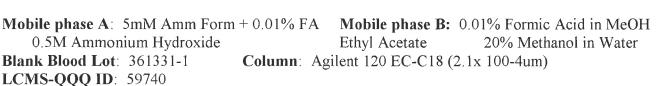
#### Worklist: 2673

LAB CASE	ITEM	TASK ID	DESCRIPTION
M2018-3648	1	126177	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
M2018-3650	1	126178	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
M2018-3794	1	126179	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
M2018-4043	2	126180	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2033	1	126181	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2115	1	126182	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2287	2	126183	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2328	1	126184	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2330	1	126185	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2332	1	126186	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2333	1	126187	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2337	1	126188	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2338	1	126189	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2339	1	126190	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2385	1	126191	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-2386	1	126192	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(

75 9/4/2018

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

Extraction Date:09/05/18Analyst:Sarah PicklePlate lot#:0530563Plate Expiration:05/21/19



#### Pre-Analytic:

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

#### Analytic:

- ☑ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Pipette 250μL blood (calibrated pipette) Pipette ID: #3 in wells of analytical (standards) plate.
- ⊠ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID: 067105
- ☑ 4. Pipette 250µL 00.5M ammonium hydroxide in wells of analytical plate.
- $\boxtimes$  5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- ⊠ 6. Transfer **300µL of blood+base** mixture to corresponding wells of SLE+ plate.
- ☑ 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). (Load at 85-100 PSI- Selector to the right) Manifold ID: 067104
- ⊠ 8. Wait 5 minutes.
- 9. Add 900uL ethyl acetate.
- $\boxtimes$  10. Wait 5 minutes.
- □ 11. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- ⊠ 12. Add 900uL ethyl acetate.
- $\boxtimes$  13. Wait 5 minutes.
- □ 14. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- I5. 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: <u>090518 MDQ P1 P2 SP</u> Batch Name: MDQ P1a, MDQ P1b
- $\boxtimes$  2. Make necessary changes to integration limits
- $\boxtimes$  3. Integration linear and R<sup>2</sup> values  $\ge 0.98$  for each analyte.
- For unknown samples and controls: response ratio within 20% of average of controls and standards, RT within +/-5% (tramadol RT +/-2%), S/N for primary transition >10 and secondary transitions >5.
- ☑ 5. Did all QCs pass for each analyte? Y / N \_\_\_\_\_\_ Add Control data to QC tracking spreadsheet.
- 6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS: Curve Range Limited: Amphetamine 10-1000, Diphenhydramine 5-500, Doxylamine 5-500, Lorazepam 10-1000, Norhydrocodone 10-1000 and calibrator 3 dropped for poor secondary peak shape, Promethazine 5-500, Tramadol 5-250, Venlafaxine 5-500, Zolpidem 5-500, Fentanyl 1-100, Methadone 5-500, Ketamine 5-500, Norfentanyl 1-100, O-desmethyl-tramadol 5-250, Quetiapine 5-250 Did Not Evaluate: Codeine, Benzoylecgonine, Buprenorphine, Dihydrocodeine, Norbuprenorphine

5

Case sample P2018-2113-1 from worklist 2680 ran with worklist 2673. Sarah	
Pickle acted as the primary analyst. I witnessed and approved of all actions and	
methods performed.	



# **Idaho State Police Forensic Services**

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

Analyst: Sarah Pickle Extraction Date: 09/05/18 Worklist Number: 2673

Reagent	Lot Number	Expiration Date	Date in Service	Date Out of Service	Initials
ToxBox Benzo/Opiate Quant Plate	0530563	05/21/19			
Negative Blood	361331-1		05/25/18		
Methanol External Control Solution	121217	12/12/18	12/12/17		
Blood External Control Solution	WS121217	12/12/18	12/12/17		
0.5M Ammonium Hydroxide	082818	02/29/19	08/28/18		
Formic Acid (LCMS Grade)	095180B		11/15/17		
Water (LCMS Grade)	181370		6/21/18		
Methanol (LCMS Grade)	177145		04/11/18		
Ammonium Formate (LCMS Grade)	A0287238		01/30/17		
Ammonium Hydroxide (ACS grade or better)	053200		08/03/07		
Ethyl Acetate (ACS grade or better)	100362		06/26/17		
20% LCMS Methanol in LCMS Water	082818		08/28/18		
5mM Ammonium Formate + 0.01% Formic Acid in Water (Mobile Phase A)	090518		09/05/18		
0.01% Formic Acid in Methanol (Mobile Phase B)	082818		08/28/18		
Needle Rinse75% LCMS MeOH in LCMS Water	090418		09/04/18		

#### Methanol External Control Solution (Lot: 121217)

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

Component	Source	Source Lot Number	Expiration Date	
Methanol (LCMS)	Fisher	172516		
Trazodone	Cerilliant	FN12151403	01/01/2020	
Ketamine	Cerilliant	FE01131504	02/01/2020	
Morphine	Cerilliant	FE08141515	11/01/2020	
Quetiapine	Cerilliant	FN02021502	02/01/2020	
Prepared:	12/12/17			
Prepared By:	Tamara Salazar			
Expires:	12/12/18			

Blood External Control Solution (Lot: WS121217) 50 ul of methanol external control solution was added to 9950 ul of blood.

Component	Source	Source Lot Number
Negative Blood	Hemostat	361331-3
Methanol External Control Solution		121217
Prepared:	12/12/17	
Prepared by:	Tamara Salazar	
Expires:	12/12/18	

#### 0.5M Ammonium Hydroxide (Lot: 082818)

Component	Source	Source Lot Number
Ammonium Hydroxide (ACS grade or better)	Fisher	053200
DI Water	-	-
Prepared:	08/28/18	
Prepared By:	Tamara Salazar	
Expires:	02/29/19	

#### 20% LCMS Methanol in LCMS Water (Lot: 082818)

Component	Source	Source Lot Number	
MeOH (LCMS Grade)	Fisher	177145	
Water (LCMS Grade)	Fisher	181370	
Prepared:	08/28/18		
Prepared By:	Tamara Salazar		

#### 5mM Ammonium Formate + 0.01% Formic Acid in Water (Lot: 090518)

Component	Source	Source Lot Number	
Ammonium Formate	Arcos Organics	A0287238	
LCMS Water	Fisher	181370	
Formic Acid	Fisher	095180B	
Prepared:	09/05/18		
Prepared By:	Sarah Pickle		

#### 0.01% Formic Acid in LCMS Methanol (Mobile Phase B) (Lot: 082818)

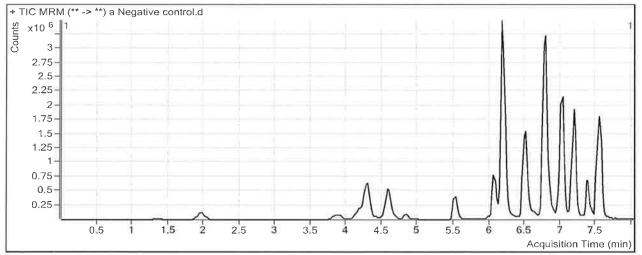
Component	Source	Source Lot Number	
Formic Acid	Fisher	095180B	
MeOH (LCMS Grade)	Fisher	177145	
Prepared:	08/28/18		
Prepared By:	Tamara Salazar		

#### Needle Rinse (75% LCMS MeOH in LCMS Water) (Lot: 090418)

Component	Source	Source Lot Number
MeOH (LCMS Grade)	Fisher	177145
Water (LCMS Grade)	Fisher	181370
Prepared:	09/04/18	
Prepared By:	Sarah Pickle	

Batch Data Path Analysis Time	C:\MassHunter\Data\2 9/6/2018 9:57 AM	018\MD Quant\09051 Analyst Name	.8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin ISPUser
Report Time	9/6/2018 2:41 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 9:56 AM	Batch State	Processed
Analysis Info Acq Time	2018-09-05 18:09	Data File	a Negative control.d
Sample Type	Sample	Sample Name	a Negative control.d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-D11	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram

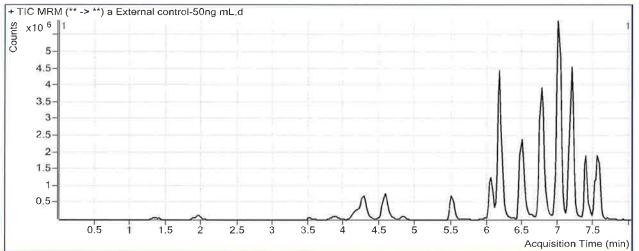


Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Amphetamine	Amphetamine-D11	4.303	600316	909718	0.6599	2.9674 510
Alprazolam	Alprazolam-D5	7,568	37858	4904550	0.0077	0.2023 <5

T5 \$

Batch Data Path	C:\MassHunter\Data\2	2018\MD Quant\09051	18 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin
Analysis Time	9/6/2018 9:57 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:41 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 9:56 AM	<b>Batch State</b>	Processed
Analysis Info			
Acq Time	2018-09-05 18:40	Data File	a External control-50ng mL.d
Sample Type	Sample	Sample Name	a External control-50ng mL.d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-C11	Sample Info	
Inj Vol	-1	Comment	AM 28; WS121217 50 ng trazodone, ketamine, morphine, quetiapine

#### Sample Chromatogram



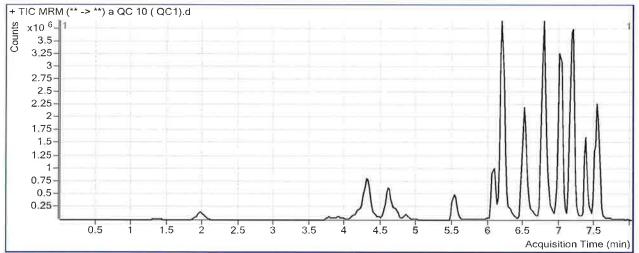
Results
---------

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	<b>Final Conc</b>
Morphine	Morphine-D6	1.348	271284	112964	2.4015	42.2259
Amphetamine	Amphetamine-D11	4.303	453500	1554036	0.2918	0.0000
Trazodone	Trazodone-D6	6.996	4497209	3546894	1.2679	45.9740

75

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\2 9/6/2018 9:57 AM 9/6/2018 2:41 PM 9/6/2018 9:56 AM	018\MD Quant\09051 Analyst Name Reporter Name Batch State	.8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin ISPUser ISPUser Processed
Analysis Info			
Acq Time	2018-09-05 19:43	Data File	a QC 10 ( QC1).d
Sample Type	QC	Sample Name	a QC 10 ( QC1).d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-H11	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results
---------

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.368	45851	94584	0.4848	9.6786
Hydromorphone	Hydromorphone-D6	1.989	176764	776046	0.2278	9.3268
Codeine	Codeine-D6	3.972	72751	333943	0.2179	
Amphetamine	Amphetamine-D11	4.323	1421133	1090741	1.3029	11.6606
Oxycodone	Oxycodone-D6	4.330	662779	3061278	0.2165	9.4670
Hydrocodone	Hydrocodone-D6	4.635	229670	1578415	0.1455	10.2262
Norhydrocodone	Norhydrocodone-D3	4.678	11527	392097	0.0294	10.6522
Methamphetamine	Methamphetamine-D11	4.702	545344	1480330	0.3684	9.2881
6-MAM	6-MAM-D6	4.849	6762	326752	0.0207	0.9687
Phentermine	Phentermine-D5	5.566	190642	2202813	0.0865	9.5885
Dextrorphan	Dextrorphan-D3	6.083	319556	3017847	0.1059	9.4351
7-aminoclonazepam	7-Aminoclonazepam-D4	6.174	382182	1752588	0.2181	9.6664
Tramadol	Tramadol-13C-D3	6.203	2265246	12337354	0.1836	10.1157
Metoprolol	Tramadol-13C-D3	6.322	185384	12337354	0.0150	9.2695
Doxylamine	Doxylamine-D5	6.522	1190188	7987046	0.1490	9.4513
Bupropion	Bupropion-D9	6.791	340692	1322808	0.2576	9.2795
Zolpidem	Zolpidem-D6	6.801	1778688	12137273	0.1465	9.0396
Meprobamate	Meprobamate-D7	6.873	162709	588286	0.2766	10.6956
Trazodone	Trazodone-D6	6.996	599176	2295519	0.2610	9.9861
Venlafaxine	Venlafaxine-D6	7.026	1727906	7469970	0.2313	9.8569

Samples Report MDQ1\_012\_a QC 10 ( QC1).d.xisx

\*\* Did not evaluate

Printed at: 2:41 PM on: 9/6/2018

75 Å

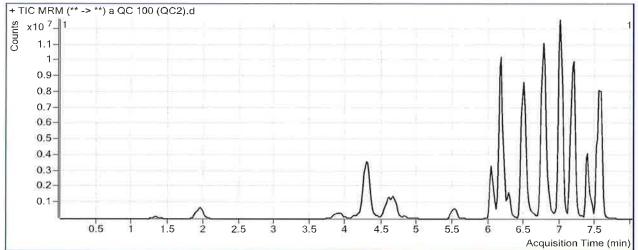
\*

# ISP FORENSICS - Pocatello Instrument # 59740

ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
- Citalopram-D6	7.139	654379	3396899	0.1926	9.7956
Dextromethorphan-D3	7.171	238246	1076368	0.2213	9.8448
Diphenhydramine-D3	7.194	1355963	7525072	0.1802	9.7339
Promethazine-D3	7.369	960215	3890729	0.2468	9.9124
Clonazepam-D4	7.405	163074	176131	0.9259	8.5138
a-hydroxyalprazolam-D5	7.481	53254	301466	0.1767	9.1626
Carisoprodol-D7	7.494	526645	2374713	0.2218	10.1328
Clonazepam-D4	7.523	59695	176131	0.3389	12.8354
Alprazolam-D5	7.548	1215145	4180829	0.2906	9.5042
	Citalopram-D6 Dextromethorphan-D3 Diphenhydramine-D3 Promethazine-D3 Clonazepam-D4 a-hydroxyalprazolam-D5 Carisoprodol-D7 Clonazepam-D4	Citalopram-D67.139Dextromethorphan-D37.171Diphenhydramine-D37.194Promethazine-D37.369Clonazepam-D47.405a-hydroxyalprazolam-D57.481Carisoprodol-D77.494Clonazepam-D47.523	Citalopram-D6       7.139       654379         Dextromethorphan-D3       7.171       238246         Diphenhydramine-D3       7.194       1355963         Promethazine-D3       7.369       960215         Clonazepam-D4       7.405       163074         a-hydroxyalprazolam-D5       7.481       53254         Carisoprodol-D7       7.494       526645         Clonazepam-D4       7.523       59695	Citalopram-D67.1396543793396899Dextromethorphan-D37.1712382461076368Diphenhydramine-D37.19413559637525072Promethazine-D37.3699602153890729Clonazepam-D47.405163074176131a-hydroxyalprazolam-D57.48153254301466Carisoprodol-D77.4945266452374713Clonazepam-D47.52359695176131	Citalopram-D67.13965437933968990.1926Dextromethorphan-D37.17123824610763680.2213Diphenhydramine-D37.194135596375250720.1802Promethazine-D37.36996021538907290.2468Clonazepam-D47.4051630741761310.9259a-hydroxyalprazolam-D57.481532543014660.1767Carisoprodol-D77.49452664523747130.2218Clonazepam-D47.523596951761310.3389

Batch Data Path	C:\MassHunter\Data\2	018\MD Quant\09051	18 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin
Analysis Time	9/6/2018 9:57 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:42 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 9:56 AM	Batch State	Processed
Analysis Info			
Acq Time	2018-09-05 21:17	Data File	a QC 100 (QC2).d
Sample Type	QC	Sample Name	a QC 100 (QC2).d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-G11	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



#### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.348	543223	87805	6.1867	106.4996
Hydromorphone	Hydromorphone-D6	1.949	2151820	778945	2.7625	93.0932
Godeine	Codeine-D6	3.912	831203	329971	2.5190	111.1827
Amphetamine	Amphetamine-D11	4.283	7811120	1001703	7.7978	99.4689
Oxycodone	Oxycodone-D6	4.290	8194126	3080041	2.6604	100.9211
Hydrocodone	Hydrocodone-D6	4.594	2728657	1622731	1.6815	92.4838
Norhydrocodone	Norhydrocodone-D3	4.638	130790	384208	0.3404	88.9167
Methamphetamine	Methamphetamine-D11	4.661	4795283	1106155	4.3351	96.8416
6-MAM	6-MAM-D6	4.829	79872	324340	0.2463	9.8063
Phentermine	Phentermine-D5	5.546	1971438	1814303	1.0866	91.4172
Dextrorphan	Dextrorphan-D3	6.043	3778731	2893556	1.3059	98.7875
7-aminoclonazepam	7-Aminoclonazepam-D4	6.134	4260181	1661470	2.5641	102.0565
Tramadol	Tramadol-13C-D3	6.180	24301806	13039751	1.8637	99.6213
Metoprolol	Tramadol-13C-D3	6.281	2121819	13039751	0.1627	92.8310
Doxylamine	Doxylamine-D5	6.483	14067075	7786028	1.8067	103.8354
Bupropion	Bupropion-D9	6.751	3116664	1084939	2.8727	82.3481
Zolpidem	Zolpidem-D6	6.779	20475374	12216902	1.6760	111.4189
Meprobamate	Meprobamate-D7	6.853	1854663	607904	3.0509	99.2580
Trazodone	Trazodone-D6	6.975	6645636	2138312	3.1079	111.7358
Venlafaxine	Venlafaxine-D6	7.006	18569344	7109597	2.6119	109.7850

Printed at: 2:42 PM on: 9/6/2018

Ø

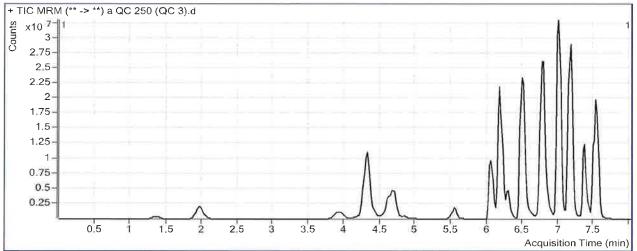
15



Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Citalopram	Citalopram-D6	7.139	6278708	2932249	2.1413	95.4996
Dextromethorphan	Dextromethorphan-D3	7.171	<b>2</b> 434624	914569	2.6620	98.0683
Diphenhydramine	Diphenhydramine-D3	7.194	13068145	6624458	1.9727	102.6424
Promethazine	Promethazine-D3	7.389	8204957	3080407	2.6636	97.2498
Clonazepam	Clonazepam-D4	7.425	1933577	158792	12.1768	92.9758
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	668076	262865	2.5415	103.5048
Carisoprodol	Carisoprodol-D7	7.534	5386553	2233456	2.4118	102.5336
Lorazepam	Clonazepam-D4	7.543	599301	158792	3.7741	71.9563
Alprazolam	Alprazolam-D5	7.568	12832067	3814399	3.3641	110.5504

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\20 9/6/2018 9:57 AM 9/6/2018 2:42 PM 9/6/2018 9:56 AM	18\MD Quant\09051 Analyst Name Reporter Name Batch State	8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin ISPUser ISPUser Processed
Analysis Info			
Acq Time	2018-09-05 23:54	Data File	a QC 250 (QC 3).d
Sample Type	QC	Sample Name	a QC 250 (QC 3).d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-F11	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



#### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Morphine	Morphine-D6	1.368	1880027	116034	16.2024	276.5713
Hydromorphone	Hydromorphone-D6	1.969	7287079	963620	7.5622	251.7129
Codeine	Codeine-D6	3.932	2764877	407581	6.7836	297.7655. 🗙 🛪
Amphetamine	Amphetamine-D11	4.303	24761961	1267872	19.5303	258.0863
Oxycodone	Oxycodone-D6	4.310	27778090	3935333	7.0586	265.5100
Hydrocodone	Hydrocodone-D6	4.615	8826707	1958935	4.5059	243.7351
Norhydrocodone	Norhydrocodone-D3	4.658	393149	419994	0.9361	238.8113
Methamphetamine	Methamphetamine-D11	4.702	17215663	1637448	10.5137	233.2170
6-MAM	6-MAM-D6	4.829	266639	402337	0.6627	26.1231
Phentermine	Phentermine-D5	5.546	7245810	2403040	3.0153	249.2267
Dextrorphan	Dextrorphan-D3	6.063	13393847	3911576	3.4242	256.5096
7-aminoclonazepam	7-Aminoclonazepam-D4	6.154	12691213	1952963	6.4984	256.9962
Tramadol	Tramadol-13C-D3	6.180	62633494	16493104	3.7976	202.6495
Metoprolol	Tramadol-13C-D3	6.302	6814834	16493104	0.4132	234.5433
Doxylamine	Doxylamine-D5	6.483	45956082	10550402	4.3559	248.9767
Bupropion	Bupropion-D9	6.751	10261526	1290186	7.9535	224.3120
Zolpidem	Zolpidem-D6	6.779	54090251	14528527	3,7230	248.4464
Meprobamate	Meprobamate-D7	6.853	5756222	709146	8.1171	260.9815
Trazodone	Trazodone-D6	6.975	22500042	2894248	7.7741	278.5088
Venlafa×ine	Venlafaxine-D6	7.006	53658300	9034076	5.9395	249.4700

Samples Report MDQ1\_024\_a QC 250 (QC 3).d.xlsx

\*\* Did not evaluate

Printed at: 2:42 PM on: 9/6/2018

D

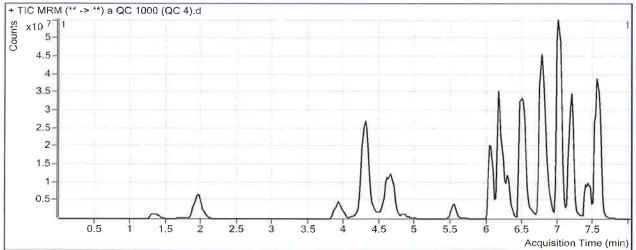
15

# FORENSICS - Pocatello Instrument # 59740 Multi-Drug Confirmatory Analysis Report 9 QC 750 **ISP FORENSICS - Pocatello Instrument # 59740**

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Citalopram	Citalopram-D6	7.139	21512936	3630195	5.9261	261.9644
Dextromethorphan	Dextromethorphan-D3	7.171	8017006	1213119	6.6086	240.7229
Diphenhydramine	Diphenhydramine-D3	7.194	38645476	8417585	4.5910	238.3537
Promethazine	Promethazine-D3	7.369	28808065	4251197	6.7765	245.8791
Clonazepam	Clonazepam-D4	7.405	6192645	184778	33.5140	253.1571
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.481	1999387	319237	6.2630	251.9679
Carisoprodol	Carisoprodol-D7	7.494	14068444	2128184	6.6105	279.6907
Lorazepam	Clonazepam-D4	7.523	2385316	184778	12.9091	229.1725
Alprazolam	Alprazolam-D5	7.548	33118698	3965995	8.3507	274.4931

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\2 9/6/2018 9:57 AM 9/6/2018 2:43 PM 9/6/2018 9:56 AM	018\MD Quant\09051 Analyst Name Reporter Name Batch State	8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin ISPUser ISPUser Processed
Analysis Info			
Acq Time	2018-09-06 02:32	Data File	a QC 1000 (QC 4).d
Sample Type	QC	Sample Name	a QC 1000 (QC 4).d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-E11	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	<b>Final Conc</b>
Morphine	Morphine-D6	1.348	7186509	106270	67.6251	1149.7496
Hydromorphone	Hydromorphone-D6	1.949	26089205	805067	32.4063	1072.7537
Codeine	Codeine-D6	3.912	9316996	341018	27.3211	1196.3119
Amphetamine	Amphetamine-D11	4.283	57533494	955989	60.1822	807.6787
Oxycodone	Oxycodone-D6	4.290	92001690	3513254	26.1870	981.3236
Hydrocodone	Hydrocodone-D6	4.594	31674899	1741749	18.1857	976.3244
Norhydrocodone	Norhydrocodone-D3	4.638	1397381	284861	4.9055	1237.6777
Methamphetamine	Methamphetamine-D11	4.682	42135652	939885	44.8307	990.6651
5-MAM	6-MAM-D6	4.829	1051557	362875	2.8979	113.6941
Phentermine	Phentermine-D5	5.546	19971155	1742680	11.4600	940.2058
Dextrorphan	Dextrorphan-D3	6.043	35235051	2511354	14.0303	1046.2317
7-aminoclonazepam	7-Aminoclonazepam-D4	6.154	35806447	1468427	24.3842	961.3634
Tramadol	Tramadol-13C-D3	6.180	105054874	12182718	8.6233	459.7405
Metoprolol	Tramadol-13C-D3	6.302	18910858	12182718	1.5523	879.0068
Doxylamine	Doxylamine-D5	6.483	98436455	8987428	10.9527	624:5802 🔆
Bupropion	Bupropion-D9	6.751	29218454	901733	32.4026	907.4406
Zolpidem	Zolpidem-D6	6.779	110335960	12014753	9.1834	613.9561
Meprobamate	Meprobamate-D7	6.873	21079411	597310	35.2906	1128,4134
Trazodone	Trazodone-D6	6.996	51046459	1918345	26.6096	951.7095
Venlafaxine	Venlafaxine-D6	7.006	94843731	7203148	13.1670	552.8546 💥

Samples Report MDQ1\_031\_a QC 1000 (QC 4).d.xlsx

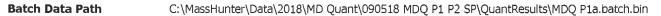
\*\* Did not evaluate \* outside cure range Printed at: 2:43 PM on: 9/6/2018



# ISP FORENSICS - Pocatello Instrument # 59740

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Citalopram	Citalopram-D6	7.159	30653679	1340707	22.8638	1006.9167
Dextromethorphan	Dextromethorphan-D3	7.191	10167771	317528	32.0217	1159.3234
Diphenhydramine	Diphenhydramine-D3	7.194	52725789	3204872	16,4518	853.1098 🔆
Promethazine	Promethazine-D3	7.389	23293305	819159	28.4356	1028.5905
Clonazepam	Clonazepam-D4	7.445	20468355	172427	118.7071	892.7130
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	8405114	313639	26.7987	1071.2024
Carisoprodol	Carisoprodol-D7	7.534	36233046	1531140	23.6641	999.2223
Lorazepam	Clonazepam-D4	7.543	8983513	172427	52.1003	903.6662
Alprazolam	Alprazolam-D5	7.568	66643390	2494309	26.7182	878.3609

75



Analyst Name

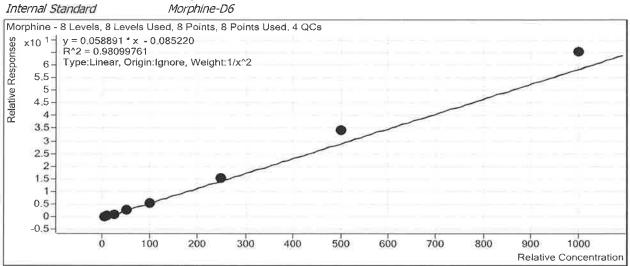
ISP TOX

Last Calib Update

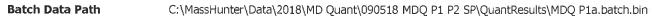
#### Target Compound Morphine

Morphine-D6

9/6/2018 9:56 AM



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	$\overline{\checkmark}$	5	5.3	105.2
a cal 2-10ng.d	2	$\checkmark$	10	9.9	99.5
a QC 10 ( QC1).d	2	¥	10	9.7	96.8
a cal 3-25ng.d	3	$\mathbf{\nabla}$	25	20.0	80.1
a cal 4-50ng.d	4	$\overline{\mathbf{V}}$	50	46.0	92.1
a cal 5-100ng.d	5	$\mathbf{\nabla}$	100	90.3	90.3
a QC 100 (QC2).d	5	$\checkmark$	100	106.5	106.5
a cal 6-250ng.d	6	$\checkmark$	250	261.5	104.6
a QC 250 (QC 3).d	6		250	276.6	110.6
a cal 7-500ng.d	7	$\checkmark$	500	586.9	117.4
a cal 8-1000ng.d	8	$\checkmark$	1000	1108.6	110.9
a QC 1000 (QC 4).d	8	$\checkmark$	1000	1149.7	115.0



**Analyst Name** 

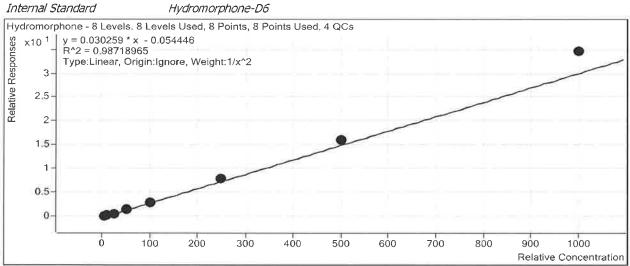
ISP TOX

#### Last Calib Update

Target Compound Hydromorphone

Hydromorphone-D6

9/6/2018 9:56 AM



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	V	5	5.4	107.2
a cal 2-10ng.d	2	V	10	9.3	93.1
a QC 10 ( QC1).d	2	$\square$	10	9.3	93.3
a cal 3-25ng.d	3	M	25	21.1	84.5
a cal 4-50ng.d	4	V	50	47.1	94.3
a cal 5-100ng.d	5	V	100	94.5	94.5
a QC 100 (QC2).d	5	V	100	93.1	93.1
a cal 6-250ng.d	6	$\square$	250	263.4	105.4
a QC 250 (QC 3).d	6	Ø	250	251.7	100.7
a cal 7-500ng.d	7	Ø	500	533.7	106.7
a cal 8-1000ng.d	8	$\checkmark$	1000	1144.1	114.4
a QC 1000 (QC 4).d	8	$\overline{\mathbf{v}}$	1000	1072.8	107.3



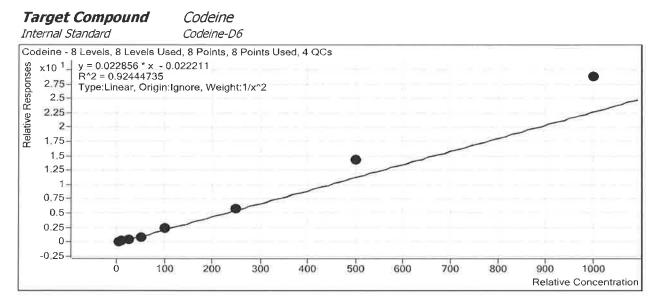
Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

#### 9/6/2018 9:56 AM

#### Analyst Name IS

ISP TOX



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a caí 1-5ng.d	1	$\checkmark$	5	5,5	110.2
a cal 2-10ng.d	2	$\mathbf{\nabla}$	10	10.0	100.4
a QC 10 ( QC1).d	2	V	10	10.5	105.0
a cal 3-25ng.d	3	V	25	15.2	60.7
a cal 4-50ng.d	4	$\overline{\mathbf{V}}$	50	32.5	65.1
a cal 5-100ng.d	5	$\overline{\mathbf{A}}$	100	110.1	110.1
a QC 100 (QC2).d	5	V	100	111.2	111.2
a cal 6-250ng.d	6	$\checkmark$	250	254.3	101.7
a QC 250 (QC 3).d	6	V	250	297.8	119.1
a cal 7-500ng.d	7	V	500	629.6	125.9
a cal 8-1000ng.d	8		1000	1257.9	125.8
a QC 1000 (QC 4).d	8	$\overline{\mathbf{M}}$	1000	1196.3	119.6

Did not evaluate codeine. p



**Batch Data Path** C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

**Analyst Name** 

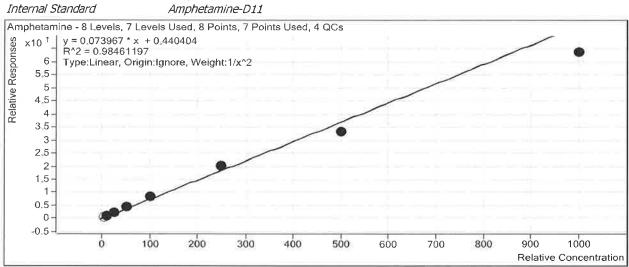
ISP TOX

Last Calib Update

Target Compound Amphetamine

Amphetamine-D11

9/6/2018 9:56 AM



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1		5	4.3	86.3
a cal 2-10ng.d	2	V	10	9.5	95.4
a QC 10 ( QC1).d	2		10	11.7	116.6
a cal 3-25ng.d	3	Ø	25	25.6	102.5
a cal 4-50ng.d	4	$\overline{\mathbf{M}}$	50	57.7	115.3
a cal 5-100ng.d	5	$\checkmark$	100	106.8	106.8
a QC 100 (QC2).d	5	$\checkmark$	100	99.5	99.5
a cal 6-250ng.d	6	$\checkmark$	250	265.2	106.1
a QC 250 (QC 3).d	6	$\overline{\mathbf{v}}$	250	258.1	103.2
a cal 7-500ng.d	7	$\checkmark$	500	441.9	88.4
a cal 8-1000ng.d	8	$\checkmark$	1000	855.3	85.5
a QC 1000 (QC 4).d	8	$\checkmark$	1000	807.7	80.8

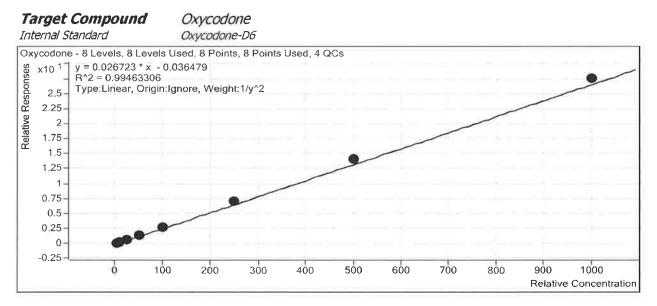


Last Calib Update

9/6/2018 9:56 AM

#### Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	$\square$	5	5.2	103.8
a cai 2-10ng.d	2	Ø	10	9.5	94.8
a QC 10 ( QC1).d	2	M	10	9.5	94.7
a cal 3-25ng.d	3	$\mathbf{M}$	25	22.5	89.9
a cal 4-50ng.d	4		50	50.8	101.7
a cal 5-100ng.d	5	$\checkmark$	100	99.7	99.7
a QC 100 (QC2).d	5	Ø	100	100.9	100.9
a cal 6-250ng.d	6	V	250	266.4	106.6
a QC 250 (QC 3).d	6	V	250	265.5	106.2
a cal 7-500ng.d	7	$\overline{\mathbf{N}}$	500	530.4	106.1
a cal 8-1000ng.d	8	$\square$	1000	1031.4	103.1
a QC 1000 (QC 4).d	8	Ø	1000	981.3	98.1

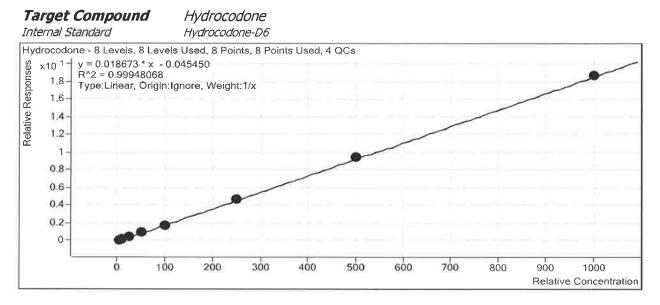


Last Calib Update

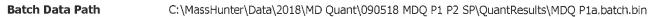
9/6/2018 9:56 AM

#### Analyst Name IS

ISP TOX



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1		5	6.1	121.4
a cai 2-10ng.d	2	V	10	9.6	96.3
a QC 10 ( QC1).d	2	$\mathbf{\nabla}$	10	10.2	102.3
a cal 3-25ng.d	3	M	25	21.8	87.0
a cal 4-50ng.d	4	$\mathbf{V}$	50	48.9	97.8
a cal 5-100ng.d	5	$\mathbf{\nabla}$	100	95.8	95.8
a QC 100 (QC2).d	5	$\checkmark$	100	92.5	92.5
a cal 6-250ng.d	6	$\mathbf{\nabla}$	250	251.7	100.7
a QC 250 (QC 3).d	6	$\mathbf{\nabla}$	250	243.7	97.5
a cal 7-500ng.d	7		500	504.4	100.9
a cal 8-1000ng.d	8	$\mathbf{N}$	1000	1001.8	100.2
a QC 1000 (QC 4).d	8	Ø	1000	976.3	97.6



Last Calib Update

9/6/2018 9:56 AM

**Analyst Name** 

ISP TOX

Target Compound Norhydrocodone Internal Standard Norhydrocodone-D3 Norhydrocodone - 8 Levels, 6 Levels Used, 8 Points, 6 Points Used, 4 QCs y = 0.003974 \* x - 0.012932 R^2 = 0.98371595 Relative Responses 4.5 Type:Linear, Origin:Ignore, Weight:1/x^2 4 3.5 3 2.5-2-1.5 1 0.5-0ò 100 200 300 400 500 600 700 800 1000 900 **Relative Concentration** 

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1		5	6.7	133.9
a cal 2-10ng.d	2	$\square$	10	10.4	104.0
a QC 10 ( QC1).d	2		10	10.7	106.5
a cal 3-25ng.d	3		25	22.4	89.4
a cai 4-50ng.d	4	$\overline{\mathbf{M}}$	50	42.2	84.3
a cal 5-100ng.d	5		100	86.1	86.1
a QC 100 (QC2).d	5	$\square$	100	88.9	88.9
a cal 6-250ng.d	6	$\checkmark$	250	270.4	108.2
a QC 250 (QC 3).d	6	V	250	238.8	95.5
a cal 7-500ng.d	7	V	500	526.0	105.2
a cal 8-1000ng.d	8	$\checkmark$	1000	1122.3	112.2
a QC 1000 (QC 4).d	8	M	1000	1237.7	123.8

Calibrator 3 dropped due to poor secondary peak. P



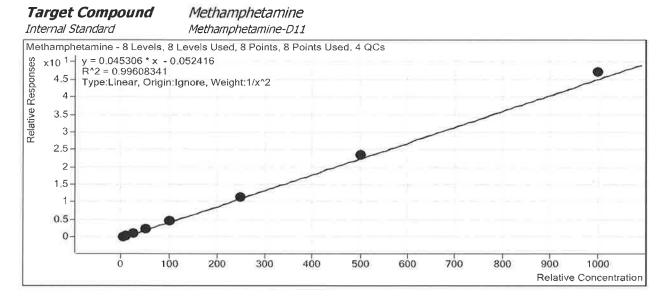
Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

9/6/2018 9:56 AM

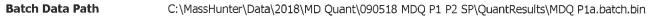
#### Analyst Name ISP

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	$\square$	5	5.1	102.1
a cai 2-10ng.d	2	Ø	10	10.1	100.9
a QC 10 ( QC1).d	2	$\checkmark$	10	9.3	92.9
a cal 3-25ng.d	3		25	21.8	87.1
a cal 4-50ng.d	4		50	49.6	99.1
a cal 5-100ng.d	5	$\square$	100	101.8	101.8
a QC 100 (QC2).d	5	V	100	96.8	96.8
a cal 6-250ng.d	6		250	254.0	101.6
a QC 250 (QC 3).d	6	V	250	233.2	93.3
a cal 7-500ng.d	7	V	500	517.3	103.5
a cal 8-1000ng.d	8	$\overline{\mathbf{v}}$	1000	1040.0	104.0
a QC 1000 (QC 4).d	8	Ø	1000	990.7	99.1

75



**Analyst Name** 

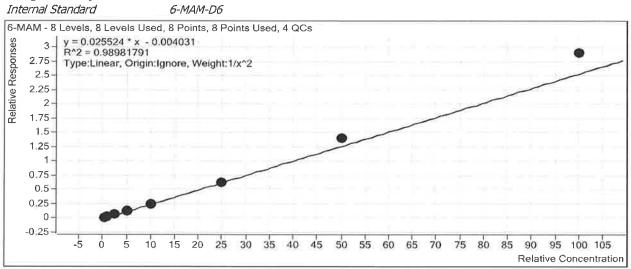
ISP TOX

Last Calib Update

#### 6-MAM Target Compound

6-MAM-D6

9/6/2018 9:56 AM



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	M	0.5	0.5	106.0
a cal 2-10ng.d	2	<b>N</b>	1	0.9	93.7
a QC 10 ( QC1).d	2	$\mathbf{\nabla}$	1	1.0	96.9
a cal 3-25ng.d	3		2.5	2.2	88.4
a cal 4-50ng.d	4	$\mathbf{\nabla}$	5	4.9	97.2
a cal 5-100ng.d	5	$\square$	10	9.3	93.5
a QC 100 (QC2).d	5	Ø	10	9.8	98.1
a cal 6-250ng.d	6	$\mathbf{V}$	25	24.5	98.0
a QC 250 (QC 3).d	6	M	25	26.1	104.5
a cal 7-500ng.d	7	$\mathbf{\nabla}$	50	54.9	109.8
a cal 8-1000ng.d	8	Ø	100	113.5	113.5
a QC 1000 (QC 4).d	8	Ø	100	113.7	113.7



Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

9/6/2018 9:56 AM

Analyst Name

ISP TOX

Target Compound Phentermine Internal Standard Phentermine-D5 Phentermine - 8 Levels. 8 Levels Used, 8 Points, 8 Points Used, 4 QCs y = 0.012221 \* x - 0.030640 R^2 = 0.99753150 Relative Responses x10<sup>1</sup> Type:Linear, Origin:Ignore, Weight:1/x 1.1-1-0.9 0.8 0.7 0.6-0.5 0.4 -0,3-0.2-0.1-0--0.1 500 600 100 200 300 400 700 800 900 ò 1000 **Relative** Concentration

Sample	Level	Enabled	Exp Conc	Final Conc	Ассигасу
a cal 1-5ng.d	1	V	5	6.0	119.3
a cal 2-10ng.d	2	Ø	10	10.1	101.1
a QC 10 ( QC1).d	2	$\mathbf{V}$	10	9.6	95.9
a cal 3-25ng.d	3	V	25	21.4	85.7
a cal 4-50ng.d	4	$\overline{\mathbf{v}}$	50	49.4	98.8
a cal 5-100ng.d	5		100	90.1	90.1
a QC 100 (QC2).d	5	Ŋ	100	91.4	91.4
a cal 6-250ng.d	6	$\checkmark$	250	251.1	100.5
a QC 250 (QC 3).d	6	V	250	249.2	99.7
a cal 7-500ng.d	7	$\mathbf{\nabla}$	500	533.4	106.7
a cal 8-1000ng.d	8	V	1000	978.5	97.8
a QC 1000 (QC 4).d	8	Ø	1000	940.2	94.0



**Batch Data Path** C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Analyst Name

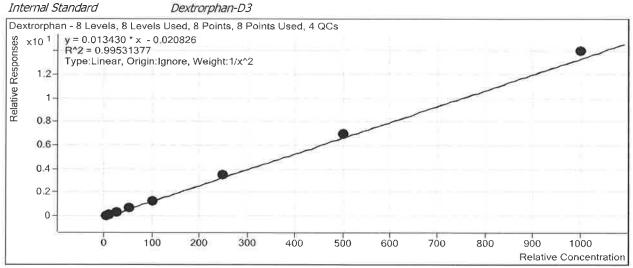
ISP TOX

Last Calib Update

Target Compound Dextrorphan

Dextrorphan-D3

9/6/2018 9:56 AM



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	$\checkmark$	5	5.3	105.2
a cal 2-10ng.d	2	M	10	9.4	94.0
a QC 10 ( QC1).d	2	$\overline{\mathbf{M}}$	10	9.4	94.4
a cal 3-25ng.d	3	V	25	22.3	89.0
a cal 4-50ng.d	4	V	50	49.4	98.8
a cal 5-100ng.d	5	V	100	99.2	99.2
a QC 100 (QC2).d	5	V	100	98.8	98.8
a cał 6-250ng.d	6	$\checkmark$	250	262.4	104.9
a QC 250 (QC 3).d	6	$\mathbf{\nabla}$	250	256.5	102.6
a cal 7-500ng.d	7	$\square$	500	523.3	104.7
a cal 8-1000ng.d	8	V	1000	1041,6	104.2
a QC 1000 (QC 4).d	8		1000	1046.2	104.6



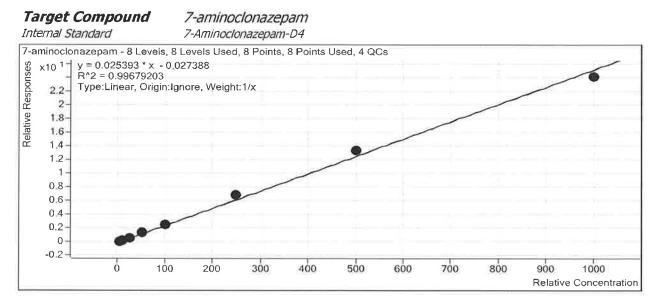
Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

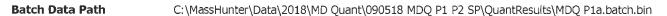
9/6/2018 9:56 AM

#### Analyst Name ISI

ISP TOX



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	V	5	4.7	95.0
a cal 2-10ng.d	2	V	10	9.3	93.3
a QC 10 ( QC1).d	2	V	10	9.7	96.7
a cal 3-25ng.d	3	Ø	25	23.9	95.5
a cal 4-50ng.d	4	$\mathbf{N}$	50	53.3	106.6
a cal 5-100ng.d	5	Ø	100	101.2	101.2
a QC 100 (QC2).d	5		100	102.1	102.1
a cal 6-250ng.d	6	$\checkmark$	250	270.2	108.1
a QC 250 (QC 3).d	6	V	250	257.0	102.8
a cal 7-500ng.d	7	V	500	526.0	105.2
a cal 8-1000ng.d	8	Z	1000	951.3	95.1
a QC 1000 (QC 4).d	8	Ø	1000	961.4	96.1



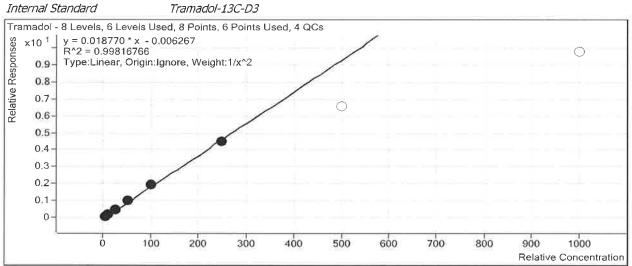
**Analyst Name** 

ISP TOX

#### Last Calib Update

#### Target CompoundTramadol

9/6/2018 9:56 AM



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1		5	5.0	100.2
a cal 2-10ng.d	2		10	10.0	99.6
a QC 10 ( QC1).d	2		10	10.1	101.2
a cal 3-25ng.d	3	$\checkmark$	25	24.3	97.2
a cal 4-50ng.d	4	V	50	52.7	105.3
a cal 5-100ng.d	5	V	100	102.1	102.1
a QC 100 (QC2).d	5	V	100	99.6	99.6
a cal 6-250ng.d	6	V	250	238.8	95.5
a QC 250 (QC 3).d	6	V	250	202.6	81.1
a cal 7-500ng.d	7		500	351.5	70.3
a cal 8-1000ng.d	8		1000	521.5	52.2
a QC 1000 (QC 4).d	8		1000	459.7	46.0

Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

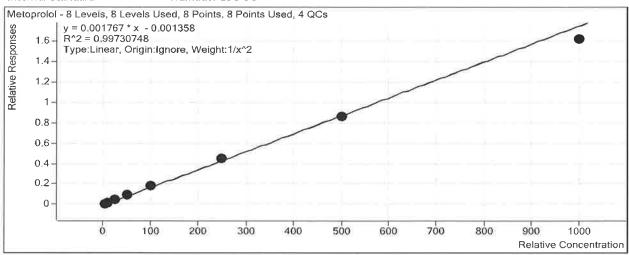
9/6/2018 9:56 AM

#### Analyst Name ISF

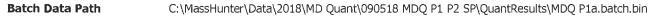
ISP TOX

75

Target CompoundMetoprololInternal StandardTramadol-13C-D3



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	$\overline{\mathbf{A}}$	5	4.9	98.7
a cal 2-10ng.d	2	V	10	10.2	101.7
a QC 10 ( QC1).d	2	V	10	9.3	92.7
a cal 3-25ng.d	3	V	25	24.6	98.3
a cal 4-50ng.d	4	$\mathbf{V}$	50	53.7	107.3
a cal 5-100ng.d	5	Q	100	101.5	101.5
a QC 100 (QC2).d	5	V	100	92.8	92.8
a cal 6-250ng.d	6	$\mathbf{N}$	250	257.1	102.8
a QC 250 (QC 3).d	6	V	250	234.5	93.8
a cal 7-500ng.d	7	Ø	500	489.0	97.8
a cal 8-1000ng.d	8	$\mathbf{\nabla}$	1000	918.8	91.9
a QC 1000 (QC 4).d	8	$\mathbf{\nabla}$	1000	879.0	87.9



**Analyst Name** 

4

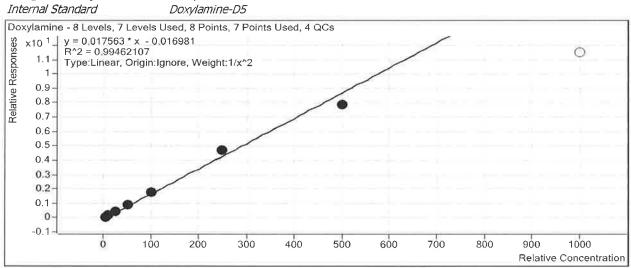
ISP TOX

Last Calib Update

#### Target Compound Doxylamine

Doxylamine-D5

9/6/2018 9:56 AM



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	<b>∑</b>	5	5.0	99.1
a cal 2-10ng.d	2	V	10	10.3	102.9
a QC 10 ( QC1).d	2	$\checkmark$	10	9.5	94.5
a cal 3-25ng.d	3		25	23.4	93.7
a cal 4-50ng.d	4	$\checkmark$	50	52.8	105.6
a cal 5-100ng.d	5	$\mathbf{V}$	100	101.4	101.4
a QC 100 (QC2).d	5	$\mathbf{\nabla}$	100	103.8	103.8
a cal 6-250ng.d	6	Ø	250	268.0	107.2
a QC 250 (QC 3).d	6	V	250	249.0	99.6
a cal 7-500ng.d	7	V	500	450.5	90.1
a cal 8-1000ng.d	8		1000	654.7	65.5
a QC 1000 (QC 4).d	8	$\square$	1000	624.6	62.5



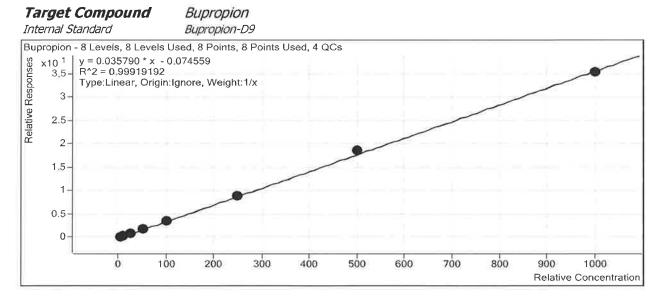
Last Calib Update

## 9/6/2018 9:56 AM



ISP TOX

15



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	V	5	5.6	111.2
a cai 2-10ng.d	2	$\mathbf{N}$	10	10.0	100.4
a QC 10 ( QC1).d	2	R	10	9.3	92.8
a cal 3-25ng.d	3	V	25	23.0	92.0
a cal 4-50ng.d	4	$\square$	50	48.0	95.9
a cal 5-100ng.d	5	V	100	99.5	99.5
a QC 100 (QC2).d	5	V	100	82.3	82.3
a cal 6-250ng.d	6	$\checkmark$	250	245.0	98.0
a QC 250 (QC 3).d	6		250	224.3	89.7
a cal 7-500ng.d	7	$\overline{\mathbf{V}}$	500	521.0	104.2
a cal 8-1000ng.d	8	$\overline{\mathbf{v}}$	1000	988.0	98.8
a QC 1000 (QC 4).d	8		1000	907.4	90.7



Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

**Analyst Name** 

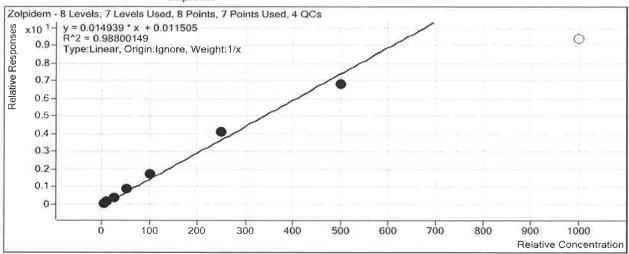
ISP TOX

Last Calib Update

# Target Compound Zolpidem

9/6/2018 9:56 AM

Internal Standard Zolpidem-D6



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	$\square$	5	4.1	81.6
a cal 2-10ng.d	2	V	10	8.9	88.6
a QC 10 ( QC1).d	2	$\mathbf{A}$	10	9.0	90.4
a cal 3-25ng.d	3	V	25	24.7	98.8
a cal 4-50ng.d	4	V	50	58.0	116.1
a cai 5-100ng.d	5		100	114.1	114.1
a QC 100 (QC2).d	5	$\overline{\mathbf{V}}$	100	111.4	111.4
a cal 6-250ng.d	6	$\checkmark$	250	274.3	109.7
a QC 250 (QC 3).d	6	V	250	248.4	99.4
a cal 7-500ng.d	7	$\checkmark$	500	455.9	91.2
a cal 8-1000ng.d	8		1000	627.7	62.8
a QC 1000 (QC 4).d	8		1000	614.0	61.4

-	1
15	

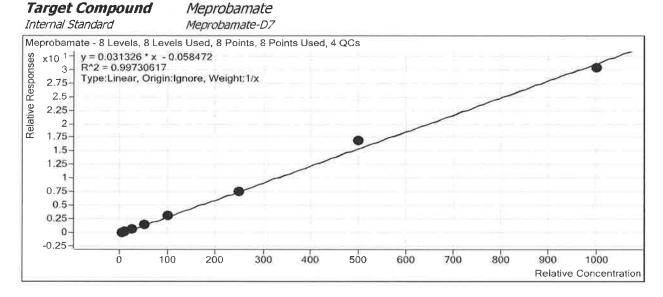
Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

late 9/6/2018 9:56 AM

#### Analyst Name I

ISP TOX



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	¥	5	5.5	109.2
a cal 2-10ng.d	2	$\mathbf{V}$	10	9.2	92.1
a QC 10 ( QC1).d	2	V	10	10.7	107.0
a cal 3-25ng.d	3	V	25	24.8	99.3
a cal 4-50ng.d	4	$\mathbf{\nabla}$	50	48.6	97.2
a cal 5-100ng.d	5	$\overline{\checkmark}$	100	100.3	100.3
a QC 100 (QC2).d	5	V	100	99.3	99.3
a cal 6-250ng.d	6	$\checkmark$	250	242.1	96.8
a QC 250 (QC 3).d	6		250	261.0	104.4
a cal 7-500ng.d	7	$\overline{\mathbf{v}}$	500	541.2	108.2
a cal 8-1000ng.d	8		1000	968.4	96.8
a QC 1000 (QC 4).d	8		1000	1128.4	112.8



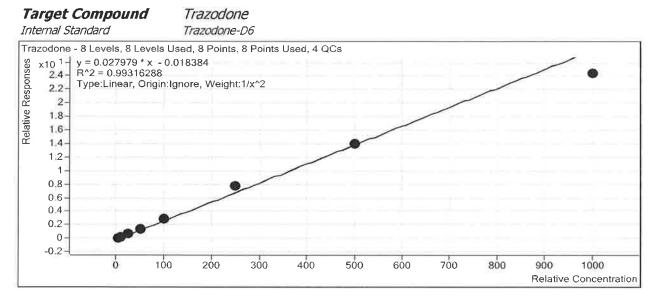
Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

9/6/2018 9:56 AM

#### Analyst Name

ISP TOX



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	Ø	5	5.1	101.2
a cal 2-10ng.d	2	V	10	9.9	98.6
a QC 10 ( QC1).d	2		10	10.0	99.9
a cal 3-25ng.d	3		25	23.7	94.6
a cal 4-50ng.d	4	$\square$	50	50.5	101.1
a cal 5-100ng.d	5	$\square$	100	106.4	106.4
a QC 100 (QC2).d	5	Ø	100	111.7	111.7
a cal 6-250ng.d	6	$\checkmark$	250	277.5	111.0
a QC 250 (QC 3).d	6	Q	250	278.5	111.4
a cal 7-500ng.d	7	V	500	500.4	100.1
a cal 8-1000ng.d	8		1000	870.4	87.0
a QC 1000 (QC 4).d	8		1000	951.7	95.2



Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

**Analyst Name** 

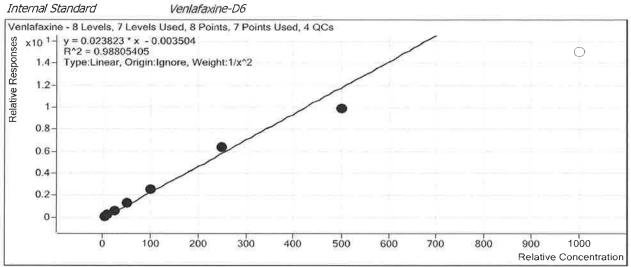
ISP TOX

Last Calib Update

Target Compound

9/6/2018 9:56 AM

Venlafaxine Venlafaxine-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1		5	5.0	100.1
a cal 2-10ng.d	2	M	10	10.0	100.1
a QC 10 ( QC1).d	2	M	10	9.9	98.6
a cal 3-25ng.d	3	V	25	23.2	92.8
a cal 4-50ng.d	4	Ø	50	54.9	109.8
a cal 5-100ng.d	5	$\square$	100	107.4	107.4
a QC 100 (QC2).d	5	Ø	100	109.8	109.8
a cal 6-250ng.d	6	$\checkmark$	250	266.1	106.4
a QC 250 (QC 3).d	6	$\checkmark$	250	249.5	99.8
a cal 7-500ng.d	7	$\checkmark$	500	417.0	83.4
a cal 8-1000ng.d	8		1000	631.2	63.1
a QC 1000 (QC 4).d	8		1000	552.9	55.3

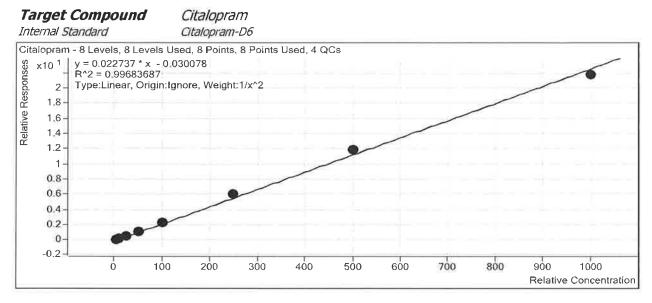


Last Calib Update

# 9/6/2018 9:56 AM



ISP TOX



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	$\overline{\mathbf{A}}$	5	5.1	103.0
a cal 2-10ng.d	2	V	10	9.7	96.6
a QC 10 ( QC1).d	2	V	10	9.8	98.0
a cal 3-25ng.d	3	V	25	23.0	91.9
a cal 4-50ng.d	4	$\square$	50	50.9	101.7
a cal 5-100ng.d	5	$\square$	100	99.9	99.9
a QC 100 (QC2).d	5	Ø	100	95. <b>5</b>	95.5
a cal 6-250ng.d	6	$\checkmark$	250	264.1	105.6
a QC 250 (QC 3).d	6	V	250	262.0	104.8
a cal 7-500ng.d	7	$\checkmark$	500	527.2	105.4
a cal 8-1000ng.d	8	$\mathbf{\nabla}$	1000	958.2	95.8
a QC 1000 (QC 4).d	8		1000	1006,9	100.7

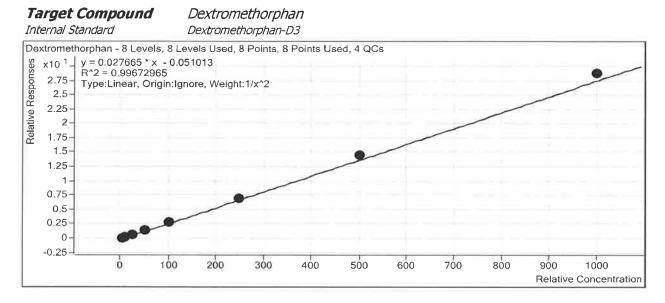


Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

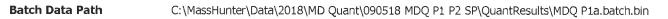
9/6/2018 9:56 AM

#### Analyst Name IS



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	$\square$	5	5.2	103.6
a cal 2-10ng.d	2		10	9.7	96.7
a QC 10 ( QC1).d	2	$\checkmark$	10	9.8	98.4
a cal 3-25ng.d	3	V	25	22.4	89.8
a cal 4-50ng.d	4	$\checkmark$	50	49.8	99.5
a cal 5-100ng.d	5	$\checkmark$	100	100.4	100.4
a QC 100 (QC2).d	5	$\mathbf{\nabla}$	100	98.1	98.1
a cal 6-250ng.d	6	$\square$	250	251.6	100.6
a QC 250 (QC 3).d	6		250	240.7	96.3
a cal 7-500ng.d	7	$\checkmark$	500	526.6	105.3
a cal 8-1000ng.d	8	$\checkmark$	1000	1039.8	104.0
a QC 1000 (QC 4).d	8	V	1000	1159.3	115.9





Last Calib Update

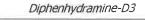
Internal Standard

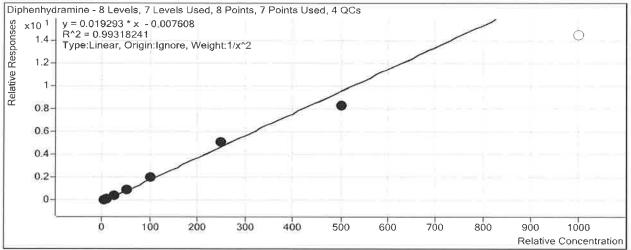
9/6/2018 9:56 AM

#### **Analyst Name** ISP TOX

75 À

Target Compound Diphenhydramine





Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	M	5	5.0	99.8
a cal 2-10ng.d	2	$\checkmark$	10	10.0	100.0
a QC 10 ( QC1).d	2	V	10	9.7	97.3
a cal 3-25ng.d	3	Ø	25	24.4	97.6
a cal 4-50ng.d	4	$\mathbf{\nabla}$	50	51.6	103.2
a cal 5-100ng.d	5	$\checkmark$	100	107.2	107.2
a QC 100 (QC2).d	5		100	102.6	102.6
a cal 6-250ng.d	6	$\overline{\mathbf{A}}$	250	264.9	106.0
a QC 250 (QC 3).d	6	$\overline{\mathbf{v}}$	250	238.4	95.3
a cal 7-500ng.d	7	$\checkmark$	500	430.9	86.2
a cal 8-1000ng.d	8		1000	747.3	74.7
a QC 1000 (QC 4).d	8	Ø	1000	853.1	85.3

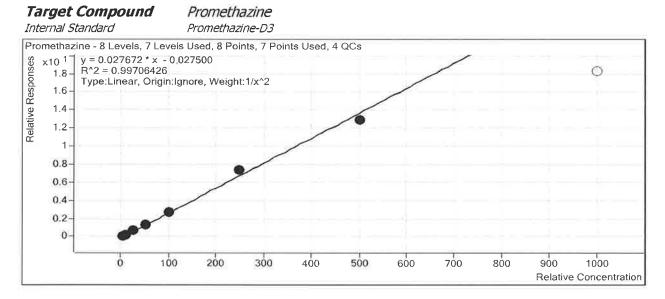


Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

9/6/2018 9:56 AM

#### Analyst Name I



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1		5	5.1	101.9
a cal 2-10ng.d	2	$\checkmark$	10	9.6	95.9
a QC 10 ( QC1).d	2	$\square$	10	9.9	99.1
a cal 3-25ng.d	3	Ø	25	24.9	99.7
a cal 4-50ng.d	4	V	50	50.6	101.2
a cal 5-100ng.d	5	$\square$	100	100.8	100.8
a QC 100 (QC2).d	5	$\checkmark$	100	97.2	97.2
a cal 6-250ng.d	6	$\checkmark$	250	268.7	107.5
a QC 250 (QC 3).d	6	$\square$	250	245.9	98.4
a cal 7-500ng.d	7	$\overline{\mathbf{V}}$	500	465.3	93.1
a cal 8-1000ng.d	8		1000	661.2	66.1
a QC 1000 (QC 4).d	8	Ø	1000	1028.6	102.9

Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

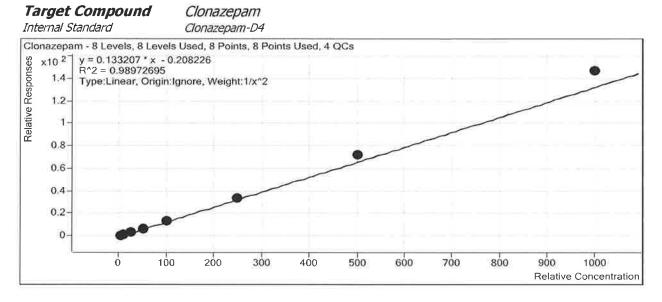
Last Calib Update

9/6/2018 9:56 AM

#### Analyst Name ISP

ISP TOX

75



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	M	5	5.4	108.0
a cal 2-10ng.d	2	$\square$	10	8.9	88.6
a QC 10 ( QC1).d	2	M	10	8.5	85.1
a cal 3-25ng.d	3		25	23.1	92.5
a cal 4-50ng.d	4	$\square$	50	44.7	89.4
a cal 5-100ng.d	5		100	103.1	103.1
a QC 100 (QC2).d	5	Ŋ	100	93.0	93.0
a cal 6-250ng.d	6	V	250	250.1	100.0
a QC 250 (QC 3).d	6	M	250	253.2	101.3
a cal 7-500ng.d	7	M	500	540.8	108.2
a cal 8-1000ng.d	8		1000	1102.7	110.3
a QC 1000 (QC 4).d	8	$\square$	1000	892.7	89.3

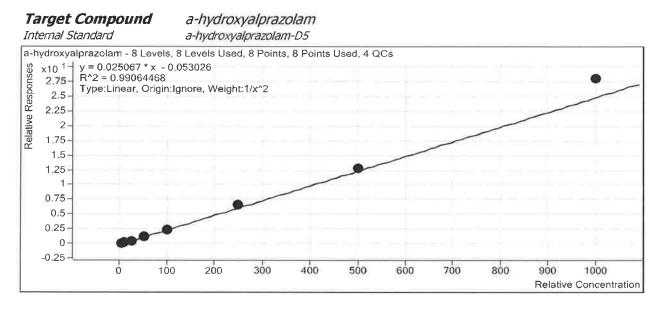


#### Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

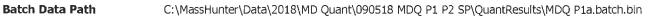
Last Calib Update

9/6/2018 9:56 AM

Analyst Name



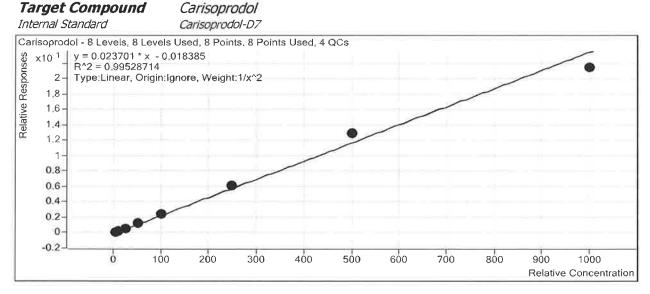
Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	M	5	5.3	105.2
a cal 2-10ng.d	2	Ø	10	9.6	96.2
a QC 10 ( QC1).d	2	$\square$	10	9.2	91.6
a cal 3-25ng.d	3	V	25	21.3	85.4
a cai 4-50ng.d	4	$\mathbf{\nabla}$	50	48.7	97.3
a cal 5-100ng.d	5	$\checkmark$	100	94.5	94.5
a QC 100 (QC2).d	5	$\square$	100	103.5	103.5
a cal 6-250ng.d	6	V	250	268,7	107.5
a QC 250 (QC 3).d	6	V	250	252.0	100.8
a cal 7-500ng.d	7	$\checkmark$	500	510.3	102.1
a cal 8-1000ng.d	8	$\square$	1000	1120.2	112.0
a QC 1000 (QC 4).d	8	V	1000	1071.2	107.1



Last Calib Update

9/6/2018 9:56 AM

Analyst Name



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	$\square$	5	5.1	101.2
a cal 2-10ng.d	2	Ø	10	10.0	99.9
a QC 10 ( QC1).d	2		10	10.1	101.3
a cal 3-25ng.d	3	Ø	25	23.1	92.6
a cal 4-50ng.d	4		50	51.0	102.1
a cal 5-100ng.d	5	V	100	100.2	100.2
a QC 100 (QC2).d	5	V	100	102.5	102.5
a cal 6-250ng.d	6	V	250	259.9	104.0
a QC 250 (QC 3).d	6	V	250	279.7	111.9
a cal 7-500ng.d	7		500	546.7	109.3
a cal 8-1000ng.d	8	$\checkmark$	1000	907.3	90.7
a QC 1000 (QC 4).d	8	V	1000	999.2	99.9

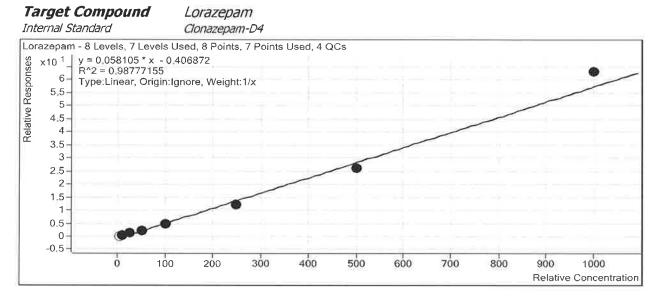


Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

#### 9/6/2018 9:56 AM

#### Analyst Name



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1		5	10.0	199.9
a cal 2-10ng.d	2	V	10	12.8	127.7
a QC 10 ( QC1).d	2	$\square$	10	12.8	128.4
a cal 3-25ng.d	3		25	27.9	111.7
a cal 4-50ng.d	4	$\square$	50	44.2	88.4
a cal 5-100ng.d	5	V	100	85.6	85.6
a QC 100 (QC2).d	5		100	72.0	72.0
a cal 6-250ng.d	6	$\checkmark$	250	213.8	85.5
a QC 250 (QC 3).d	6		250	229.2	91.7
a cal 7-500ng.d	7		500	460.0	92.0
a cal 8-1000ng.d	8	V	1000	1090.7	109.1
a QC 1000 (QC 4).d	8	V	1000	903.7	90.4

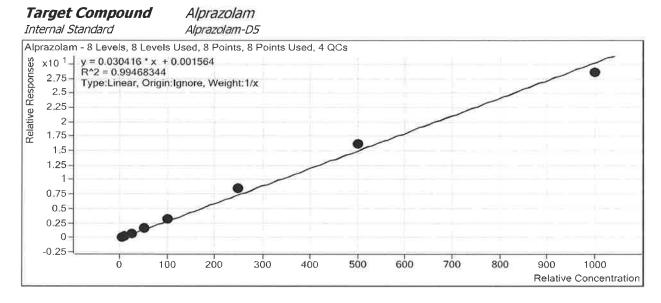


C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin

Last Calib Update

9/6/2018 9:56 AM

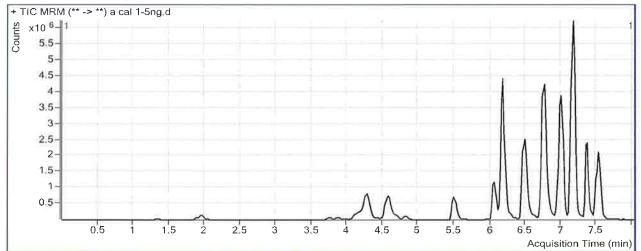
#### Analyst Name



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
a cal 1-5ng.d	1	V	5	4.5	90.8
a cai 2-10ng.d	2	V	10	9.4	93.8
a QC 10 ( QC1).d	2	$\mathbf{V}$	10	9.5	95.0
a cal 3-25ng.d	3	V	25	23.5	94.0
a cal 4-50ng.d	4	$\overline{\mathbf{A}}$	50	53.7	107.4
a cal 5-100ng.d	5	$\blacksquare$	100	102.9	102.9
a QC 100 (QC2).d	5	V	100	110.6	110.6
a cal 6-250ng.d	6		250	278.6	111.4
a QC 250 (QC 3).d	6	V	250	274.5	109.8
a cal 7-500ng.d	7	$\overline{\mathbf{N}}$	500	529.8	106.0
a cal 8-1000ng.d	8		1000	937.6	93.8
a QC 1000 (QC 4).d	8	Ø	1000	878.4	87.8

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\2 9/6/2018 9:57 AM 9/6/2018 2:40 PM 9/6/2018 9:56 AM	018\MD Quant\09051 Analyst Name Reporter Name Batch State	8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin ISPUser ISPUser Processed
Analysis Info			
Acq Time	2018-09-05 13:25	Data File	a cal 1-5ng.d
Sample Type	Calibration	Sample Name	a cal 1-5ng.d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-H12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.368	24403	108661	0.2246	5.2606
Hydromorphone	Hydromorphone-D6	1.969	94251	875180	0.1077	5,3583
Codeine	Codeine-D6	3.952	41035	395486	0.1038	5.5113
Amphetamine	Amphetamine-D11	4.303	1137923	1498212	0.7595	4.3143
Oxycodone	Oxycodone-D6	4.310	350778	3432615	0.1022	5.1892
Hydrocodone	Hydrocodone-D6	4.615	124362	1832870	0.0679	6.0676
Norhydrocodone	Norhydrocodone-D3	4.638	6597	482274	0.0137	6.6966
Methamphetamine	Methamphetamine-D11	4.682	400007	2237337	0.1788	5.1031
6-MAM	6-MAM-D6	4.829	3677	387464	0.0095	0.5298
Phentermine	Phentermine-D5	5.546	133827	3166385	0.0423	5.9654
Dextrorphan	Dextrorphan-D3	6.043	200699	4030099	0.0498	5.2587
7-aminoclonazepam	7-Aminoclonazepam-D4	6.154	185679	1991784	0.0932	4.7498
Tramadol	Tramadol-13C-D3	6.180	1335033	15208146	0.0878	5.0106
Metoprolol	Tramadol-13C-D3	6.302	111980	15208146	0.0074	4.9340
Doxylamine	Doxylamine-D5	6.502	735410	10493008	0.0701	4.9573
Bupropion	Bupropion-D9	6.751	452050	3632344	0.1245	5.5605
Zolpidem	Zolpidem-D6	6.779	943347	13023197	0.0724	4.0786
Meprobamate	Meprobamate-D7	6.853	83074	737882	0.1126	5.4604
Trazodone	Trazodone-D6	6.996	502906	4083624	0.1232	5.0586
Venlafaxine	Venlafa×ine-D6	7.006	1147033	9915482	0.1157	5.0030

Samples Report MDQ1\_000\_a cal 1-5ng.d.xlsx

Printed at: 2:40 PM on: 9/6/2018

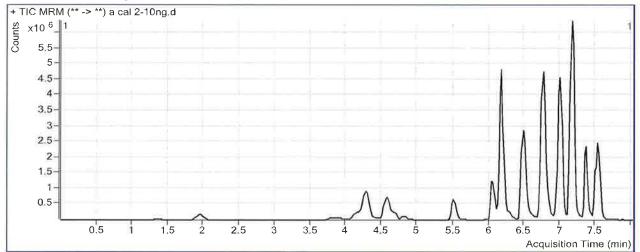
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Citalopram	Citalopram-D6	7.139	497770	5721411	0.0870	5.1494
Dextromethorphan	Dextromethorphan-D3	7.171	182575	1977765	0.0923	5.1808
Diphenhydramine	Diphenhydramine-D3	7.174	1165556	13145911	0.0887	4.9898
Promethazine	Promethazine-D3	7.369	796763	7023570	0.1134	5.0933
Clonazepam	Clonazepam-D4	7.405	95899	187623	0.5111	5.4003
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.481	24181	306970	0.0788	5.2579
Carisoprodol	Carisoprodol-D7	7.494	270580	2664441	0.1016	5.0604
Lorazepam	Clonazepam-D4	7.523	32609	187623	0.1738	9.9936
Alprazolam	Alprazolam-D5	7.548	651426	4666242	0.1396	4.5383

75

1

Batch Data Path	C:\MassHunter\Data\2	018\MD Quant\09051	.8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin
Analysis Time	9/6/2018 9:57 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:40 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 9:56 AM	Batch State	Processed
Analysis Info			
Acq Time	2018-09-05 13:57	Data File	a cal 2-10ng.d
Sample Type	Calibration	Sample Name	a cal 2-10ng.d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-G12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Resu	ts
------	----

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Morphine	Morphine-D6	1.368	51376	102651	0.5005	9.9456
Hydromorphone	Hydromorphone-D6	1.969	198794	875087	0.2272	9.3068
Codeine	Codeine-D6	3.892	83268	401823	0.2072	10.0382
Amphetamine	Amphetamine-D11	4.303	1596631	1393292	1.1459	9.5385
Oxycodone	Oxycodone-D6	4.310	735537	3393488	0.2167	9.4762
Hydrocodone	Hydrocodone-D6	4.594	249250	1854130	0.1344	9.6330
Norhydrocodone	Norhydrocodone-D3	4.658	14178	499466	0.0284	10.3973
Methamphetamine	Methamphetamine-D11	4.682	702604	1736561	0.4046	10.0872
6-MAM	6-MAM-D6	4.849	7425	373530	0.0199	0.9368
Phentermine	Phentermine-D5	5.546	251683	2708757	0.0929	10.1097
Dextrorphan	Dextrorphan-D3	6.043	403581	3827130	0.1055	9.4026
7-aminoclonazepam	7-Aminoclonazepam-D4	6.154	403100	1923871	0.2095	9.3300
Tramadol	Tramadol-13C-D3	6.180	2729875	15111357	0.1807	9.9581
Metoprolol	Tramadol-13C-D3	6.302	251193	15111357	0.0166	10.1729
Doxylamine	Doxylamine-D5	6.502	1672775	10217171	0.1637	10.2887
Bupropion	Bupropion-D9	6.751	875794	3075383	0.2848	10.0401
Zolpidem	Zolpidem-D6	6.779	1978084	13751940	0.1438	8.8584
Meprobamate	Meprobamate-D7	6.853	172669	750116	0.2302	9.2147
Trazodone	Trazodone-D6	6.996	1011469	3926197	0.2576	9.8646
Venlafaxine	Venlafaxine-D6	7.006	2269067	9654179	0.2350	10.0131

Samples Report MDQ1\_001\_a cal 2-10ng.d.xlsx

Printed at: 2:40 PM on: 9/6/2018

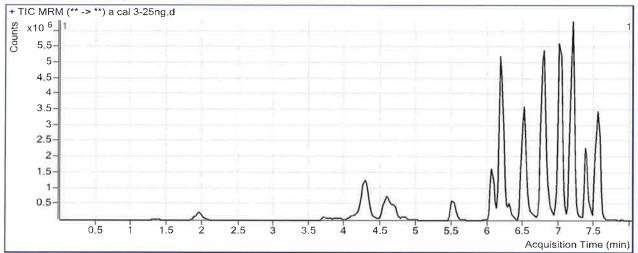
75

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Citalopram	Citalopram-D6	7.139	990248	5221626	0.1896	9.6638
Dextromethorphan	Dextromethorphan-D3	7.171	422248	1949341	0.2166	9.6737
Diphenhydramine	Diphenhydramine-D3	7.194	2282558	12311629	0.1854	10.0037
Promethazine	Promethazine-D3	7.369	1391950	5851361	0.2379	9.5904
Clonazepam	Clonazepam-D4	7.405	173018	178124	0.9713	8.8551
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.481	62415	331907	0.1881	9.6173
Carisoprodol	Carisoprodol-D7	7.494	612383	2805428	0.2183	9.9857
Lorazepam	Clonazepam-D4	7.523	59679	178124	0.3350	12.7686
Alprazolam	Alprazolam-D5	7.548	1311724	4570512	0.2870	9.3842

\$75

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\2 9/6/2018 9:57 AM 9/6/2018 2:40 PM 9/6/2018 9:56 AM	018\MD Quant\09051 Analyst Name Reporter Name Batch State	8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin ISPUser ISPUser Processed
<b>Analysis Info</b> Acq Time Sample Type	2018-09-05 14:28 Calibration	Data File Sample Name	a cal 3-25ng.d a cal 3-25ng.d
Dilution Position Inj Vol	1 P1-F12 -1	Acq Method Sample Info Comment	MD Quant Panel 1a 7-11-18.m AM 28

#### Sample Chromatogram



Result	S

Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Morphine	Morphine-D6	1.368	114198	104397	1.0939	20.0217
Hydromorphone	Hydromorphone-D6	1.969	473086	808898	0.5849	21.1274
Codeine	Codeine-D6	3.932	73110	225134	0.3247	15.1797
Amphetamine	Amphetamine-D11	4.283	2872318	1229589	2.3360	25.6275
Oxycodone	Oxycodone-D6	4.290	1798048	3187233	0.5641	22.4761
Hydrocodone	Hydrocodone-D6	4.594	626032	1735216	0.3608	21.7547
Norhydrocodone	Norhydrocodone-D3	4.638	33471	441024	0.0759	22.3523
Methamphetamine	Methamphetamine-D11	4.682	1745969	1870228	0.9336	21.7626
6-MAM	6-MAM-D6	4.829	18383	350789	0.0524	2.2112
Phentermine	Phentermine-D5	5.546	603509	2608968	0.2313	21.4346
Dextrorphan	Dextrorphan-D3	6.063	971954	3494898	0.2781	22.2582
7-aminoclonazepam	7-Aminoclonazepam-D4	6.174	1042396	1800800	0.5789	23.8746
Tramadol	Tramadol-13C-D3	6.203	6162812	13693249	0.4501	24.3110
Metoprolol	Tramadol-13C-D3	6.302	576042	13693249	0.0421	24.5690
Doxylamine	Doxylamine-D5	6.502	3685182	9344801	0.3944	23.4203
Bupropion	Bupropion-D9	6.771	1846072	2465685	0.7487	23.0028
Zolpidem	Zolpidem-D6	6.779	4830410	12697730	0.3804	24.6945
Meprobamate	Meprobamate-D7	6.873	485854	675525	0.7192	24.8256
Trazodone	Trazodone-D6	6.996	1930984	3001273	0.6434	23.6523
Venlafaxine	Venlafaxine-D6	7.026	4857193	8841821	0.5493	23.2067

Samples Report MDQ1\_002\_a cal 3-25ng.d.xlsx

Printed at: 2:40 PM on: 9/6/2018

75

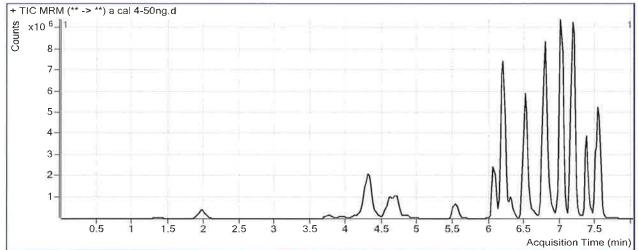
# ISP FORENSICS - Pocatello Instrument # 59740 Image: Confirmatory Analysis Report 9 (0) 3 Multi-Drug Confirmatory Analysis Report 9 (0) 3

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Citalopram	Citalopram-D6	7.159	1824518	3705690	0.4924	22.9776
Dextromethorphan	Dextromethorphan-D3	7.171	739095	1296725	0.5700	22.4465
Diphenhydramine	Diphenhydramine-D3	7.194	4398733	9494573	0.4633	24.4072
Promethazine	Promethazine-D3	7.369	2718574	4104585	0.6623	24.9287
Clonazepam	Clonazepam-D4	7.425	464280	161715	2.8710	23.1160
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.481	194476	403554	0.4819	21.3402
Carisoprodol	Carisoprodol-D7	7.514	1511380	2850467	0.5302	23.1471
Lorazepam	Clonazepam-D4	7.543	196552	161715	1.2154	27.9203
Alprazolam	Alprazolam-D5	7.548	3136876	4380350	0.7161	23.4926

TSD

Batch Data Path	C:\MassHunter\Data\20	18\MD Quant\09051	.8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin
Analysis Time	9/6/2018 9:57 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:40 PM	<b>Reporter Name</b>	ISPUser
Last Calib Update	9/6/2018 9:56 AM	Batch State	Processed
Analysis Info			
Acq Time	2018-09-05 15:00	Data File	a cal 4-50ng.d
Sample Type	Calibration	Sample Name	a cal 4-50ng.d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-E12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.368	266550	101529	2.6254	46.0269
Hydromorphone	Hydromorphone-D6	1,969	1090997	795398	1.3716	47.1288
Codeine	Codeine-D6	3.972	175005	242501	0.7217	32.5457
Amphetamine	Amphetamine-D11	4.303	5846917	1242438	4.7060	57.6688
Oxycodone	Oxycodone-D6	4.310	4143882	3134482	1.3220	50.8375
Hydrocodone	Hydrocodone-D6	4.615	1467724	1691331	0.8678	48.9065
Norhydrocodone	Norhydrocodone-D3	4.678	64104	414642	0.1546	42.1579
Methamphetamine	Methamphetamine-D11	4.702	4071890	1856603	2.1932	49.5654
6-MAM	6-MAM-D6	4.849	42554	354668	0.1200	4.8588
Phentermine	Phentermine-D5	5.566	1484371	2590831	0.5729	49.3864
Dextrorphan	Dextrorphan-D3	6.063	2208628	3437536	0.6425	49.3908
7-aminoclonazepam	7-Aminoclonazepam-D4	6.174	2350053	1772536	1.3258	53.2910
Tramadol	Tramadol-13C-D3	6.203	13711645	13958973	0.9823	52.6651
Metoprolol	Tramadol-13C-D3	6.302	1305092	13958973	0.0935	53.6653
Doxylamine	Doxylamine-D5	6.502	8522470	9362799	0.9102	52.7937
Bupropion	Bupropion-D9	6.771	3602494	2194053	1.6419	47.9604
Zolpidem	Zolpidem-D6	6.779	10910605	12419474	0.8785	58.0363
Meprobamate	Meprobamate-D7	6.873	966878	660611	1.4636	48.5879
Trazodone	Trazodone-D6	6.996	4225181	3027432	1.3956	50.5382
Venlafaxine	Venlafaxine-D6	7.006	11237900	8616894	1.3042	54.8920

Samples Report MDQ1\_003\_a cal 4-50ng.d.xlsx

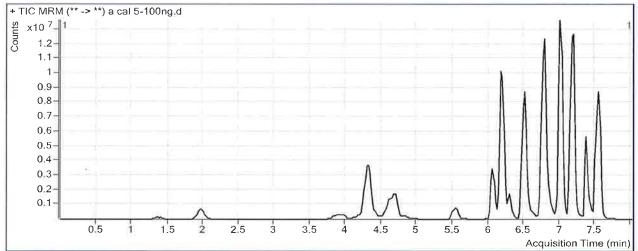
Printed at: 2:41 PM on: 9/6/2018

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Citalopram	Citalopram-D6	7.139	4378910	3887731	1.1263	50.8615
Dextromethorphan	Dextromethorphan-D3	7.171	1698861	1281380	1.3258	49.7675
Diphenhydramine	Diphenhydramine-D3	7.194	9313212	9430333	0.9876	51.5818
Promethazine	Promethazine-D3	7.369	6349945	4625363	1.3729	50.6055
Clonazepam	Clonazepam-D4	7.405	926424	161315	5.7430	44.6763
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.481	336205	288208	1.1665	48.6524
Carisoprodol	Carisoprodol-D7	7.514	2864404	2404754	1.1911	51.0329
Lorazepam	Clonazepam-D4	7.523	348816	161315	2.1623	44.2168
Alprazolam	Alprazolam-D5	7.548	6750565	4128748	1.6350	53.7029

15

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\26 9/6/2018 9:57 AM 9/6/2018 2:41 PM 9/6/2018 9:56 AM	018\MD Quant\09051 Analyst Name Reporter Name Batch State	8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin ISPUser ISPUser Processed
Analysis Info			
Acq Time	2018-09-05 15:31	Data File	a cal 5-100ng.d
Sample Type	Calibration	Sample Name	a cal 5-100ng.d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-D12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	<b>Final Conc</b>
Morphine	Morphine-D6	1.368	543613	103833	5.2355	90.3473
Hydromorphone	Hydromorphone-D6	1.969	2198306	783713	2.8050	94,4980
Codeine	Codeine-D6	3.952	864033	346297	2.4951	110.1347
Amphetamine	Amphetamine-D11	4.303	8926285	1070571	8.3379	106.7698
Oxycodone	Oxycodone-D6	4.310	8253058	3139771	2.6286	99.7296
Hydrocodone	Hydrocodone-D6	4.615	2795643	1604276	1.7426	95.7558
Norhydrocodone	Norhydrocodone-D3	4.658	126227	383341	0.3293	86.1147
Methamphetamine	Methamphetamine-D11	4.702	6241444	1368282	4.5615	101.8394
6-MAM	6-MAM-D6	4.849	77852	331966	0.2345	9.3462
Phentermine	Phentermine-D5	5.566	2290877	2139904	1.0706	90.1033
Dextrorphan	Dextrorphan-D3	6.063	3910468	2981040	1.3118	99.2244
7-aminoclonazepam	7-Aminoclonazepam-D4	6.154	4640823	1825296	2.5425	101.2060
Tramadol	Tramadol-13C-D3	6.203	24523900	12835681	1.9106	102.1217
Metoprolol	Tramadol-13C-D3	6.302	2284808	12835681	0.1780	101.4789
Doxylamine	Doxylamine-D5	6.502	14296598	8103651	1.7642	101.4161
Bupropion	Bupropion-D9	6.771	6237699	1789764	3.4852	99.4631
Zolpidem	Zolpidem-D6	6.779	20824241	12138022	1.7156	114.0719
Meprobamate	Meprobamate-D7	6.873	1958481	635337	3.0826	100.2690
Trazodone	Trazodone-D6	6.996	7675590	2594731	2.9581	106.3838
Venlafaxine	Venlafaxine-D6	7.006	19155669	7499525	2.5543	107.3663

Samples Report MDQ1\_004\_a cal 5-100ng.d.xlsx

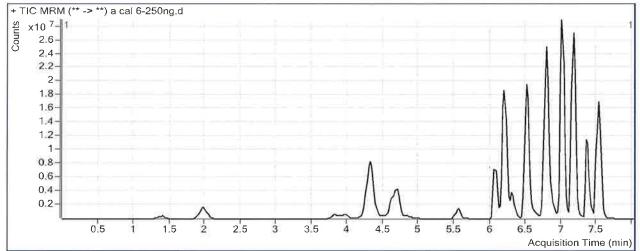
P

# **ISP FORENSICS - Pocatello Instrument # 59740** Multi-Drug Confirmatory Analysis Report $\sigma$ (0) 5

			_			
Сотроила	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Citalopram	Citalopram-D6	7.139	7736883	3453444	2.2403	99.8572
Dextromethorphan	Dextromethorphan-D3	7.171	3146928	1154461	2.7259	100.3758
Diphenhydramine	Diphenhydramine-D3	7.194	16548382	8028016	2.0613	107.2356
Promethazine	Promethazine-D3	7.369	11429851	4139459	2.7612	100.7768
Clonazepam	Clonazepam-D4	7.425	2012440	148721	13.5317	103.1472
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.481	688444	297402	2.3149	94.4626
Carisoprodol	Carisoprodol-D7	7.514	5961514	2528952	2.3573	100.2363
Lorazepam	Clonazepam-D4	7.523	679353	148721	4.5680	85.6190
Alprazolam	Alprazolam-D5	7,548	12894046	4119376	3.1301	102.8566

Batch Data Path Analysis Time Report Time Last Calib Update	9/6/2018 9:57 AM 9/6/2018 2:41 PM	18\MD Quant\09051 Analyst Name Reporter Name Batch State	8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin ISPUser ISPUser Processed
Analysis Info	9/6/2018 9:56 AM 2018-09-05 16:03	Data File	a cal 6-250ng.d
Sample Type	Calibration	Sample Name	a cal 6-250ng.d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-C12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Morphine	Morphine-D6	1.368	1470326	96000	15.3160	261.5186
Hydromorphone	Hydromorphone-D6	1.989	5867022	741244	7.9151	263.3757
Codeine	Codeine-D6	3.972	1223083	211222	5.7905	254.3156
Amphetamine	Amphetamine-D11	4.303	19883732	991341	20.0574	265.2121
Oxycodone	Oxycodone-D6	4.330	22215788	3136850	7.0822	266.3916
Hydrocodone	Hydrocodone-D6	4.615	7063331	1517631	4.6542	251.6776
Norhydrocodone	Norhydrocodone-D3	4.678	343498	323559	1.0616	270.4027
Methamphetamine	Methamphetamine-D11	4.702	16085868	1404460	11.4534	253.9583
6-MAM	6-MAM-D6	4.849	201578	324580	0.6210	24.4901
Phentermine	Phentermine-D5	5.566	5962185	1962090	3.0387	251.1432
Dextrorphan	Dextrorphan-D3	6.063	10007533	2857055	3.5027	262.3612
7-aminoclonazepam	7-Aminoclonazepam-D4	6.174	10978553	1606538	6.8337	270.1981
Tramadol	Tramadol-13C-D3	6.203	54036418	12073199	4.4757	238.7795
Metoprolol	Tramadol-13C-D3	6.322	5469047	12073199	0.4530	257.0600
Doxylamine	Doxylamine-D5	6.502	36624937	7810367	4.6893	267.9601
Bupropion	Bupropion-D9	6.771	13387825	1539920	8.6938	244.9973
Zolpidem	Zolpidem-D6	6.779	48263602	11743197	4.1099	274.3440
Meprobamate	Meprobamate-D7	6.873	4722850	627676	7.5243	242.0587
Trazodone	Trazodone-D6	6.996	18846534	2433161	7.7457	277.4954
Venlafaxine	Venlafaxine-D6	7.006	43543910	6873301	6.3352	266.0794

Samples Report MDQ1\_005\_a cal 6-250ng.d.xlsx

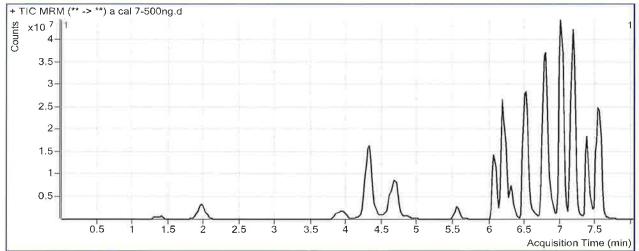
Printed at: 2:41 PM on: 9/6/2018



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Citalopram	Citalopram-D6	7.139	18281593	3060175	5.9740	264.0723
Dextromethorphan	Dextromethorphan-D3	7.171	7252526	1049594	6.9098	251.6122
Diphenhydramine	Diphenhydramine-D3	7.194	35415802	6940383	5.1029	264.8820
Promethazine	Promethazine-D3	7.349	28345570	3826917	7.4069	268.6615
Clonazepam	Clonazepam-D4	7.405	5010907	151346	33.1090	250.1165
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.461	1731262	259111	6.6815	268.6637
Carisoprodol	Carisoprodol-D7	7.494	12796708	2083475	6.1420	259.9219
Lorazepam	Clonazepam-D4	7.503	1818474	151346	12.0153	213.7907
Alprazolam	Alprazolam-D5	7.528	28230140	3330902	8.4752	278.5882

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\20 9/6/2018 9:57 AM 9/6/2018 2:41 PM 9/6/2018 9:56 AM	018\MD Quant\09051 Analyst Name Reporter Name Batch State	8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin ISPUser ISPUser Processed
<b>Analysis Info</b> Acq Time	2018-09-05 16:34	Data File	a cal 7-500ng.d
Sample Type	Calibration	Sample Name	a cal 7-500ng.d
Dilution Position	1 P1-B12	Acq Method Sample Info	MD Quant Panel 1a 7-11-18.m
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.348	3179500	92221	34.4770	586.8813
Hydromorphone	Hydromorphone-D6	1.969	12062981	749472	16.0953	533.7131
Codeine	Codeine-D6	3.952	4707824	327635	14.3691	629.6413
Amphetamine	Amphetamine-D11	4.303	36421204	1099397	33.1283	441.9244
Oxycodone	Oxycodone-D6	4.310	46182801	3266911	14.1365	530.3758
Hydrocodone	Hydrocodone-D6	4.615	14873035	1586778	9.3731	504.3881
Norhydrocodone	Norhydrocodone-D3	4.658	611575	294397	2.0774	526.0091
Methamphetamine	Methamphetamine-D11	4.682	33345444	1425930	23.3851	517.3149
6-MAM	6-MAM-D6	4.849	470828	336894	1.3976	54.9133
Phentermine	Phentermine-D5	5.566	12304271	1896443	6.4881	533.3840
Dextrorphan	Dextrorphan-D3	6.063	20927235	2986556	7.0071	523.2953
7-aminoclonazepam	7-Aminoclonazepam-D4	6.154	20089925	1507111	13.3301	526.0362
Tramadol	Tramadol-13C-D3	6.203	80647428	12233363	6.5924	351.5463
Metoprolo	Tramadol-13C-D3	6.302	10556850	12233363	0.8630	489.0089
Doxylamine	Doxylamine-D5	6.502	67492121	8548596	7.8951	450.4912
Bupropion	Bupropion-D9	6.771	29023286	1562853	18.5707	520.9659
Zolpidem	Zolpidem-D6	6.779	77409466	11346333	6.8224	455.9163
Meprobamate	Meprobamate-D7	6.873	9661757	571911	16.8938	541.1516
Trazodone	Trazodone-D6	6.996	35455597	2535987	13.9810	500.3502
Venlafaxine	Venlafaxine-D6	7.006	71864187	7236631	9.9306	417.0022

Samples Report MDQ1\_006\_a cal 7-500ng.d.xlsx

Printed at: 2:41 PM on: 9/6/2018

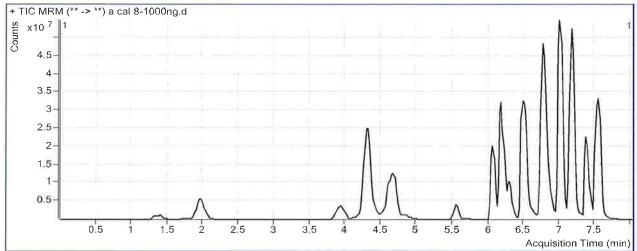


# Multi-Drug Confirmatory Analysis Report Q CQ 7 **ISP FORENSICS - Pocatello Instrument # 59740**

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Citalopram	Citalopram-D6	7.139	33431240	2796211	11.9559	527.1663
Dextromethorphan	Dextromethorphan-D3	7.171	14528669	1000732	14.5180	526.6238
Diphenhydramine	Diphenhydramine-D3	7.194	57989583	6981297	8.3064	430.9265
Promethazine	Promethazine-D3	7.369	47099261	3665650	12.8488	465.3197
Cíonazepam	Clonazepam-D4	7.405	8900716	123909	71.8328	540.8215
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.481	3369498	264531	12.7376	510.2617
Carisoprodol	Carisoprodol-D7	7.514	21193404	1637911	12.9393	546.7162
Lorazepam	Clonazepam-D4	7.523	3261117	123909	26.3187	459.9562
Alprazolam	Alprazolam-D5	7.548	44720015	2774844	16.1162	529.8011

Batch Data Path	C:\MassHunter\Data\2	018\MD Quant\09051	.8 MDQ P1 P2 SP\QuantResults\MDQ P1a.batch.bin
Analysis Time	9/6/2018 9:57 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:41 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 9:56 AM	Batch State	Processed
Analysis Info			
Acq Time	2018-09-05 17:06	Data File	a cal 8-1000ng.d
Sample Type	Calibration	Sample Name	a cal 8-1000ng.d
Dilution	1	Acq Method	MD Quant Panel 1a 7-11-18.m
Position	P1-A12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



#### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Morphine	Morphine-D6	1.368	5608823	86022	65.2021	1108.6068
Hydromorphone	Hydromorphone-D6	1.969	21892529	633387	34.5642	1144.0697
Codeine	Codeine-D6	3.932	8248247	287102	28.7293	1257.9213
Amphetamine	Amphetamine-D11	4.303	57193901	897822	63.7029	855.2778
Oxycodone	Oxycodone-D6	4.310	80727204	2932932	27.5244	1031.3702
Hydrocodone	Hydrocodone-D6	4.615	26892847	1441071	18.6617	1001.8167
Norhydrocodone	Norhydrocodone-D3	4.658	1105478	248581	4.4471	1122.3401
Methamphetamine	Methamphetamine-D11	4.682	47840359	1016469	47.0652	1039.9870
6-MAM	6-MAM-D6	4.849	897581	310288	2.8927	113.4939
Phentermine	Phentermine-D5	5.546	19182503	1608230	11.9277	978.4735
Dextrorphan	Dextrorphan-D3	6.063	33433065	2393598	13.9677	1041.5704
7-aminoclonazepam	7-Aminoclonazepam-D4	6.154	32003252	1326337	24.1291	951.3144
Tramadol	Tramadol-13C-D3	6.180	100596386	10282389	9.7834	521.5449
Metoprolol	Tramadol-13C-D3	6.302	16684338	10282389	1.6226	918.8058
Doxylamine	Doxylamine-D5	6.502	88594597	7715990	11.4819	654.7150
Bupropion	Bupropion-D9	6.751	40317062	1142576	35.2861	988.0098
Zolpidem	Zolpidem-D6	6.779	96814420	10311552	9.3889	627.7158
Meprobamate	Meprobamate-D7	6.873	16927868	559064	30.2790	968.4320
Trazodone	Trazodone-D6	6.996	50573182	2078151	24.3357	870.4359
Venlafaxine	Venlafaxine-D6	7.006	90374348	6011258	15.0342	631.2336

Samples Report MDQ1\_007\_a cal 8-1000ng.d.xlsx

Printed at: 2:41 PM on: 9/6/2018

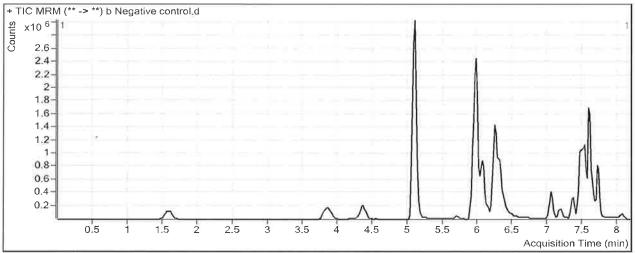
75 P 8

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

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Citalopram	Citalopram-D6	7.139	41530558	1908882	21.7565	958.2141
Dextromethorphan	Dextromethorphan-D3	7.171	21495421	748573	28,7152	1039.8041
Diphenhydramine	Diphenhydramine-D3	7.194	74759766	5187890	14.4104	747.3055
Promethazine	Promethazine-D3	7.369	56642060	3100201	18.2704	661.2448
Clonazepam	Clonazepam-D4	7.425	16339782	111399	146.6774	1102.6899
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.481	6236930	222528	28.0277	1120.2300
Carisoprodol	Carisoprodol-D7	7.514	27149182	1263585	21.4858	907.3159
Lorazepam	Clonazepam-D4	7.523	7014760	111399	62.9694	1090.7285
Alprazolam	Alprazołam-D5	7.568	59875215	2099329	28.5211	937,6361

Batch Data Path Analysis Time Report Time	C:\MassHunter\Data\20 9/6/2018 10:03 AM 9/6/2018 2:45 PM	018\MD Quant\09051 Analyst Name Reporter Name	8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin ISPUser ISPUser
Last Calib Update	9/6/2018 10:03 AM	Batch State	Processed
Analysis Info			
Acq Time	2018-09-05 18:25	Data File	b Negative control.d
Sample Type	Sample	Sample Name	b Negative control.d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-D11	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram

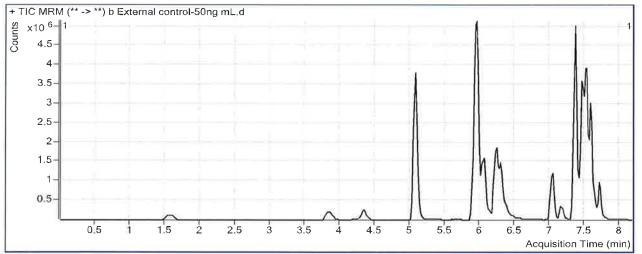


Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Buprenorphine	Buprenorphine-D4	7.798	3854	336785	0.0114	0.1350 DNE

75

Batch Data Path	C:\MassHunter\Data\2	018\MD Quant\09051	18 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin
Analysis Time	9/6/2018 10:03 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:45 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 10:03 AM	<b>Batch State</b>	Processed
Analysis Info			
Acq Time	2018-09-05 18:56	Data File	b External control-50ng mL.d
Sample Type	Sample	Sample Name	b External control-50ng mL.d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-C11	Sample Info	
Inj Vol	-1	Comment	AM 28; WS121217 50 ng trazodone, ketamine, morphine, quetiapine

#### Sample Chromatogram



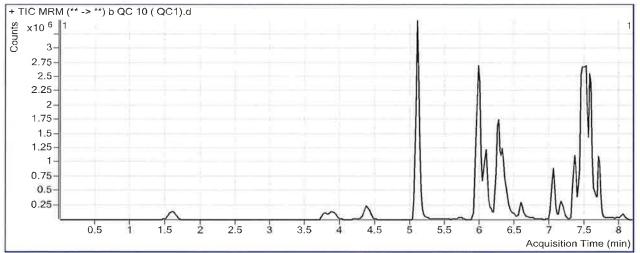
#### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Ketamine	Ketamine-D4	5.942	9952050	7373987	1.3496	58.3412
Quetiapine	Quetiapine-D8	7.358	10266424	2419045	4.2440	48.7875
Buprenorphine	Buprenorphine-D4	7.637	7809	1405536	0.0056	0.0000

15

Batch Data Path	C:\MassHunter\Data\20	018\MD Quant\09051	18 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin
Analysis Time	9/6/2018 10:03 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:45 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 10:03 AM	Batch State	Processed
<b>Analysis Info</b> Acq Time Sample Type Dilution Position Inj Vol	2018-09-05 19:59 QC 1 P1-H11 -1	Data File Sample Name Acq Method Sample Info Comment	b QC 10 ( QC1).d b QC 10 ( QC1).d MD Quant Panel 1b 7-11-18.m AM 28

#### Sample Chromatogram



#### Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxymorphone	Oxymorphone-D3	1.608	188518	842222	0.2238	9.0951
Dihydrocodeine	Dihydrocodeine-D6	3.930	195883	605780	0.3234	17.7979
Noroxycodone	Noroxycodone-D3	4,411	297721	1183297	0.2516	9.3664
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.100	2329081	12294490	0.1894	10.0973
Benzoylecgonine	Benzoylecgonine-d8	5.731	26464	115728	0.2287	71.7333
Ketamine	Ketamine-D4	5.962	1205507	5699334	0.2115	9.9321
Norfentanyl	Norfentanyl-D5	6.004	87402	6653229	0.0131	1.1390
Cocaine	Cocaine-d3	6.252	437818	6346986	0.0690	10.2166
alpha-PVP	alpha-PVP-d8	6.348	606878	4180771	0.1452	9.0639
Mirtazapine	alpha-PVP-d8	6.583	623903	4180771	0.1492	7.9108
Norbuprenorphine	Norbuprenorphine-D3	6,974	1070	39950	0.0268	0.0000 * *
Fentanyl	Fentanyl-D5	7.057	35303	2890056	0.0122	1.0235
Mitragynine	EDDP-D3	7.136	171709	769060	0.2233	9.0833
EDDP	EDDP-D3	7.169	111053	769060	0.1444	8.8639
Quetiapine	Quetiapine-D8	7.358	1410811	1737744	0.8119	9.8282
Cyclobenzaprine	Cyclobenzaprine-D3	7.433	362773	1665004	0.2179	10.7201
Methadone	Methadone-D9	7.461	1396269	5340497	0.2614	10.5444
Buprenorphine	Buprenorphine-D4	7.476	14675	657800	0.0223	-0.5131 4 *
Fluoxetine	Fluoxetine-D6	7.502	1192576	5582077	0.2136	10.5745

Samples Report MDQ1\_012\_b QC 10 ( QC1).d.xlsx

\*\* Did not evaluate. B

Printed at: 2:45 PM on: 9/6/2018

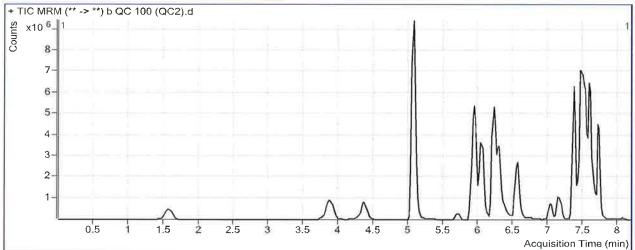
# 75P

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

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxazepam	Oxazepam-D5	7.529	58677	343491	0.1708	10.2836
Sertraline	Sertraline-D3	7,563	432430	2405060	0.1798	9.9298
Temazepam	Temazepam-D5	7.584	781842	4122076	0.1897	9.6828
Nordiazepam	Nordiazepam-D5	7.655	210873	621763	0.3392	9.6258
Diazepam	Diazepam-D5	7.712	462731	2137392	0.2165	10.2824

Batch Data Path	C:\MassHunter\Data\20	018\MD Quant\09051	.8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin
Analysis Time	9/6/2018 10:03 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:45 PM	<b>Reporter Name</b>	ISPUser
Last Calib Update	9/6/2018 10:03 AM	Batch State	Processed
Analysis Info			
Acq Time	2018-09-05 21:33	Data File	b QC 100 (QC2).d
Sample Type	QC	Sample Name	b QC 100 (QC2).d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-G11	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Oxymorphone	Oxymorphone-D3	1.568	2240656	832369	2.6919	89.1825
Dihydrocodeine	Dihydrocodeine-D6	3.890	2417656	1227475	1.9696	97.6643 💥 🖌
Noroxycodone	Noroxycodone-D3	4.371	3413712	1093953	3.1205	94.9299
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.072	26113147	12762915	2.0460	102.7500
Benzoylecgonine	Benzoylecgonine-d8	5.690	337523	114408	2.9502	-145.4385 ¥
Ketamine	Ketamine-D4	5.942	12844303	5761769	2.2292	95.7556
Norfentanyl	Norfentanyl-D5	5.984	1120852	6252348	0.1793	8.7333
Cocaine	Cocaine-d3	6.212	4377684	6211108	0.7048	86.2639
alpha-PVP	alpha-PVP-d8	6.308	6260842	3544770	1.7662	98.4927
Mirtazapine	alpha-PVP-d8	6.563	6536697	3544770	1.8440	98.3542
Norbuprenorphine	Norbuprenorphine-D3	6:994	5941	30797	0.1929	7.3653
Fentanyl	Fentanyl-D5	7.037	318801	2369386	0.1346	8.0832
Mitragynine	EDDP-D3	7.115	1684889	721974	2.3337	87.2821
EDDP	EDDP-D3	7.169	1394628	721974	1.9317	89.7107
Quetiapine	Quetiapine-D8	7.358	14014116	1505729	9.3072	106.2614
Cyclobenzaprine	Cyclobenzaprine-D3	7.453	2991579	1336393	2.2385	89.1720
Methadone	Methadone-D9	7.481	11628408	4392190	2.6475	100.0912
Buprenorphine	Buprenorphine-D4	7.496	153088	553900	0.2764	9.3511 💥 🔧
Fluoxetine	Fluoxetine-D6	7.521	9630832	4278817	2.2508	107.3287

Samples Report MDQ1\_013\_b QC 100 (QC2).d.xlsx

\*\* Did not evaluate. P

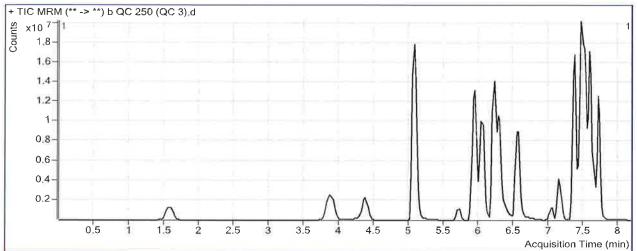
Printed at: 2:45 PM on: 9/6/2018



Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Oxazepam	Oxazepam-D5	7.549	598608	289247	2.0695	92.6126
Sertraline	Sertraline-D3	7.583	3515170	1872168	1.8776	89.3234
Temazepam	Temazepam-D5	7.604	7096131	3405572	2.0837	101.3166
Nordiazepam	Nordiazepam-D5	7.675	2016190	508933	3.9616	97.4250
Diazepam	Diazepam-D5	7.712	5006534	2047873	2.4447	92.7185

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\20 9/6/2018 10:03 AM 9/6/2018 2:46 PM 9/6/2018 10:03 AM	018\MD Quant\09051 Analyst Name Reporter Name Batch State	18 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin ISPUser ISPUser Processed
Analysis Info			
Acq Time	2018-09-06 00:10	Data File	b QC 250 (QC 3).d
Sample Type	QC	Sample Name	b QC 250 (QC 3).d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-F11	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Oxymorphone	Oxymorphone-D3	1.588	7434600	985656	7.5428	246.5913
Dihydrocodeine	Dihydrocodeine-D6	3:870	8156928	1533955	5.3176	260:0869
Noroxycodone	Noroxycodone-D3	4.371	11001959	1307939	8.4117	252.7343
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.072	68367348	15304889	4,4670	223.5707
Benzoylecgonine	Benzoylecgonine-d8	5.711	1409799	134283	10.4987	349.8712
Ketamine	Ketamine-D4	5.942	40938980	6600311	6.2026	264.7626
Norfentanyl	Norfentanyl-D5	5.984	3890231	7829068	0.4969	23.2528
Cocaine	Cocaine-d3	6.212	14936244	7560505	1.9756	238.2481
alpha-PVP	alpha-PVP-d8	6.308	21845900	4721478	4.6269	256.3085
Mirtazapine	alpha-PVP-d8	6.563	22116662	4721478	4.6843	249.9229
Norbuprenorphine	Norbuprenorphine-D3	6.954	20312	42688	0.4758	21.7909
Fentanyl	Fentanyl-D5	7.037	1135185	2806012	0.4046	23.6647
Mitragynine	EDDP-D3	7.115	5854688	966321	6.0587	225.3053
EDDP	EDDP-D3	7.169	5494335	966321	5.6858	259.5272
Quetiapine	Quetiapine-D8	7.358	40427388	1973876	20.4812	233.1011
Cyclobenzaprine	Cyclobenzaprine-D3	7.433	9914601	1664361	5.9570	233.5401
Methadone	Methadone-D9	7.461	36254348	6151313	5.8938	221.9192
Buprenorphine	Buprenorphine-D4	7:496	563933	746375	0.7556	26.0196 **
Fluoxetine	Fluoxetine-D6	7.521	28153892	4903000	5.7422	273.1485

Samples Report MDQ1\_016\_b QC 250 (QC 3).d.xlsx \*\* Did not evaluate. F

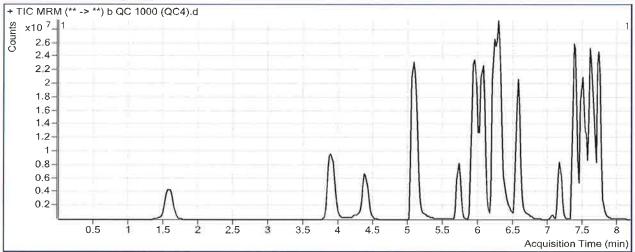
Printed at: 2:46 PM on: 9/6/2018

# ISTD Compound RT

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxazepam	Oxazepam-D5	7.549	2161983	387299	5.5822	244.9236
Sertraline	Sertraline-D3	7.583	10287810	2081759	4.9419	232.6181
Temazepam	Temazepam-D5	7.604	22121325	4029618	5.4897	266.1018
Nordiazepam	Nordiazepam-D5	7.655	6066898	576370	10.5260	256.5309
Diazepam	Diazepam-D5	7.712	15640422	2357969	6.6330	247.6664

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\20 9/6/2018 10:03 AM 9/6/2018 2:46 PM 9/6/2018 10:03 AM	018\MD Quant\09051 Analyst Name Reporter Name Batch State	8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin ISPUser ISPUser Processed
Analysis Info			
Acq Time	2018-09-06 02:47	Data File	b QC 1000 (QC4).d
Sample Type	QC	Sample Name	b QC 1000 (QC4).d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-E11	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	1.588	28181003	958504	29.4010	955.8782
Dihydrocodeine	Dihydrocodeine-D6	3.890	27566866	1392381	19.7984	962.6058 **
Noroxycodone	Noroxycodone-D3	4.371	34342661	938500	36.5931	1093.2243
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.072	124528671	12656037	9.8395	491.6831
Benzoylecgonine	Benzoylecgonine-d8	5.711	10244007	120526	84.9939	-2367.3902
Ketamine	Ketamine-D4	5.942	98143889	5859545	16.7494	-713.3727 *
Norfentanyl	Norfentanyl-D5	6.004	14583392	6288905	2.3189	106.5416
Cocaine	Cocaine-d3	6.212	44983483	5534123	8.1284	974.1397
alpha-PVP	alpha-PVP-d8	6.308	60597527	3714319	16.3146	901.0794
Mirtazapine	alpha-PVP-d8	6.563	48574008	3714319	13.0775	697.8277
Norbuprenorphine	Norbuprenorphine-D3	6.974	20515	9771	2.0996	104.5869
Fentanyl	Fentanyl-D5	7.057	1013553	531459	1.9071	110.3751
Mitragynine	EDDP-D3	7.136	5914320	626122	9.4460	350.8121
EDDP	EDDP-D3	7.169	15890629	626122	25.3795	1150.3570
Quetiapine	Quetiapine-D8	7.358	62324085	1116441	55.8239	634.2867 💥
Cyclobenzaprine	Cyclobenzaprine-D3	7.453	7274047	262381	27.7232	1078.6070
Methadone	Methadone-D9	7:481	43992048	1711215	25.7081	965.5307 💑
Buprenorphine	Buprenorphine-D4	7.496	440999	175865	2:5076	86.9648-*
Fluoxetine	Fluoxetine-D6	7.521	13786981	536726	25.6872	1220.4235

Samples Report MDQ1\_019\_b QC 1000 (QC4).d.xlsx \*Outside curve range & \* \* Did not evaluate.

Printed at: 2:46 PM on: 9/6/2018

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Oxazepam	Oxazepam-D5	7.549	8233136	318964	25.8121	1122.1013
Sertraline	Sertraline-D3	7.603	4689116	203895	22.9977	1076.9564
Temazepam	Temazepam-D5	7.604	56248796	3203111	17.5607	850.1068
Nordiazepam	Nordiazepam-D5	7.675	17584735	417677	42.1013	1021.8365
Diazepam	Diazepam-D5	7.732	41282841	1628340	25.3527	940.2170



Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

Analyst Name

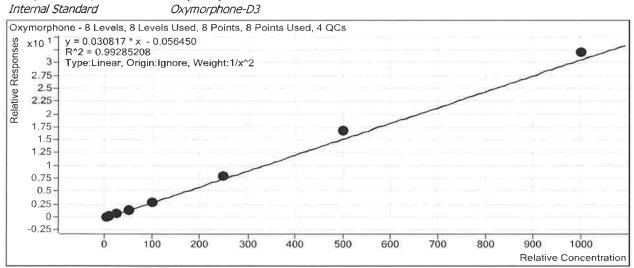
ISP TOX

Last Calib Update

Target Compound Oxymo

d Oxymorphone Oxymorphone-D3

9/6/2018 10:03 AM



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1	$\checkmark$	5	5.3	106.2
b cal 2-10ng.d	2	$\overline{\mathbf{v}}$	10	9.3	92.9
b QC 10 ( QC1).d	2	$\checkmark$	10	9.1	91.0
b cal 3-25ng.d	3	$\checkmark$	25	22.0	88.0
b cal 4-50ng.d	4	$\checkmark$	50	48.3	96.6
b cal 5-100ng.d	5	V	100	97.8	97.8
b QC 100 (QC2).d	5	$\checkmark$	100	89.2	89.2
b cal 6-250ng.d	6	V	250	263.8	105.5
b QC 250 (QC 3).d	6	V	250	246.6	98.6
b cal 7-500ng.d	7	$\overline{\mathbf{V}}$	500	545.6	109.1
b cal 8-1000ng.d	8	V	1000	1039.0	103.9
b QC 1000 (QC4).d	8	Ø	1000	955.9	95.6



Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

Last Calib Update

9/6/2018 10:03 AM

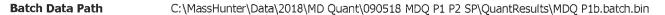
#### Analyst Name ISP

ISP TOX

Target Compound Dihydrocodeine Internal Standard Dihydrocodeine-D6 Dihydrocodeine - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs y = 0.020613 \* x - 0.043506 R^2 = 0.99915020 x10<sup>1</sup> 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 ó 100 200 300 600 700 800 900 400 500 1000 Relative Concentration

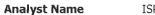
Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1	V	5	5.7	114.2
b cal 2-10ng.d	2		10	9.7	96.5
b QC 10 ( QC1).d	2	$\mathbf{\nabla}$	10	17.8	178.0
b cal 3-25ng.d	3	V	25	22.5	90.1
b cal 4-50ng.d	4		50	48.0	96.0
b cal 5-100ng.d	5	Ø	100	97.9	97.9
b QC 100 (QC2).d	5	Ø	100	97.7	97.7
b cal 6-250ng.d	6	V	250	262.4	105.0
b QC 250 (QC 3).d	6	V	250	260.1	104.0
b cal 7-500ng.d	7	V	500	509.1	101.8
b cal 8-1000ng.d	8	V	1000	984.6	98.5
b QC 1000 (QC4).d	8	Ø	1000	962.6	96.3

Did not evaluate. PTS



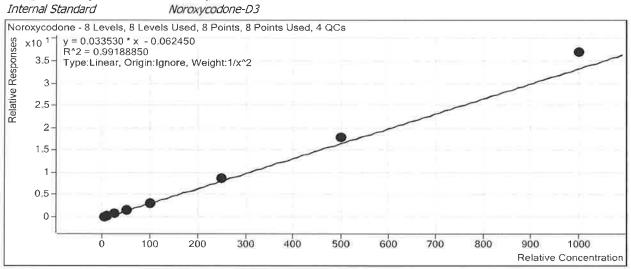
Last Calib Update

9/6/2018 10:03 AM



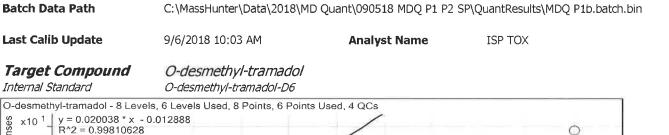
ISP TOX

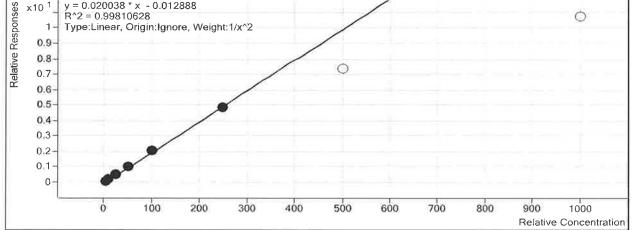
Target CompoundNoroxycodoneInternal StandardNoroxycodone-D3



Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
1		5	5.3	105.8
2		10	9.4	93.8
2	$\checkmark$	10	9.4	93.7
3	$\square$	25	22.1	88.5
4	Ø	50	48.2	96.4
5		100	94.0	94.0
5	Ø	100	94.9	94.9
6	$\mathbf{\nabla}$	250	258.6	103.4
6	$\checkmark$	250	252.7	101.1
7	$\overline{\mathbf{V}}$	500	538.6	107.7
8	$\checkmark$	1000	1102.9	110.3
8	Ø	1000	1093.2	109.3
	1 2 3 4 5 5 6 7 8	1     Image: Constraint of the second s	1       Image: Second system         2       Image: Second system         2       Image: Second system         3       Image: Second system         4       Image: Second system         5       Image: Second system         6       Image: Second system         6       Image: Second system         7       Image: Second system         8       Image: None system	1 $\boxdot$ 55.32 $\boxdot$ 109.42 $\checkmark$ 109.43 $\boxdot$ 2522.14 $\boxdot$ 5048.25 $\boxdot$ 10094.05 $\checkmark$ 10094.96 $\checkmark$ 250258.66 $\checkmark$ 250252.77 $\checkmark$ 500538.68 $\checkmark$ 10001102.9

TS \$





Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1	$\mathbf{N}$	5	5.0	100.4
b cal 2-10ng.d	2		10	10.0	99.8
b QC 10 ( QC1).d	2	V	10	10.1	101.0
b cal 3-25ng.d	3	V	25	23.9	95.6
b cal 4-50ng.d	4	$\overline{\mathbf{M}}$	50	52.6	105.3
b cal 5-100ng.d	5		100	102.2	102.2
b QC 100 (QC2).d	5	Ø	100	102.7	102.7
b cal 6-250ng.d	6	$\mathbf{\nabla}$	250	241.7	96.7
b QC 250 (QC 3).d	6	$\checkmark$	250	223.6	89.4
b cal 7-500ng.d	7		500	367.5	73.5
b cal 8-1000ng.d	8		1000	536.7	53.7
b QC 1000 (QC4).d	8		1000	491.7	49,2



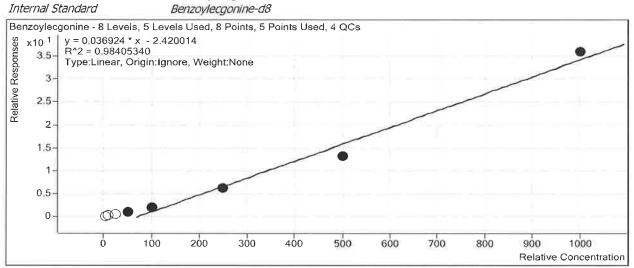
Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

Last Calib Update

9/6/2018 10:03 AM

Analyst Name ISP TOX

Target CompoundBenzoylecgonineInternal StandardBenzoylecgonine-d8



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1		5	66.9	1338.2
b cal 2-10ng.d	2		10	69.6	696.2
b QC 10 ( QC1).d	2	V	10	71.7	717.3
b cal 3-25ng.d	3		25	74.5	298.2
b cal 4-50ng.d	4	$\square$	50	88.6	177.1
b cal 5-100ng.d	5	$\square$	100	119.1	119.1
b QC 100 (QC2).d	5	Ø	100	145.4	145.4
b cal 6-250ng.d	6	$\square$	250	229.6	91.8
b QC 250 (QC 3).d	6	$\mathbf{\nabla}$	250	349.9	139.9
b cal 7-500ng.d	7	V	500	423.0	84.6
b cal 8-1000ng.d	8		1000	1039.8	104.0
b QC 1000 (QC4).d	8		1000	2367.4	236.7

Did not evaluate. \$ 75



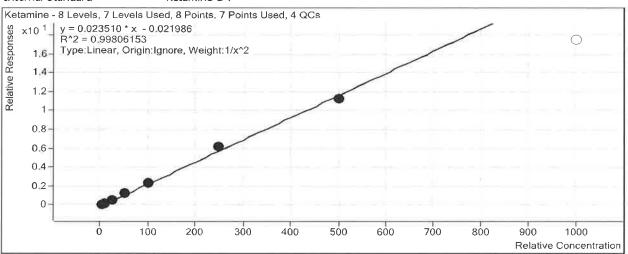
Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

Last Calib Update

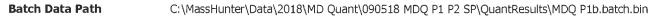
## 9/6/2018 10:03 AM

#### Analyst Name ISP





Sample	Level	Enabled	Ехр Сопс	Final Conc	Accuracy
b cal 1-5ng.d	1	$\mathbf{\nabla}$	5	5.1	101.6
b cal 2-10ng.d	2	V	10	9.7	97.3
b QC 10 ( QC1).d	2	$\checkmark$	10	9.9	99.3
b cal 3-25ng.d	3	V	25	24.2	96.6
b cal 4-50ng.d	4	V	50	51.7	103.4
b cal 5-100ng.d	5	V	100	99.4	99.4
b QC 100 (QC2).d	5	V	100	95.8	95.8
b cal 6-250ng.d	6	$\mathbf{M}$	250	264.4	105.8
b QC 250 (QC 3).d	6	V	250	264.8	105.9
b cal 7-500ng.d	7	V	500	479.2	95.8
b cal 8-1000ng.d	8		1000	744.2	74.4
b QC 1000 (QC4).d	8		1000	713.4	71.3



Last Calib Update

9/6/2018 10:03 AM

Analyst Name I

ISP TOX

75

Target Compound Norfentanyl Norfentanyl-D5 Internal Standard Norfentanyl - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 4 QCs y = 0.021876 \* x - 0.011780 R^2 = 0.99768000 2.4-Relative Responses 2.2-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 -5 15 25 50 55 60 65 70 75 80 95 100 105 10 20 30 35 40 45 85 90 0 5 **Relative Concentration** 

Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
1		0.5	0.8	165.5
2	$\square$	1	1.3	125.2
2		1	1.1	113.9
3	V	2.5	2.4	97.2
4	V	5	4.6	91.6
5	$\checkmark$	10	8.9	88.7
5	$\overline{\mathbf{v}}$	10	8.7	87.3
6	$\overline{\mathbf{A}}$	25	23.7	94.8
6	V	25	23.3	93.0
7	V	50	49.7	99.3
8	$\checkmark$	100	103.0	103.0
8	V	100	106.5	106.5
	1 2 3 4 5 5 6 6 7 8	1     □       2     □       3     ジ       4     ジ       5     ジ       6     ジ       7     ジ       8     ジ	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 $\Box$ 0.50.82 $\Box$ 11.32 $\Box$ 11.13 $\Box$ 2.52.44 $\Box$ 54.65 $\Box$ 108.95 $\Box$ 108.76 $\Box$ 2523.76 $\Box$ 2523.37 $\Box$ 5049.78 $\Box$ 100103.0

15

Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

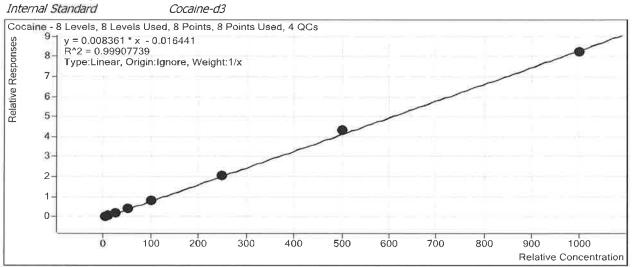
Analyst Name

ISP TOX

Last Calib Update

## e 9/6/2018 10:03 AM

Target CompoundCocaineInternal StandardCocaine-d3



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1		5	5.7	114.1
b cal 2-10ng.d	2	V	10	10.0	100.0
b QC 10 ( QC1).d	2	$\checkmark$	10	10.2	102.2
b cal 3-25ng.d	3		25	22.3	89.2
b cal 4-50ng.d	4	$\square$	50	47.6	95.1
b cal 5-100ng.d	5		100	99.4	99.4
b QC 100 (QC2).d	5	V	100	86.3	86.3
b cal 6-250ng.d	6	M	250	248.5	99.4
b QC 250 (QC 3).d	6		250	238.2	95,3
b cal 7-500ng.d	7	V	500	521.2	104.2
b cal 8-1000ng.d	8	V	1000	985.3	98.5
b QC 1000 (QC4).d	8	$\overline{\mathbf{M}}$	1000	974.1	97.4

Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

Last Calib Update

9/6/2018 10:03 AM

#### Analyst Name ISF

ISP TOX

75

Target Compound alpha-PVP Internal Standard alpha-PVP-d8 alpha-PVP - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs y = 0.018127 \* x - 0.019141 R^2 = 0.99688870 Relative Responses x10<sup>17</sup> 1.8-Type:Linear, Origin:Ignore, Weight:1/x^2 1.6 1.4 1.2 1 8.0 0.6 0.4 0.2 0 800 100 400 500 600 700 900 ò 200 300 1000 Relative Concentration

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1	$\overline{\mathbf{A}}$	5	5.2	103.5
b cal 2-10ng.d	2	M	10	9.7	96.8
b QC 10 ( QC1).d	2	$\square$	10	9.1	90.6
b cal 3-25ng.d	3	V	25	22.7	90.6
b cal 4-50ng.d	4		50	49.5	98.9
b cal 5-100ng.d	5	V	100	98.9	98.9
b QC 100 (QC2).d	5	$\mathbf{V}$	100	98.5	98.5
b cal 6-250ng.d	6	$\mathbf{M}$	250	265.1	106.0
b QC 250 (QC 3).d	6	V	250	256.3	102.5
b cal 7-500ng.d	7	$\overline{\mathbf{v}}$	500	517.7	103.5
b cal 8-1000ng.d	8	V	1000	1016.5	101.7
b QC 1000 (QC4).d	8	V	1000	901.1	90.1

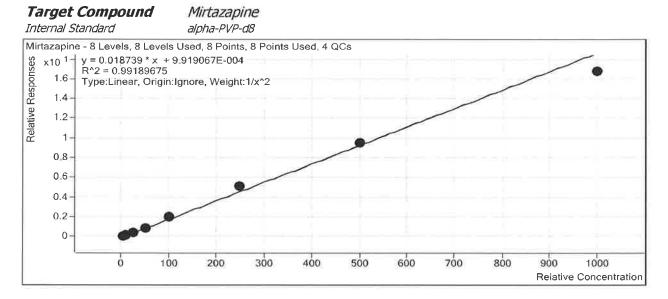


Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

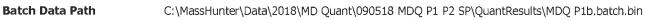
Last Calib Update

9/6/2018 10:03 AM

Analyst Name



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1		5	4.9	98.1
b cal 2-10ng.d	2	Ø	10	10.7	107.0
b QC 10 ( QC1).d	2	V	10	7.9	79.1
b cal 3-25ng.d	3		25	23.0	92.0
b cal 4-50ng.d	4	$\square$	50	47.1	94.1
b cal 5-100ng.d	5	$\square$	100	107.5	107.5
b QC 100 (QC2).d	5	V	100	98.4	98.4
b cal 6-250ng.d	6	$\overline{\mathbf{M}}$	250	275.8	110.3
b QC 250 (QC 3).d	6	M	250	249.9	100.0
b cal 7-500ng.d	7	V	500	507.4	101.5
b cal 8-1000ng.d	8	$\checkmark$	1000	893.4	89.3
b QC 1000 (QC4).d	8	Ø	1000	697.8	69.8



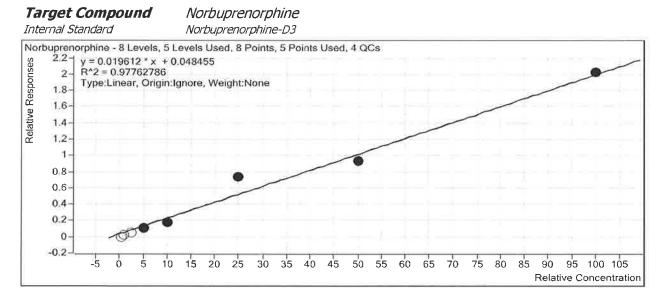
Last Calib Update

9/6/2018 10:03 AM

Analyst Name

ISP TOX

75



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1		0.5	0.0	0.0
b cal 2-10ng.d	2		1	0.0	0.0
b QC 10 ( QC1).d	2		1	0.0	0.0
b cal 3-25ng.d	3		2.5	0.0	0.0
b cal 4-50ng.d	4		5	3.1	62.3
b cai 5-100ng.d	5		10	6.6	66.1
b QC 100 (QC2).d	5	$\square$	10	7.4	73.7
b cal 6-250ng.d	6	V	25	34.8	139.4
b QC 250 (QC 3).d	6	V	25	21.8	87.2
b cal 7-500ng.d	7	V	50	44.9	89.8
b cal 8-1000ng.d	8	V	100	100.5	100.5
b QC 1000 (QC4).d	8	M	100	104.6	104.6

Did not evaluate. \$75



C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin **Batch Data Path** 

**Analyst Name** 

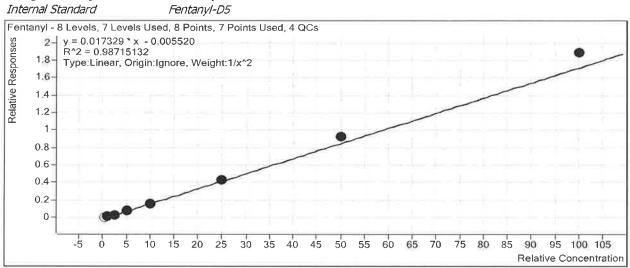
ISP TOX

Last Calib Update

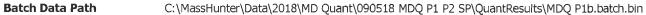
#### Target Compound Fentanyl

Fentanyl-D5

9/6/2018 10:03 AM



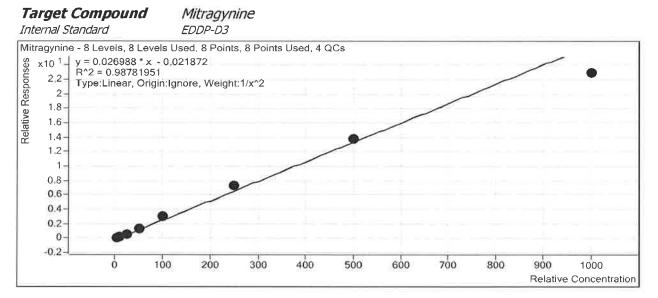
Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1		0.5	0.6	129.6
b cal 2-10ng.d	2	M	1	1.1	108.1
b QC 10 ( QC1).d	2		1	1.0	102.3
b cal 3-25ng.d	3	Ø	2.5	2.0	81.2
b cal 4-50ng.d	4	V	5	4.9	97.5
b cal 5-100ng.d	5	V	10	9.6	96.3
b QC 100 (QC2).d	5	$\square$	10	8.1	80.8
b cal 6-250ng.d	6	$\mathbf{V}$	25	25.2	100.6
b QC 250 (QC 3).d	6	Ø	25	23.7	94.7
b cal 7-500ng.d	7	Ø	50	53.5	107.0
b cal 8-1000ng.d	8	V	100	109.2	109.2
b QC 1000 (QC4).d	8	V	100	110.4	110.4



Last Calib Update

9/6/2018 10:03 AM

#### Analyst Name



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1	$\square$	5	4.9	98.8
b cal 2-10ng.d	2	Ø	10	10.6	105.9
b QC 10 ( QC1).d	2		10	9.1	90.8
b cal 3-25ng.d	3	Ø	25	22.0	88.2
b cal 4-50ng.d	4	$\square$	50	49.3	98.5
b cal 5-100ng.d	5		100	112.3	112.3
b QC 100 (QC2).d	5	V	100	87.3	87.3
b cal 6-250ng.d	6	$\square$	250	273.5	109.4
b QC 250 (QC 3).d	6		250	225.3	90.1
b cal 7-500ng.d	7	V	500	510.1	102.0
b cal 8-1000ng.d	8		1000	848.9	84.9
b QC 1000 (QC4).d	8	$\overline{\mathbf{A}}$	1000	350.8	35.1



Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

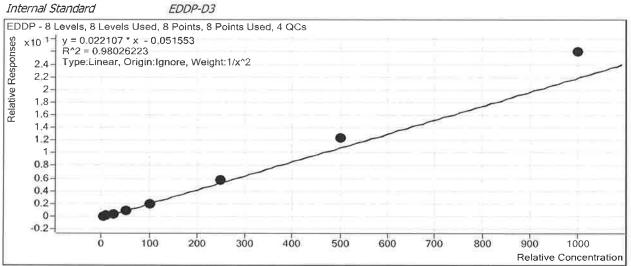
Analyst Name

ISP TOX

Last Calib Update

9/6/2018 10:03 AM





Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1		5	5.4	107.6
b cal 2-10ng.d	2	V	10	9.4	94.4
b QC 10 ( QC1).d	2	V	10	8.9	88.6
b cal 3-25ng.d	3	Ø	25	20.3	81.3
b cal 4-50ng.d	4	$\square$	50	45.1	90.2
b cal 5-100ng.d	5		100	93.1	93.1
b QC 100 (QC2).d	5	$\mathbf{V}$	100	89.7	89.7
b cal 6-250ng.d	6	$\checkmark$	250	258.7	103.5
b QC 250 (QC 3).d	6	V	250	259.5	103.8
b cal 7-500ng.d	7	V	500	560.7	112.1
b cal 8-1000ng.d	8		1000	1178.7	117.9
b QC 1000 (QC4).d	8		1000	1150.4	115.0



#### **Batch Data Path** C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

Analyst Name

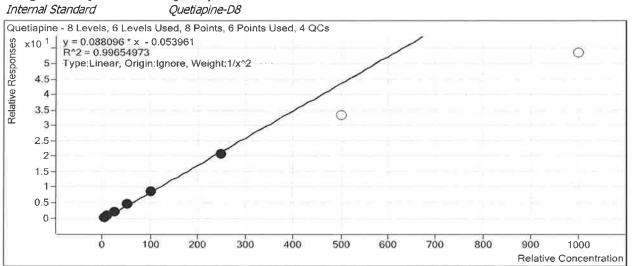
ISP TOX

Last Calib Update

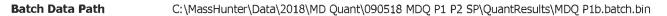
#### Target Compound Quetiapine

Quetiapine-D8

9/6/2018 10:03 AM



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1	M	5	4.9	97.9
b cal 2-10ng.d	2	M	10	10.5	104.7
b QC 10 ( QC1).d	2	$\mathbf{N}$	10	9.8	98.3
b cal 3-25ng.d	3	A	25	24.0	96.0
b cal 4-50ng.d	4	V	50	53.6	107.1
b cal 5-100ng.d	5	V	100	98.9	98.9
b QC 100 (QC2).d	5	R	100	106.3	106.3
b cal 6-250ng.d	6	V	250	238.7	95.5
b QC 250 (QC 3).d	6	V	250	233.1	93.2
b cal 7-500ng.d	7		500	378.1	75.6
b cal 8-1000ng.d	8		1000	608.2	60.8
b QC 1000 (QC4).d	8		1000	634.3	63.4



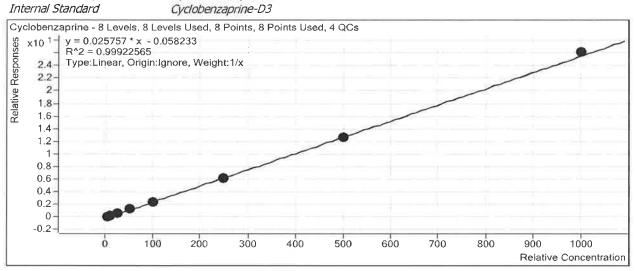
Last Calib Update

9/6/2018 10:03 AM

Analyst Name

ISP TOX

Target CompoundCyclobenzaprineInternal StandardCyclobenzaprine-D3



Level	Enabled	Exp Conc	Final Conc	Accuracy
1	$\overline{\mathbf{A}}$	5	5.7	114.3
2	V	10	10.3	103.3
2	$\checkmark$	10	10.7	107.2
3	N	25	22.1	88.4
4	$\mathbf{\nabla}$	50	50.9	101.7
5	$\square$	100	94.3	94.3
5	V	100	89.2	89.2
6	$\mathbf{V}$	250	242.1	96.8
6	V	250	233.5	93.4
7	$\mathbf{\nabla}$	500	496.8	99.4
8	$\checkmark$	1000	1017.7	101.8
8	Ø	1000	1078.6	107.9
	1 2 3 4 5 5 6 6 7 8	1     ビ       2     グ       2     グ       3     ビ       4     グ       5     グ       6     グ       7     グ       8     グ	1       Ø       5         2       Ø       10         2       Ø       10         3       Ø       25         4       Ø       50         5       Ø       100         5       Ø       100         6       Ø       250         6       Ø       250         7       Ø       500         8       Ø       1000	1       Image: Second sec

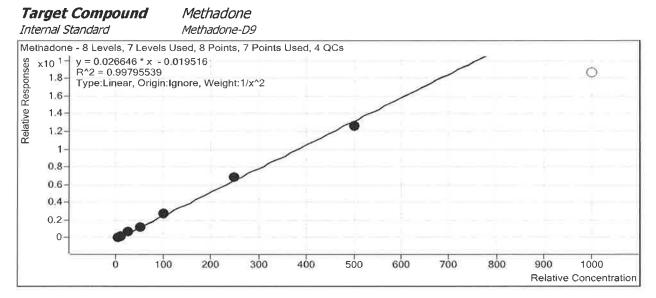


Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

Last Calib Update

## 9/6/2018 10:03 AM

#### Analyst Name IS



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1	$\square$	5	5.1	101.8
b cal 2-10ng.d	2		10	9.6	96,4
b QC 10 ( QC1).d	2		10	10.5	105.4
b cal 3-25ng.d	3	Ø	25	24.9	99.6
b cal 4-50ng.d	4	V	50	48.8	97.6
b cal 5-100ng.d	5	M	100	105.9	105.9
b QC 100 (QC2).d	5	V	100	100.1	100.1
b cal 6-250ng.d	6	V	250	258.1	103.2
Ь QC 250 (QC 3).d	6	$\checkmark$	250	221.9	88.8
b cal 7-500ng.d	7	Ø	500	477.5	95.5
b cal 8-1000ng.d	8		1000	699.9	70.0
b QC 1000 (QC4).d	8	V	1000	965.5	96.6



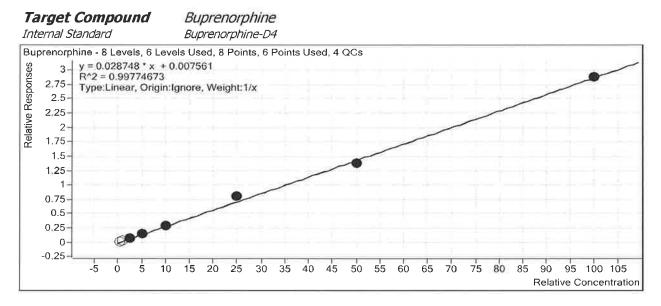
#### Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

Last Calib Update

9/6/2018 10:03 AM

Analyst Name IS

ISP TOX



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1		0.5	0.5	90.7
b cal 2-10ng.d	2		1	0.7	65.1
b QC 10 ( QC1).d	2		1	0.5	51.3
b cal 3-25ng.d	3	$\overline{\mathbf{M}}$	2.5	2.4	95.8
b cal 4-50ng.d	4	V	5	4.9	97.6
b cal 5-100ng.d	5	Ø	10	10.1	101.4
b QC 100 (QC2).d	5	V	10	9.4	93.5
b cal 6-250ng.d	6		25	27.4	109.6
b QC 250 (QC 3).d	6	$\square$	25	26.0	104.1
b cal 7-500ng.d	7	V	50	47.9	95.8
b cal 8-1000ng.d	8	$\square$	100	99.8	99.8
b QC 1000 (QC4).d	8	M	100	87.0	87.0

Did not craluate. PTS

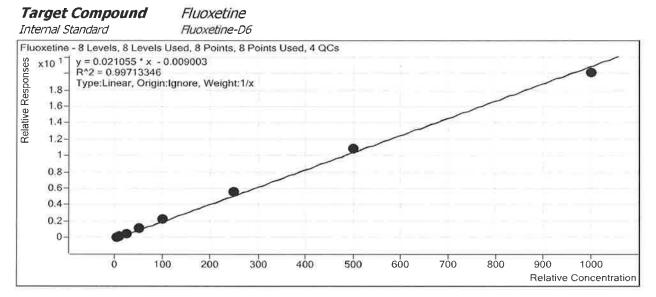


Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

Last Calib Update

## 9/6/2018 10:03 AM

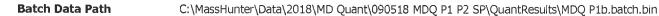




Sample	Leveí	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1	$\mathbf{\nabla}$	5	4.3	85.8
b cal 2-10ng.d	2	$\overline{\mathbf{A}}$	10	9.7	97.4
b QC 10 ( QC1).d	2	$\square$	10	10.6	105.7
b cal 3-25ng.d	3	$\overline{\mathbf{V}}$	25	23.6	94.3
b cal 4-50ng.d	4	V	50	53.8	107.6
b cal 5-100ng.d	5	V	100	108.8	108.8
b QC 100 (QC2).d	5	$\checkmark$	100	107.3	107.3
b cal 6-250ng.d	6	V	250	268.1	107.2
b QC 250 (QC 3).d	6	Ø	250	273.1	109.3
b cal 7-500ng.d	7	$\checkmark$	500	516.3	103.3
b cal 8-1000ng.d	8		1000	955.4	95.5
b QC 1000 (QC4).d	8	$\square$	1000	1220.4	122.0

**Analyst Name** 

ISP TOX

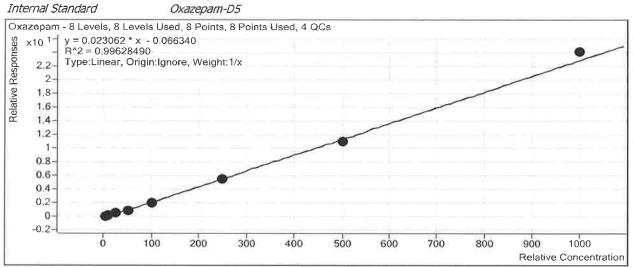


9/6/2018 10:03 AM

#### Last Calib Update

Target Compound

Oxazepam Oxazepam-D5



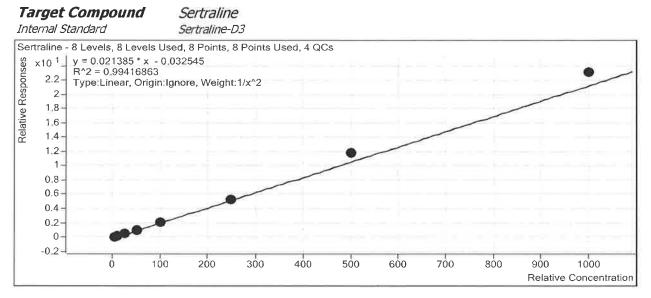
Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1	M	5	6.2	124.6
b cal 2-10ng.d	2	V	10	11.2	112.1
b QC 10 ( QC1).d	2	$\checkmark$	10	10.3	102.8
b cal 3-25ng.d	3		25	23.7	94.8
b cal 4-50ng.d	4	$\mathbf{V}$	50	42.2	84.4
b cal 5-100ng.d	5		100	86.3	86.3
b QC 100 (QC2).d	5	M	100	92.6	92.6
b cal 6-250ng.d	6	M	250	241.7	96.7
b QC 250 (QC 3).d	6	V	250	244.9	98.0
b cal 7-500ng.d	7	V	500	482.7	96.5
b cal 8-1000ng.d	8	V	1000	1045.9	104.6
b QC 1000 (QC4).d	8	V	1000	1122.1	112.2

Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin

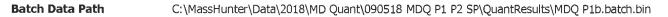
Last Calib Update

## 9/6/2018 10:03 AM

#### Analyst Name IS



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1	$\overline{\mathbf{A}}$	5	5.2	103.9
b cal 2-10ng.d	2	Q	10	9.7	96.8
b QC 10 ( QC1).d	2	$\checkmark$	10	9.9	99.3
b cal 3-25ng.d	3		25	22.7	90.9
b cal 4-50ng.d	4	$\overline{\checkmark}$	50	48.0	96.0
b cal 5-100ng.d	5	$\checkmark$	100	96.3	96.3
b QC 100 (QC2).d	5	$\overline{\mathbf{v}}$	100	89.3	89.3
b cal 6-250ng.d	6	V	250	244.9	97.9
b QC 250 (QC 3).d	6	V	250	232.6	93.0
b cal 7-500ng.d	7	$\overline{\mathbf{V}}$	500	550.6	110.1
b cal 8-1000ng.d	8	$\checkmark$	1000	1080.4	108.0
b QC 1000 (QC4).d	8	Ø	1000	1077.0	107.7



Last Calib Update

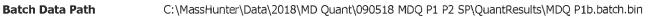
9/6/2018 10:03 AM

#### Analyst Name IS

ISP TOX

Target Compound Temazepam Internal Standard Temazepam-D5 Temazepam - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs y = 0.020669 \* x - 0.010464 R^2 = 0.99721511 Type:Linear, Origin:Ignore, Weight:1/x Relative Responses x10<sup>1</sup> 1.8-1.6 1.4 1.2 15 0.8-0.6 0.4-0.2-0 600 ò 100 200 300 400 500 700 800 900 1000 **Relative Concentration** 

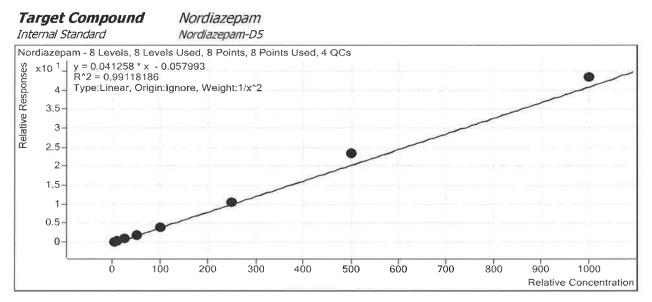
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1	$\mathbf{\nabla}$	5	4.5	90.2
b cal 2-10ng.d	2	Ø	10	9.7	97.3
b QC 10 ( QC1).d	2	$\checkmark$	10	9.7	96.8
b cal 3-25ng.d	3	V	25	24.4	97.8
b cal 4-50ng.d	4	V	50	53.5	107.0
b cal 5-100ng.d	5	$\checkmark$	100	99.6	99.6
b QC 100 (QC2).d	5	V	100	101.3	101.3
b cal 6-250ng.d	6	V	250	270.0	108.0
b QC 250 (QC 3).d	6	V	250	266.1	106.4
b cal 7-500ng.d	7	$\checkmark$	500	522.8	104.6
b cal 8-1000ng.d	8	$\checkmark$	1000	955.4	95.5
b QC 1000 (QC4).d	8		1000	850.1	85.0



Last Calib Update

9/6/2018 10:03 AM

Analyst Name



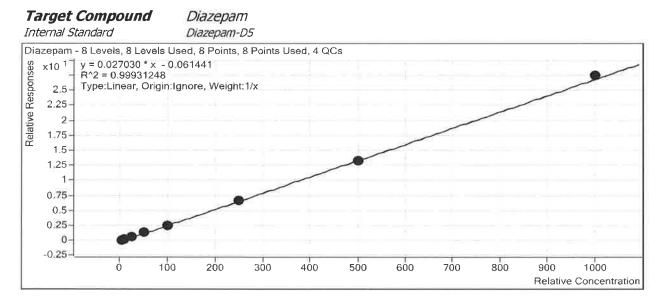
Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1	$\square$	5	5.3	105.4
b cal 2-10ng.d	2	đ	10	9.5	94.7
b QC 10 ( QC1).d	2	V	10	9.6	96.3
b cal 3-25ng.d	3		25	22.4	89.6
b cal 4-50ng.d	4	$\overline{\mathbf{V}}$	50	46.4	92.8
b cal 5-100ng.d	5	$\overline{\mathcal{A}}$	100	95.4	95.4
b QC 100 (QC2).d	5	$\overline{\mathbf{v}}$	100	97.4	97.4
b cal 6-250ng.d	6	$\mathbf{\nabla}$	250	257.3	102.9
b QC 250 (QC 3).d	6		250	256.5	102.6
b cal 7-500ng.d	7	V	500	569.5	113.9
b cal 8-1000ng.d	8	V	1000	1052.5	105.3
b QC 1000 (QC4).d	8		1000	1021.8	102.2



Last Calib Update

#### 9/6/2018 10:03 AM

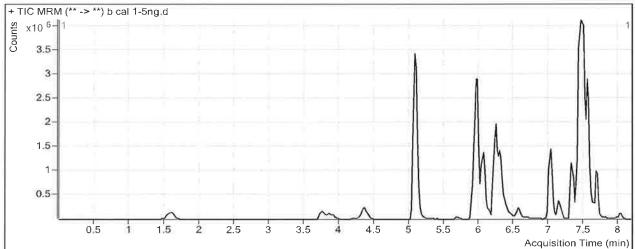
#### Analyst Name



Sample	Level	Enabled	Exp Conc	<b>Final Conc</b>	Accuracy
b cal 1-5ng.d	1	$\square$	5	5.9	118.4
b cal 2-10ng.d	2	$\square$	10	9.9	98.9
b QC 10 ( QC1).d	2	$\square$	10	10.3	102.8
b cal 3-25ng.d	3	$\square$	25	22.9	91.7
b cal 4-50ng.d	4	$\square$	50	48.8	97.7
b cal 5-100ng.d	5	V	100	93.1	93.1
b QC 100 (QC2).d	5	$\square$	100	92.7	92.7
b cal 6-250ng.d	6	Ø	250	249.7	99.9
b QC 250 (QC 3).d	6	Ø	250	247.7	99.1
b cal 7-500ng.d	7		500	493.0	98.6
b cal 8-1000ng.d	8	Z	1000	1016.6	101.7
b QC 1000 (QC4).d	8	Ø	1000	940.2	94.0

Batch Data Path	C:\MassHunter\Data\20	018\MD Quant\09051	8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin
Analysis Time	9/6/2018 10:03 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:44 PM	<b>Reporter Name</b>	ISPUser
Last Calib Update	9/6/2018 10:03 AM	Batch State	Processed
Analysis Info			
Acq Time	2018-09-05 13:41	Data File	b cal 1-5ng.d
Sample Type	Calibration	Sample Name	b cal 1-5ng.d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-H12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Oxymorphone	Oxymorphone-D3	1.588	103797	968287	0.1072	5.3102
Dihydrocodeine	Dihydrocodeine-D6	3.910	102576	1382182	0.0742	5.7110
Noroxycodone	Noroxycodone-D3	4.391	156792	1363335	0.1150	5.2925
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.100	1284169	14642216	0.0877	5.0200
Benzoylecgonine	Benzoylecgonine-d8	5.731	6724	133048	0.0505	66.9089
Ketamine	Ketamine-D4	5.942	659218	6762757	0.0975	5.0814
Norfentanyl	Norfentanyl-D5	6.004	50494	7989489	0.0063	0.8274
Cocaine	Cocaine-d3	6.232	245467	7855994	0.0312	5.7035
alpha-PVP	alpha-PVP-d8	6.328	372043	4983937	0.0746	5.1741
Mirtazapine	alpha-PVP-d8	6.563	463108	4983937	0.0929	4.9057
Norbuprenorphine	Norbuprenorphine-D3	6.954	62	77738	0.0008	0.0000
Fentanyl	Fentanyl-D5	7.017	28712	5030944	0.0057	0.6479
Mitragynine	EDDP-D3	7.115	118135	1059533	0.1115	4.9418
EDDP	EDDP-D3	7.149	71376	1059533	0.0674	5.3792
Quetiapine	Quetiapine-D8	7.338	906709	2403431	0.3773	4.8949
Cyclobenzaprine	Cyclobenzaprine-D3	7.413	248435	2793918	0.0889	5.7132
Methadone	Methadone-D9	7.441	1029652	8865806	0.1161	5,0909
Buprenorphine	Buprenorphine-D4	7.456	22957	1114565	0.0206	0.4535
Fluoxetine	Fluoxetine-D6	7.482	762354	9369349	0.0814	4.2921

Samples Report MDQ1\_000\_b cal 1-5ng.d.xlsx

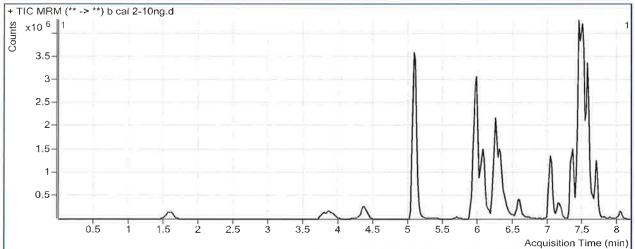
Printed at: 2:44 PM on: 9/6/2018

T5 A

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Oxazepam	Oxazepam-D5	7.510	27492	355358	0.0774	6.2311
Sertraline	Sertraline-D3	7.542	312186	3974820	0.0785	5.1947
Temazepam	Temazepam-D5	7.564	338162	4086732	0.0827	4.5096
Nordiazepam	Nordiazepam-D5	7.635	98317	616262	0.1595	5.2724
Diazepam	Diazepam-D5	7.692	233015	2362804	0.0986	5.9215

Batch Data Path	C:\MassHunter\Data\20	)18\MD Quant\09051	8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin
Analysis Time	9/6/2018 10:03 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:44 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 10:03 AM	Batch State	Processed
Analysis Info			
Acq Time	2018-09-05 14:12	Data File	b cal 2-10ng.d
Sample Type	Calibration	Sample Name	b cal 2-10ng.d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-G12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Oxymorphone	Oxymorphone-D3	1.608	213738	930441	0.2297	9.2860
Dihydrocodeine	Dihydrocodeine-D6	3.910	211797	1362691	0.1554	9.6509
Noroxycodone	Noroxycodone-D3	4.391	334564	1326600	0.2522	9.3841
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.100	2663197	14234594	0.1871	9.9801
Benzoylecgonine	Benzoylecgonine-d8	5.731	18223	120880	0.1508	69.6229
Ketamine	Ketamine-D4	5.962	1374909	6648169	0.2068	9.7319
Norfentanyl	Norfentanyl-D5	6.004	119293	7640245	0.0156	1.2522
Cocaine	Cocaine-d3	6.232	490083	7296822	0.0672	9.9994
alpha-PVP	alpha-PVP-d8	6.328	755069	4831333	0.1563	9.6777
Mirtazapine	alpha-PVP-d8	6.583	973888	4831333	0.2016	10.7042
Norbuprenorphine	Norbuprenorphine-D3	6.974	1687	74182	0.0227	0.0000
Fentanyl	Fentanyl-D5	7.037	61860	4679772	0.0132	1.0814
Mitragynine	EDDP-D3	7.115	247305	937360	0.2638	10.5862
EDDP	EDDP-D3	7.169	147321	937360	0.1572	9.4413
Quetiapine	Quetiapine-D8	7.338	1979416	2279665	0.8683	10.4688
Cyclobenzaprine	Cyclobenzaprine-D3	7.433	506040	2433703	0.2079	10.3337
Methadone	Methadone-D9	7.461	1966970	8289370	0.2373	9.6376
Buprenorphine	Buprenorphine-D4	7.456	26122	994442	0.0263	0.6508
Fluoxetine	Fluoxetine-D6	7.502	1596284	8143217	0.1960	9.7377

Samples Report MDQ1\_001\_b cai 2-10ng.d.xlsx

Printed at: 2:44 PM on: 9/6/2018

75

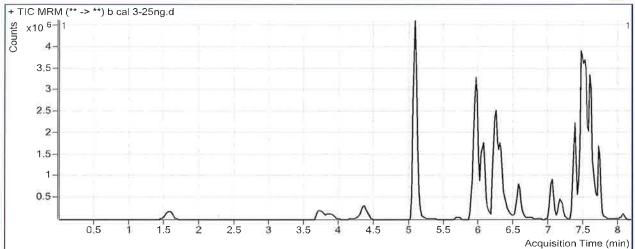
# Multi-Drug Confirmatory Analysis Report 6 Cal Z **ISP FORENSICS - Pocatello Instrument # 59740**

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Oxazepam	Oxazepam-D5	7.529	67239	349800	0.1922	11.2113
Sertraline	Sertraline-D3	7.542	589417	3377365	0.1745	9.6829
Temazepam	Temazepam-D5	7.584	874402	4585116	0.1907	9.7327
Nordiazepam	Nordiazepam-D5	7.655	249321	748965	0.3329	9.4740
Diazepam	Diazepam-D5	7.692	481403	2337138	0.2060	9.8934



Batch Data Path	C:\MassHunter\Data\2	018\MD Quant\09051	8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin
Analysis Time	9/6/2018 10:03 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:44 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 10:03 AM	Batch State	Processed
<b>Analysis Info</b> Acq Time Sample Type Dilution	2018-09-05 14:44 Calibration	Data File Sample Name Acq Method	b cal 3-25ng.d b cal 3-25ng.d MD Ouant Panel 1b 7-11-18.m
Position	P1-F12	Sample Info	AM 28
Inj Vol	-1	Comment	

#### Sample Chromatogram

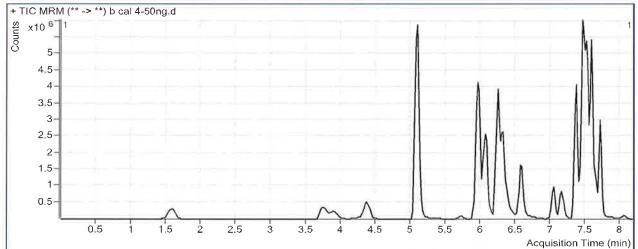


Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Oxymorphone	Oxymorphone-D3	1.588	539075	867666	0.6213	21.9924
Dihydrocodeine	Dihydrocodeine-D6	3.750	500676	1189832	0.4208	22.5250
Noroxycodone	Noroxycodone-D3	4.371	834713	1228975	0.6792	22.1190
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.072	6191554	13281061	0.4662	23.9087
Benzoylecgonine	Benzoylecgonine-d8	5.711	38659	116231	0.3326	74.5480
Ketamine	Ketamine-D4	5.942	3268183	5985021	0.5461	24.1619
Norfentanyl	Norfentanyl-D5	6.004	306881	7412237	0.0414	2.4311
Cocaine	Cocaine-d3	6.232	1210570	7118145	0.1701	22.3070
alpha-PVP	alpha-PVP-d8	6.328	1756407	4486081	0.3915	22.6551
Mirtazapine	alpha-PVP-d8	6.563	1938751	4486081	0.4322	23,0098
Norbuprenorphine	Norbuprenorphine-D3	6.974	2096	45982	0.0456	0.0000
Fentanyl	Fentanyl-D5	7.037	98660	3327882	0.0296	2.0294
Mitragynine	EDDP-D3	7.136	473483	826271	0.5730	22.0432
EDDP	EDDP-D3	7.189	328629	826271	0.3977	20.3229
Quetiapine	Quetiapine-D8	7.358	3936495	1911045	2.0599	23.9947
Cyclobenzaprine	Cyclobenzaprine-D3	7.453	889390	1740846	0.5109	22.0963
Methadone	Methadone-D9	7.481	3732470	5796105	0.6440	24.8997
Buprenorphine	Buprenorphine-D4	7.496	55340	724535	0.0764	2.3939
Fluoxetine	Fluoxetine-D6	7.521	2755996	5654008	0.4874	23.5783

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxazepam	Oxazepam-D5	7.549	144063	300131	0.4800	23.6896
Sertraline	Sertraline-D3	7.583	1092378	2409541	0.4534	22.7220
Temazepam	Temazepam-D5	7.604	197224 <b>2</b>	3986360	0.4947	24.4426
Nordiazepam	Nordiazepam-D5	7.675	570569	659031	0.8658	22.3897
Diazepam	Diazepam-D5	7.712	1178698	2111556	0.5582	22.9246

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin					
Analysis Time	9/6/2018 10:03 AM	Analyst Name	ISPUser			
Report Time	9/6/2018 2:44 PM	<b>Reporter Name</b>	ISPUser			
Last Calib Update	9/6/2018 10:03 AM	Batch State	Processed			
Analysis Info						
Acq Time	2018-09-05 15:15	Data File	b cal 4-50ng.d			
Sample Type	Calibration	Sample Name	b cal 4-50ng.d			
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m			
Position	P1-E12	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	1.588	1221452	852948	1.4320	48.3005
Dihydrocodeine	Dihydrocodeine-D6	3.750	1193614	1261691	0.9460	48.0068
Noroxycodone	Noroxycodone-D3	4.391	1876860	1208501	1.5530	48.1810
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.100	13794800	13238464	1.0420	52,6455
Benzoylecgonine	Benzoylecgonine-d8	5.711	95660	112529	0.8501	88.5628
Ketamine	Ketamine-D4	5.942	7264492	6088041	1.1932	51.6897
Norfentanyl	Norfentanyl-D5	6.004	641485	7251850	0.0885	4.5821
Cocaine	Cocaine-d3	6.232	2630354	6901246	0.3811	47.5519
alpha-PVP	alpha-PVP-d8	6.328	3978910	4533428	0.8777	49.4749
Mirtazapine	alpha-PVP-d8	6.563	4001855	4533428	0.8827	47.0547
Norbuprenorphine	Norbuprenorphine-D3	6.954	5278	48184	0.1095	3.1146
Fentanyl	Fentanyl-D5	7.037	233597	2957854	0.0790	4.8761
Mitragynine	EDDP-D3	7.136	1055257	807136	1.3074	49.2539
EDDP	EDDP-D3	7.169	762911	807136	0.9452	45.0879
Quetiapine	Quetiapine-D8	7.358	8473325	1816859	4.6637	53.5519
Cyclobenzaprine	Cyclobenzaprine-D3	7.433	2082650	1663991	1.2516	50.8539
Methadone	Methadone-D9	7.461	7409064	5785129	1.2807	48.7961
Buprenorphine	Buprenorphine-D4	7.476	113539	767746	0.1479	4.8813
Fluoxetine	Fluoxetine-D6	7.521	6253210	5564661	1.1237	53.7987

Samples Report MDQ1\_003\_b cal 4-50ng.d.xlsx

Printed at: 2:45 PM on: 9/6/2018

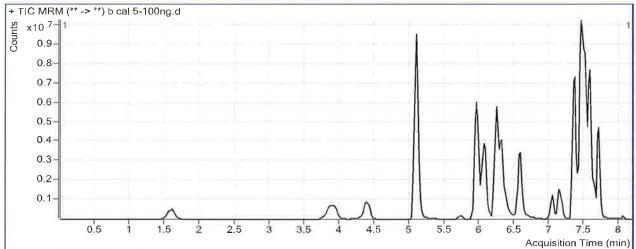
75

ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Oxazepam-D5	7.549	311658	343610	0.9070	42.2050
Sertraline-D3	7.563	2251110	2264963	0.9939	47.9986
Temazepam-D5	7.584	4380718	4000858	1.0949	53.4806
Nordiazepam-D5	7.655	1258185	678102	1.8555	46.3772
Diazepam-D5	7.712	2764716	2196321	1.2588	48.8431
	Oxazepam-D5 Sertraline-D3 Temazepam-D5 Nordiazepam-D5	Dxazepam-D5         7.549           Sertraline-D3         7.563           Temazepam-D5         7.584           Nordiazepam-D5         7.655	Dxazepam-D5         7.549         311658           Sertraline-D3         7.563         2251110           Temazepam-D5         7.584         4380718           Nordiazepam-D5         7.655         1258185	Dxazepam-D5         7.549         311658         343610           Sertraline-D3         7.563         2251110         2264963           Temazepam-D5         7.584         4380718         4000858           Nordiazepam-D5         7.655         1258185         678102	Dxazepam-D57.5493116583436100.9070Sertraline-D37.563225111022649630.9939Temazepam-D57.584438071840008581.0949Nordiazepam-D57.65512581856781021.8555

75 <

Batch Data Path	C:\MassHunter\Data\20	18\MD Quant\09051	8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin
Analysis Time	9/6/2018 10:03 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:45 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 10:03 AM	<b>Batch State</b>	Processed
Analysis Info			
Acq Time	2018-09-05 15:47	Data File	b cal 5-100ng.d
Sample Type	Calibration	Sample Name	b cal 5-100ng.d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-D12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Oxymorphone	Oxymorphone-D3	1.608	2549673	862018	2.9578	97.8106
Dihydrocodeine	Dihydrocodeine-D6	3.910	2489432	1260992	1.9742	97.8860
Noroxycodone	Noroxycodone-D3	4.391	3677167	1190012	3.0900	94.0201
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5,100	27021015	13281099	2.0345	102.1775
Benzoylecgonine	Benzoylecgonine-d8	5.711	226735	114698	1.9768	119.0768
Ketamine	Ketamine-D4	5.962	14024558	6056329	2.3157	99.4331
Norfentanyl	Norfentanyl-D5	6.004	1259484	6906490	0.1824	8.8747
Cocaine	Cocaine-d3	6.232	5267771	6464987	0.8148	99.4202
alpha-PVP	alpha-PVP-d8	6.328	7467735	4209179	1.7742	98.9304
Mirtazapine	alpha-PVP-d8	6.583	8486198	4209179	2.0161	107.5371
Norbuprenorphine	Norbuprenorphine-D3	6.974	8033	45091	0.1782	6.6132
Fentanyl	Fentanyl-D5	7.037	523407	3242780	0.1614	9.6331
Mitragynine	EDDP-D3	7.136	2313392	768704	3.0095	112.3205
EDDP	EDDP-D3	7.169	1542019	768704	2.0060	93.0721
Quetiapine	Quetiapine-D8	7.358	16124323	1863031	8.6549	98.8568
Cyclobenzaprine	Cyclobenzaprine-D3	7.433	4285457	1807167	2.3714	94.3287
Methadone	Methadone-D9	7.461	17029514	6077449	2.8021	105.8918
Buprenorphine	Buprenorphine-D4	7.476	224788	751643	0.2991	10.1400
Fluoxetine	Fluoxetine-D6	7.502	13066189	5723935	2.2827	108.8443

Samples Report MDQ1\_004\_b cal 5-100ng.d.xlsx

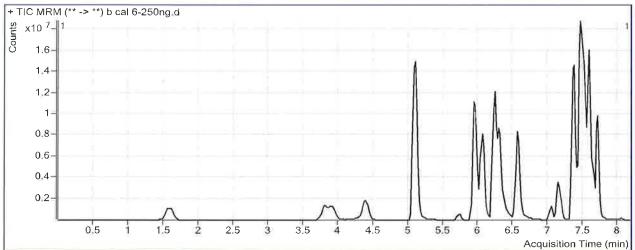
Printed at: 2:45 PM on: 9/6/2018

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Oxazepam	Oxazepam-D5	7.529	578079	300577	1.9232	86.2687
Sertraline	Sertraline-D3	7.563	4907738	2421835	2.0265	96.2845
Temazepam	Temazepam-D5	7.584	8011340	3909456	2.0492	99.6493
Nordiazepam	Nordiazepam-D5	7.655	2256130	581641	3.8789	95.4207
Diazepam	Diazepam-D5	7.712	5264576	2144363	2.4551	93.1006

5

Batch Data Path Analysis Time	C:\MassHunter\Data\20 9/6/2018 10:03 AM	018\MD Quant\09051 Analyst Name	.8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin ISPUser
Report Time	9/6/2018 2:45 PM	Reporter Name	ISPUser
Last Calib Update	9/6/2018 10:03 AM	<b>Batch State</b>	Processed
<b>Analysis Info</b> Acq Time	2018-09-05 16:18	Data File	b cal 6-250ng.d
Sample Type	Calibration	Sample Name	b cal 6-250ng.d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-C12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	<b>Final Conc</b>
Oxymorphone	Oxymorphone-D3	1.588	6329354	783966	8.0735	263.8124
Dihydrocodeine	Dihydrocodeine-D6	3.810	6394618	1191633	5.3663	262.4488
Noroxycodone	Noroxycodone-D3	4.391	8944362	1038963	8.6089	258.6172
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.100	59889738	12396833	4.8311	241.7374
Benzoylecgonine	Benzoylecgonine-d8	5.711	658889	108788	6.0566	229.5685
Ketamine	Ketamine-D4	5.942	36096097	5827783	6.1938	264.3889
Norfentanyl	Norfentanyl-D5	6.004	3089414	6094981	0.5069	23.7092
Cocaine	Cocaine-d3	6.232	12868907	6241969	2.0617	248.5473
alpha-PVP	alpha-PVP-d8	6.328	17809628	3720682	4.7867	265.1207
Mirtazapine	alpha-PVP-d8	6.563	19235621	3720682	5.1699	275.8397
Norbuprenorphine	Norbuprenorphine-D3	6.974	24251	33140	0.7318	34.8416
Fentanyl	Fentanyl-D5	7.037	1206269	2803361	0.4303	25.1501
Mitragynine	EDDP-D3	7.136	5572932	757267	7.3593	273.4937
EDDP	EDDP-D3	7.169	4291134	757267	5.6666	258.6575
Quetiapine	Quetiapine-D8	7.358	34004760	1621326	20.9734	238.6882
Cyclobenzaprine	Cyclobenzaprine-D3	7.433	9802946	1586967	6.1772	242.0877
Methadone	Methadone-D9	7.461	35533659	5182047	6.8571	258.0714
Buprenorphine	Buprenorphine-D4	7.476	490835	617040	0.7955	27.4077
Fluoxetine	Fluoxetine-D6	7.502	26092123	4630285	5.6351	268.0631

Samples Report MDQ1\_005\_b cal 6-250ng.d.xlsx

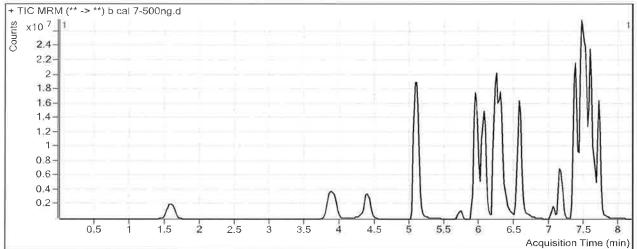
Printed at: 2:45 PM on: 9/6/2018



Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Oxazepam	Oxazepam-D5	7.529	1800228	326823	5.5083	241.7176
Sertraline	Sertraline-D3	7,563	9965832	1915044	5.2040	244.8740
Temazepam	Temazepam-D5	7.584	22494109	4038248	5.5703	270.0004
Nordiazepam	Nordiazepam-D5	7.655	6965970	659726	10.5589	257.3268
Diazepam	Diazepam-D5	7.712	12332430	1843831	6.6885	249.7187

Batch Data Path Analysis Time Report Time Last Calib Update	C:\MassHunter\Data\20 9/6/2018 10:03 AM 9/6/2018 2:45 PM 9/6/2018 10:03 AM	018\MD Quant\09051 Analyst Name Reporter Name Batch State	8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin ISPUser ISPUser Processed
Analysis Info			
Acq Time	2018-09-05 16:50	Data File	b cal 7-500ng.d
Sample Type	Calibration	Sample Name	b cal 7-500ng.d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-B12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Oxymorphone	Oxymorphone-D3	1.588	13030327	777526	16.7587	545.6426
Dihydrocodeine	Dihydrocodeine-D6	3.890	13152196	1258435	10.4512	509.1401
Noroxycodone	Noroxycodone-D3	4.391	17725822	984967	17.9964	538.5900
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.100	90178045	12267969	7.3507	367.4803
Benzoylecgonine	Benzoylecgonine-d8	5.711	1507780	114223	13.2004	423.0395
Ketamine	Ketamine-D4	5.942	63526090	5649921	11,2437	479.1875
Norfentanyl	Norfentanyl-D5	6.004	6471428	6022508	1.0745	49.6584
Cocaine	Cocaine-d3	6.232	26857983	6186763	4.3412	521.1839
alpha-PVP	alpha-PVP-d8	6.308	37684402	4023937	9.3651	517.6966
Mirtazapine	alpha-PVP-d8	6.563	38265845	4023937	9.5096	507.4243
Norbuprenorphine	Norbuprenorphine-D3	6.974	35808	38530	0.9294	44.9163
Fentanyl	Fentanyl-D5	7.037	2271172	2463830	0.9218	53.5145
Mitragynine	EDDP-D3	7.136	10446311	760079	13.7437	510.0574
EDDP	EDDP-D3	7.169	9381498	760079	12.3428	560.6514
Quetiapine	Quetiapine-D8	7.358	51395269	1545419	33.2565	378.1175
Cyclobenzaprine	Cyclobenzaprine-D3	7.433	16800661	1318872	12.7387	496.8366
Methadone	Methadone-D9	7.461	56894399	4478765	12.7031	477.4687
Buprenorphine	Buprenorphine-D4	7.476	807112	582825	1.3848	47.9090
Fluoxetine	Fluoxetine-D6	7.521	38995652	3590025	10.8622	516.3218

Samples Report MDQ1\_006\_b cal 7-500ng.d.xlsx

Printed at: 2:45 PM on: 9/6/2018

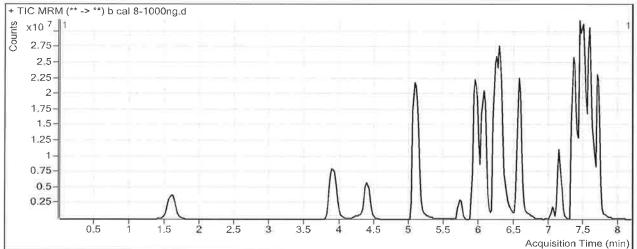
75



<b>Compound</b> Oxazepam	ISTD Compound Oxazepam-D5	<b>RT</b> 7,529	Response 3253228	<b>ISTD Resp</b> 293967	<b>Resp Ratio</b> 11.0666	<b>Final Conc</b> 482.7307
Sertraline	Sertraline-D3	7.583	15918807	1355726	11.7419	550.6059
Temazepam	Temazepam-D5	7.604	32411735	3002277	10.7957	522.8123
Nordiazepam	Nordiazepam-D5	7.655	10508840	448366	23.4381	569.4873
Diazepam	Diazepam-D5	7.712	22067412	1663550	13.2653	493.0317

Batch Data Path	C:\MassHunter\Data\2	018\MD Quant\09051	.8 MDQ P1 P2 SP\QuantResults\MDQ P1b.batch.bin
Analysis Time	9/6/2018 10:03 AM	Analyst Name	ISPUser
Report Time	9/6/2018 2:45 PM	<b>Reporter Name</b>	ISPUser
Last Calib Update	9/6/2018 10:03 AM	Batch State	Processed
Analysis Info			
Acq Time	2018-09-05 17:22	Data File	b cal 8-1000ng.d
Sample Type	Calibration	Sample Name	b cal 8-1000ng.d
Dilution	1	Acq Method	MD Quant Panel 1b 7-11-18.m
Position	P1-A12	Sample Info	
Inj Vol	-1	Comment	AM 28

#### Sample Chromatogram



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	<b>Final Conc</b>
Oxymorphone	Oxymorphone-D3	1.608	24769575	774945	31.9630	1039.0129
Dihydrocodeine	Dihydrocodeine-D6	3.890	23610575	1165818	20.2524	984.6313
Noroxycodone	Noroxycodone-D3	4.391	29440231	797482	36.9165	1102.8686
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.100	118817203	11062382	10.7407	536.6568
Benzoylecgonine	Benzoylecgonine-d8	5.711	4139160	115066	35.9720	1039.7523
Ketamine	Ketamine-D4	5.942	91971064	5263122	17.4746	744.2199
Norfentanyl	Norfentanyl-D5	6.004	11549673	5153197	2.2413	102.9923
Cocaine	Cocaine-d3	6.232	43007813	5231085	8.2216	985.2868
alpha-PVP	alpha-PVP-d8	6.308	59108240	3211111	18.4074	1016.5346
Mirtazapine	alpha-PVP-d8	6.563	53759091	3211111	16.7416	893.3615
Norbuprenorphine	Norbuprenorphine-D3	6.974	40933	20267	2.0197	100.5144
Fentanyl	Fentanyl-D5	7.037	2983677	1581277	1.8869	109.2072
Mitragynine	EDDP-D3	7.115	13603678	594324	22.8893	848.9295
EDDP	EDDP-D3	7.169	15456078	594324	26.0061	1178.7044
Quetiapine	Quetíapine-D8	7.338	60637903	1132937	53.5228	608.1658
Cyclobenzaprine	Cyclobenzaprine-D3	7.433	24041423	919166	26.1557	1017.7499
Methadone	Methadone-D9	7.461	61948858	3324987	18.6313	699.9467
Buprenorphine	Buprenorphine-D4	7.476	1034800	359848	2.8757	99.7681
Fluoxetine	Fluoxetine-D6	7.502	45514095	2263671	20.1063	955.3640

Samples Report MDQ1\_007\_b cal 8-1000ng.d.xlsx

Printed at: 2:45 PM on: 9/6/2018

75

Compound	ISTD Compound	RT	Response	ISTD Resp	<b>Resp Ratio</b>	Final Conc
Oxazepam	Oxazepam-D5	7.529	6905625	287067	24.0558	1045.9460
Sertraline	Sertraline-D3	7.563	19043951	825464	23.0706	1080.3670
Temazepam	Temazepam-D5	7.584	51310477	2599783	19.7364	955.3724
Nordiazepam	Nordiazepam-D5	7.655	17147455	395409	43.3664	1052.5000
Diazepam	Diazepam-D5	7.692	35727831	1303153	27.4164	1016.5663