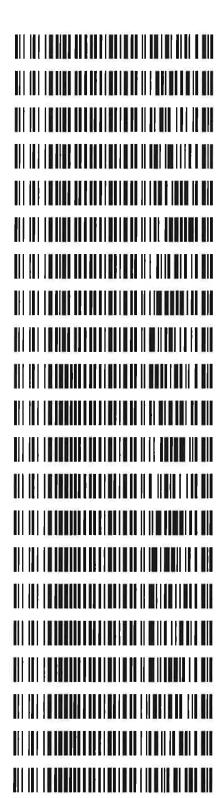




Worklist:	2440
-----------	------

LAB CASE	<u>ITEM</u>	TASK ID	DESCRIPTION
M2018-2145	1	117441	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
M2018-2416	1	118875	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
M2018-2479	1	118876	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
M2018-2509	1	118878	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
M2018-2617	2	118880	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
M2018-2732	1	118879	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
M2018-2738	1	118881	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
M2018-2839	1	118883	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
M2018-2900	2	118885	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-1395	1	118891	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
P2018-1407	1	116916	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
P2018-1522	1	118882	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
P2018-1616	1	118884	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
P2018-1639	1	118886	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
P2018-1649	1	118888	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
P2018-1655	1	118887	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-1668	1	118889	AM 28 Blood Multi-Drug Quant Panel 1 by LC-QC
P2018-1671	1	118893	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q(
P2018-1692	1	118890	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
P2018-1716	8	118894	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0
P2018-1720	1	118892	AM 28 Blood Multi-Drug Quant Panel 1 by LC-Q0





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

Extraction Date: 06/18/2018

Analyst: Tamara Salazar

Plate lot#: 0530563

Plate Expiration: 05/21/2019

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

Mobile phase B: 0.01% Formic Acid in MeOH

0.5M Ammonium Hydroxide

Ethyl Acetate 20% Methanol in Water

Blank Blood Lot: 361331-1

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

LCMS-QQQ ID: 59740

Pre-Analytic:

☑ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.

Analytic:

☑ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.

- Σ 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.
- ∑ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- ☑ 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
- \boxtimes 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).
- □ 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. SPE Dry ID: 067103
- ☑ 16. Reconstitute in 100 µL 20% MeOH and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

□ 1. Create batch and process data.

Worklist path: C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1and P2 TS Batch Name: pla MDQ 61818 final p1b MDQ 61818 final

- \boxtimes 3. Integration linear and R² values \ge 0.98 for each analyte.
- ✓ 4. For unknown samples and controls: response ratio within 20% of average of controls and standards, RT within +/-5% (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.



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

Extraction Date: 06/18/2018

Plate lot#: 0530563

Analyst: Tamara Salazar Plate Expiration: 05/21/2019

COMMENTS:

Pla evaluated for: Morphine

Hydromorphone Amphetamine Oxycodone Methamphetamine Phentermine 7-aminoclonazepam

Tramadol
Metoprolol
Doxylamine
Zolpidem
Trazodone
Venlafaxine
Citalopram
Clonazepam

a-hydroxyalprazolam

Lorazepam Alprazolam

P1b evaluated for:

Noroxycodone

O-desmethyl-tramadol

Ketamine

Norbuprenorphine

Quetiapine Buprenorphine

Curves Limited:

Amphetamine 10-1000 Phentermine 10-1000 Tramadol 5-500 Metoprolol 5-250 Zolpidem 5-500 Venlafaxine 5-500 Lorazepam 10-1000

O-desmethyl-tramadol 5-500 Norbuprenorphine 2.5-100 Buprenorphine 2.5-100

Zolpidem evaluated qualitatively due to removing a calibration point.







Idaho State Police Forensic Services

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

Analyst: Tamara Salazar Extraction Date: 06/18/18 Worklist Number: 2440

Reagent	Lot Number	Expiration Date	Date in Service	Date Out of Service	Initials
ToxBox Benzo/Opiate Quant Plate	0530563	05/21/19	06/05/18		
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	032918	09/29/18	03/29/18		
Formic Acid (LCMS Grade)	095180B		11/15/17		
Water (LCMS Grade)	177528		03/05/18		
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	052918	Make Fresh	-052918-		
5mM Ammonium Formate + 0.01% Formic Acid in Water (Mobile Phase A)	051018		05/10/18		
0.01% Formic Acid in Methanol (Mobile Phase B)	061818		06/18/18		
Needle Rinse75% LCMS MeOH in LCMS Water	061818		06/18/18		

Methanol External Control Solution (Lot:121217) 100 ul each 1 mg/mL stock solution in 9600 ul MeOH

100 at each 1 mg/ml stock solution in 2000 at meon					
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		121217
Solution		
Prepared:	12/12/17	
Prepared by:	Tamara Salazar	
Expires:	12/12/18	

0.5M Ammonium Hydroxide (Lot: 032918)

Component	Source	Source Lot Number	
Ammonium Hydroxide (ACS grade or better)	Fisher	053200	
DI Water			
Prepared:	03/29/18		
Prepared By:	Tamara Salazar		
Expires:	09/29/18		

20% LCMS Methanol in LCMS Water (Lot: Prepared Fresh)

Component	Source	Source Lot Number
MeOH (LCMS Grade)	Fisher	177145
Water (LCMS Grade)	Fisher	177528

5mM Ammonium Formate + 0.01% Formic Acid in Water (Lot: 051018)

Component	Source	Source Lot Number
Ammonium Formate	Arcos Organic	A0287238
LCMS Water	Fisher	177528
Formic Acid	Fisher	095180B
Prepared:	05/10/18	
Prepared By:	Sarah Pickle	

0.01% Formic Acid in LCMS Methanol (Mobile Phase B) (Lot: 061818)

Component	Source	Source Lot Number	
Formic Acid	Fisher	095180B	
MeOH (LCMS Grade)	Fisher	172517	
Prepared:	06/18/18		
Prepared By:	Tamara Salazar		

Needle Rinse (75% LCMS MeOH in LCMS Water) (Lot: 061818)

Component	Source	Source Lot Number
MeOH (LCMS Grade)	Fisher	177145
Water (LCMS Grade)	Fisher	177528
Prepared:	06/18/18	
Prepared By:	Tamara Salazar	



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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 Analyst Name
 ISPUser

 Report Time
 6/20/2018 12:57 PM
 Reporter Name
 ISPUser

 Last Calib Update
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 Batch State
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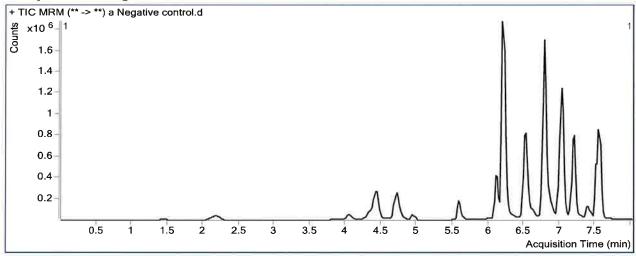
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Position P1-E2 Sample Info

Inj Vol -1 Comment AM 28

Sample Chromatogram



Results	
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Compound ISTD Compound RT Response ISTD Resp Resp Ratio Final Conc Amphetamine Amphetamine-D11 4.464 87389 296349 0.2949 1.5970 🔰



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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 Analyst Name
 ISPUser

 Report Time
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 ISPUser

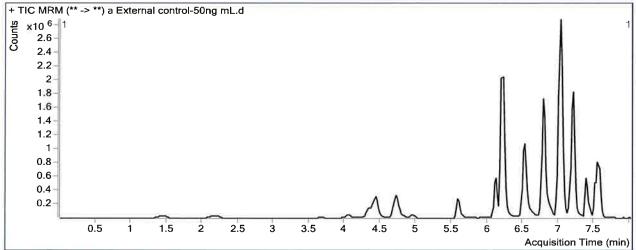
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 Batch State
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Analysis Info

Acq Time2018-06-19 06:50Data Filea External control-50ng mL.dSample TypeSampleSample Namea External control-50ng mL.dDilution1Acq MethodMD Quant Panel 1a 6-14-18.mPositionP1-F2Sample Info

rosition P1-F2 Sample Info

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



Results							
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc	
Morphine	Morphine-D6	1.468	110938	44440	2.4964	44.1374	
Amphetamine	Amphetamine-D11	4.464	176555	615377	0.2869	1.4783 45 75	
Trazodone	Trazodone-D6	7.015	2137953	1570174	1.3616	49.8655	



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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 Analyst Name
 ISPUser

 Report Time
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 ISPUser

 Last Calib Update
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 Batch State
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Analysis Info

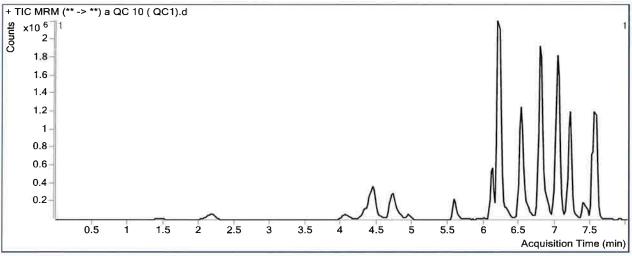
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 Sample Type
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 Sample Name
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Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-A2 **Sample Info**

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.448	26679	51722	0.5158	10.2092
Hydromorphone	Hydromorphone-D6	2.189	91089	393179	0.2317	9.1718
Amphetamine	Amphetamine-D11	4.464	403601	420939	0.9588	11.4672
Oxycodone	Oxycodone-D6	4.451	336173	1480125	0.2271	9.4814
Methamphetamine	Methamphetamine-D11	4.824	175419	431518	0.4065	11.4936
Phentermine	Phentermine-D5	5.625	88467	899212	0.0984	9.8137
7-aminoclonazepam	7-Aminoclonazepam-D4	6.195	176313	757016	0.2329	9.1578
Tramadol	Tramadol-13C-D3	6.223	1266630	6683637	0.1895	10.0228
Metoprolol	Oxycodone-D6	6.321	108439	1480125	0.0733	9.4449
Doxylamine	Doxylamine-D5	6.542	731612	4299026	0.1702	9.0551
Zołpidem	Zolpidem-D6	6.801	1008460	6089942	0.1656	9.7689
Trazodone	Trazodone-D6	7.015	312383	1048612	0.2979	11.0537
Venlafaxine	Venlafaxine-D6	7.026	1022223	3928058	0.2602	10.3069
Citalopram	Citalopram-D6	7.179	210582	997353	0.2111	9.8661
Clonazepam	Clonazepam-D4	7.44 5	105161	89606	1.1736	10.5118
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	36225	171052	0.2118	10.0445
Lorazepam	Clonazepam-D4	7.543	38544	89606	0.4301	11.0012
Alprazolam	Alprazolam-D5	7.568	714467	2257214	0.3165	10.3291



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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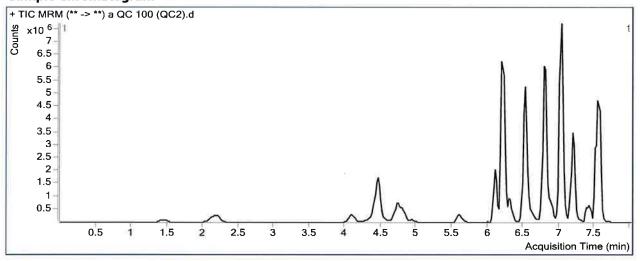
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 Sample Type
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 Sample Name
 a QC 100 (QC2).d

Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-B2 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.448	293478	51183	5.7339	99.5991
Hydromorphone	Hydromorphone-D6	2.189	1131008	400033	2.8273	95.5770
Amphetamine	Amphetamine-D11	4.464	2552464	345820	7.3809	106.9410
Oxycodone	Oxycodone-D6	4.451	4083021	1597788	2.5554	96.5236
Methamphetamine	Methamphetamine-D11	4.804	1649708	463484	3.5594	95.4968
Phentermine	Phentermine-D5	5.625	905591	813267	1.1135	94.9179
7-aminoclonazepam	7-Aminoclonazepam-D4	6.195	1847633	713382	2.5900	106.0490
Tramadol	Tramadol-13C-D3	6.223	13731081	7043556	1.9495	105.1233
Metoprolol	Oxycodone-D6	6.321	1172264	1597788	0.7337	90.0994
Doxylamine	Doxylamine-D5	6.522	8091194	4284735	1.8884	111.5679
Zolpidem	Zolpidem-D6	6.801	11694771	6314129	1.8522	102.4685
Trazodone	Trazodone-D6	7.015	3705012	1208728	3.0652	112.0262
Venlafaxine	Venlafaxine-D6	7.026	10794093	3960126	2.7257	102.7089
Citalopram	Citalopram-D6	7.158	2100887	949134	2.2135	94.9039
Clonazepam	Clonazepam-D4	7.425	1187598	97264	12.2100	98.2521
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	425611	177555	2.3971	97.2741
Lorazepam	Clonazepam-D4	7.543	485992	97264	4.9966	88.4381
Alprazolam	Alprazolam-D5	7.568	6983581	2065777	3.3806	93.4111



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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 Analyst Name
 ISPUser

 Report Time
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 Reporter Name
 ISPUser

 Last Calib Update
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Analysis Info

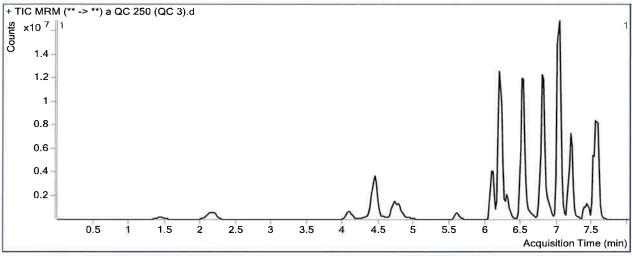
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 Sample Type
 QC
 Sample Name
 a QC 250 (QC 3).d

Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-C2 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.448	700004	39761	17.6051	302.9618
Hydromorphone	Hydromorphone-D6	2.169	2760746	366376	7.5353	252.3012
Amphetamine	Amphetamine-D11	4.444	4866984	322021	15.1139	221.9032
Oxycodone	Oxycodone-D6	4.431	10057133	1463648	6.8713	257.8698
Methamphetamine	Methamphetamine-D11	4.784	3909613	411570	9.4993	253.7574
Phentermine	Phentermine-D5	5.606	2176394	755624	2.8803	243.0322
7-aminoclonazepam	7-Aminoclonazepam-D4	6.174	4162647	646659	6.4372	264.1948
Tramadol	Tramadol-13C-D3	6.203	33696848	7227677	4.6622	251.7097
Metoprolol	Oxycodone-D6	6.301	2641450	1463648	1.8047	220.9002
Doxylamine	Doxylamine-D5	6.522	20793407	4351484	4.7785	283.9992
Zolpidem	Zolpidem-D6	6.801	26939 44 2	6079068	4.4315	244.2387
Trazodone	Trazodone-D6	6.995	9360175	1257246	7. 44 50	271.8332
Venlafaxine	Venlafaxine-D6	7.026	28154038	3803023	7.4031	278.0105
Citalopram	Citalopram-D6	7.158	5220017	887991	5.8785	250.5527
Clonazepam	Clonazepam-D4	7.425	2623465	82890	31.6500	252.8017
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	986936	146373	6.7426	270.7347
Lorazepam	Clonazepam-D4	7.543	1153108	82890	13.9113	239.6118
Alprazolam	Alprazolam-D5	7.568	14455356	1602316	9.0215	246.3639



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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 Analyst Name
 ISPUser

 Report Time
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 Reporter Name
 ISPUser

 Last Calib Update
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Analysis Info

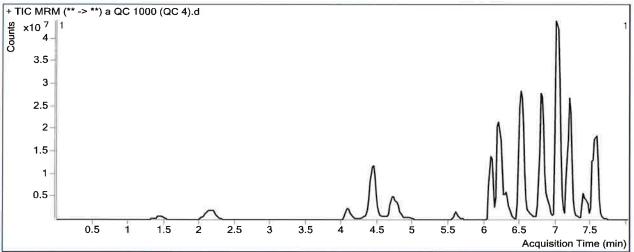
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 Sample Type
 QC
 Sample Name
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 Dilution
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 Acq Method
 MD Quant Panel 1a 6-14-18.m

Position P1-D2 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.448	2612256	32839	79.5463	1364.0598
Hydromorphone	Hydromorphone-D6	2.169	10409954	313750	33.1792	1105.9578
Amphetamine	Amphetamine-D11	4.424	14088269	289429	48.6760	720.8545
Oxycodone	Oxycodone-D6	4.431	40558094	1372503	29.5505	1105.7203
Methamphetamine	Methamphetamine-D11	4.784	11031563	288904	38.1842	1018.0281
Phentermine	Phentermine-D5	5.606	7288452	625139	11.6589	978.9909
7-aminoclonazepam	7-Aminoclonazepam-D4	6.174	11445076	484132	23.6404	971.3655
Tramadol	Tramadol-13C-D3	6.203	76742958	4 327561	1 7.733 5	958_0353 Outside curve range
Metoprolol	Oxycodone-D6	6.301	8073817	1372503	5.8826	718.9150
Doxylamine	Doxylamine-D5	6.502	66271588	4441508	14.9210	889.1316
Zolpider n	Zolpidem-D6	6.80 1	6743718 1	5201289	12.965 5	713.2957 Outside curve range
Trazodone	Trazodone-D6	6.995	39741169	1632257	24.3474	888.5600
Venlafa xine	Venlafaxine D6	7.02 6	7325688 2	349726 6	20.946 9	785.6148 Outside curve range
Citalopram	Citalopram-D6	7.158	21274328	825135	25.7828	1095.8768
Clonazepam	Clonazepam-D4	7.425	7917786	60834	130.1532	1035.9093
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	3402694	121559	27.9922	1118.9510
Lorazepam	Clonazepam-D4	7.543	3733503	60834	61.3716	1044.4318
Alprazolam	Alprazolam-D5	7.568	35279413	878904	40.1402	1090.1415



Batch Data Path

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61818 final.batch.bin

Last Calib Update

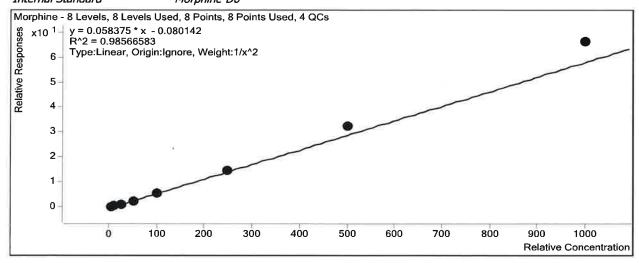
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound
Internal Standard

Morphine Morphine-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
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a cal 2-10ng.d	2	Ø	10	9.4	93.8
a QC 10 (QC1).d	2	₫	10	10.2	102.1
a cal 3-25ng.d	3	☑	25	21.0	84.0
a cal 4-50ng.d	4	Ø	50	44.6	89.1
a cal 5-100ng.d	5	\square	100	99.5	99.5
a QC 100 (QC2).d	5	Ø	100	99.6	99.6
a cal 6-250ng.d	6		250	255.4	102.2
a QC 250 (QC 3).d	6	Ø	250	303.0	121.2
a cal 7-500ng.d	7	\square	500	555.1	111.0
a cal 8-1000ng.d	8	Ø	1000	1132.2	113.2
a QC 1000 (QC 4).d	8	☑	1000	1364.1	136.4

istdnew1.xlsx Page 1 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

Last Calib Update

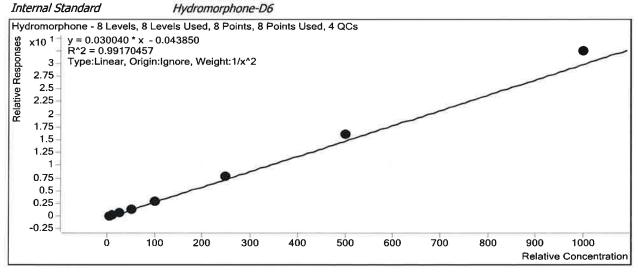
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound

Hydromorphone Hydromorphone-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	\square	5	5.3	106.9
a cal 2-10ng.d	2	☑	10	9.2	91.8
a QC 10 (QC1).d	2		10	9.2	91.7
a cal 3-25ng.d	3		25	22.2	88.6
a cal 4-50ng.d	4	☑	50	46.7	93.4
a cal 5-100ng.d	5	☑	100	98.3	98.3
a QC 100 (QC2).d	5	☑	100	95.6	95.6
a cal 6-250ng.d	6	\square	250	262.9	105.1
a QC 250 (QC 3).d	6	☑	250	252.3	100.9
a cal 7-500ng.d	7	\square	500	539.9	108.0
a cal 8-1000ng.d	8		1000	1078.2	107.8
a QC 1000 (QC 4).d	8	☑	1000	1106.0	110.6

istdnew1.xlsx Page 2 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

Last Calib Update

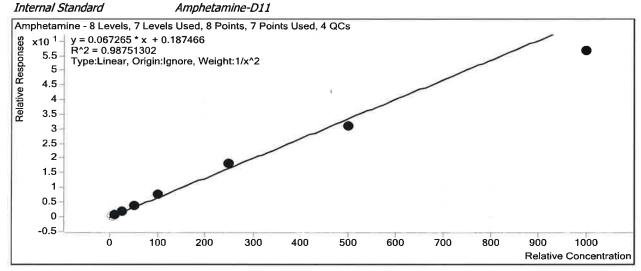
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound

Amphetamine



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1		5	4.5	89.1
a cal 2-10ng.d	2	☑	10	9.7	97.1
a QC 10 (QC1).d	2	Ø	10	11.5	114.7
a cal 3-25ng.d	3	Ø	25	25.3	101.4
a cal 4-50ng.d	4		50	53.2	106.4
a cal 5-100ng.d	5	Ø	100	110.9	110.9
a QC 100 (QC2).d	5	Ø	100	106.9	106.9
a cal 6-250ng.d	6	☑	250	270.4	108.2
a QC 250 (QC 3).d	6		250	221.9	88.8
a cal 7-500ng.d	7		500	461.1	92.2
a cal 8-1000ng.d	8	Ø	1000	838.6	83.9
a QC 1000 (QC 4).d	8	Ø	1000	720.9	72.1

istdnew1.xlsx Page 3 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

Last Calib Update

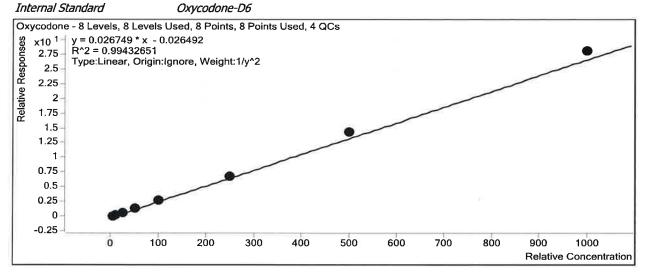
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound

Oxycodone



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	\square	5	5.2	103.8
a cal 2-10ng.d	2	\square	10	9.7	96.5
a QC 10 (QC1).d	2	☑	10	9.5	94.8
a cal 3-25ng.d	3	☑	25	22.1	88.6
a cal 4-50ng.d	4	\square	50	49.4	98.8
a cal 5-100ng.d	5	\square	100	103.0	103.0
a QC 100 (QC2).d	5	\square	100	96.5	96.5
a cal 6-250ng.d	6	Ø	250	257.7	103.1
a QC 250 (QC 3).d	6	Ø	250	257.9	103.1
a cal 7-500ng.d	7	Ø	500	536.7	107.3
a cal 8-1000ng.d	8	☑	1000	1046.5	104.6
a QC 1000 (QC 4).d	8	☑	1000	1105.7	110.6

istdnew1.xlsx Page 4 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

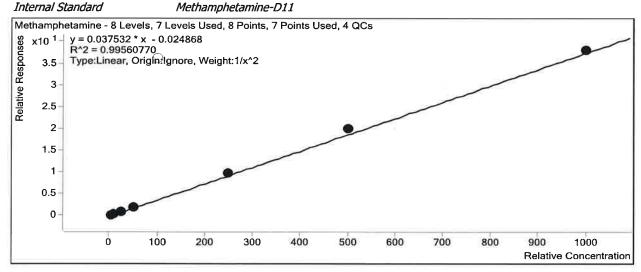
Last Calib Update

6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target CompoundMethamphetamineInternal StandardMethamphetamine-D11



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	\square	5	5.3	105.5
a cal 2-10ng.d	2		10	9.2	91.5
a QC 10 (QC1).d	2		10	11.5	114.9
a cal 3-25ng.d	3	\square	25	23.3	93.3
a cal 4-50ng.d	4		50	49.8	99.5
a cal 5-100ng.d	5		100	962.5	962.5
a QC 100 (QC2).d	5		100	95.5	95.5
a cal 6-250ng.d	6	☑	250	258.1	103.2
a QC 250 (QC 3).d	6	Ø	250	253.8	101.5
a cal 7-500ng.d	7	☑	500	529.5	105.9
a cal 8-1000ng.d	8	☑	1000	1010.5	101.0
a QC 1000 (QC 4).d	8	Ø	1000	1018.0	101.8

istdnew1.xlsx Page 5 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

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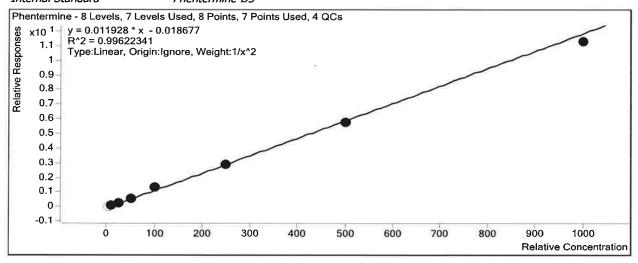
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target CompoundInternal Standard

Phentermine Phentermine-D5



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1		5	5.7	113.7
a cal 2-10ng.d	2	\square	10	10.0	99.8
a QC 10 (QC1).d	2	☑	10	9.8	98.1
a cal 3-25ng.d	3		25	24.3	97.2
a cal 4-50ng.d	4	☑	50	51.0	102.1
a cal 5-100ng.d	5	$\overline{\checkmark}$	100	110.7	110.7
a QC 100 (QC2).d	5		100	94.9	94.9
a cal 6-250ng.d	6	☑	250	246.3	98.5
a QC 250 (QC 3).d	6	☑	250	243.0	97.2
a cal 7-500ng.d	7	Ø	500	485.1	97.0
a cal 8-1000ng.d	8	\square	1000	946.5	94.7
a QC 1000 (QC 4).d	8	☑	1000	979.0	97.9

istdnew1.xlsx Page 6 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

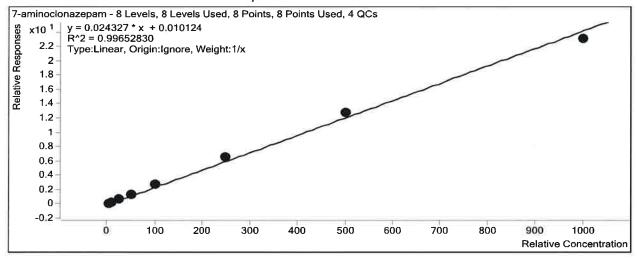
Last Calib Update

6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound7-aminoclonazepamInternal Standard7-Aminoclonazepam-D4



Sample	Levei	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	☑	5	4.2	84.4
a cal 2-10ng.d	2	Ø	10	9.5	94.8
a QC 10 (QC1).d	2	Ø	10	9.2	91.6
a cal 3-25ng.d	3	☑	25	25.1	100.3
a cal 4-50ng.d	4		50	52.0	103.9
a cal 5-100ng.d	5	Ø	100	110.0	110.0
a QC 100 (QC2).d	5	\square	100	106.0	106.0
a cal 6-250ng.d	6	Ø	250	267.4	106.9
a QC 250 (QC 3).d	6	₫	250	264.2	105.7
a cal 7-500ng.d	7	Ø	500	523.3	104.7
a cal 8-1000ng.d	8	Ø	1000	948.6	94.9
a QC 1000 (QC 4).d	8	☑	1000	971.4	97.1

istdnew1.xlsx Page 7 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

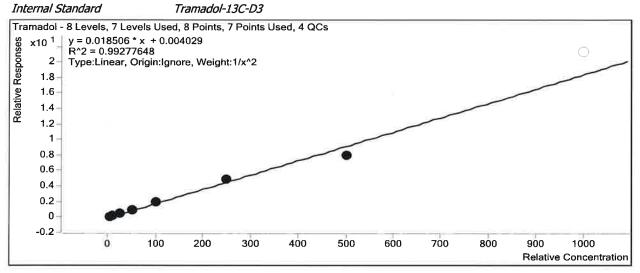
Last Calib Update

6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target CompoundTramadolInternal StandardTramadol-13



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	\square	5	5.0	100.4
a cal 2-10ng.d	2	\square	10	9.8	97.7
a QC 10 (QC1).d	2	☑	10	10.0	100.2
a cal 3-25ng.d	3	☑	25	24.8	99.4
a cal 4-50ng.d	4	Ø	50	52.5	105.0
a cal 5-100ng.d	5	☑	100	107.6	107.6
a QC 100 (QC2).d	5		100	105.1	105.1
a cal 6-250ng.d	6	☑	250	260.4	104.2
a QC 250 (QC 3).d	6		250	251.7	100.7
a cal 7-500ng.d	7	☑	500	428.3	85.7
a cal 8-1000ng.d	8		1000	1151.2	115.1
a QC 1000 (QC 4).d	8		1000	958.0	95.8

istdnew1.xlsx Page 8 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

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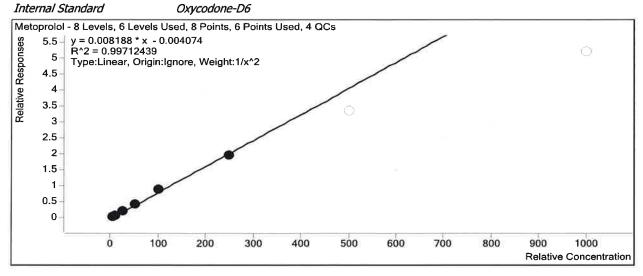
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound

Metoprolol



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	☑	5	5.1	101.8
a cal 2-10ng.d	2	♂	10	9.7	96.7
a QC 10 (QC1).d	2	☑	10	9.4	94.4
a cal 3-25ng.d	3	☑	25	24.3	97.3
a cal 4-50ng.d	4	$\mathbf{\nabla}$	50	50.5	101.0
a cal 5-100ng.d	5	\square	100	107.4	107.4
a QC 100 (QC2).d	5	\square	100	90.1	90.1
a cal 6-250ng.d	6	Ø	250	239.6	95.8
a QC 250 (QC 3).d	6	Ø	250	220.9	88.4
a cal 7-500ng.d	7		500	408.6	81.7
a cal 8-1000ng.d	8		1000	635.2	63.5
a QC 1000 (QC 4).d	8		1000	718.9	71.9

istdnew1.xlsx Page 9 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

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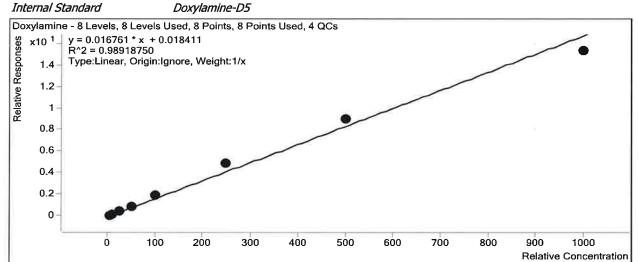
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound

Doxylamine



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	☑	5	3.9	78.7
a cał 2-10ng.d	2		10	8.9	89.5
a QC 10 (QC1).d	2	☑	10	9.1	90.6
a cal 3-25ng.d	3	☑	25	24.5	97.9
a cal 4-50ng.d	4	☑	50	52.9	105.7
a cal 5-100ng.d	5	☑	100	114.1	114.1
a QC 100 (QC2).d	5	\square	100	111.6	111.6
a cal 6-250ng.d	6	Ø	250	289.9	116.0
a QC 250 (QC 3).d	6	☑	250	284.0	113.6
a cal 7-500ng.d	7	Ø	500	535.2	107.0
a cal 8-1000ng.d	8	Ø	1000	910.6	91.1
a QC 1000 (QC 4).d	8	☑	1000	889.1	88.9

istdnew1.xlsx Page 10 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

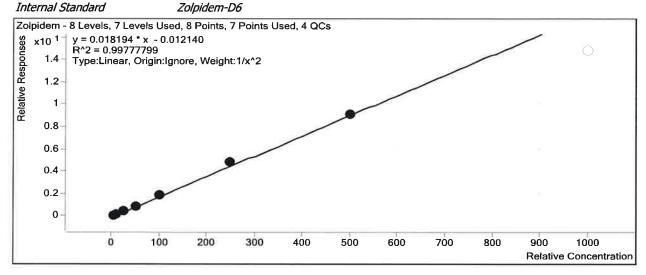
Last Calib Update

6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target CompoundZolpidemInternal StandardZolpidem-De



Sample	Levei	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	\square	5	5.1	102.4
a cal 2-10ng.d	2	Ø	10	9.7	97.0
a QC 10 (QC1).d	2		10	9.8	97.7
a cal 3-25ng.d	3	\square	25	24.1	96.5
a cal 4-50ng.d	4	\square	50	47.7	95.3
a cal 5-100ng.d	5	\square	100	102.1	102.1
a QC 100 (QC2).d	5	Ø	100	102.5	102.5
a cal 6-250ng.d	6	☑	250	266.2	106.5
a QC 250 (QC 3).d	6	$ \overline{\mathbf{V}} $	250	244.2	97.7
a cal 7-500ng.d	7	☑	500	500.7	100.1
a cal 8-1000ng.d	8		1000	814.6	81.5
a QC 1000 (QC 4).d	8		1000	713.3	71.3

istdnew1.xlsx Page 11 of 18



Batch Data Path

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61818 final.batch.bin

Last Calib Update

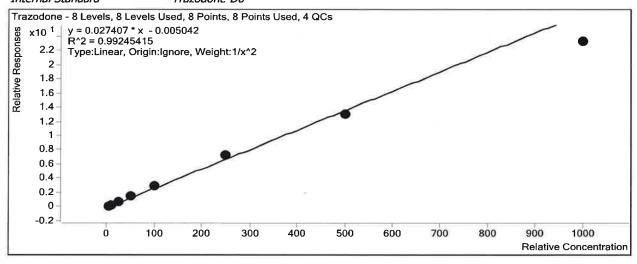
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound
Internal Standard

Trazodone
Trazodone-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	Ø	5	4.9	97.3
a cal 2-10ng.d	2	\square	10	10.3	103,1
a QC 10 (QC1).d	2		10	11.1	110.5
a cal 3-25ng.d	3	☑	25	25.1 3	100.2
a cal 4-50ng.d	4	\square	50	54.1	108.3
a cal 5-100ng.d	5	\square	100	105.9	105.9
a QC 100 (QC2).d	5	\square	100	112.0	112.0
a cal 6-250ng.d	6	\square	250	262.8	105.1
a QC 250 (QC 3).d	6		250	271.8	108.7
a cal 7-500ng.d	7	\square	500	476.0	95.2
a cal 8-1000ng.d	8		1000	848.2	84.8
a QC 1000 (QC 4).d	8		1000	888.6	88.9

istdnew1.xlsx Page 12 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

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6/20/2018 12:54 PM

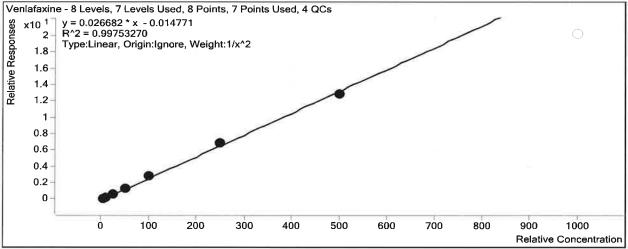
Analyst Name

ISP TOX

Target Compound

Venlafaxine





Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	\square	5	5.1	102.6
a cal 2-10ng.d	2	☑	10	9.6	95.6
a QC 10 (QC1).d	2		10	10.3	103.1
a cal 3-25ng.d	3	☑	25	24.2	96.8
a cal 4-50ng.d	4		50	49.2	98.5
a cal 5-100ng.d	5	Ø	100	106.6	106.6
a QC 100 (QC2).d	5	Ø	100	102.7	102.7
a cal 6-250ng.d	6	Ø	250	258.5	103.4
a QC 250 (QC 3).d	6	Ø	250	278.0	111.2
a cal 7-500ng.d	7	\square	500	482.1	96.4
a cal 8-1000ng.d	8		1000	757.3	75.7
a QC 1000 (QC 4).d	8		1000	785.6	78.6

istdnew1.xlsx Page 13 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

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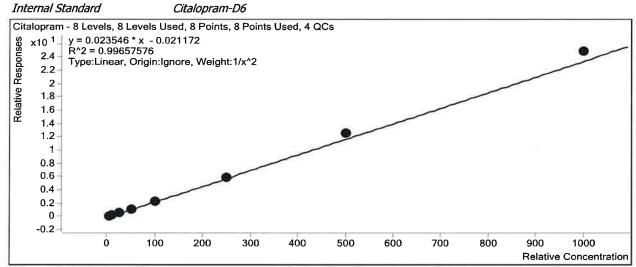
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound

Citalopram



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1		5	5.2	104.0
a cal 2-10ng.d	2	☑	10	9.6	95.7
a QC 10 (QC1).d	2	☑	10	9.9	98.7
a cal 3-25ng.d	3	☑	25	22.9	91.6
a cal 4-50ng.d	4		50	49.0	97.9
a cal 5-100ng.d	5	☑	100	98.6	98.6
a QC 100 (QC2).d	5	$\overline{\mathbf{A}}$	100	94.9	94.9
a cal 6-250ng.d	6	\square	250	251.0	100.4
a QC 250 (QC 3).d	6	☑	250	250.6	100.2
a cal 7-500ng.d	7	\square	500	530.9	106.2
a cal 8-1000ng.d	8	\square	1000	1056.1	105.6
a QC 1000 (QC 4).d	8	☑	1000	1095.9	109.6

istdnew1.xlsx Page 14 of 18



Batch Data Path

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61818 final.batch.bin

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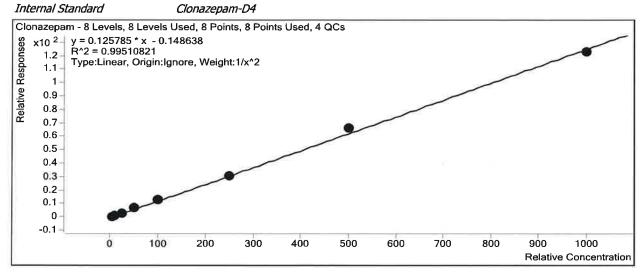
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound

Clonazepam



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	\square	5	5.0	100.9
a cal 2-10ng.d	2		10	10.2	101.8
a QC 10 (QC1).d	2	☑	10	10.5	105.1
a cal 3-25ng.d	3		25	21.9	87.5
a cal 4-50ng.d	4	\square	50	53.3	106.7
a cal 5-100ng.d	5	☑	100	102.0	102.0
a QC 100 (QC2).d	5	\square	100	98.3	98.3
a cal 6-250ng.d	6		250	243.5	97.4
a QC 250 (QC 3).d	6	☑	250	252.8	101.1
a cal 7-500ng.d	7	☑	500	530.8	106.2
a cal 8-1000ng.d	8		1000	977.0	97.7
a QC 1000 (QC 4).d	8	\square	1000	1035.9	103.6

istdnew1.xlsx Page 15 of 18

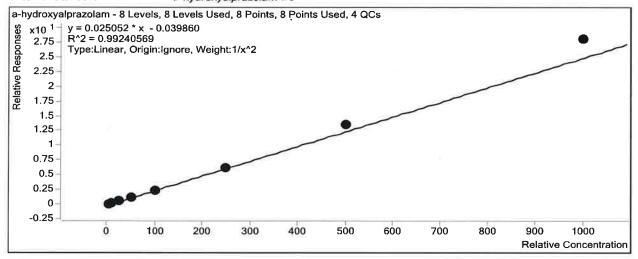


Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

Last Calib Update 6/20/2018 12:54 PM Analyst Name ISP TOX

Target Compounda-hydroxyalprazolamInternal Standarda-hydroxyalprazolam-D5



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1	\square	5	5.3	105.3
a cal 2-10ng.d	2	\square	10	9.4	94.1
a QC 10 (QC1).d	2	\square	10	10.0	100.4
a cal 3-25ng.d	3		25	23.0	92.1
a cal 4-50ng.d	4		50	46.0	92.1
a cal 5-100ng.d	5	\square	100	97.3	97.3
a QC 100 (QC2).d	5	☑	100	97.3	97.3
a cal 6-250ng.d	6	₫	250	247.7	99.1
a QC 250 (QC 3).d	6	₫	250	270.7	108.3
a cal 7-500ng.d	7	☑	500	540.2	108.0
a cal 8-1000ng.d	8	☑	1000	1119.3	111.9
a QC 1000 (QC 4).d	8	☑	1000	1119.0	111.9

istdnew1.xlsx Page 16 of 18



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

Last Calib Update

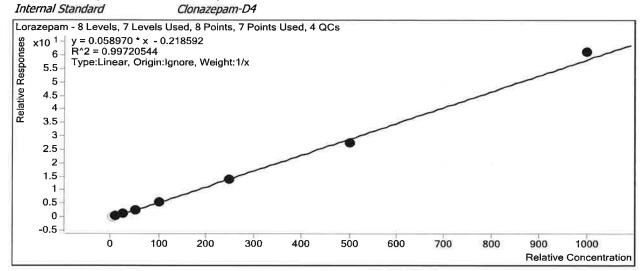
6/20/2018 12:54 PM

Analyst Name

ISP TOX

Target Compound

Lorazepam



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
a cal 1-5ng.d	1		5	6.9	137.0
a cal 2-10ng.d	2	☑	10	11.6	116.0
a QC 10 (QC1).d	2	☑	10	11.0	110.0
a cal 3-25ng.d	3	\square	25	22.2	88.6
a cal 4-50ng.d	4	\square	50	50.4	100.7
a cal 5-100ng.d	5		100	100.1	100.1
a QC 100 (QC2).d	5		100	88.4	88.4
a cal 6-250ng.d	6	囟	250	242.3	96.9
a QC 250 (QC 3).d	6		250	239.6	95.8
a cal 7-500ng.d	7	☑	500	467.3	93.5
a cal 8-1000ng.d	8		1000	1041.1	104.1
a QC 1000 (QC 4).d	8	Ø	1000	1044.4	104.4

istdnew1.xlsx Page 17 of 18

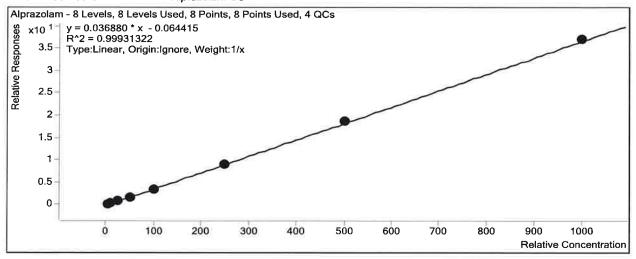


Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ

61818 final.batch.bin

Last Calib Update 6/20/2018 12:54 PM Analyst Name ISP TOX

Target CompoundAlprazolamInternal StandardAlprazolam-D5



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
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a cal 2-10ng.d	2	\square	10	10.2	101.6
a QC 10 (QC1).d	2	Ø	10	10.3	103.3
a cal 3-25ng.d	3	☑	25	22.6	90.6
a cal 4-50ng.d	4	Ø	50	45.9	91.9
a cal 5-100ng.d	5	Ø	100	95.4	95.4
a QC 100 (QC2).d	5	\square	100	93.4	93.4
a cal 6-250ng.d	6	₹	250	245.6	98.2
a QC 250 (QC 3).d	6		250	246.4	98.5
a cal 7-500ng.d	7	☑	500	508.3	101.7
a cal 8-1000ng.d	8	☑	1000	1005.9	100.6
a QC 1000 (QC 4).d	8	☑	1000	1090.1	109.0

istdnew1.xlsx Page 18 of 18



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

Analysis Time6/20/2018 12:54 PMAnalyst NameISPUserReport Time6/20/2018 12:56 PMReporter NameISPUserLast Calib Update6/20/2018 12:54 PMBatch StateProcessed

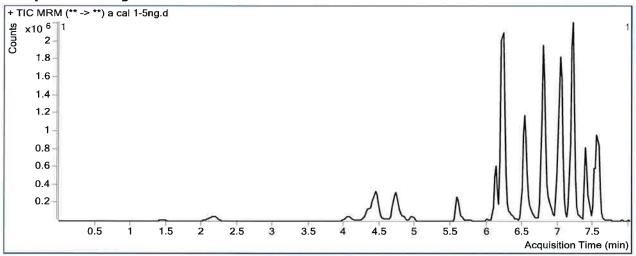
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Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-A1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.468	11588	49786	0.2328	5.3603
Hydromorphone	Hydromorphone-D6	2.209	45056	386100	0.1167	5.3 44 3
Amphetamine	Amphetamine-D11	4.464	290519	596336	0.4872	4.4556
Oxycodone	Oxycodone-D6	4.471	166788	1485434	0.1123	5.1880
Methamphetamine	Methamphetamine-D11	4.824	111141	641903	0.1731	5.2757
Phentermine	Phentermine-D5	5.646	54482	1108979	0.0491	5.6845
7-aminoclonazepam	7-Aminoclonazepam-D4	6.215	90932	805866	0.1128	4.2222
Tramadol	Tramadol-13C-D3	6.223	666365	6872333	0.0970	5.0218
Metoprolol	Oxycodone-D6	6.321	55874	1485434	0.0376	5.0912
Doxylamine	Doxylamine-D5	6.542	387542	4592410	0.0844	3.9364
Zolpidem	Zolpidem-D6	6.801	485957	5997861	0.0810	5.1205
Trazodone	Trazodone-D6	7.015	219822	1713617	0.1283	4.8646
Venlafaxine	Venlafaxine-D6	7.046	562470	4606361	0.1221	5.1300
Citalopram	Citalopram-D6	7.179	202029	1994503	0.1013	5.2010
Clonazepam	Clonazepam-D4	7.445	46730	96203	0.4857	5.0434
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	14678	159370	0.0921	5.2673
Lorazepam	Clonazepam-D4	7.543	17842	96203	0.1855	6.8518
Alprazolam	Alprazolam-D5	7.568	323812	2062700	0.1570	6.0032



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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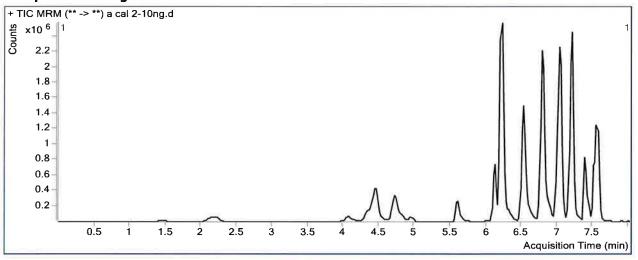
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Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-B1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.468	26685	57099	0.4673	9.3787
Hydromorphone	Hydromorphone-D6	2.209	100696	434128	0.2319	9.1811
Amphetamine	Amphetamine-D11	4.464	502429	597823	0.8404	9.7073
Oxycodone	Oxycodone-D6	4.471	386489	1667846	0.2317	9.6535
Methamphetamine	Methamphetamine-D11	4.824	190914	599312	0.3186	9.1500
Phentermine	Phentermine-D5	5.646	113720	1132963	0.1004	9.9807
7-aminoclonazepam	7-Aminoclonazepam-D4	6.215	213481	886993	0.2407	9.4774
Tramadol	Tramadol-13C-D3	6.223	1407244	7610900	0.1849	9.7735
Metoprolol	Oxycodone-D6	6.321	125226	1667846	0.0751	9.6671
Doxylamine	Doxylamine-D5	6.542	849483	5045007	0.1684	8.9477
Zolpidem	Zolpidem-D6	6.801	1062318	6460599	0.1644	9.7049
Trazodone	Trazodone-D6	7.015	445304	1604279	0.2776	10.3119
Venlafaxine	Venlafaxine-D6	7.046	1206791	5019160	0.2404	9.5648
Citalopram	Citalopram-D6	7.179	410152	2009489	0.2041	9.5675
Clonazepam	Clonazepam-D4	7.445	108431	95852	1.1312	10.1751
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	34831	177913	0.1958	9.4059
Lorazepam	Clonazepam-D4	7.543	44635	95852	0.4657	11.6035
Alprazolam	Alprazolam-D5	7.568	706649	2278429	0.3101	10.1562



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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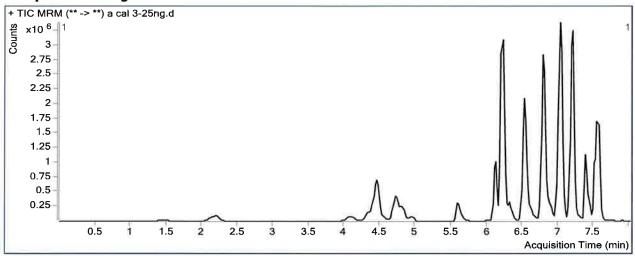
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Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-C1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.448	60876	53157	1.1452	20.9912
Hydromorphone	Hydromorphone-D6	2.209	247843	398519	0.6219	22.1624
Amphetamine	Amphetamine-D11	4.464	1187022	627437	1.8919	25.3383
Oxycodone	Oxycodone-D6	4.471	934365	1651306	0.5658	22.1438
Methamphetamine	Methamphetamine-D11	4.824	670432	788457	0.8503	23.3179
Phentermine	Phentermine-D5	5.626	329132	1213823	0.2712	24.2979
7-aminoclonazepam	7-Aminoclonazepam-D4	6.195	525096	846392	0.6204	25.0862
Tramadol	Tramadol-13C-D3	6.223	3427276	7390458	0.4637	24.8412
Metoprolol	Oxycodone-D6	6.321	322106	1651306	0.1951	24.3197
Doxylamine	Doxylamine-D5	6.542	2075695	4842045	0.4287	24.4780
Zolpidem	Zolpidem-D6	6.801	2660028	6233630	0.4267	24.1214
Trazodone	Trazodone-D6	7.015	1163658	1707215	0.6816	25.0543
Venlafaxine	Venlafaxine-D6	7.026	3095103	4904832	0.6310	24.2038
Citalopram	Citalopram-D6	7.158	1058861	2043574	0.5181	22.9043
Clonazepam	Clonazepam-D4	7.425	260264	100031	2.6018	21.8665
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	88386	164517	0.5372	23.0363
Lorazepam	Clonazepam-D4	7.543	108820	100031	1.0879	22.1546
Alprazolam	Alprazolam-D5	7.568	1632154	2117408	0.7708	22.6474



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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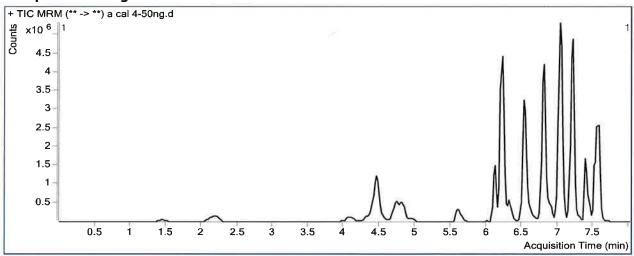
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Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-D1 **Sample Info**

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.468	135292	53659	2.5213	44.5648
Hydromorphone	Hydromorphone-D6	2.209	548781	403701	1.3594	46.7119
Amphetamine	Amphetamine-D11	4.464	2390959	634735	3.7669	53.2131
Oxycodone	Oxycodone-D6	4.471	2061281	1591388	1.2953	49.4136
Methamphetamine	Methamphetamine-D11	4.824	1661452	901629	1.8427	49.7593
Phentermine	Phentermine-D5	5.626	708165	1200091	0.5901	51.0362
7-aminoclonazepam	7-Aminoclonazepam-D4	6.195	1065958	836371	1.2745	51.9746
Tramadol	Tramadol-13C-D3	6.223	7170611	7347802	0.9759	52.5154
Metoprolol	Oxycodone-D6	6.321	651241	1591388	0.4092	50.4752
Doxylamine	Doxylamine-D5	6.542	4462608	4934380	0.9044	52.8603
Zolpidem	Zolpidem-D6	6.801	5456487	6382794	0.8549	47.6542
Trazodone	Trazodone-D6	7.015	2513151	1699225	1.4790	54.1490
Venlafaxine	Venlafaxine-D6	7.046	6351995	4888774	1.2993	49.2497
Citalopram	Citalopram-D6	7.179	2333233	2061625	1.1317	48.9635
Clonazepam	Clonazepam-D4	7.425	572707	87316	6.5590	53.3264
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	186778	167759	1.1134	46.0334
Lorazepam	Clonazepam-D4	7.543	240205	87316	2.7510	50.3573
Alprazolam	Alprazolam-D5	7.568	3297639	2023575	1.6296	45.9332



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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 Analyst Name
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 Report Time
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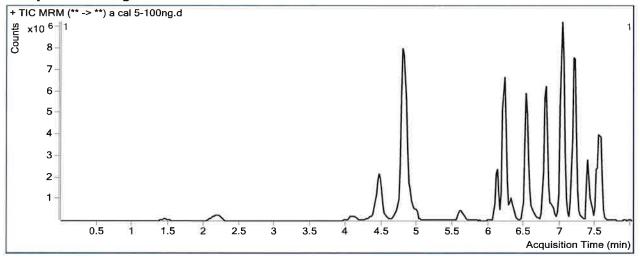
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Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-E1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.468	263465	45990	5.7288	99.5109
Hydromorphone	Hydromorphone-D6	2.189	1096327	376984	2.9082	98.2690
Amphetamine	Amphetamine-D11	4.464	4750025	621064	7.6 4 82	110.9150
Oxycodone	Oxycodone-D6	4.451	4102800	1503057	2.7296	103.0366
Methamphetamine	Methamphetamine-D11	4.804	32064682	888228	36.0996	962.4861
Phentermine	Phentermine-D5	5.625	1589809	1220747	1.3023	110.7461
7-aminoclonazepam	7-Aminoclonazepam-D4	6.195	2002021	745153	2.6867	110.0265
Tramadol	Tramadol-13C-D3	6.223	14117162	7074793	1.9954	107.6070
Metoprolol	Oxycodone-D6	6.321	1316288	1503057	0.8757	107.4490
Doxylamine	Doxylamine-D5	6.522	9119878	4723249	1.9308	114.1018
Zolpidem	Zolpidem-D6	6.801	10552623	5716495	1.8460	102.1297
Trazodone	Trazodone-D6	7.015	5068587	1748608	2.8986	105.9483
Venlafaxine	Venlafaxine-D6	7.026	12850845	4541622	2.8296	106.6021
Citalopram	Citalopram-D6	7.158	4537973	1973076	2.2999	98.5762
Clonazepam	Clonazepam-D4	7.425	946328	74623	12.6814	101.9996
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	378153	157683	2.3982	97.3188
Lorazepam	Clonazepam-D4	7.543	424333	74623	5.6863	100.1341
Alprazolam	Alprazolam-D5	7.568	5964593	1726451	3.4548	95.4237



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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 Report Time
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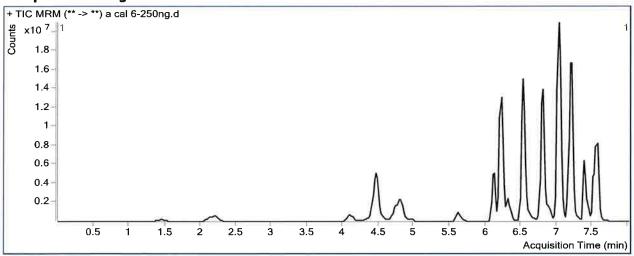
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Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-F1 Sample Info

Inj Vol -1 Comment AM 28



mpound RT	Response	ISTD Resp	Resp Ratio	Final Conc
-D6 1.468	628734	42397	14.8297	255.4162
rphone-D6 2,209	2716054	345867	7.8529	262.8734
mine-D11 4.464	10597533	576749	18.3746	270.3786
ne-D6 4.451	10834282	1577695	6.8672	257.7158
hetamine-D11 4.824	7817419	809010	9.6630	258.1183
nine-D5 5.625	3414917	1169929	2.9189	246.2723
lonazepam-D4 6.195	4591300	704781	6.5145	267.3744
l-13C-D3 6.223	34930570	7241910	4.8234	260.4201
ne-D6 6.321	3088401	1577695	1.9575	239.5657
ne-D5 6.522	24300724	4982184	4.8775	289.9094
-D6 6.801	28061280	5808245	4.8313	266.2117
e-D6 7.015	13530047	1880124	7.1964	262.7615
ne-D6 7.026	32879238	4776913	6.8829	258.5171
m-D6 7.158	11345287	1926441	5.8892	251.0110
am-D4 7.425	2256225	74023	30.4800	243.5003
alprazolam-D5 7.501	918120	148893	6.1663	247.7309
am-D4 7.543	1041488	74023	14.0698	242.2989
m-D5 7.568	13796963	1534165	8.9931	245.5939
	1-D6 1.468 rphone-D6 2.209 mine-D11 4.464 ne-D6 4.451 shetamine-D11 4.824 nine-D5 5.625 clonazepam-D4 6.195 l-13C-D3 6.223 ne-D6 6.321 ne-D5 6.522 -D6 6.801 ne-D6 7.015 ne-D6 7.026 m-D6 7.158 am-D4 7.425 yalprazolam-D5 7.501 am-D4 7.543	1-D6 1.468 628734 Irphone-D6 2.209 2716054 Imphone-D6 2.209 2716054 Imphone-D11 4.464 10597533 Impe-D6 4.451 10834282 Imphone-D5 5.625 3414917 Impe-D5 5.625 3414917 Impe-D6 6.321 3088401 Impe-D6 6.321 3088401 Impe-D5 6.522 24300724 Impe-D6 6.801 28061280 Impe-D6 7.015 13530047 Impe-D6 7.026 32879238 Impe-D6 7.158 11345287 Impe-D6 7.425 2256225 Impe-D6 7.501 918120 Impe-D6 7.501 918120 Impe-D6 7.543 1041488	1-D6 1.468 628734 42397 Irphone-D6 2.209 2716054 345867 Imine-D11 4.464 10597533 576749 Ime-D6 4.451 10834282 1577695 Ime-D6 4.451 10834282 1577695 Ime-D5 5.625 3414917 1169929 Image: I	1-D6 1.468 628734 42397 14.8297 rphone-D6 2.209 2716054 345867 7.8529 mine-D11 4.464 10597533 576749 18.3746 ne-D6 4.451 10834282 1577695 6.8672 shetamine-D11 4.824 7817419 809010 9.6630 nine-D5 5.625 3414917 1169929 2.9189 clonazepam-D4 6.195 4591300 704781 6.5145 ne-D6 6.321 3088401 1577695 1.9575 ne-D6 6.321 3088401 1577695 1.9575 ne-D5 6.522 24300724 4982184 4.8775 ne-D6 6.801 28061280 5808245 4.8313 ne-D6 7.015 13530047 1880124 7.1964 ne-D6 7.026 32879238 4776913 6.8829 mr-D6 7.158 11345287 1926441 5.8892 ne-D6 7.425 2256225 74023 30.4800 yalprazolam-D5 7.501 918120 148893 6.1663 ne-D4 7.543 1041488 74023 14.0698



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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Analysis Info

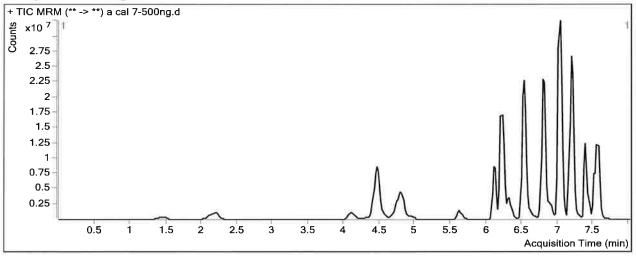
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Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18.m

Position P1-G1 **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	1.468	1296660	40116	32.3231	555.0918
Hydromorphone	Hydromorphone-D6	2.189	5335760	329855	16.1761	539.9444
Amphetamine	Amphetamine-D11	4.464	18220308	583900	31.2045	461.1144
Oxycodone	Oxycodone-D6	4.451	20949476	1461985	14.3295	536.6909
Methamphetamine	Methamphetamine-D11	4.824	16105405	811429	19.8482	529.4901
Phentermine	Phentermine-D5	5.625	6237214	1081412	5.7677	485.0972
7-aminoclonazepam	7-Aminoclonazepam-D4	6.195	7797294	612052	12.7396	523.2680
Tramadol	Tramadol-13C-D3	6.223	53127828	6699577	7.9300	428.2909
Metoprolol	Oxycodone-D6	6.321	4885736	1461985	3.3419	408.6273
Doxylamine	Doxylamine-D5	6.522	41923618	4663927	8.9889	535.2072
Zolpidem	Zolpidem-D6	6.801	47771896	5251480	9.0968	500.6620
Trazodone	Trazodone-D6	6.995	25324428	1941904	13.0410	476.0193
Venlafaxine	Venlafaxine-D6	7.026	51607236	4016254	12.8496	482.1389
Citalopram	Citalopram-D6	7.158	19737879	1581679	12.4791	530.8758
Clonazepam	Clonazepam-D4	7.425	4330105	64997	66.6201	530.8167
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	1548527	114764	13.4931	540.1923

1777005

21773582

64997

1165440

27.3398

18.6827

467.3289

508.3249

Printed at: 12:57 PM on: 6/20/2018

7.543

7.568

Lorazepam

Alprazolam

Clonazepam-D4

Alprazolam-D5



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1a MDQ 61818 final.batch.bir

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 Report Time
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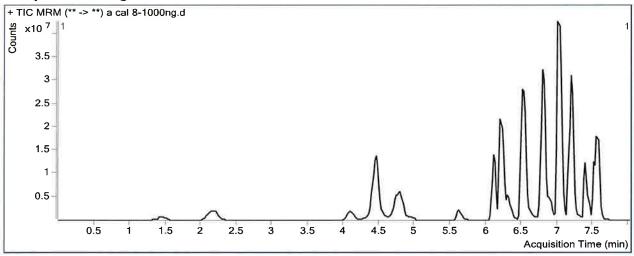
Analysis Info

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Dilution 1 **Acq Method** MD Quant Panel 1a 6-14-18,m

Position P1-H1 **Sample Info**

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Morphine	Morphine-D6	1.448	2641953	40023	66.0100	1132.1735
Hydromorphone	Hydromorphone-D6	2.189	10416261	322028	32.3458	1078.2173
Amphetamine	Amphetamine-D11	4.444	25842831	456626	56.5952	838.5844
Oxycodone	Oxycodone-D6	4.451	40942542	1463994	27.9663	1046.4981
Methamphetamine	Methamphetamine-D11	4.804	19915622	525456	37.9016	1010.4975
Phentermine	Phentermine-D5	5.626	9643062	855496	11.2719	946.5445
7-aminoclonazepam	7-Aminoclonazepam-D4	6.195	11912950	516028	23.0859	948.5706
Tramadol	Tramadol-13C-D3	6.223	71685667	3364123	21.3089	1151.2331
Metoprolol	Oxycodone-D6	6.321	7608470	1463994	5.1971	635.1985
Doxylamine	Doxylamine-D5	6.502	65786024	4305337	15.2801	910.5592
Zolpidem	Zolpidem-D6	6.801	70414925	4755020	14.8085	814.5973
Trazodone	Trazodone-D6	6.995	38738069	1666834	23.2405	848.1731
Venlafaxine	Venlafaxine-D6	7.026	68947025	3414775	20.1908	757.2770
Citalopram	Citalopram-D6	7.158	24548102	988043	24.8452	1056.0556
Clonazepam	Clonazepam-D4	7.425	7820696	63716	122.7427	976.9950
a-hydroxyalprazolam	a-hydroxyalprazolam-D5	7.501	3001941	107206	28.0015	1119.3222
Lorazepam	Clonazepam-D4	7.543	3897933	63716	61.1765	1041.1227
Alprazolam	Alprazolam-D5	7.568	32942639	889523	37.0340	1005.9175



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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 6/20/2018 1:00 PM
 Analyst Name
 ISPUser

 Report Time
 6/20/2018 1:04 PM
 Reporter Name
 ISPUser

 Last Calib Update
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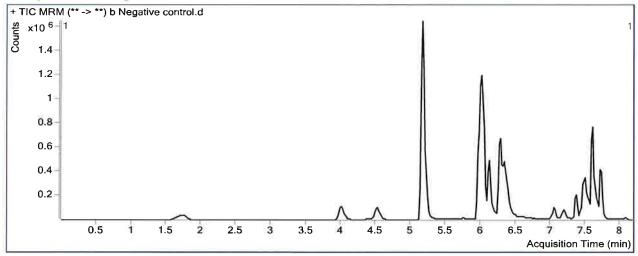
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Position P1-E2 Sample Info

Inj Vol -1 Comment AM 28

Sample Chromatogram



Results

CompoundISTD CompoundRTResponseISTD RespResp RatioFinal ConcBuprenorphineBuprenorphine-D47.43511661418360.00820.4411\$\frac{1}{2}.5\$

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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 Analyst Name
 ISPUser

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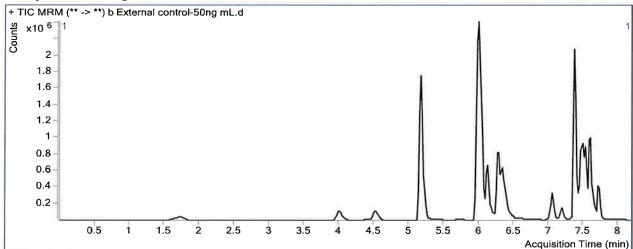
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Analysis Info

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Position P1-F2 **Sample Info**

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



Results							
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc	
Ketamine	Ketamine-D4	5.981	4314622	3171565	1.3604	59.6910	
Quetiapine	Quetiapine-D8	7.358	3581367	907379	3.9469	48.6868	
Buprenorphine	Buprenorphine-D4	7.435	1100	391395	0.0028	0.2890 < 2.5	73



Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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 ISPUser

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 Reporter Name
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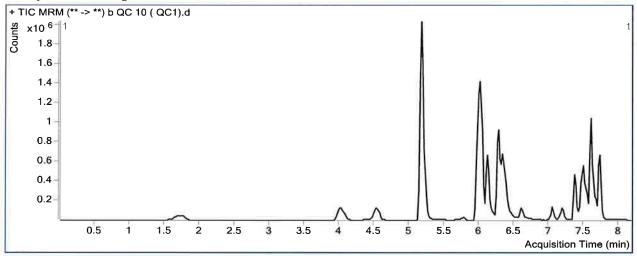
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 Sample Type
 QC
 Sample Name
 b QC 10 (QC1).d

 Dilution
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 Acq Method
 MD Quant Panel 1b 6-14-18.m

Position P1-A2 Sample Info

Inj Vol -1 Comment AM 28



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
loroxycodone	Noroxycodone-D3	4.568	153635	577700	0.2659	10.1842
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.179	1277049	6408840	0.1993	10.0228
Cetamine	Ketamine-D4	6.001	649463	2991301	0.2171	9.8774
lorbuprenorphine	Norbuprenorphine-D3	7.034	457	13893	0.0329	9.8774 outside caroe
Quetiapine	Quetiapine-D8	7.358	615735	630750	0.9762	9.5942
Suprenorphine	Buprenorphine-D4	7.455	4910	186806	0.0263	0.9486 Octside
						Curve
						Pange



Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

 Analysis Time
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 Analyst Name
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 Reporter Name
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Analysis Info

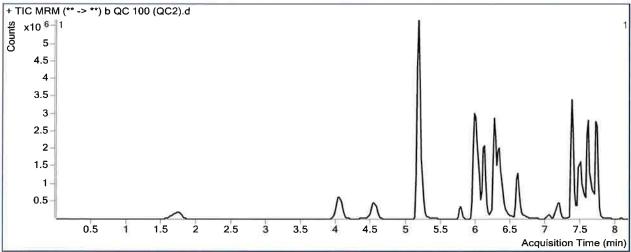
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 Dilution
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 Acq Method
 MD Quant Panel 1b 6-14-18.m

Position P1-B2 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.548	1770855	579817	3.0542	90.7357
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.179	1 44 37663	6626610	2.1787	104.8346
Ketamine	Ketamine-D4	5.981	6822157	3008647	2.2675	99.2141
Norbuprenorphine	Norbuprenorphine-D3	6.974	3152	12021	0.2622	13.5199
Quetiapine	Quetiapine-D8	7.358	7183896	660265	10.8803	139.9247
Buprenorphine	Buprenorphine-D4	7.455	56304	168787	0.3336	9.5846



Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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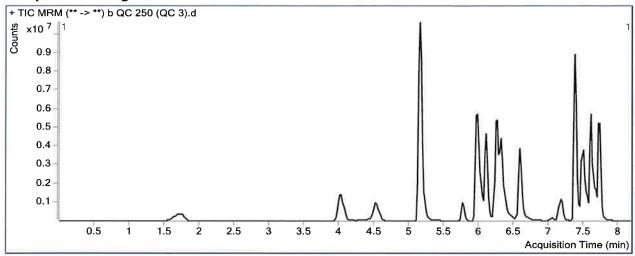
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 Sample Name
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 Dilution
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 Acq Method
 MD Quant Panel 1b 6-14-18.m

Position P1-C2 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.528	4184159	527443	7.9329	231.6824
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.159	35296691	6273651	5.6262	269.9579
Ketamine	Ketamine-D4	5.961	17520888	2858493	6.1294	267.4784
Norbuprenorphine	Norbuprenorphine-D3	6.993	4538	9214	0.4926	25.4608
Quetiapine	Quetiapine-D8	7.358	19659404	707179	27.7997	362.5709
Buprenorphine	Buprenorphine-D4	7.455	124534	172419	0.7223	20.5080



Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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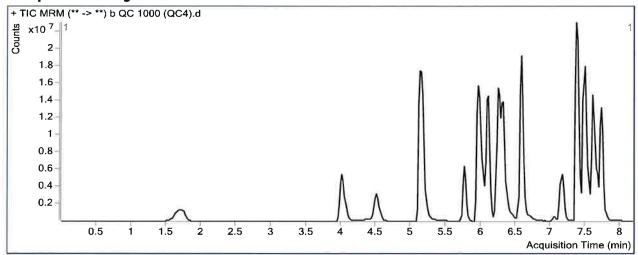
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 Sample Type
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 Sample Name
 b QC 1000 (QC4).d

 Dilution
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 Acq Method
 MD Quant Panel 1b 6-14-18.m

Position P1-D2 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.508	14001870	401041	34.9138	1011.1575
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.159	83093924	5165251	16.0871	-771.0087 range. To
Ketamine	Ketamine-D4	5.961	57102252	2537501	22.5033	980.8964
Norbuprenorphine	Norbuprenorphine-D3	6.974	17309	9801	1.7660	91.4735
Quetiapine	Quetiapine-D8	7.358	52012622	823005	63.1984	828.3895
Buprenorphine	Buprenorphine-D4	7.475	491630	168463	2.9183	82.2232



Batch Data Path

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61818 final.batch.bin

Last Calib Update

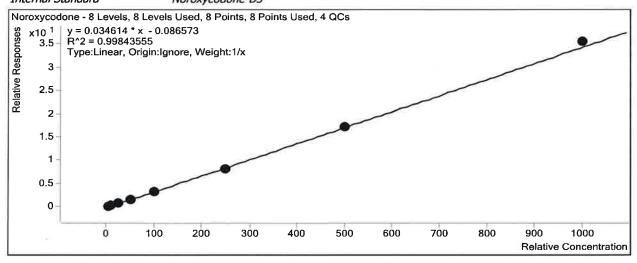
6/20/2018 1:00 PM

Analyst Name

ISP TOX

Target Compound
Internal Standard

Noroxycodone-D3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1	☑	5	6.2	124.6
b cal 2-10ng.d	2	\square	10	10.3	102.5
b QC 10 (QC1).d	2	☑	10	10.2	101.8
b cal 3-25ng.d	3	✓	25	22.6	90.3
b cal 4-50ng.d	4	☑	50	45.8	91.7
b cal 5-100ng.d	5	☑	100	94.3	94.3
b QC 100 (QC2).d	5	\square	100	90.7	90.7
b cal 6-250ng.d	6	\square	250	236.1	94.5
b QC 250 (QC 3).d	6		250	231.7	92.7
b cal 7-500ng.d	7		500	496.9	99.4
b cal 8-1000ng.d	8	\square	1000	1027.7	102.8
b QC 1000 (QC4).d	8	函	1000	1011.2	101.1

istdnew1.xlsx Page 1 of 6

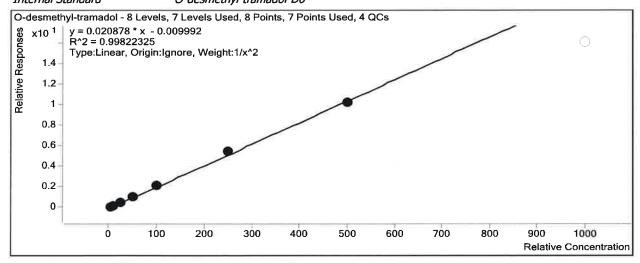


Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ

61818 final.batch.bin

Last Calib Update 6/20/2018 1:00 PM Analyst Name ISP TOX

Target CompoundO-desmethyl-tramadolInternal StandardO-desmethyl-tramadol-D6



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1	Ø	5	5.1	102.3
b cal 2-10ng.d	2	☑	10	9.7	96.7
b QC 10 (QC1).d	2	☑	10	10.0	100.2
b cal 3-25ng.d	3	☑	25	23.8	95.2
b cal 4-50ng.d	4	Ø	50	50.2	100.5
b cal 5-100ng.d	5	☑	100	103.6	103.6
b QC 100 (QC2).d	5		100	104.8	104.8
b cal 6-250ng.d	6		250	260.6	104.2
b QC 250 (QC 3).d	6	\square	250	270.0	108.0
b cal 7-500ng.d	7	☑	500	487.4	97.5
b cal 8-1000ng.d	8		1000	768.4	76.8
b QC 1000 (QC4).d	8		1000	771.0	77.1

istdnew1.xlsx Page 2 of 6

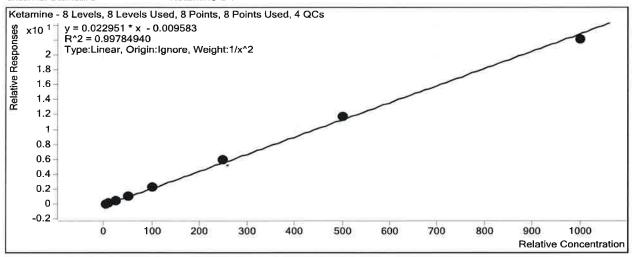


Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ

61818 final.batch.bin

Last Calib Update 6/20/2018 1:00 PM Analyst Name ISP TOX

Target CompoundKetamineInternal StandardKetamine-D4



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1	Ø	5	5.1	102.9
b cal 2-10ng.d	2	Ø	10	9.6	95.8
b QC 10 (QC1).d	2		10	9.9	98.8
b cal 3-25ng.d	3	₫	25	23.7	94.9
b cal 4-50ng.d	4	₽Ĭ	50	49.5	99.0
b cal 5-100ng.d	5	₫	100	105.0	105.0
b QC 100 (QC2).d	5	\square	100	99.2	99.2
b cal 6-250ng.d	6		250	258.9	103.6
b QC 250 (QC 3).d	6		250	267.5	107.0
b cal 7-500ng.d	7		500	513.8	102.8
b cal 8-1000ng.d	8	☑	1000	961.0	96.1
b QC 1000 (QC4).d	8	☑	1000	980.9	98.1

istdnew1.xlsx Page 3 of 6



Batch Data Path

C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ

61818 final.batch.bin

Last Calib Update

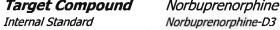
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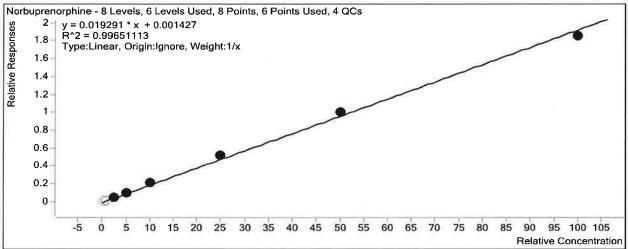
Analyst Name

ISP TOX

Target Compound

Norbuprenorphine





Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1		0.5	0.7	139.8
b cal 2-10ng.d	2		1	0.7	71.6
b QC 10 (QC1).d	2		1	1.6	163.0
b cal 3-25ng.d	3		2.5	2.1	84.0
b cal 4-50ng.d	4	☑	5	5.0	100.8
b cal 5-100ng.d	5	₫	10	10.8	108.1
b QC 100 (QC2).d	5	Ø	10	13.5	135.2
b cal 6-250ng.d	6	Ø	25	27.0	107.9
b QC 250 (QC 3).d	6	Ø	25	25.5	101.8
b cal 7-500ng.d	7	Ø	50	51.7	103.4
b cal 8-1000ng.d	8	☑	100	95.9	95.9
b QC 1000 (QC4).d	8	Ø	100	91.5	91.5

istdnew1.xlsx Page 4 of 6

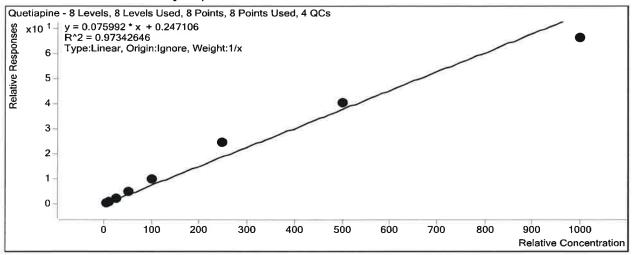


Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ

61818 final.batch.bin

Last Calib Update 6/20/2018 1:00 PM Analyst Name ISP TOX

Target CompoundQuetiapineInternal StandardQuetiapine-D8



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1	\square	5	2.6	51.8
b cal 2-10ng.d	2		10	8.8	87.8
b QC 10 (QC1).d	2		10	9.6	95.9
b cal 3-25ng.d	3	☑	25	23.8	95.3
b cal 4-50ng.d	4	☑	50	59.5	119.0
b cal 5-100ng.d	5	\square	100	124.6	124.6
b QC 100 (QC2).d	5	₽Ĭ	100	139.9	139.9
b cal 6-250ng.d	6	☑	250	321.5	128.6
b QC 250 (QC 3).d	6	Ø	250	362.6	145.0
b cal 7-500ng.d	7	\square	500	529.4	105.9
b cal 8-1000ng.d	8	Ø	1000	869.9	87.0
b QC 1000 (QC4).d	8		1000	828.4	82.8

istdnew1.xlsx Page 5 of 6

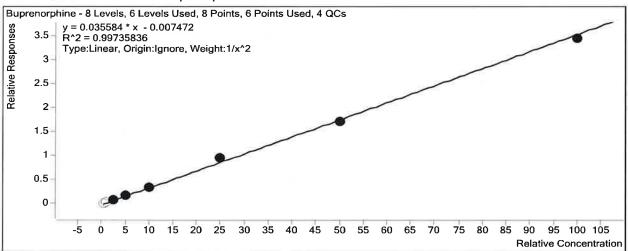


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61818 final.batch.bin

Last Calib Update 6/20/2018 1:00 PM Analyst Name ISP TOX

Target CompoundBuprenorphineInternal StandardBuprenorphine-D4



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
b cal 1-5ng.d	1		0.5	0.7	141.5
b cal 2-10ng.d	2		1	1.1	105.3
b QC 10 (QC1).d	2		1	0.9	94.9
b cal 3-25ng.d	3		2.5	2.5	100.0
b cal 4-50ng.d	4	\square	5	5.0	99.6
b cal 5-100ng.d	5	☑	10	9.9	98.5
b QC 100 (QC2).d	5	\square	10	9.6	95.8
b cal 6-250ng.d	6		25	27.0	108.0
b QC 250 (QC 3).d	6	☑	25	20.5	82.0
b cal 7-500ng.d	7	\blacksquare	50	48.5	97.0
b cal 8-1000ng.d	8		100	96.8	96.8
b QC 1000 (QC4).d	8	☑	100	82.2	82.2

istdnew1.xlsx Page 6 of 6



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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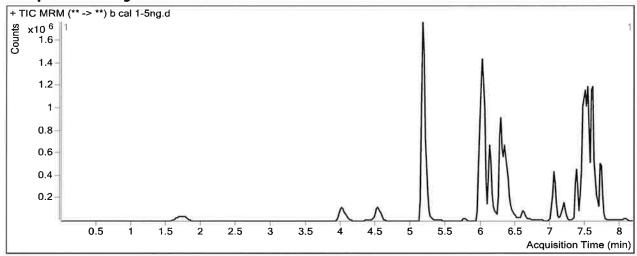
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Dilution 1 **Acq Method** MD Quant Panel 1b 6-14-18.m

Position P1-A1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.548	77070	597030	0.1291	6.2305
			4	440		
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.179	600067	61977 44	0.0968	5.1161
Ketamine	Ketamine-D4	6.001	322698	2974767	0.1085	5.1440
Norbuprenorphine	Norbuprenorphine-D3	6.993	438	29361	0.0149	0.6992
Quetiapine	Quetiapine-D8	7.358	394351	888071	0.4441	2.5917
Buprenorphine	Buprenorphine-D4	7.455	7440	420339	0.0177	0.7074



Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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 6/20/2018 1:00 PM
 Analyst Name
 ISPUser

 Report Time
 6/20/2018 1:05 PM
 Reporter Name
 ISPUser

 Last Calib Update
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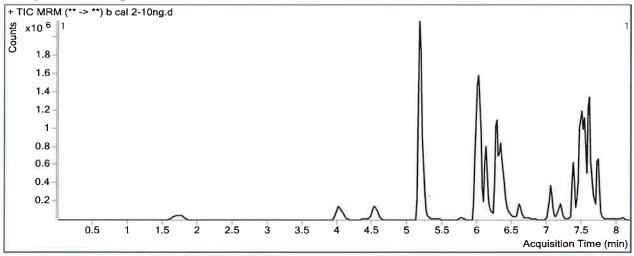
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Dilution 1 **Acq Method** MD Quant Panel 1b 6-14-18.m

Position P1-B1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.548	175368	653655	0.2683	10.2519
	0 1 11 11 11 11 11 11 11 11 11 11 11 11	5 4 70	10.40.407	700000	0.4040	0.6600
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.179	1349487	7032830	0.1919	9.6693
Ketamine	Ketamine-D4	6.001	703925	3345956	0.2104	9.5839
Norbuprenorphine	Norbuprenorphine-D3	7.014	396	25961	0.0152	0.7161
Quetiapine	Quetiapine-D8	7.358	785828	859326	0.9145	8.7820
Buprenorphine	Buprenorphine-D4	7.455	11232	374563	0.0300	1.0527



Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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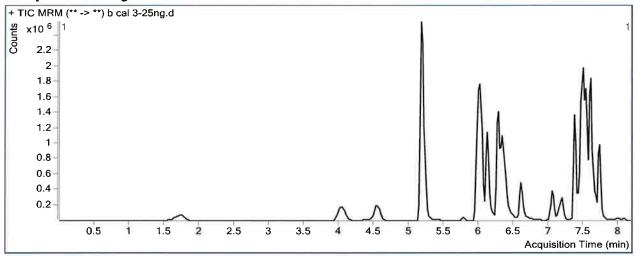
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 Sample Name
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Dilution 1 **Acq Method** MD Quant Panel 1b 6-14-18.m

Position P1-C1 **Sample Info**

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.548	440687	634462	0.6946	22.5676
0	0 d	E 100	2252016	6670261	0.4071	22 0002
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.199	3252816	6678261	0.4871	23.8082
Ketamine	Ketamine-D4	6.001	1727166	3230410	0.5347	23.7128
Norbuprenorphine	Norbuprenorphine-D3	7.014	1184	28239	0.0419	2.0996
Quetiapine	Quetiapine-D8	7.358	2116871	1028623	2.0580	23.8295
Buprenorphine	Buprenorphine-D4	7.455	34731	426261	0.0815	2.4997



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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 Analyst Name
 ISPUser

 Report Time
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 ISPUser

 Last Calib Update
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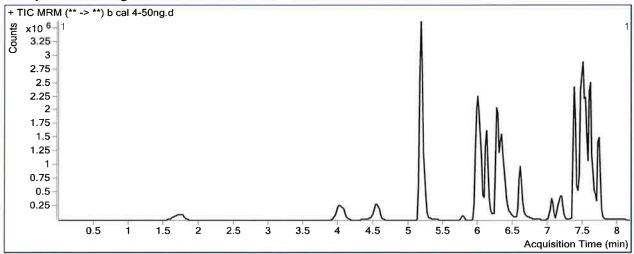
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Dilution 1 **Acq Method** MD Quant Panel 1b 6-14-18.m

Position P1-D1 Sample Info

Inj Voi -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.548	939043	625843	1.5004	45.8489
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.179	6852067	6595457	1.0389	50.2395
Ketamine	Ketamine-D4	5.981	3619870	3212967	1.1266	49.5058
Norbuprenorphine	Norbuprenorphine-D3	6.993	2676	27116	0.0987	5.0409
Quetiapine	Quetiapine-D8	7.358	4720172	990160	4.7671	59.4792
Buprenorphine	Buprenorphine-D4	7.455	69118	407143	0.1698	4.9809



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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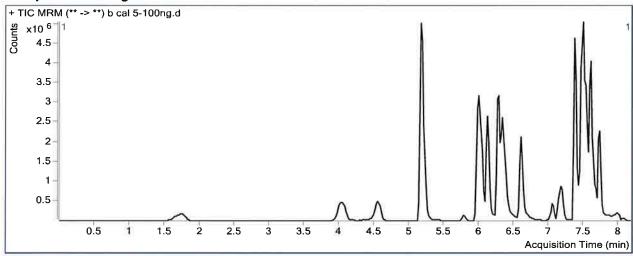
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Dilution 1 **Acq Method** MD Quant Panel 1b 6-14-18.m

Position P1-E1 **Sample Info**

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.548	1856842	58 444 4	3.1771	94.2875
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.179	13214180	6139650	2.1523	103.5667
Ketamine	Ketamine-D4	6.001	7352915	3063160	2.4004	105.0053
Norbuprenorphine	Norbuprenorphine-D3	6.993	5775	27520	0.2099	10.8050
Quetiapine	Quetiapine-D8	7.358	9480879	975692	9.7171	124.6174
Buprenorphine	Buprenorphine-D4	7.455	138223	402871	0.3431	9.8520



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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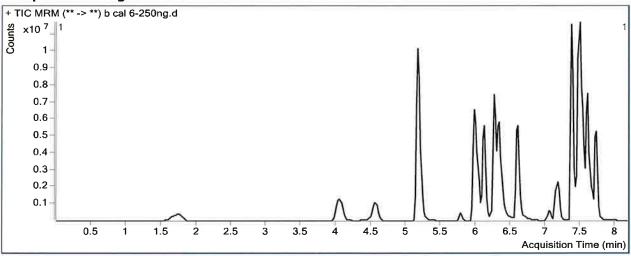
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Dilution 1 **Acq Method** MD Quant Panel 1b 6-14-18.m

Position P1-F1 Sample Info

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.548	4483494	55 44 12	8.0869	236.1322
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.179	33026574	6081669	5.4305	260.5859
Ketamine	Ketamine-D4	5.981	18254785	3077258	5.9322	258.8839
Norbuprenorphine	Norbuprenorphine-D3	6.993	12633	24221	0.5216	26.9635
Quetiapine	Quetiapine-D8	7.358	25249222	1023148	24.6780	321.4909
Buprenorphine	Buprenorphine-D4	7.455	423401	444196	0.9532	26.9972



Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

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 ISPUser

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Analysis Info

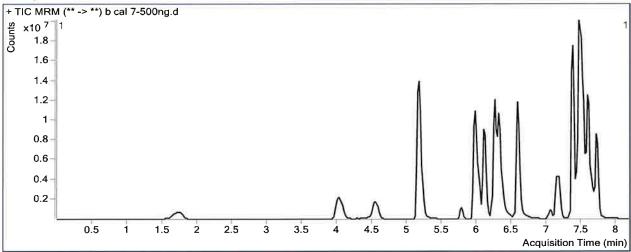
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 Sample Type
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 Sample Name
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Dilution 1 **Acq Method** MD Quant Panel 1b 6-14-18.m

Position P1-G1 Sample Info

Inj Vol -1 Comment AM 28



Results							
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc	
Noroxycodone	Noroxycodone-D3	4.548	8098016	473157	17.1149	496.9486	
					10.1551	407.0400	
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.179	54143842	5326423	10.1651	487.3622	
Ketamine	Ketamine-D4	5.981	32923095	27 94 070	11.7832	513.8161	
Norbuprenorphine	Norbuprenorphine-D3	6.993	21960	21987	0.9988	51.7009	
Quetiapine	Quetiapine-D8	7.358	40227511	993907	40.4741	529.3554	
Buprenorphine	Buprenorphine-D4	7.455	728273	423647	1.7191	48.5205	



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

Batch Data Path C:\MassHunter\Data\2018\MD Quant\061818 MDQ P1 and P2 TS\QuantResults\p1b MDQ 61818 final.batch.bir

 Analysis Time
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 Analyst Name
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Analysis Info

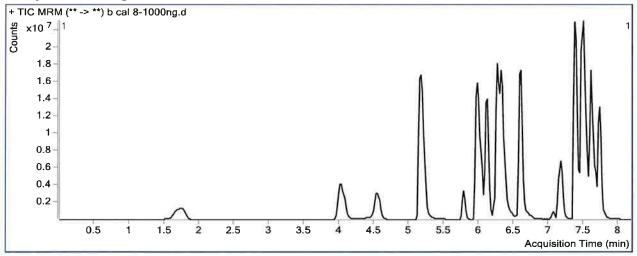
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 Sample Type
 Calibration
 Sample Name
 b cal 8-1000ng.d

Dilution 1 **Acq Method** MD Quant Panel 1b 6-14-18.m

Position P1-H1 **Sample Info**

Inj Vol -1 Comment AM 28



Results						
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Noroxycodone	Noroxycodone-D3	4.548	14214392	400546	35.4875	1027.7329
O-desmethyl-tramadol	O-desmethyl-tramadol-D6	5.179	79478979	4957435	16.0323	768.3827
Ketamine	Ketamine-D4	5.981	57696810	2617129	22.0458	960.9630
Norbuprenorphine	Norbuprenorphine-D3	6.993	27589	14903	1.8512	95.8899
Quetiapine	Quetiapine-D8	7.358	56627435	853473	66.3494	869.8540
Buprenorphine	Buprenorphine-D4	7.455	891679	259317	3.4386	96.8439