By Britany Wylie at 8:06 am, Sep 22, 2018

REVIEWED

DESCRIPTION	<u>TASK ID</u>	ITEM	LAB CASE
AM 28 Blood Multi-Drug Quant Panel 2 by LC-Q(126535	1	P2018-2174
AM 28 Blood Multi-Drug Quant Panel 2 by LC-Q(127470	1	P2018-2599

Worklist: 2703



9/21/2018

Ppd 8/8/18 Exp: 8/8/19 lot 8819 Stock solution 1mg/ml 150 ul each in 9700 ul meOH working solution 14706 ng/ml in meoh Doxepin, desipramine, chlordiazepoxide, paroxetine Toxicology AM method 28 panel 2 external prep information by AMN

Paroxetine	Chlordiazepoxide	Desipramine	Doxepine	Drug
fn05111505	fe07241502	fn10231502	fn01281502	lot
6/1/2020	8/1/2020	10/1/2020	2/1/2020	expiration

ppd 8/8/18 Exp 8/8/19 AM 28 control 50 ul working solution lot (8819) in 9950 ul blood lot (18G207D7) by AMN Concentration 73.53 ng/ml each



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

Extraction Date: <u>9/20/18</u> Plate lot#: 0530563 Analyst: <u>Anne Nord</u> Plate Expiration: May 21 2019

Mobile phase A:5mM Amm Form + 0.01% FA
0.5M Ammonium HydroxideMobile phase B:0.01% Formic Acid in MeOH
Ethyl AcetateBlank Blood Lot:18G207D7
62340Column:Agilent 120 EC-C18 (2.1x 100-4um)

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:

- \boxtimes 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Pipette 250µL blood (calibrated pipette) Pipette ID: 1926134 in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID: 66759
- ☑ 4. Pipette 250µL 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: 66792
- \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).
- I5. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. SPE Dry ID: 66819
- □ 16. Reconstitute in 100µL 20% MeOH and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- ⊠ 1. Create batch and process data. Worklist path: <u>092018 mdq</u> Batch Name: <u>p2b mdq</u>
- \boxtimes 2. Make necessary changes to integration limits
- \boxtimes 3. Integration linear and \mathbb{R}^2 values ≥ 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.
- \boxtimes 5. Did all QCs pass for each analyte? Add Control data to QC tracking spreadsheet.
- 8. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS: Panel 2b Run MDA, MDMA and Desipramine were the only compounds evaluated.

ISP Forensics Calibration Curve Report

Batch Data Path Last Calib Update	D:\2018 Data\092018 mdq\QuantR 9/21/2018 8:58 AM	esults\mdq p2b.batch.bin Analyst Name	ISP TOX
Target Compound	MDA		
Internal Standard	MDA-D5		
MDA - 8 Levels, 8 Levels Used,			
% x10 ¹ y = 0.028727 * x + 0	.036407		
2.75 <u>R^2 = 0.99884498</u> <u>R^2 = 0.99884498</u> <u>R^2 = 0.99884498</u> <u>R^2 = 0.99884498</u>	anore, Weight: 1/x		
<u>د</u> 2.25			
1.5			
1.25			
1			
0.75			
0.5			
0.25			
0			
-0.25			00 900 1000
0 100	0 200 300 400 50	0 600 700 8	Concentration (ng/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
2b cal 1-5ng	1	\square	5	4.1	82.1
2b cal 2-10ng	2	$\mathbf{\nabla}$	10	9.5	95.2
2b QC 10	2	\square	10	10.9	109.5
2b cal 3-25ng	3		25	26.6	106.4
2b cal 4-50ng	4	\square	50	53.7	107.4
2b cal 5-100ng	5	\mathbf{V}	100	106.2	106.2
2b QC 100	5	\square	100	118.5	118.5
2b cal 6-250ng	6	\square	250	261.6	104.6
2b QC 250	6		250	281.9	112.8
2b cal 7-500ng	7	☑	500	501.8	100.4
2b cal 8-1000ng	8	\square	1000	976.4	97.6
2b QC 1000	8	\square	1000	1059.5	106.0

ISP Forensics Calibration Curve Report

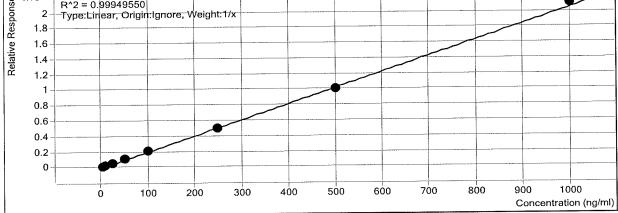
Batch Data Path Last Calib Update					018 Data /2018 8:5		.8 mdq∖Ç		ılts\mdq p nalyst Na	2b.batch.t ame		тох		
Targe Interna		Compo andard	ound	MD MDN	MA 1A-D6									
MDMA	- 8 L	evels, 8	Levels Us	ed, 8 Poi	nts, 8 Poir	nts Use	d, 4 QCs							
₩ x10	2	y = 0.15	6598 * x + 99967222	0.00316	5									
Suc		$R^{2} = 0.$	99967222	Janara	Maightit							_		
<u>ດ</u> 1.	.4	Type:Lit	lear, Ongi	Lignore,	Weight:1/	<u>^</u>								
Relative Responses	.2													
telativ	1													
0.	.8													
0	.6													
0	.4													
0	.2-													
	0	(
	Ļ	(D 1	00	200	300	400	500	600	700	800	900	1000	
												Conce	ntration (no	g/ml)

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
2b cal 1-5ng	1	\mathbf{N}	5	4.7	93.9
2b cal 2-10ng	2	\square	10	9.7	97.3
2b QC 10	2		10	10.2	102.2
2b cal 3-25ng	3	\square	25	25.6	102.2
2b cal 4-50ng	4	\square	50	51.2	102.4
2b cal 5-100ng	5	$\mathbf{\nabla}$	100	101.9	101.9
2b QC 100	5	M	100	108.2	108.2
2b cal 6-250ng	6	\square	250	259.6	103.8
2b QC 250	6	\square	250	259.8	103.9
2b cal 7-500ng	7	\square	500	496.7	99.3
2b cal 8-1000ng	8	\square	1000	990.6	99.1
2b QC 1000	8	\square	1000	1027.4	102.7



ISP Forensics Calibration Curve Report

Batch Data Path Last Calib Update	D:\2018 Data\092018 md 9/21/2018 8:58 AM	lq\QuantResults\mdq p2b.batch.bin Analyst Name	ISP TOX
Target Compound Internal Standard	Desipramine Desipramine-D3		
Desipramine - 8 Levels, 8 Leve	Is Used, 8 Points, 8 Points Use	d, 4 QCs	

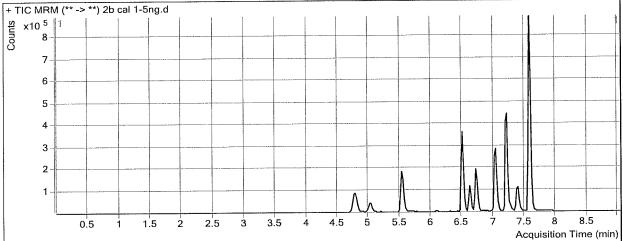


Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
2b cal 1-5ng	1	\square	5	5.4	107.7
2b cal 2-10ng	2	\square	10	10.0	100.0
2b QC 10	2	\square	10	10.1	101.2
2b cal 3-25ng	3	\square	25	25.0	100.0
2b cal 4-50ng	4	\square	50	48.6	97.1
2b cal 5-100ng	5	\square	100	97.7	97.7
2b QC 100	5	Ø	100	97.9	97.9
2b cal 6-250ng	6	\square	250	244.0	97.6
2b QC 250	6	\square	250	239.8	95.9
2b cal 7-500ng	7	\square	500	489.3	97.9
2b cal 8-1000ng	8	\square	1000	1020.0	102.0
2b QC 1000	8		1000	980.0	98.0



Batch Data Path	D:\2018 Data\092018 r	ndq\QuantResults\mo	ISP Tox
Analysis Time	9/21/2018 8:58 AM	Analyst Name	
Report Time	9/21/2018 9:00 AM	Reporter Name	
Last Calib Update	9/21/2018 8:58 AM	Batch State	
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-09-20 22:12 Calibration 1 P2-A5 -1	Data File Sample Name Acq Method Sample Info Comment	2b cal 1-5ng.d 2b cal 1-5ng 2b mdq 618 .m AM 28 Panel 2

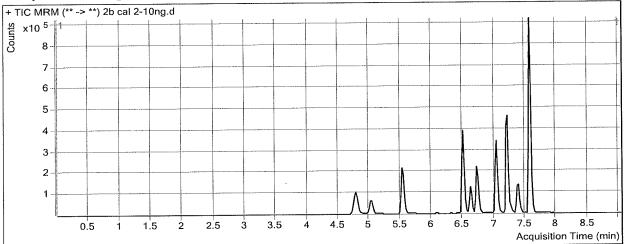
Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
MDA	MDA-D5	4.809	51374	333018	0.1543	4.1028
MDMA	MDMA-D6	5.027	55980	75785	0.7387	4.6968
Desipramine	Desipramine-D3	7.567	108972	1100083	0.0991	5.3837

Batch Data Path Analysis Time Report Time Last Calib Update	D:\2018 Data\092018 r 9/21/2018 8:58 AM 9/21/2018 9:00 AM 9/21/2018 8:58 AM	/2018 9:00 AM Reporter Name ISP Tox				
Analysis Info						
Acq Time	2018-09-20 22:25	Data File	2b cal 2-10ng.d			
Sample Type	Calibration	Sample Name	2b cal 2-10ng			
Dilution	1	Acq Method	2b mdq 618 .m			
Position	P2-B5	Sample Info				
Inj Vol	-1	Comment	AM 28 Panel 2			

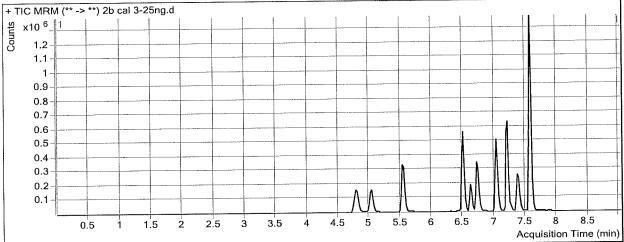
Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
MDA	MDA-D5	4.809	101250	326685	0.3099	9.5216
MDMA	MDMA-D6	5.027	112703	73842	1.5263	9.7262
Desipramine	Desipramine-D3	7.587	185510	954601	0.1943	9.9986

Batch Data Path Analysis Time Report Time Last Calib Update	D:\2018 Data\092018 n 9/21/2018 8:58 AM 9/21/2018 9:00 AM 9/21/2018 8:58 AM	ndq\QuantResults\m Analyst Name Reporter Name Batch State	ISP Tox
Analysis Info			
Acq Time	2018-09-20 22:38	Data File	2b cal 3-25ng.d
Sample Type	Calibration	Sample Name	2b cal 3-25ng
Dilution	1	Acq Method	2b mdq 618 .m
Position	P2-C5	Sample Info	
Inj Vol	-1	Comment	AM 28 Panel 2

Sample Chromatogram



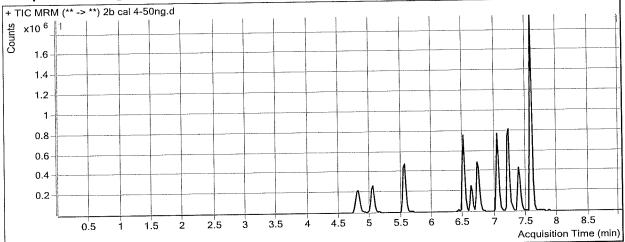
Compound MDA	ISTD Compound MDA-D5	RT 4.809	Response 270604	ISTD Resp 337879	Resp Ratio 0.8009	Final Conc 26.6122
MDMA	MDMA-D6	5.027	314820	78591 986912	4.0058 0.5041	25.5601 25.0035
Desipramine	Desipramine-D3	7.587	497516	900912	0.0011	25.0055

Samples Report MDQ.xlsx

Printed at: 9:02 AM on: 9/21/2018

Batch Data Path	D:\2018 Data\092018 r	ndq\QuantResults\m	ISP Tox
Analysis Time	9/21/2018 8:58 AM	Analyst Name	
Report Time	9/21/2018 9:00 AM	Reporter Name	
Last Calib Update	9/21/2018 8:58 AM	Batch State	
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-09-20 22:50 Calibration 1 P2-D5 -1	Data File Sample Name Acq Method Sample Info Comment	2b cal 4-50ng.d 2b cal 4-50ng 2b mdq 618 .m AM 28 Panel 2

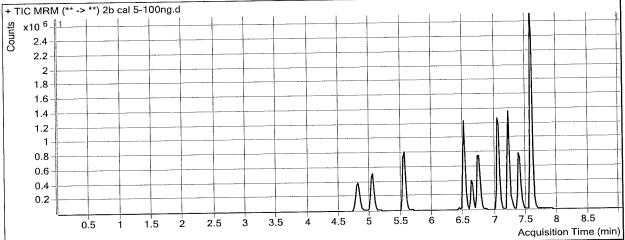
Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
MDA	MDA-D5	4.809	479021	303301	1.5794	53.7113
MDMA	MDMA-D6	5.027	575465	71711	8.0248	51.2245
Designamine	Desipramine-D3	7.567	910320	919050	0.9905	48.5628
Desipramine	Desipramine-D3	/.30/	910520	J19030	010000	

Batch Data Path	D:\2018 Data\092018 r	ndq\QuantResults\m	ISP Tox
Analysis Time	9/21/2018 8:58 AM	Analyst Name	
Report Time	9/21/2018 9:00 AM	Reporter Name	
Last Calib Update	9/21/2018 8:58 AM	Batch State	
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-09-20 23:03 Calibration 1 P2-E5 -1	Data File Sample Name Acq Method Sample Info Comment	2b cal 5-100ng.d 2b cal 5-100ng 2b mdq 618 .m AM 28 Panel 2

Sample Chromatogram

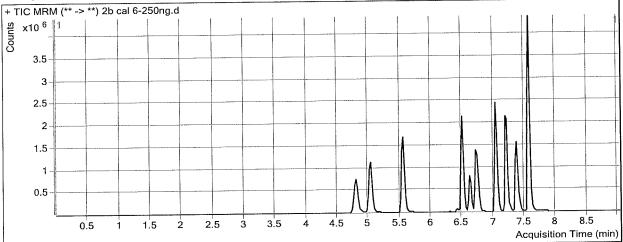


Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Cor
MDA	MDA-D5	4.809	923243	298992	3.0878	106.2229
MDMA	MDMA-D6	5.027	1159680	72680	15.9560	101.8714
Desipramine	Desipramine-D3	7.587	1679599	837474	2.0056	97.7293
Desipramine	Desiprariate D5	/150/				



Batch Data Path	D:\2018 Data\092018 r	ndq\QuantResults\m	ISP Tox
Analysis Time	9/21/2018 8:58 AM	Analyst Name	
Report Time	9/21/2018 9:00 AM	Reporter Name	
Last Calib Update	9/21/2018 8:58 AM	Batch State	
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-09-20 23:16 Calibration 1 P2-F5 -1	Data File Sample Name Acq Method Sample Info Comment	2b cal 6-250ng.d 2b cal 6-250ng 2b mdq 618 .m AM 28 Panel 2

Sample Chromatogram

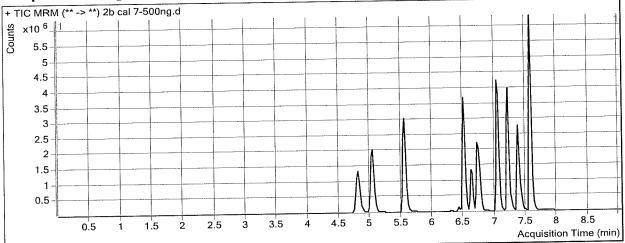


Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
MDA	MDA-D5	4.809	1905730	252405	7.5503	261.5640
MDMA	MDMA-D6	5.027	2593216	63788	40.6534	259.5829
Desipramine	Desipramine-D3	7.567	2741527	545471	5.0260	244.0307
Desipramine	Desipramme-D3	7.507	2/1152/	515171		



Batch Data Path	D:\2018 Data\092018 r	ndq\QuantResults\m	dq p2b.batch.bin
Analysis Time	9/21/2018 8:58 AM	Analyst Name	ISP Tox
Report Time	9/21/2018 9:00 AM	Reporter Name	ISP Tox
Last Calib Update	9/21/2018 8:58 AM	Batch State	Processed
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-09-20 23:28 Calibration 1 P2-G5 -1	Data File Sample Name Acq Method Sample Info Comment	2b cal 7-500ng.d 2b cal 7-500ng 2b mdq 618 .m AM 28 Panel 2

Sample Chromatogram

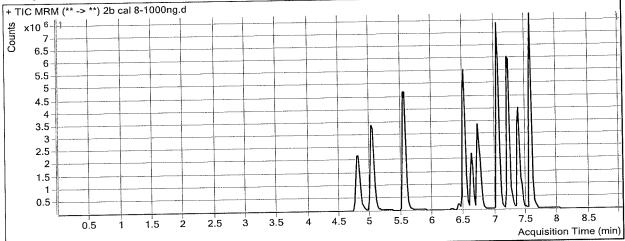


Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
MDA	MDA-D5	4.809	3535242	244617	14.4521	501.8219
MDMA	MDMA-D6	5.027	5029252	64650	77.7921	496.7423
Designamine	Desipramine-D3	7.587	4071543	403538	10.0896	489.2993
Desipramine	Desipramine-D3	/.20/	10/13/13	100000		



Batch Data Path	D:\2018 Data\092018 n	ndq\QuantResults\m	ISP Tox
Analysis Time	9/21/2018 8:58 AM	Analyst Name	
Report Time	9/21/2018 9:00 AM	Reporter Name	
Last Calib Update	9/21/2018 8:58 AM	Batch State	
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-09-20 23:41 Calibration 1 P2-H5 -1	Data File Sample Name Acq Method Sample Info Comment	2b cal 8-1000ng.d 2b cal 8-1000ng 2b mdq 618 .m AM 28 Panel 2

Sample Chromatogram

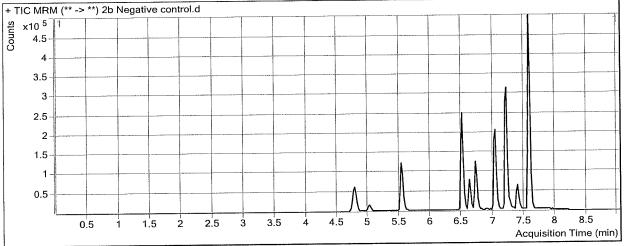


ResultsCompoundISTD CompoundMDAMDA-D5MDMAMDMA-D6DesipramineDesipramine-D3	RT	Response	ISTD Resp	Resp Ratio	Final Conc
	4.809	6318770	224976	28.0865	976.4434
	5.007	8973965	57849	155.1286	990.5958
	7.567	4767670	226537	21.0459	1019.9921



Batch Data Path Analysis Time Report Time Last Calib Update	D:\2018 Data\092018 n 9/21/2018 8:58 AM 9/21/2018 9:00 AM 9/21/2018 8:58 AM	ndq\QuantResults\m Analyst Name Reporter Name Batch State	ISP Tox
Analysis Info			
Acq Time	2018-09-21 00:07	Data File	2b Negative control.d
Sample Type	Sample	Sample Name	2b Negative control
Dilution	1	Acq Method	2b mdq 618 .m
Position	P2-E6	Sample Info	
Inj Vol	-1	Comment	AM 28 Panel 2

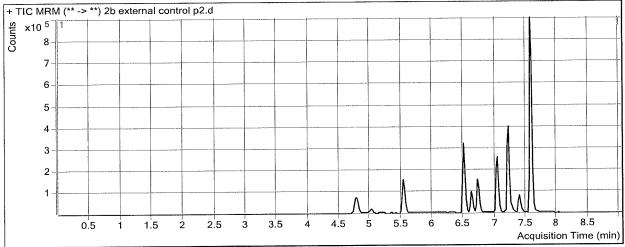
Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Desipramine	Desipramine-D3	7.587	17726	692204	0.0256	1.8260 2.5

Batch Data Path	D:\2018 Data\092018 mdq\QuantResults\mdq p2b.batch.bin					
Analysis Time	9/21/2018 8:58 AM	Analyst Name	ISP Tox			
Report Time	9/21/2018 9:00 AM	Reporter Name	ISP Tox			
Last Calib Update	9/21/2018 8:58 AM	Batch State	Processed			
Analysis Info						
Acq Time	2018-09-21 00:19	Data File	2b external control p2.d			
Sample Type	Sample	Sample Name	2b external control p2			
Dilution	1	Acq Method	2b mdq 618 .m			
Position	P2-F6	Sample Info				
Inj Vol	-1	Comment	AM 28 meperidine 50ng			

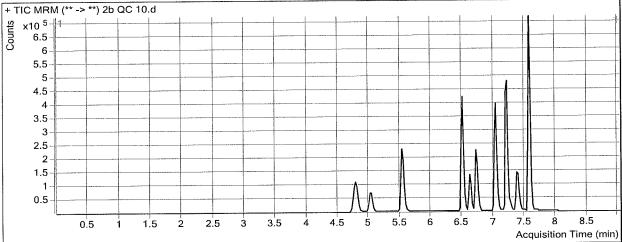
Sample Chromatogram



Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Desipramine	Desipramine-D3	7.567	768797	645363	1.1913	58.2871

Batch Data Path	atch Data Path D:\2018 Data\092018 mdq\QuantResults\mdq p2b.batch.b					
Analysis Time	9/21/2018 8:58 AM	Analyst Name	ISP Tox			
Report Time	9/21/2018 9:00 AM	Reporter Name	ISP Tox			
Last Calib Update	9/21/2018 8:58 AM	Batch State	Processed			
Analysis Info						
Acq Time	2018-09-21 00:32	Data File	2b QC 10.d			
Sample Type	QC	Sample Name	2b QC 10			
Dilution	1	Acq Method	2b mdq 618 .m			
Position	P2-A6	Sample Info				
Inj Vol	-1	Comment	AM 28 Panel 2			

Sample Chromatogram

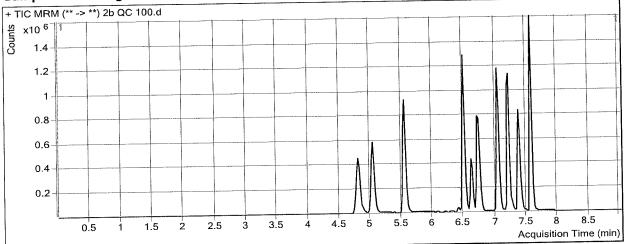


Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
MDA	MDA-D5	4.809	120276	342800	0.3509	10.9465
MDMA	MDMA-D6	5.027	125621	78327	1.6038	10.2213
Desipramine	Desipramine-D3	7.567	133606	678847	0.1968	10.1187



Batch Data Path	D:\2018 Data\092018 m	ndq\QuantResults\mo	ISP Tox
Analysis Time	9/21/2018 8:58 AM	Analyst Name	
Report Time	9/21/2018 9:00 AM	Reporter Name	
Last Calib Update	9/21/2018 8:58 AM	Batch State	
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-09-21 01:35 QC 1 P2-B6 -1	Data File Sample Name Acq Method Sample Info Comment	2b QC 100.d 2b QC 100 2b mdq 618 .m AM 28 Panel 2

Sample Chromatogram

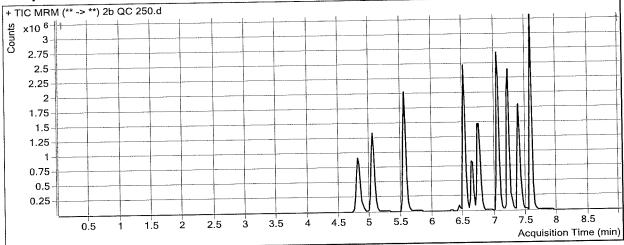


Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
MDA	MDA-D5	4.809	1070840	311326	3.4396	118.4679
MDMA	MDMA-D6	5.027	1280517	75544	16.9507	108.2230
Designamine	Desipramine-D3	7.567	722289	359488	2.0092	97.9066
Desipramine	Desipramine-D3	7.567	122203	335100		



Batch Data Path Analysis Time Report Time Last Calib Update	D:\2018 Data\092018 r 9/21/2018 8:58 AM 9/21/2018 9:00 AM 9/21/2018 8:58 AM	Analyst Name	ISP Tox
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-09-21 01:48 QC 1 P2-C6 -1	Data File Sample Name Acq Method Sample Info Comment	2b QC 250.d 2b QC 250 2b mdq 618 .m AM 28 Panel 2

Sample Chromatogram

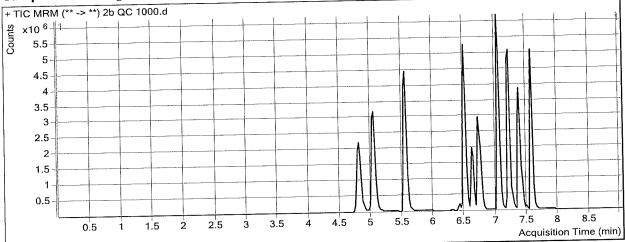


Results Compound MDA MDMA Desipramine	ISTD Compound MDA-D5 MDMA-D6 Desipramine-D3	RT 4.809 5.027 7.567	Response 2368411 3088965 1777988	ISTD Resp 291122 75915 359956	Resp Ratio 8.1355 40.6898 4.9395	Final Conc 281.9342 259.8159 239.8399
Desipramine	Desipramine-D3	1.007	1777500			



Batch Data Path	D:\2018 Data\092018 n	ndq\QuantResults\m	ISP Tox
Analysis Time	9/21/2018 8:58 AM	Analyst Name	
Report Time	9/21/2018 9:00 AM	Reporter Name	
Last Calib Update	9/21/2018 8:58 AM	Batch State	
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-09-21 02:01 QC 1 P2-D6 -1	Data File Sample Name Acq Method Sample Info Comment	2b QC 1000.d 2b QC 1000 2b mdq 618 .m AM 28 Panel 2

Sample Chromatogram



ResultsCompoundISTD CompoundMDAMDA-D5MDMAMDMA-D6DesipramineDesipramine-D3	RT	Response	ISTD Resp	Resp Ratio	Final Conc
	4.809	6081069	199558	30.4727	1059.5107
	5.027	8228821	51146	160.8879	1027.3730
	7.587	2751952	136100	20.2201	979.9933

Samples Report MDQ.xlsx

Printed at: 9:02 AM on: 9/21/2018