446	0.4000	4.0000
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.958	168190	1678416	0.1002	4.9299
Ketamine	Ketamine-D4	5.759	86393	832364	0.1038	5.0119
Norfentanyl	Norfentanyl-D5	5.802	5909	693715	0.0085	0.9189
alpha-PVP	alpha-PVP-d8	6.127	33707	358439	0.0940	5.0451
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.437	863	119399	0.0072	0.5543
Fentanyl	Fentanyl-D5	6.860	416	71371	0.0058	0.7532
EDDP	EDDP-D3	6.950	4299	46986	0.0915	5.8345
Quetiapine	Quetiapine-D8	7.159	39941	87912	0.4543	5.0006
Sufentanil	Sufentanil-D5	7.158	382	44456	0.0086	0.5639
Cyclobenzaprine	Cyclobenzaprine-D3	7.232	4738	38920	0.1217	5.4992
Methadone	Methadone-D9	7.242	17430	148083	0.1177	5.0505
Fluoxetine	Fluoxetine-D6	7.304	11502	143596	0.0801	5.1491

15

Compound	<b>ISTD Compound</b>	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxazepam	Oxazepam-D5	7.329	47646	633710	0.0752	5.4095
Sertraline	Sertraline-D3	7.345	7456	68332	0.1091	5.2631
Temazepam	Temazepam-D5	7.367	145881	1798837	0.0811	5.6780
Buprenorphine	Buprenorphine-D4	7.476	2179	29793	0.0732	4.1712
Nordiazepam	Nordiazepam-D5	7.434	62262	405119	0.1537	5.0419
Diazepam	Diazepam-D5	7.490	46949	387697	0.1211	4.9649



Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:41 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

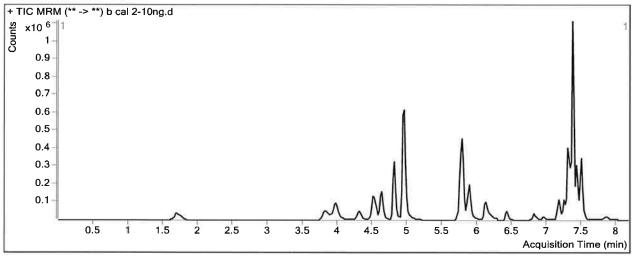
 Acq Time
 2018-02-21 04:56
 Data File
 b cal 2-10ng.d

 Sample Type
 Calibration
 Sample Name
 b cal 2-10ng

Dilution 1 Acq Method MD Quant Panel 1b 12-12-17.m

Position P1-B1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.708	52663	198589	0.2652	9.8369
Dihydrocodeine	Dihydrocodeine-D6	3.857	38584	236466	0.1632	9.4233
Naloxone	Naloxone-D5	4.030	75322	506759	0.1486	9.4786
Noroxycodone	Noroxycodone-D3	4.339	49011	159093	0.3081	10.0455
Naltrexone	Naltrexone-D3	4.531	82169	409527	0.2006	9.8124
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.683	14025	588733	0.0238	0.9653
Naltrexol	Naltrexol-D3	4.810	187380	798761	0.2346	9.9353
O-desmethyl-tramadol	O dosmothyl tramadal D6	4.050	402565	1046726	0.2100	10.1621
•	O-desmethyl-tramadol-D6	4.958	402565	1846736	0.2180	10.1621
Ketamine	Ketamine-D4	5.759	194972	901177	0.2164	9.8229
Norfentanyl	Norfentanyl-D5	5.802	13695	759799	0.0180	1.3520
alpha-PVP	alpha-PVP-d8	6.127	80300	392350	0.2047	9.9456
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.437	2062	175675	0.0117	0.8506
Fentanyl	Fentanyl-D5	6.840	1982	116949	0.0170	1.2749
EDDP	EDDP-D3	6.970	9864	50733	0.1944	10.2092
Quetiapine	Quetiapine-D8	7.159	98607	102123	0.9656	9.8360
Sufentanil	Sufentanil-D5	7.178	1641	78157	0.0210	1.0960
Cyclobenzaprine	Cyclobenzaprine-D3	7.232	14491	57331	0.2528	10.4263
Methadone	Methadone-D9	7.263	<del>4944</del> 5	199459	0.2479	10.1218
Fluoxetine	Fluoxetine-D6	7.304	46983	240620	0.1953	9.9671

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxazepam	Oxazepam-D5	7.329	104412	640890	0.1629	10.2054
Sertraline	Sertraline-D3	7.365	19923	96932	0.2055	9.1349
Temazepam	Temazepam-D5	7.367	320456	1894768	0.1691	10.1579
Buprenorphine	Buprenorphine-D4	7.376	892	45478	0.0196	3.3596
Nordiazepam	Nordiazepam-D5	7. <del>4</del> 55	147186	444106	0.3314	9.9200
Diazepam	Diazepam-D5	7.490	109985	413110	0.2662	10.3058

Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:41 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

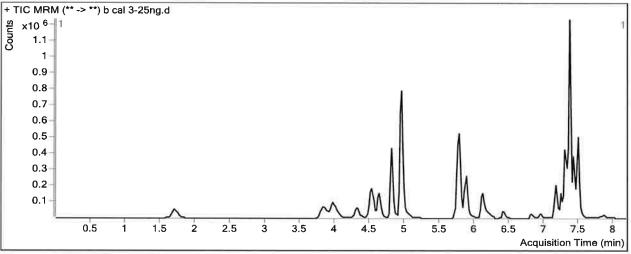
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 Data File
 b cal 3-25ng.d

 Sample Type
 Calibration
 Sample Name
 b cal 3-25ng

**Dilution** 1 **Acq Method** MD Quant Panel 1b 12-12-17.m

Position P1-C1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	<b>Final Conc</b>
Oxymorphone	Oxymorphone-D3	1.708	131259	187566	0.6998	23.9009
Dihydrocodeine	Dihydrocodeine-D6	3.857	99115	225399	0.4397	25.2865
Naloxone	Naloxone-D5	4.030	185675	453040	0.4098	24.2905
Noroxycodone	Noroxycodone-D3	4.339	120366	153166	0.7859	23.7890
Naltrexone	Naltrexone-D3	4.531	203857	376878	0.5409	25.5488
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.683	35582	574247	0.0620	2.3562
Naltrexol	Naltrexol-D3	4.810	462084	745226	0.6201	25.3366
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.958	990404	1757226	0.5636	25.5163
Ketamine	Ketamine-D4	5.759	513014	865374	0.5928	25.9139
Norfentanyl	Norfentanyl-D5	5.802	39434	772134	0.0511	2.8571
alpha-PVP	alpha-PVP-d8	6.127	215932	404026	0.5344	24.5545
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.417	4978	137063	0.0363	2.4671
Norbuprenorphine	Norbuprenorphine-D3	6.752	196	4903	0.0401	1.7074
Fentanyl	Fentanyl-D5	6.820	3929	88991	0.0441	2.5506
EDDP	EDDP-D3	6.950	27203	51343	0.5298	24.4650
Quetiapine	Quetiapine-D8	7.159	252242	97531	2.5863	25.1646
Sufentanil	Sufentanil-D5	7.178	3042	60505	0.0503	2.3534
Cyclobenzaprine	Cyclobenzaprine-D3	7.232	30530	51014	0.5985	23.4273
Methadone	Methadone-D9	7.242	109918	183477	0.5991	23.8013

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
•	•		•			
Fluoxetine	Fluoxetine-D6	7.304	100027	177800	0.5626	25.3351
Oxazepam	Oxazepam-D5	7.329	227908	533684	0.4270	24.6445
Sertraline	Sertraline-D3	7.345	48610	82296	0.5907	24.6008
Temazepam	Temazepam-D5	7.367	770585	1630967	0.4725	25.5956
Buprenorphine	Buprenorphine-D4	7.376	3241	36118	0.0897	4.4224
Nordiazepam	Nordiazepam-D5	7.434	341793	388722	0.8793	24.9564
Diazepam	Diazepam-D5	7.490	259211	408228	0.6350	23.8748



Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:41 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

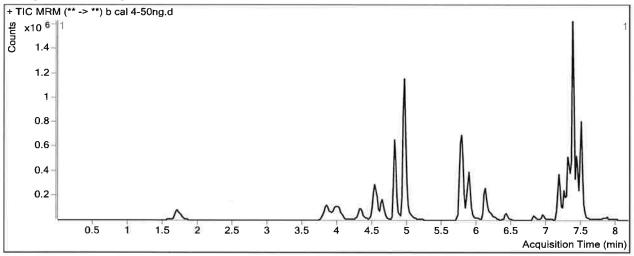
 Acq Time
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 Data File
 b cal 4-50ng.d

 Sample Type
 Calibration
 Sample Name
 b cal 4-50ng

Dilution 1 Acq Method MD Quant Panel 1b 12-12-17.m

Position P1-D1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.708	276467	188819	1.4642	48.6364
Dihydrocodeine	Dihydrocodeine-D6	3.857	206937	232851	0.8887	51.0395
Naloxone	Naloxone-D5	4.030	373145	460344	0.8106	47.0146
Noroxycodone	Noroxycodone-D3	4.339	240396	148257	1.6215	47.8252
Naltrexone	Naltrexone-D3	4.531	416314	396796	1.0492	49.0554
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.683	73604	581772	0.1265	4.7104
Naltrexol	Naltrexol-D3	4.810	961196	789459	1.2175	49.2087
O decreative transported	O decree about two and all DC	4.050	2024044	1077561	4.0760	40.0400
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.958	2021944	1877561	1.0769	48.3182
Ketamine	Ketamine-D4	5.759	1039045	904301	1.1490	49.6860
Norfentanyl	Norfentanyl-D5	5.802	76298	922002	0.0828	4.3001
alpha-PVP	alpha-PVP-d8	6.127	479272	444998	1.0770	48.5896
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.417	13138	178171	0.0737	4.9275
Norbuprenorphine	Norbuprenorphine-D3	6.752	733	5741	0.1276	6.4240
Fentanyl	Fentanyl-D5	6.820	9321	110677	0.0842	4.4300
EDDP	EDDP-D3	6.950	58206	60131	0.9680	43.0891
Quetiapine	Quetiapine-D8	7.159	571959	106556	5.3677	51.4713
Sufentanil	Sufentanil-D5	7.178	7114	71794	0.0991	4.4488
Cyclobenzaprine	Cyclobenzaprine-D3	7.232	65815	62467	1.0536	40.5426
Methadone	Methadone-D9	7.242	251012	212435	1.1816	46.4918

15

Compound	<b>ISTD Compound</b>	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Fluoxetine	Fluoxetine-D6	7.304	230613	202608	1.1382	49.4189
Oxazepam	Oxazepam-D5	7.329	359252	432621	0.8304	46.6950
Sertraline	Sertraline-D3	7.365	102249	90950	1.1242	46.0270
Temazepam	Temazepam-D5	7.367	1420358	1621658	0.8759	46.1250
Buprenorphine	Buprenorphine-D4	7.376	8962	44424	0.2017	6.1203
Nordiazepam	Nordiazepam-D5	7.455	642904	372910	1.7240	48.1414
Diazepam	Diazepam-D5	7.490	523516	388563	1.3473	50.0887

**Batch Data Path** C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

**Analysis Time** 2/26/2018 8:38 AM **Analyst Name ISPUser Report Time** 2/26/2018 8:41 AM Reporter Name ISPUser Last Calib Update **Batch State** 2/26/2018 8:38 AM Processed

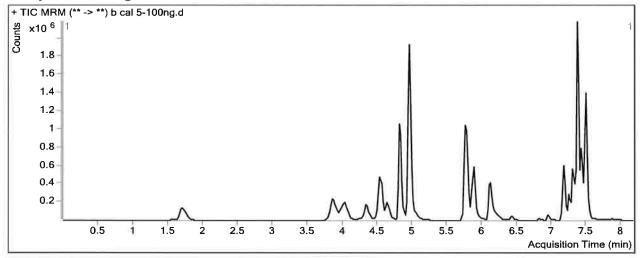
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**Acq Time** 2018-02-21 06:30 **Data File** b cal 5-100ng.d Sample Type Calibration Sample Name b cal 5-100ng **Dilution** 1 Acq Method

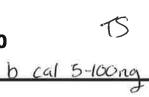
MD Quant Panel 1b 12-12-17.m

**Position** P1-E1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.708	586797	195004	3.0092	98.6308
Dihydrocodeine	Dihydrocodeine-D6	3.877	451146	245436	1.8381	105.4980
Naloxone	Naloxone-D5	4.030	780390	457828	1.7045	97.7078
Noroxycodone	Noroxycodone-D3	4.359	480948	147084	3.2699	95.2409
Naltrexone	Naltrexone-D3	4.531	858361	389440	2.2041	102.4665
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.683	158228	611329	0.2588	9.5354
Naltrexol	Naltrexol-D3	4.830	2025230	795109	2.5471	102.3313
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.958	4359913	1946729	2.2396	99.9701
Ketamine	Ketamine-D4	5.759	2276279	971282	2.3 <del>4</del> 36	100.7 <del>44</del> 5
Norfentanyl	Norfentanyl-D5	5.802	173064	801289	0.2160	10.3681
alpha-PVP	alpha-PVP-d8	6.127	944190	421147	2.2419	100.1940
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.417	18554	124470	0.1491	9.8805
Norbuprenorphine	Norbuprenorphine-D3	6.752	750	3691	0.2031	10.4910
Fentanyl	Fentanyl-D5	6.820	11970	66410	0.1802	8.9336
EDDP	EDDP-D3	6.950	102216	46214	2.2118	95.9558
Quetiapine	Quetiapine-D8	7.159	1004217	88283	11.3750	108.2887
Sufentanil	Sufentanil-D5	7.158	9105	39556	0.2302	10.0766
Cyclobenzaprine	Cyclobenzaprine-D3	7.232	92509	32298	2.8643	108.6341
Methadone	Methadone-D9	7.242	364424	143893	2.5326	99.1169



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Fluoxetine	Fluoxetine-D6	7.304	289853	124894	2.3208	98.8958
Oxazepam	Oxazepam-D5	7.329	548273	317265	1.7281	95.7703
Sertraline	Sertraline-D3	7.365	143385	57812	2.4802	100.4792
Temazepam	Temazepam-D5	7.367	2841228	1551658	1.8311	94.7377
Buprenorphine	Buprenorphine-D4	7.376	10657	27169	0.3923	9.0080
Nordiazepam	Nordiazepam-D5	7.434	1193050	332117	3.5923	99.4173
Diazepam	Diazepam-D5	7.490	1095296	389558	2.8116	103.9748



Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:41 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

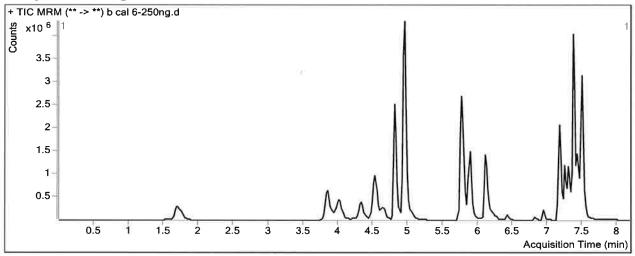
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 Sample Type
 Calibration
 Sample Name
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**Dilution** 1 **Acq Method** MD Quant Panel 1b 12-12-17.m

**Position** P1-F1 **Sample Info** 

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	<b>Final Conc</b>
Oxymorphone	Oxymorphone-D3	1.708	1607300	208031	7.7262	251.2736
Dihydrocodeine	Dihydrocodeine-D6	3.857	1297086	289756	4.4765	256.8301
Naloxone	Naloxone-D5	4.010	1993714	471798	4.2258	240.6761
Noroxycodone	Noroxycodone-D3	4.339	1447436	149453	9.6849	279.7651
Naltrexone	Naltrexone-D3	4.531	2030704	387179	5.2449	243.0948
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.683	482280	709968	0.6793	24.8692
Naltrexol	Naitrexol-D3	4.810	5474797	888014	6.1652	246.8915
0 4	0   11   11   15	4.050	10571017	22424	= === 4	
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.958	12574047	2262186	5.5584	247.4013
Ketamine	Ketamine-D4	5.759	6911671	1225517	5.6398	241.6308
Norfentanyl	Norfentanyl-D5	5.802	533969	951707	0.5611	26.0852
alpha-PVP	alpha-PVP-d8	6.107	3253271	592448	5.4912	244.1322
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.417	83951	210705	0.3984	26.2780
Norbuprenorphine	Norbuprenorphine-D3	6.752	2805	6240	0.4495	23.7714
Fentanyl	Fentanyl-D5	6.820	57652	123848	0.4655	22.3135
EDDP	EDDP-D3	6.950	408816	71038	5.7549	246.5517
Quetiapine	Quetiapine-D8	7.159	3613688	136072	26.5573	251.8823
Sufentanil	Sufentanil-D5	7.178	43319	83133	0.5211	22.5658
Cyclobenzaprine	Cyclobenzaprine-D3	7.232	419602	62351	6.7297	253.9962
Methadone	Methadone-D9	7.242	1682697	261404	6.4371	251.2093

13 b cal 6-250ng

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Fluoxetine	Fluoxetine-D6	7.304	1193653	208623	5.7216	241.1776
Oxazepam	Oxazepam-D5	7.308	840736	185884	4.5229	248.5519
Sertraline	Sertraline-D3	7.365	592430	90240	6.5651	264.5150
Temazepam	Temazepam-D5	7.367	6107618	1322130	4.6195	236.6454
Buprenorphine	Buprenorphine-D4	7.376	52309	41970	1.2464	21.9540
Nordiazepam	Nordiazepam-D5	7.434	2405004	270341	8.8962	244.9893
Diazepam	Diazepam-D5	7.490	2845316	469022	6.0665	223.7506

Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:41 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

**Analysis Info** 

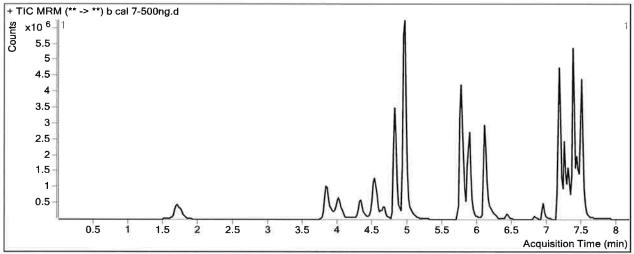
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 Sample Name
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**Dilution** 1 **Acq Method** MD Quant Panel 1b 12-12-17.m

Position P1-G1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	<b>Final Conc</b>
Oxymorphone	Oxymorphone-D3	1.708	2582304	164915	15.6584	507.9562
Dihydrocodeine	Dihydrocodeine-D6	3.837	2188377	231716	9.4442	541.7749
Naloxone	Naloxone-D5	4.010	2982902	322657	9.2448	525.2840
Noroxycodone	Noroxycodone-D3	4.339	2008964	120746	16.6379	479.7655
Naltrexone	Naltrexone-D3	4.531	2968952	273568	10.8527	502.4421
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.683	874993	587348	1.4897	54.4242
Naltrexol	Naltrexol-D3	4.810	8437628	666047	12.6682	506.7168
O decreable d bosco del	O described becaused the	4.050	20002706	1000010		547 7740
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	4.958	20983706	1802013	11.6 <del>44</del> 6	517.7742
Ketamine	Ketamine-D4	5.759	11913169	1011502	11.7777	503.9756
Norfentanyl	Norfentanyl-D5	5.802	915105	986004	0.9281	42.8019
alpha-PVP	alpha-PVP-d8	6.107	6698241	577752	11.5936	514.4580
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.417	190390	232642	0.8184	53.8928
Norbuprenorphine	Norbuprenorphine-D3	6.752	5613	5645	0.9943	53.1231
Fentanyl	Fentanyl-D5	6.820	110350	106021	1.0408	49.2979
EDDP	EDDP-D3	6.950	983157	81906	12.0035	512.1427
Quetiapine	Quetiapine-D8	7.159	8417598	156860	53.6630	508.2490
Sufentanil	Sufentanil-D5	7.178	81077	69069	1.1738	50.5899
Cyclobenzaprine	Cyclobenzaprine-D3	7.232	884420	65359	13.5318	509.7967
Methadone	Methadone-D9	7.242	3417902	253209	13.4983	526.2618

12	CCC 1	
Resp Ratio	Final Con-	c
12.0984	507.9737	
9.4382	517.2543	
12 5515	E04 0114	

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Compound	131D Compound	K1	Kesponse	121D Kesh	Kesp Katio	rinai Conc
Fluoxetine	Fluoxetine-D6	7.304	1808969	149521	12.0984	507.9737
Oxazepam	Oxazepam-D5	7.308	1105349	117115	9.4382	517.2543
Sertraline	Sertraline-D3	7.345	839861	66913	12.5515	504.9114
Temazepam	Temazepam-D5	7.367	8572046	898148	9.5441	487.2657
Buprenorphine	Buprenorphine-D4	7.376	101614	35230	2.8843	46.7814
Nordiazepam	Nordiazepam-D5	7.434	3355104	182654	18.3686	504.9718
Diazepam	Diazepam-D5	7.490	4192388	294160	14.2521	524.9735



Batch Data Path C:\MassHunter\Data\2018\MD Quant\022018 MDQ P1 and P2 TS and SP\QuantResults\MDQ P1b 022018 TS.b.

Analysis Time2/26/2018 8:38 AMAnalyst NameISPUserReport Time2/26/2018 8:41 AMReporter NameISPUserLast Calib Update2/26/2018 8:38 AMBatch StateProcessed

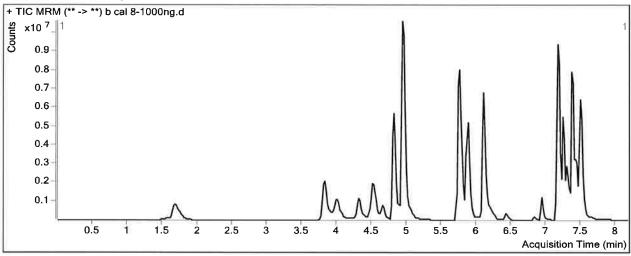
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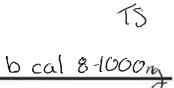
**Dilution** 1 **Acq Method** MD Quant Panel 1b 12-12-17.m

Position P1-H1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.688	5106375	166392	30.6889	994.3358
Dihydrocodeine	Dihydrocodeine-D6	3.837	4199213	254743	16.4841	945.5777
Naloxone	Naloxone-D5	4.010	5349614	273223	19.5796	1111.3288
Noroxycodone	Noroxycodone-D3	4.319	3791696	109384	34.6640	998.2783
Naltrexone	Naltrexone-D3	4.531	4854322	222911	21.7770	1007.6613
Acetyl Norfentanyl	Acetyl Norfentanyl-D5	4.663	1860446	582967	3.1913	116.4783
Naltrexol	Naltrexol-D3	4.810	15508864	623350	24.8799	994.6303
O dosmathyl tramadal	O decreative transported DC	4.938	40400000	1025620	22 1020	005 0270
O-desmethyl-tramadol	O-desmethyl-tramadol-D6		40498065	1825638	22.1830	985.9278
Ketamine	Ketamine-D4	5.759	26236877	1118545	23.4563	1003.1383
Norfentanyl	Norfentanyl-D5	5.802	2307337	995579	2.3176	106.0875
alpha-PVP	alpha-PVP-d8	6.107	15581832	667430	23.3460	1035.0695
Acetyl Fentanyl	Acetyl Fentanyl-D5	6.417	453795	313872	1.4458	95.1492
Norbuprenorphine	Norbuprenorphine-D3	6.752	11270	6232	1.8083	96.9831
Fentanyl	Fentanyl-D5	6.840	266714	120032	2.2220	104.6995
EDDP	EDDP-D3	6.950	2361164	100378	23.5227	1001.7519
Quetiapine	Quetiapine-D8	7.159	18170963	196939	92.2668	873.3642
Sufentanil	Sufentanil-D5	7.178	210412	88466	2.3784	102.3057
Cyclobenzaprine	Cyclobenzaprine-D3	7.232	1892761	72134	26.2394	987.6778
Methadone	Methadone-D9	7.242	8579454	319240	26.8746	1047.3037



Compound	<b>ISTD Compound</b>	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Fluoxetine	Fluoxetine-D6	7.304	3185420	133234	23.9084	1002.0827
Oxazepam	Oxazepam-D5	7.329	1913557	105647	18.1128	991.4692
Sertraline	Sertraline-D3	7.365	1536937	58459	26.2910	1056.6527
Temazepam	Temazepam-D5	7.387	15433704	760909	20.2832	1033.7947
Buprenorphine	Buprenorphine-D4	7.376	188254	27684	6.8002	106.1364
Nordiazepam	Nordiazepam-D5	7.455	5534315	144164	38.3890	1054.4534
Diazepam	Diazepam-D5	7.490	7706993	274160	28.1113	1034.9830