

REVIEWED
By Anne Nord at 1:16 pm, Nov 06, 2018

10/31/2018

Worklist: 2764

<u>LAB_CASE</u>	<u>ITEM</u>	<u>TASK_ID</u>	<u>DESCRIPTION</u>
C2018-2001	3	130705	AM 28 Blood Multi-Drug Quant Panel 2 by LC-QC



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

Extraction Date: 10/31/18
Plate lot#: 0530563

Analyst: Britany Wylie
Plate Expiration: May 21 2019

Mobile phase A: 5mM Amm Form + 0.01% FA
0.5M Ammonium Hydroxide
Mobile phase B: 0.01% Formic Acid in MeOH
Ethyl Acetate 20% Methanol in Water
Blank Blood Lot: 18G207D7
Column: Agilent 120 EC-C18 (2.1x 100-4um)
LCMS-QQQ ID: 62340

Pre-Analytic:

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

Analytic:

1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
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.
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
8. Wait 5 minutes.
9. Add **900uL ethyl acetate**.
10. Wait 5 minutes.
11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*.
12. Add **900uL ethyl acetate**.
13. Wait 5 minutes.
14. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*.
15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
SPE Dry ID: 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.
Batch Name: *10312018 MDQ pla-r, 10312018 MDQ plb-r, MDQ pzb rerun*
2. Make necessary changes to integration limits
3. Integration linear and R² values ≥ 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? See comments. Add Control data to QC tracking spreadsheet.
6. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS: *only Desimpramine and phenacyclidine evaluated in this run*

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

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

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

ISP FORENSICS - Cd'A Instrument # 62340

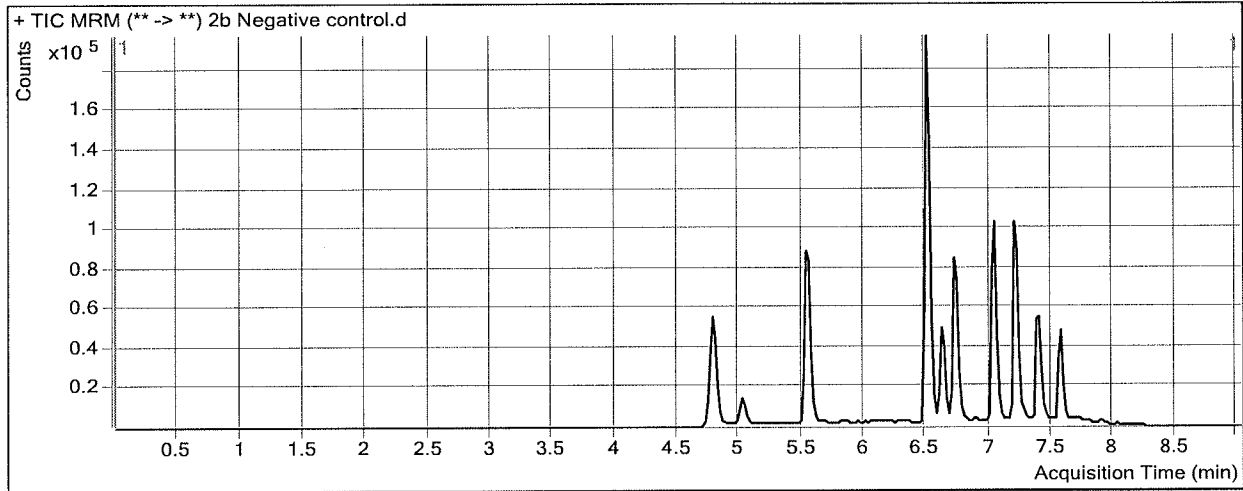
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 10:55 **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



ISP FORENSICS - Cd'A Instrument # 62340

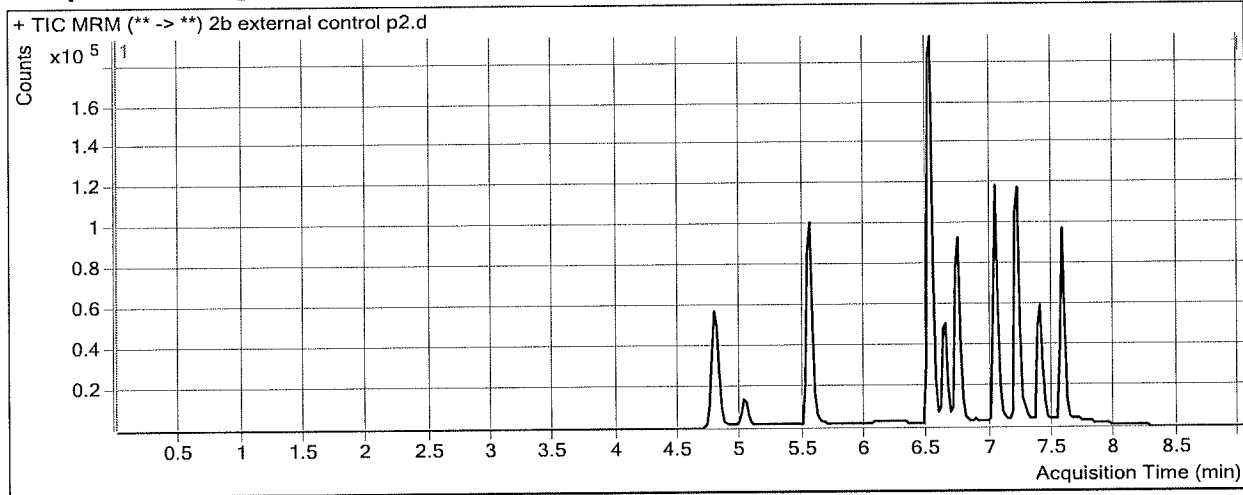
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 11:07 **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 mepredine-50ng^{bw}

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Desipramine	Desipramine-D3	7.566	68708	39410	1.7434	79.8434

BW

ISP FORENSICS - Cd'A Instrument # 62340

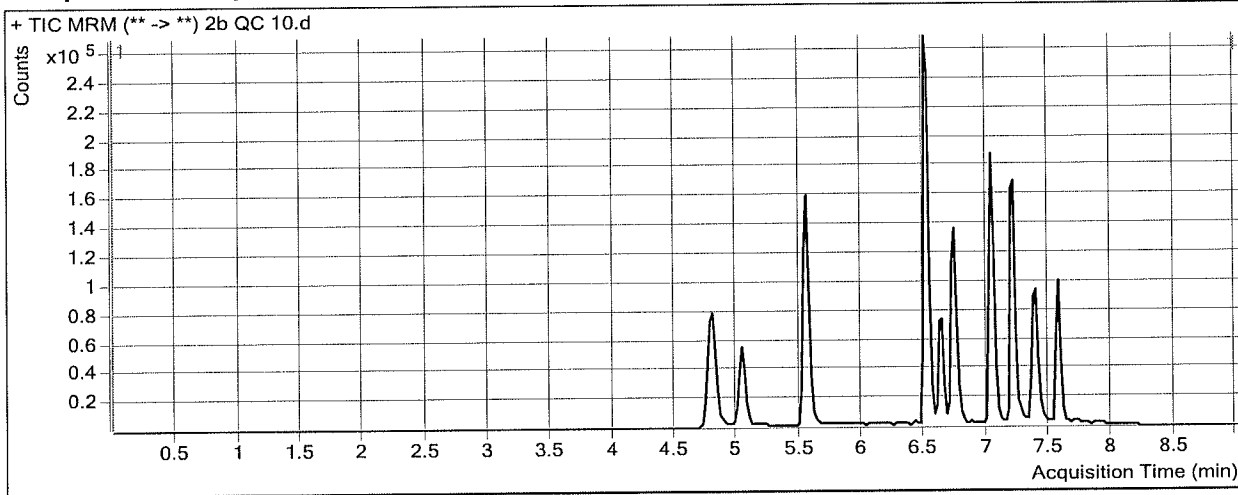
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 11:20 **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



Results

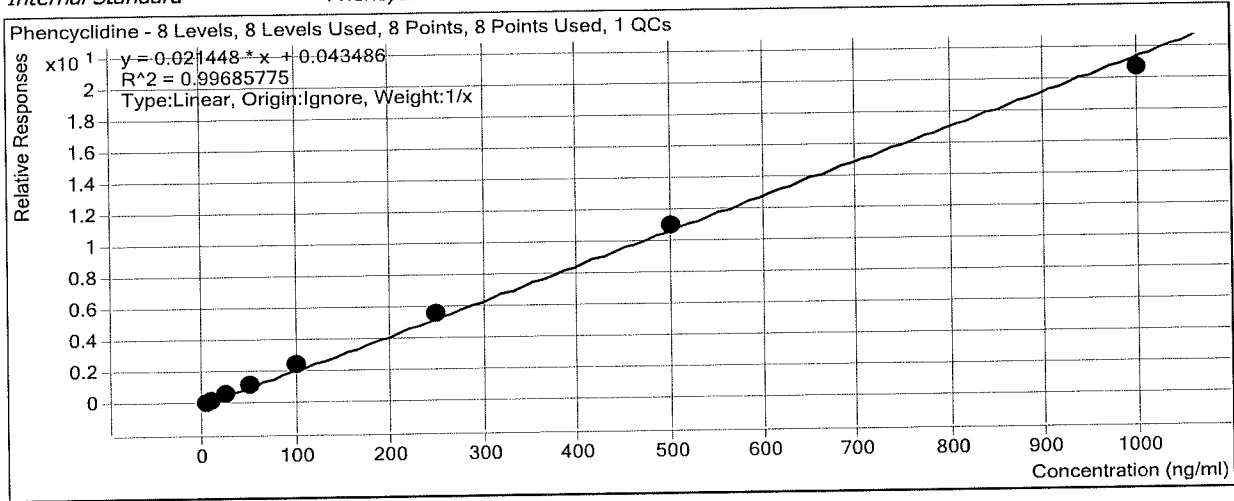
Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Phencyclidine	Phencyclidine-D5	7.066	90015	386921	0.2326	8.8196
Desipramine	Desipramine-D3	7.566	10674	47062	0.2268	9.7160

ISP Forensics Calibration Curve Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin

Last Calib Update 11/2/2018 7:15 AM **Analyst Name** ISP TOX

Target Compound Phencyclidine
Internal Standard Phencyclidine-D5



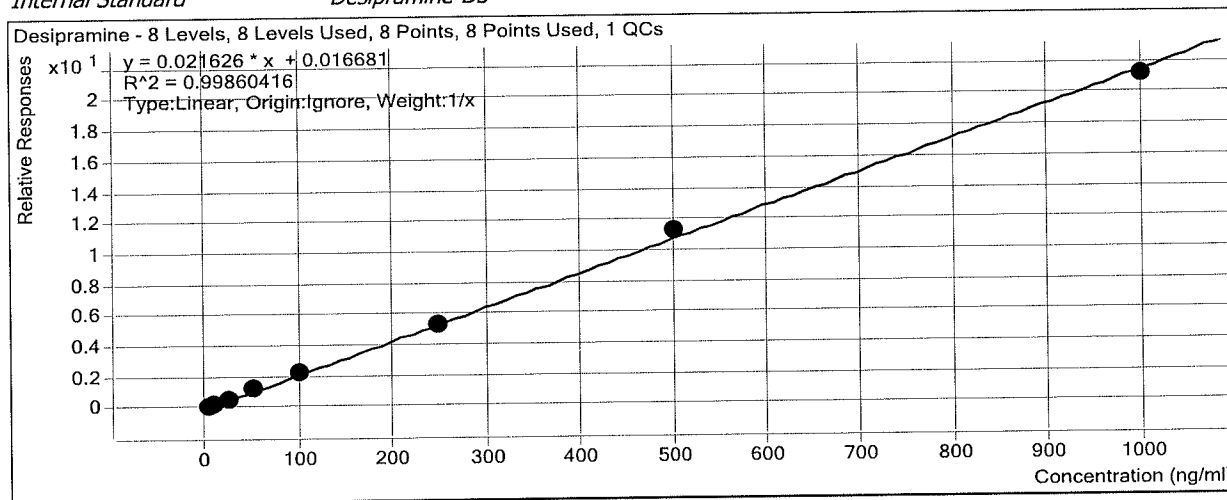
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
2b cal 1-5ng	1	<input checked="" type="checkbox"/>	5	3.7	73.5
2b cal 2-10ng	2	<input checked="" type="checkbox"/>	10	10.0	99.6
2b QC 10	2	<input checked="" type="checkbox"/>	10	8.8	88.2
2b cal 3-25ng	3	<input checked="" type="checkbox"/>	25	24.9	99.5
2b cal 4-50ng	4	<input checked="" type="checkbox"/>	50	54.6	109.1
2b cal 5-100ng	5	<input checked="" type="checkbox"/>	100	116.0	116.0
2b cal 6-250ng	6	<input checked="" type="checkbox"/>	250	259.8	103.9
2b cal 7-500ng	7	<input checked="" type="checkbox"/>	500	511.1	102.2
2b cal 8-1000ng	8	<input checked="" type="checkbox"/>	1000	959.9	96.0

ISP Forensics Calibration Curve Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin

Last Calib Update 11/2/2018 7:15 AM **Analyst Name** ISP TOX

Target Compound *Desipramine*
Internal Standard *Desipramine-D3*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
2b cal 1-5ng	1	<input checked="" type="checkbox"/>	5	4.3	86.2
2b cal 2-10ng	2	<input checked="" type="checkbox"/>	10	11.0	109.5
2b QC 10	2	<input checked="" type="checkbox"/>	10	9.7	97.2
2b cal 3-25ng	3	<input checked="" type="checkbox"/>	25	23.2	93.0
2b cal 4-50ng	4	<input checked="" type="checkbox"/>	50	53.1	106.1
2b cal 5-100ng	5	<input checked="" type="checkbox"/>	100	106.0	106.0
2b cal 6-250ng	6	<input checked="" type="checkbox"/>	250	242.5	97.0
2b cal 7-500ng	7	<input checked="" type="checkbox"/>	500	521.5	104.3
2b cal 8-1000ng	8	<input checked="" type="checkbox"/>	1000	978.4	97.8

ISP FORENSICS - Cd'A Instrument # 62340

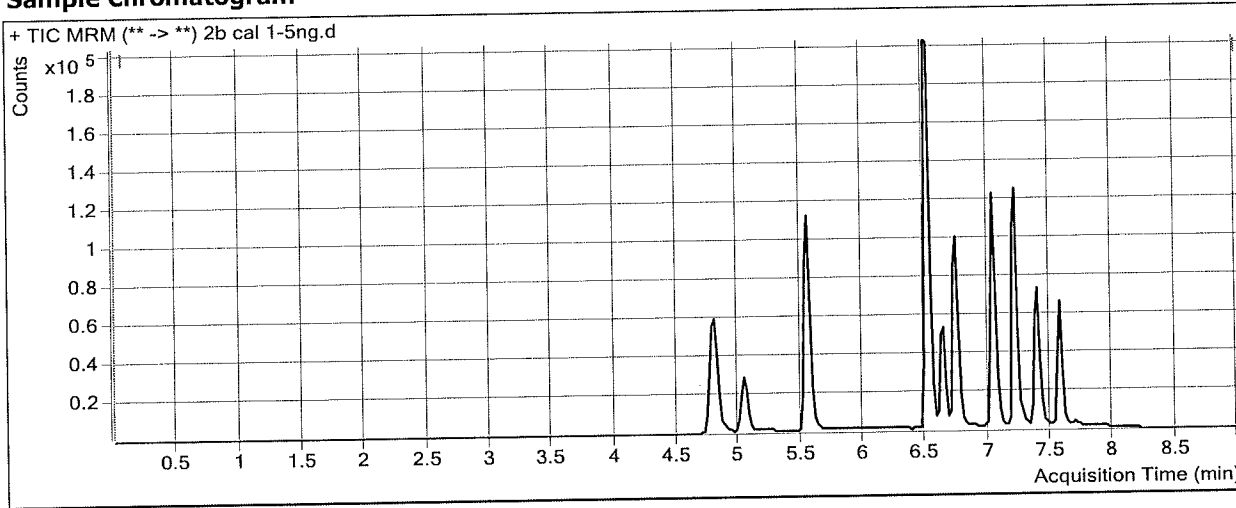
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 09:01 **Data File** 2b cal 1-5ng.d
Sample Type Calibration **Sample Name** 2b cal 1-5ng
Dilution 1 **Acq Method** 2b mdq 618 .m
Position P2-A5 **Sample Info**
Inj Vol -1 **Comment** AM 28 Panel 2

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Phencyclidine	Phencyclidine-D5	7.066	34834	284794	0.1223	3.6753
Desipramine	Desipramine-D3	7.566	4165	37894	0.1099	4.3106

ISP FORENSICS - Cd'A Instrument # 62340

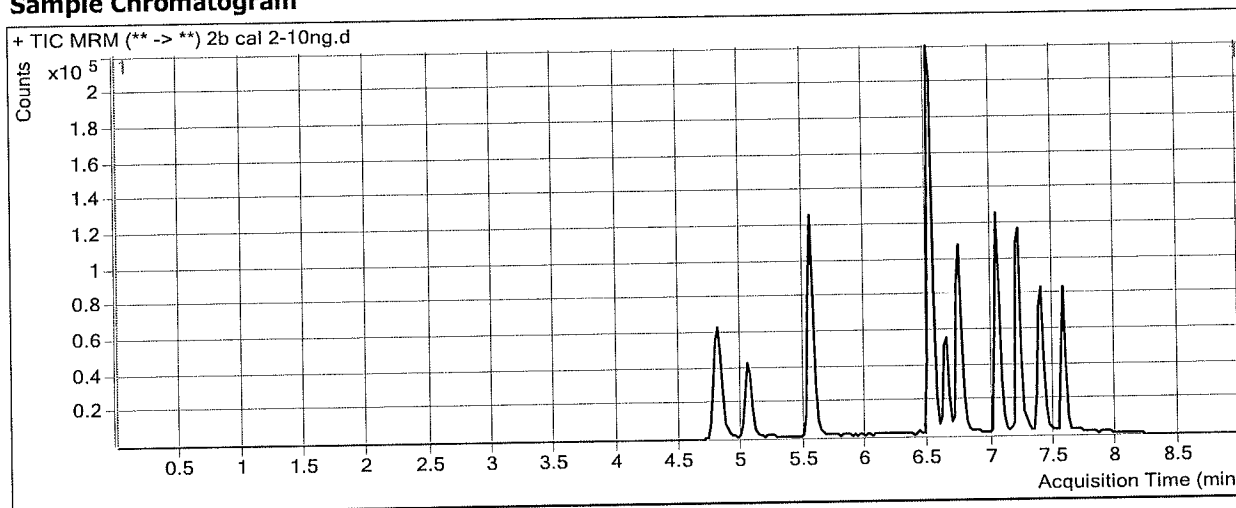
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 09:13 **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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Phencyclidine	Phencyclidine-D5	7.066	65698	255476	0.2572	9.9627
Desipramine	Desipramine-D3	7.566	9690	38222	0.2535	10.9512

ISP FORENSICS - Cd'A Instrument # 62340

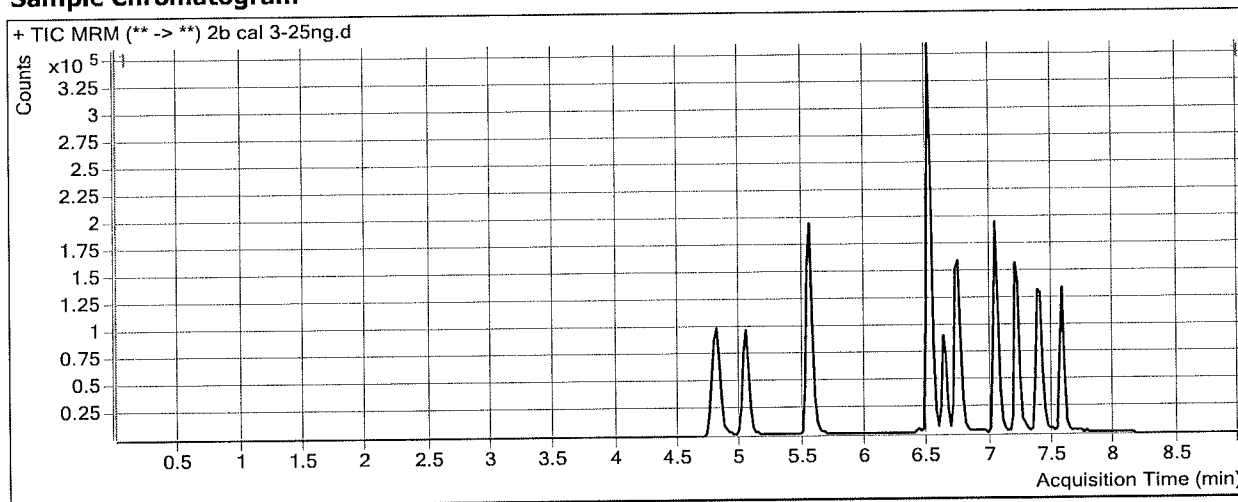
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 09:26 **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-CS **Sample Info**
Inj Vol -1 **Comment** AM 28 Panel 2

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Phencyclidine	Phencyclidine-D5	7.046	156803	271660	0.5772	24.8848
Desipramine	Desipramine-D3	7.566	19542	37628	0.5193	23.2426

ISP FORENSICS - Cd'A Instrument # 62340

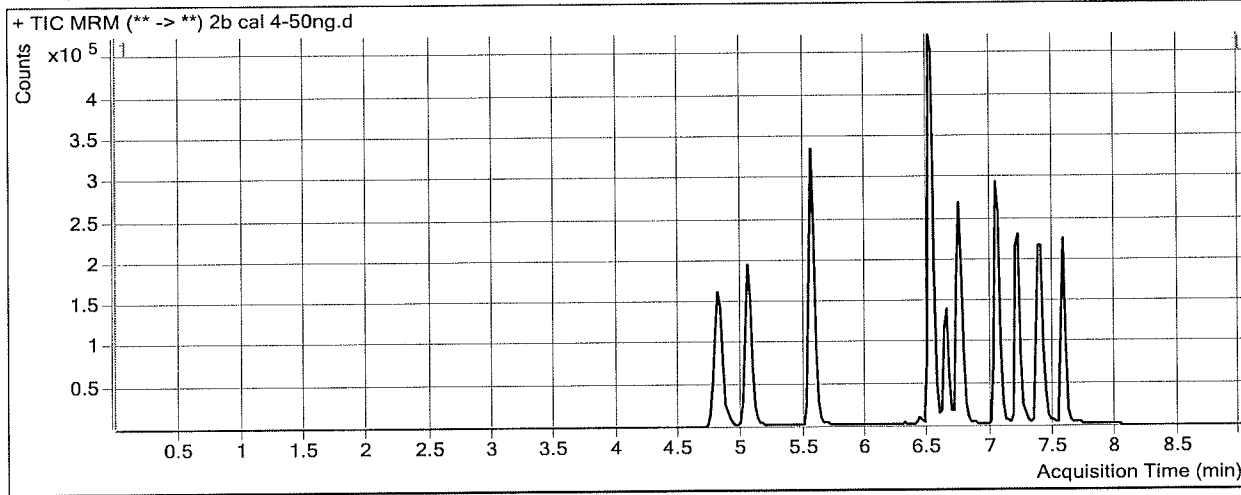
Multi-Drug Confirmatory Analysis Report

Batch Data Path	D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin		
Analysis Time	11/2/2018 7:15 AM	Analyst Name	ISP Tox
Report Time	11/2/2018 7:16 AM	Reporter Name	ISP Tox
Last Calib Update	11/2/2018 7:15 AM	Batch State	Processed

Analysis Info

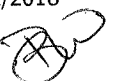
Acq Time	2018-11-01 09:39	Data File	2b cal 4-50ng.d
Sample Type	Calibration	Sample Name	2b cal 4-50ng
Dilution	1	Acq Method	2b mdq 618 .m
Position	P2-D5	Sample Info	
Inj Vol	-1	Comment	AM 28 Panel 2

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Phencyclidine	Phencyclidine-D5	7.066	344681	283949	1.2139	54.5702
Desipramine	Desipramine-D3	7.566	38320	32911	1.1644	53.0688



ISP FORENSICS - Cd'A Instrument # 62340

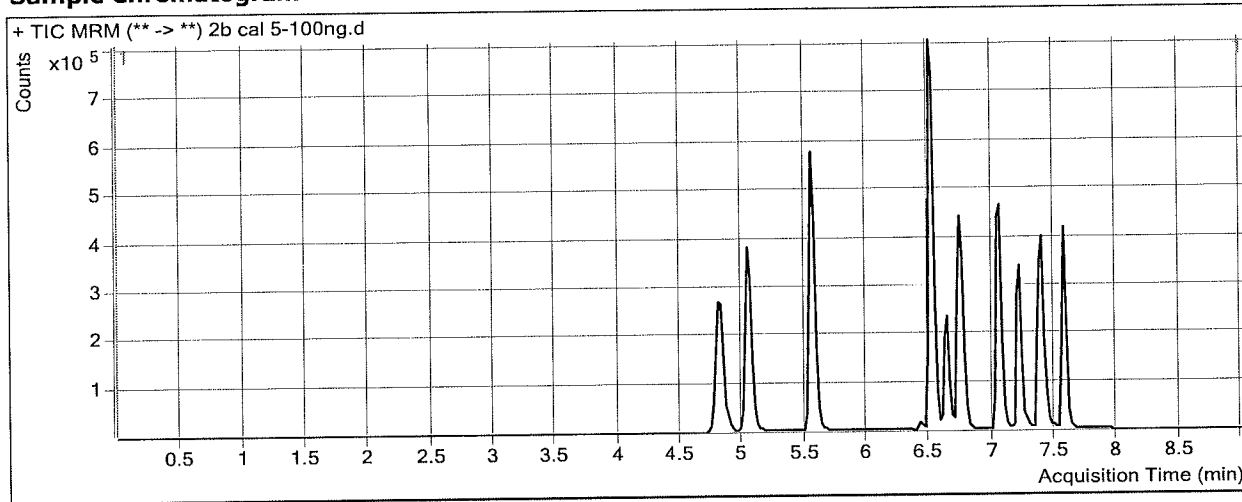
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 09:51 **Data File** 2b cal 5-100ng.d
Sample Type Calibration **Sample Name** 2b cal 5-100ng
Dilution 1 **Acq Method** 2b mdq 618 .m
Position P2-E5 **Sample Info**
Inj Vol -1 **Comment** AM 28 Panel 2

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Phencyclidine	Phencyclidine-D5	7.066	681429	269089	2.5324	116.0448
Desipramine	Desipramine-D3	7.566	89689	38838	2.3093	106.0118

ISP FORENSICS - Cd'A Instrument # 62340

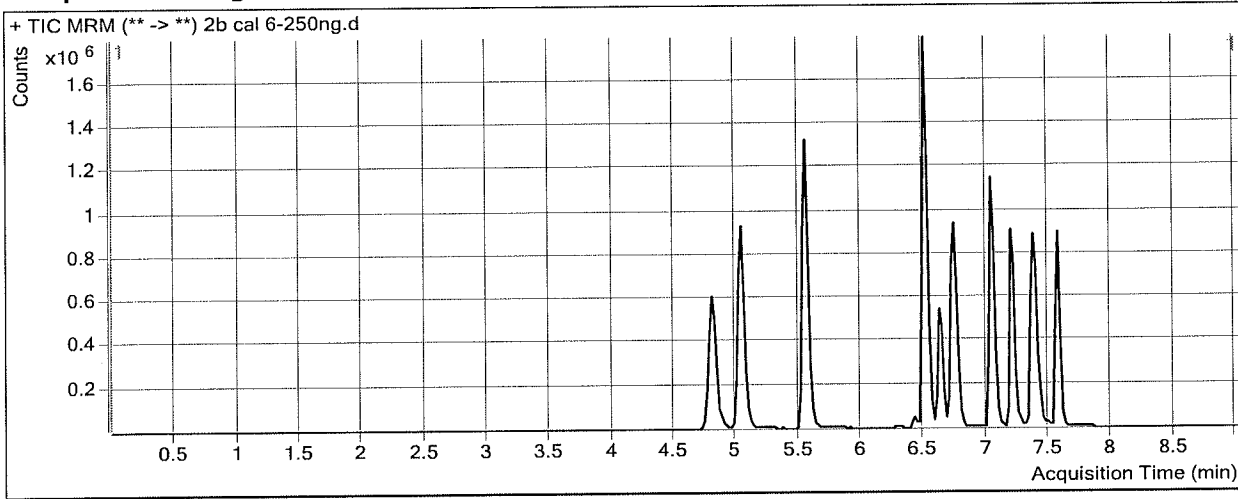
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 10:04 **Data File** 2b cal 6-250ng.d
Sample Type Calibration **Sample Name** 2b cal 6-250ng
Dilution 1 **Acq Method** 2b mdq 618 .m
Position P2-F5 **Sample Info**
Inj Vol -1 **Comment** AM 28 Panel 2

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Phencyclidine	Phencyclidine-D5	7.046	1733195	308617	5.6160	259.8211
Desipramine	Desipramine-D3	7.566	281386	53475	5.2620	242.5457

ISP FORENSICS - Cd'A Instrument # 62340

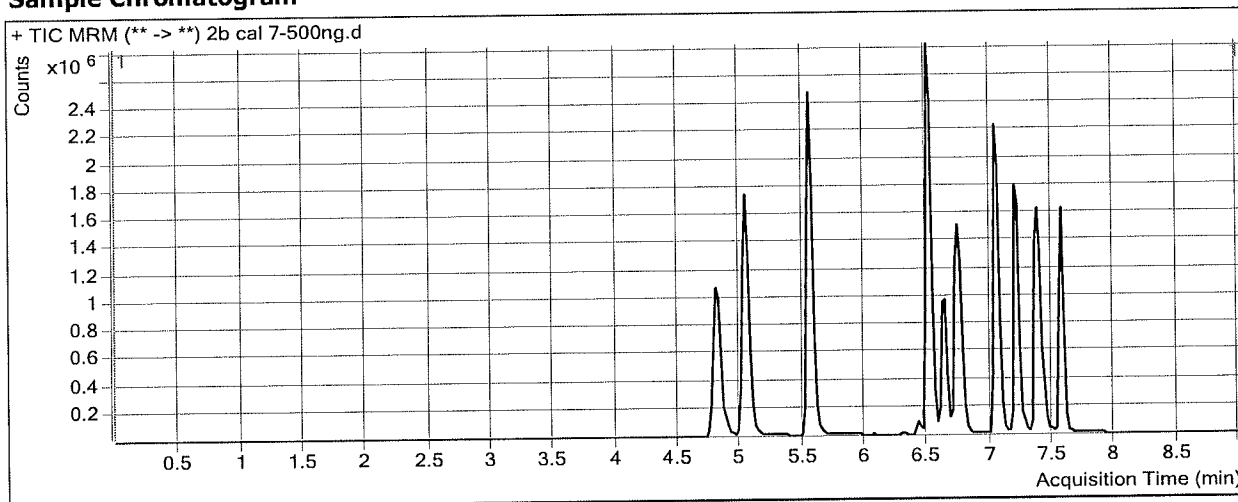
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 10:17 **Data File** 2b cal 7-500ng.d
Sample Type Calibration **Sample Name** 2b cal 7-500ng
Dilution 1 **Acq Method** 2b mdq 618 .m
Position P2-G5 **Sample Info**
Inj Vol -1 **Comment** AM 28 Panel 2

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Phencyclidine	Phencyclidine-D5	7.046	3576832	325013	11.0052	511.0953
Desipramine	Desipramine-D3	7.566	644368	57049	11.2949	521.5072

ISP FORENSICS - Cd'A Instrument # 62340

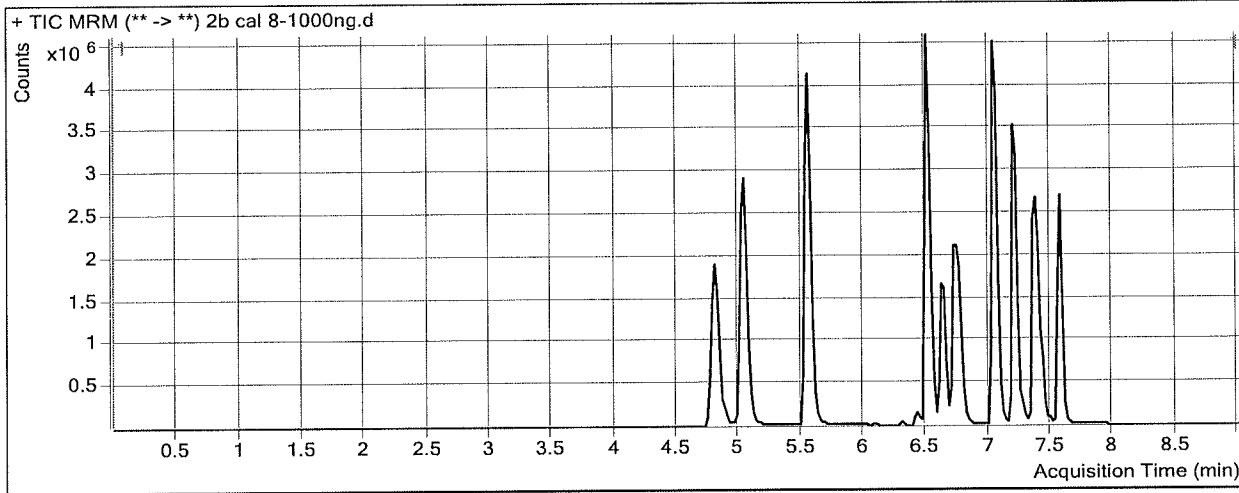
Multi-Drug Confirmatory Analysis Report

Batch Data Path D:\2018 Data\103118 mdq rerun\QuantResults\MDQ p2b rerun.batch.bin
Analysis Time 11/2/2018 7:15 AM **Analyst Name** ISP Tox
Report Time 11/2/2018 7:16 AM **Reporter Name** ISP Tox
Last Calib Update 11/2/2018 7:15 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-01 10:29 **Data File** 2b cal 8-1000ng.d
Sample Type Calibration **Sample Name** 2b cal 8-1000ng
Dilution 1 **Acq Method** 2b mdq 618 .m
Position P2-H5 **Sample Info**
Inj Vol -1 **Comment** AM 28 Panel 2

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Phencyclidine	Phencyclidine-D5	7.046	7684233	372444	20.6319	959.9458
Desipramine	Desipramine-D3	7.566	1217162	57481	21.1750	978.3621