12/28/2018

Worklist: 2863

LAB CASE	ITEM	TASK_ID	DESCRIPTION	
P2018-3029	1	134329	AM 28 Blood Multi-Drug Quant Panel 2 by LC-Q(	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖‖‖ ‖‖‖ ‖ ‖‖
P2018-3284	1	135620	AM 28 Blood Multi-Drug Quant Panel 2 by LC-Q(	‖‖ ‖‖ ‖‖‖‖‖‖‖‖‖ ‖‖‖ ‖ ‖ ‖

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

TS

Extraction Date: 01/02/18

Plate lot#: 0530563

Analyst: Tamara Salazar

Plate Expiration: 05/21/2019

Mobile phase A: 5mM Amm Form + 0.01% FA
    0.5M Ammonium Hydroxide

Blank Blood Lot: 445283-1

LCMS-QQQ ID: 59740

Mobile phase B: 0.01% Formic Acid in MeOH
Ethyl Acetate   20% Methanol in Water

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

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: 3** in wells of analytical (standards) plate.

☒ 3.   Place on shaking incubator at ambient temp., 900rpm for 15 minutes.   *Shaker ID: 067105*

☒ 4.   Pipette **250µL 00.5M ammonium hydroxide** in wells of analytical plate.

☒ 5.   Place on shaking incubator at ambient temp., 900rpm for 15 minutes.

☒ 6.   Transfer **300µL of blood+base** mixture to corresponding wells of SLE+ plate.

☒ 7.   Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent). ***(Load at 85-100 PSI- Selector to the right)*** *Manifold ID: 067104*

☒ 8.   Wait 5 minutes.

☒ 9.   Add **900uL ethyl acetate.**

☒ 10. Wait 5 minutes.

☒ 11. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***

☒ 12. Add **900uL ethyl acetate.**

☒ 13. Wait 5 minutes.

☒ 14. Apply positive pressure for approx. 15 seconds. ***(10-15 PSI- Selector to the left).***

☒ 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. *SPE Dry ID: 067103*

☒ 16. Reconstitute in **100µL 20% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

☒ 1.   Create batch and process data.
    Worklist path: *C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS*
    Batch Name: *P2a MDQ TS*

☒ 2.   Make necessary changes to integration limits

☒ 3.   Integration linear and R^2 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? Y / N _____ Add Control data to QC tracking spreadsheet.

☒ 6.   Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports.

COMMENTS:
Curves limited: Nortriptyline 10-1000
Compounds evaluated: Chlordiazepoxide, Zopiclone, Nortriptyline, Pseudophedrine, Amitriptyline

Idaho State Police
Forensic Services

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

Analyst: Tamara Salazar
Extraction Date: 01/02/18
Worklist Number: 2863

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	445283-1		10/25/18		
Methanol External Control Solution	022018	02/20/19	02/20/18		
Blood External Control Solution	WS010219	02/20/19	01/02/19		
0.5M Ammonium Hydroxide	082818	02/28/19	08/28/18		
Formic Acid (LCMS Grade)	095180B		11/15/17		
Water (LCMS Grade)	183905		12/14/18		
Methanol (LCMS Grade)	184782		12/14/18		
2M Ammonium Formate	121418		12/14/18		
Ammonium Formate (LCMS Grade)	A0287238		01/30/17		
Ammonium Hydroxide (ACS grade or better)	053200		08/03/07		
Ethyl Acetate (ACS grade or better)	100362		06/26/17		
20% LCMS Methanol in LCMS Water	082818		08/28/18		
5mM Ammonium Formate + 0.01% Formic Acid in Water (Mobile Phase A)	010318		01/03/18	*Due to an instrument error, the panel 1 analysis took more mobile phase than expected. A fresh lot of mobile phase A was prepared for the panel 2 analysis.	
0.01% Formic Acid in Methanol (Mobile Phase B)	121418		12/14/18		
Needle Rinse--75% LCMS MeOH in LCMS Water	122618		12/26/18		

Methanol External Control Solution (Lot: 022018)
100 ul each 1 mg/mL stock solution in 9600 ul MeOH

Component	Source	Source Lot Number	Expiration Date
Methanol (LCMS)	Fisher	172516	
Zopiclone	Cerilliant	FE08291601	12/31/2021
Chlordiazepoxide	Cerilliant	FE07241502	08/31/2020
Flunitrazepam	Cerilliant	FE08051602	08/31/2021
Prepared:	02/20/18		
Prepared By:	Tamara Salazar		
Expires:	02/20/19		

Blood External Control Solution (Lot: WS010219)
50 ul of methanol external control solution was added to 9950 ul of blood.

Component	Source	Source Lot Number
Negative Blood	Hemostat	445283-1
Methanol External Control Solution		022018
Prepared:	01/02/19	
Prepared by:	Tamara Salazar	
Expires:	02/20/19	

0.5M Ammonium Hydroxide (Lot: 082818)

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

2M Ammonium Formate Solution (Lot: 121418)

Component	Source	Source Lot Number
Ammonium Formate	Arcos Organic	A0287238
LCMS Water	Fisher	183905
Prepared:	12/14/18	
Prepared By:	Tamara Salazar	
Expires:	Remake as needed	

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

Component	Source	Source Lot Number
MeOH (LCMS Grade)	Fisher	177145
Water (LCMS Grade)	Fisher	182702
Prepared:	08/28/18	
Prepared By:	Tamara Salazar	

5mM Ammonium Formate + 0.01% Formic Acid in Water (Lot: 010319)

Component	Source	Source Lot Number
2M Ammonium Formate		121418
LCMS Water	Fisher	183905
Formic Acid	Fisher	095180B
Prepared:	01/03/19	
Prepared By:	Tamara Salazar	

0.01% Formic Acid in LCMS Methanol (Mobile Phase B) (Lot: 121418)

Component	Source	Source Lot Number
Formic Acid	Fisher	095180B
MeOH (LCMS Grade)	Fisher	184782
Prepared:	12/14/18	
Prepared By:	Tamara Salazar	

Needle Rinse (75% LCMS MeOH in LCMS Water) (Lot: 122618)

Component	Source	Source Lot Number
MeOH (LCMS Grade)	Fisher	177145
Water (LCMS Grade)	Fisher	183905
Prepared:	12/26/18	
Prepared By:	Tamara Salazar	

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ		
Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:16 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-04 09:19	**Data File**	P2 a Negative control.d
Sample Type	Sample	**Sample Name**	P2 a Negative control.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-E6	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2
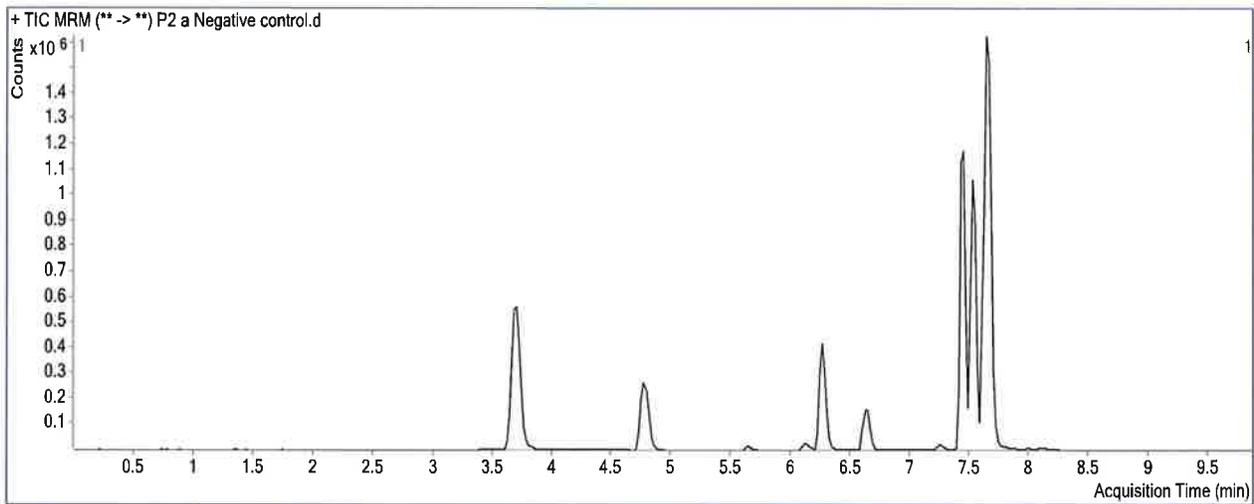
Sample Chromatogram

TS

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bii
Analysis Time	1/7/2019 2:14 PM
Report Time	1/7/2019 2:16 PM
Last Calib Update	1/7/2019 2:14 PM

Analyst Name	ISPUser		
Reporter Name	ISPUser		
Batch State	Processed		

Analysis Info

Acq Time	2019-01-04 09:32	**Data File**	P2 a External control-50ng mL.d
Sample Type	Sample	**Sample Name**	P2 a External control-50ng mL.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-F6	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28; 445283-1 + WS022018 50 ng flunitrazepam, zopiclone, chlorodia:

Sample Chromatogram

+ TIC MRM (** -> **) P2 a External control-50ng mL.d
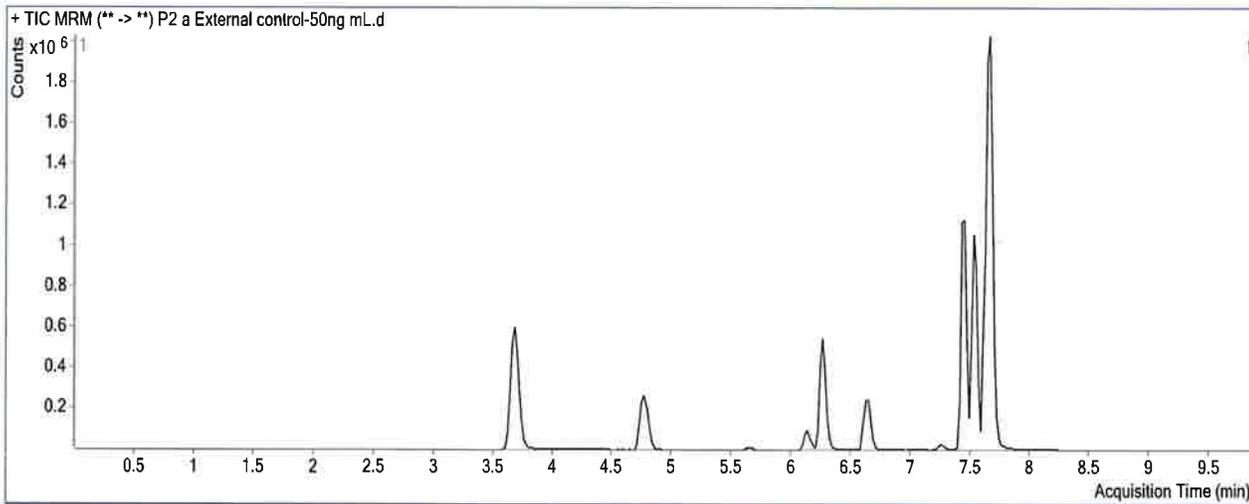
Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Zopiclone	Zopiclone-D4	6.130	166343	136617	1.2176	40.1025
Chlordiazepoxide	Chlordiazepoxide-D5	7.667	651734	3237600	0.2013	47.4615

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

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bi
Analysis Time	1/7/2019 2:14 PM
Report Time	1/7/2019 2:16 PM
Last Calib Update	1/7/2019 2:14 PM

Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:16 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-04 09:57	**Data File**	P2 a QC 10 (QC1).d
Sample Type	QC	**Sample Name**	P2 a QC 10 (QC1).d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-A6	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2
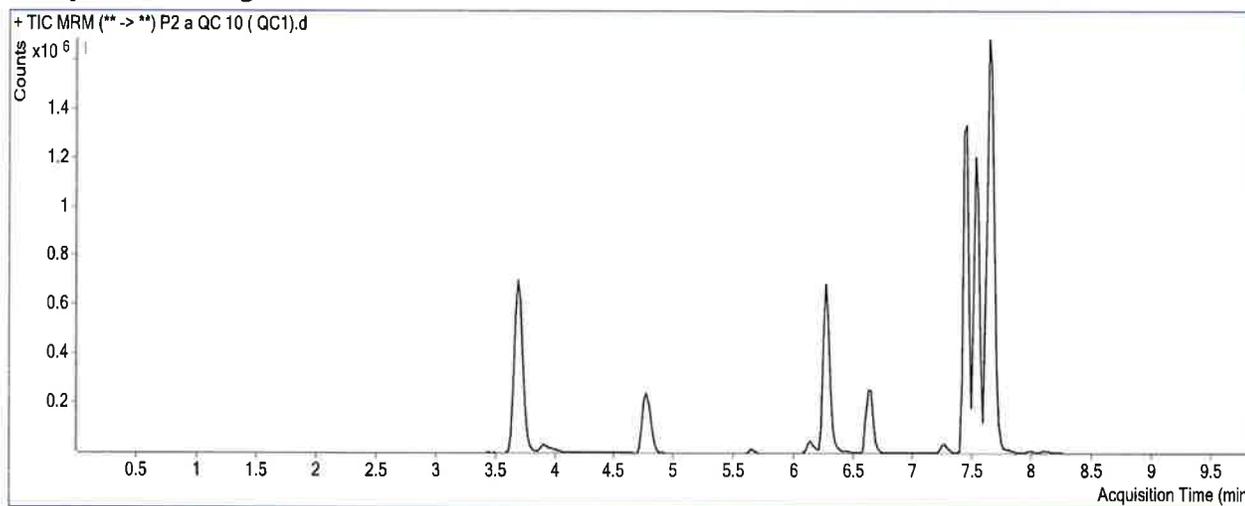
Sample Chromatogram

+ TIC MRM (** -> **) P2 a QC 10 (QC1).d

Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.715	649898	2887723	0.2251	10.2464
Zopiclone	Zopiclone-D4	6.130	36086	143110	0.2522	9.6763
Amitriptyline	Amitriptyline-D3	7.509	23088	54375	0.4246	8.8444
Nortriptyline	Nortriptyline-D3	7.533	6452	14778	0.4366	10.5965
Chlordiazepoxide	Chlordiazepoxide-D5	7.667	126882	3019086	0.0420	10.0724

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bii
Analysis Time	1/7/2019 2:14 PM
Report Time	1/7/2019 2:16 PM
Last Calib Update	1/7/2019 2:14 PM

Analysis Time	1/7/2019 2:14 PM
Report Time	1/7/2019 2:16 PM
Last Calib Update	1/7/2019 2:14 PM

Analyst Name ISPUser
Reporter Name ISPUser
Batch State Processed

Analysis Info

Acq Time	2019-01-04 10:48	**Data File**	P2 a QC 100 (QC2).d
Sample Type	QC	**Sample Name**	P2 a QC 100 (QC2).d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-B6	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2
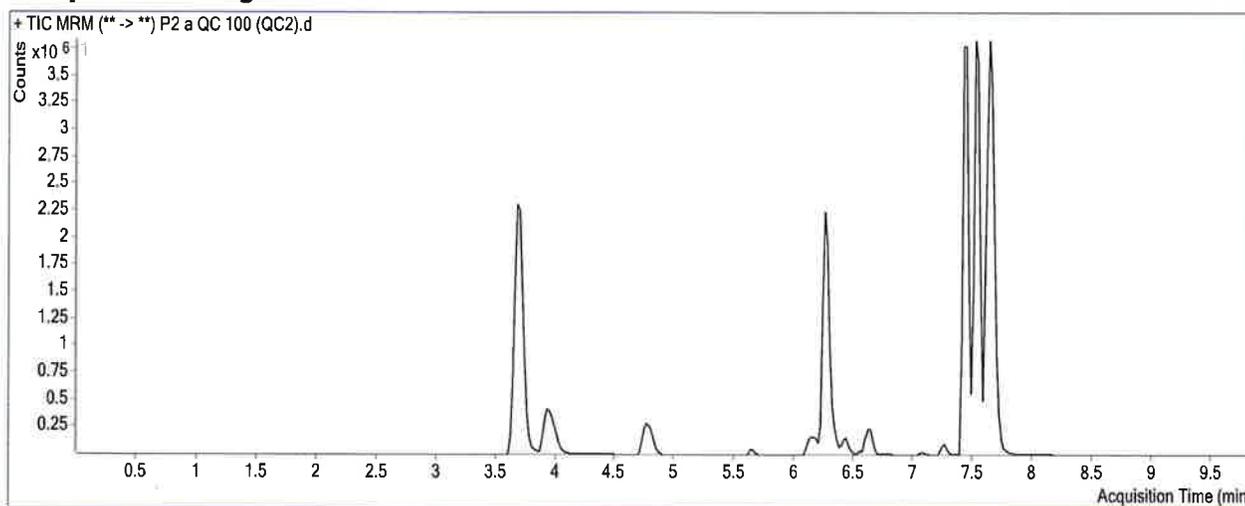
Sample Chromatogram

+ TIC MRM (** -> **) P2 a QC 100 (QC2).d

Results

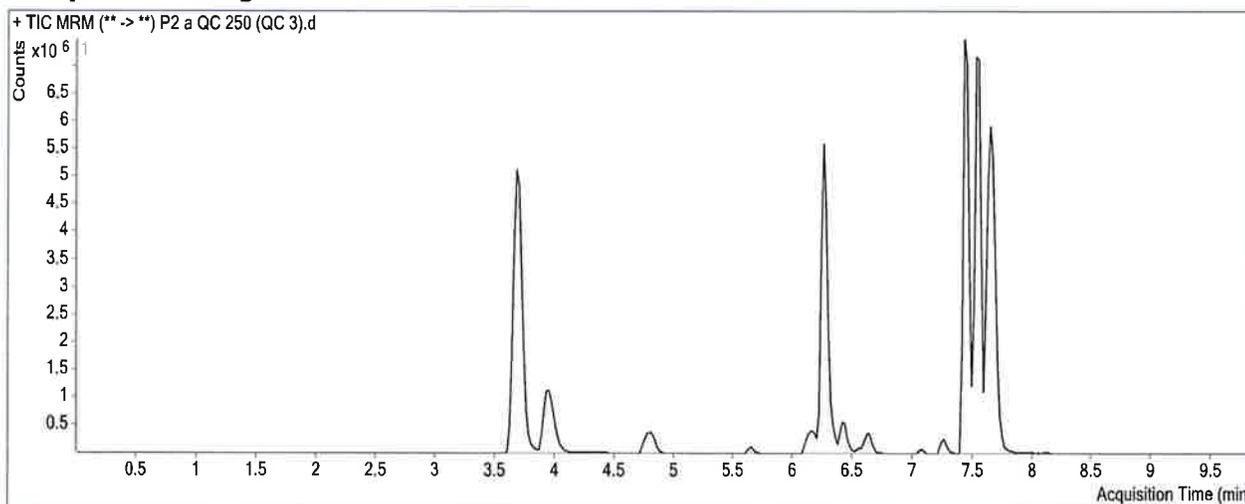| Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.715	7934092	3182613	2.4929	96.7170
Zopiclone	Zopiclone-D4	6.130	310380	95600	3.2466	104.0497
Amitriptyline	Amitriptyline-D3	7.509	186946	41018	4.5577	102.3223
Nortriptyline	Nortriptyline-D3	7.533	57276	13453	4.2574	90.2096
Chlordiazepoxide	Chlordiazepoxide-D5	7.667	1148091	2606091	0.4405	103.6222

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

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bi
Analysis Time	1/7/2019 2:14 PM
Report Time	1/7/2019 2:17 PM
Last Calib Update	1/7/2019 2:14 PM

Analyst Name	ISPUser
Reporter Name	ISPUser
Batch State	Processed

Analysis Info

Acq Time	2019-01-04 11:38	**Data File**	P2 a QC 250 (QC 3).d
Sample Type	QC	**Sample Name**	P2 a QC 250 (QC 3).d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-C6	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2

Sample Chromatogram

+ TIC MRM (** -> **) P2 a QC 250 (QC 3).d

Results

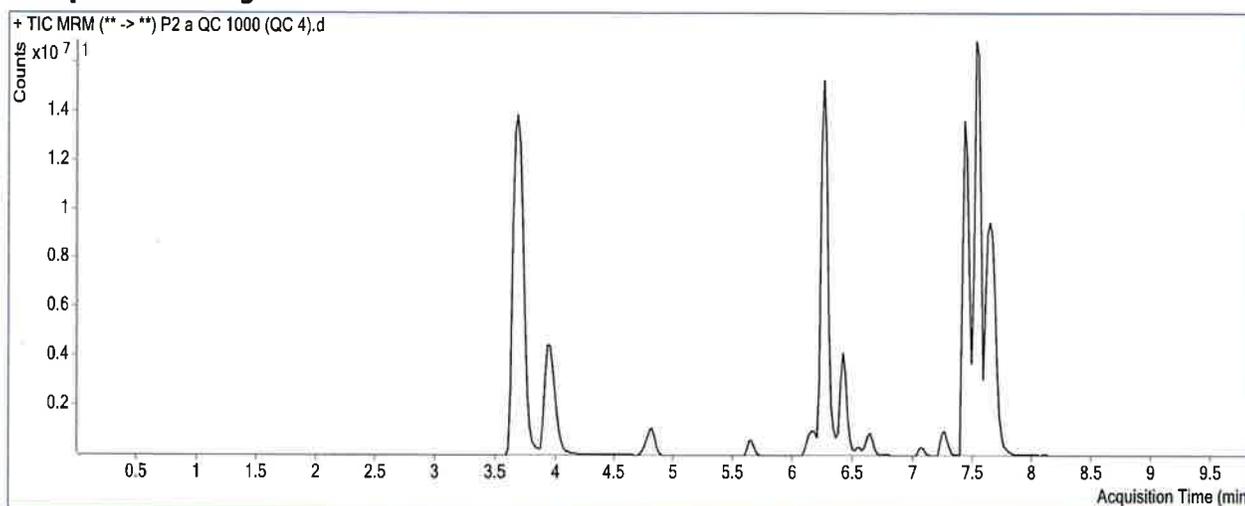| Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.695	21068661	3212612	6.5581	251.7143
Zopiclone	Zopiclone-D4	6.130	713742	86209	8.2792	262.6541
Amitriptyline	Amitriptyline-D3	7.509	510843	43874	11.6435	262.5818
Nortriptyline	Nortriptyline-D3	7.533	144794	12425	11.6532	244.3187
Chlordiazepoxide	Chlordiazepoxide-D5	7.667	2034568	1989331	1.0227	240.2910

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bil		
Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:17 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-04 12:04	**Data File**	P2 a QC 1000 (QC 4).d
Sample Type	QC	**Sample Name**	P2 a QC 1000 (QC 4).d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-D6	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2

Sample Chromatogram

+ TIC MRM (** -> **) P2 a QC 1000 (QC 4).d

Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.695	70610957	2729206	25.8723	988.1311
Zopiclone	Zopiclone-D4	6.110	1257964	40556	31.0176	979.2744
Amitriptyline	Amitriptyline-D3	7.509	2681426	64788	41.3876	935.3074
Nortriptyline	Nortriptyline-D3	7.533	796635	14530	54.8278	1143.9521
Chlordiazepoxide	Chlordiazepoxide-D5	7.687	3484276	869892	4.0054	940.4617

ISP Forensics
Calibration Curve Report

TS

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bin
Last Calib Update	1/7/2019 2:14 PM

Analyst Name　　ISP TOX

Target Compound　　*Pseudoephedrine*
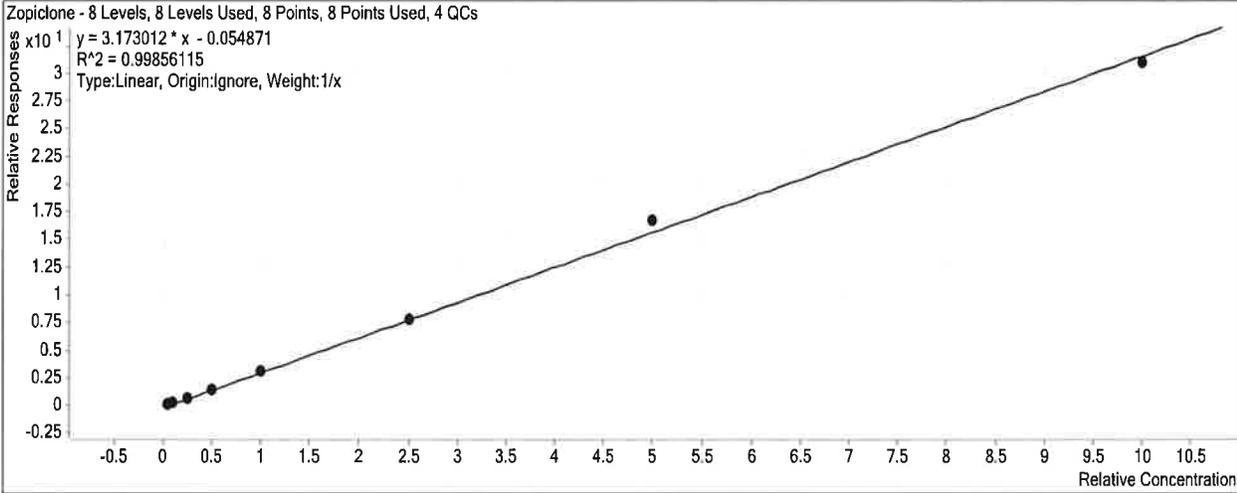*Internal Standard*　　*Pseudoephedrine-D3*

Pseudoephedrine - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs
$y = 2.622731 * x - 0.043679$
$R^2 = 0.99900408$
Type:Linear, Origin:Ignore, Weight:1/x
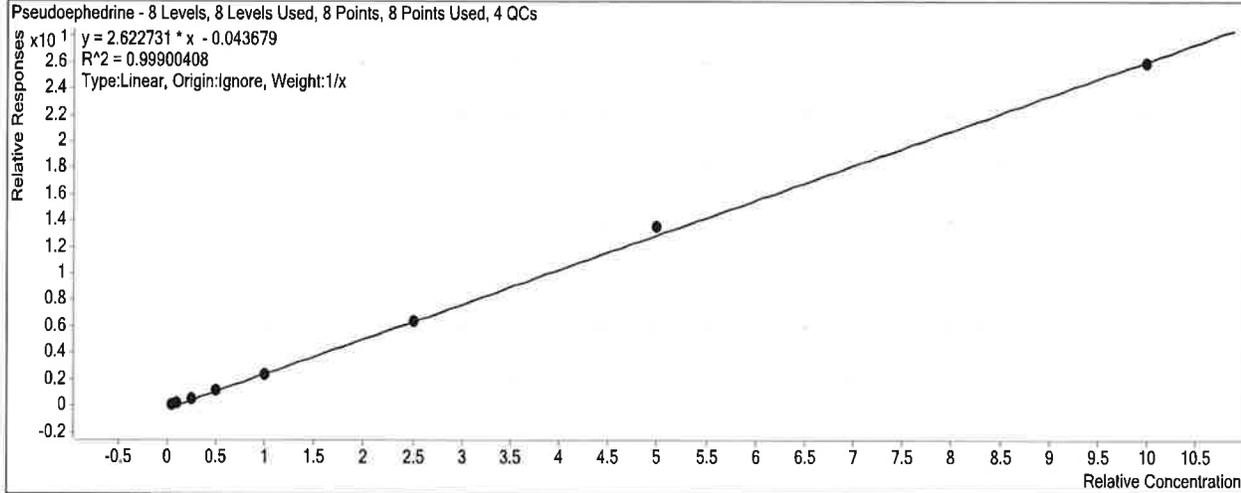
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	5.8	115.6
P2 a cal 2-10ng.d	2	☑	10	10.1	101.2
P2 a QC 10 (QC1).d	2	☑	10	10.2	102.5
P2 a cal 3-25ng.d	3	☑	25	23.5	93.8
P2 a cal 4-50ng.d	4	☑	50	46.5	93.1
P2 a cal 5-100ng.d	5	☑	100	94.4	94.4
P2 a QC 100 (QC2).d	5	☑	100	96.7	96.7
P2 a cal 6-250ng.d	6	☑	250	246.0	98.4
P2 a QC 250 (QC 3).d	6	☑	250	251.7	100.7
P2 a cal 7-500ng.d	7	☑	500	521.0	104.2
P2 a cal 8-1000ng.d	8	☑	1000	992.6	99.3
P2 a QC 1000 (QC 4).d	8	☑	1000	988.1	98.8

TS

Batch Data Path   C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bin

Last Calib Update   1/7/2019 2:14 PM   **Analyst Name**   ISP TOX

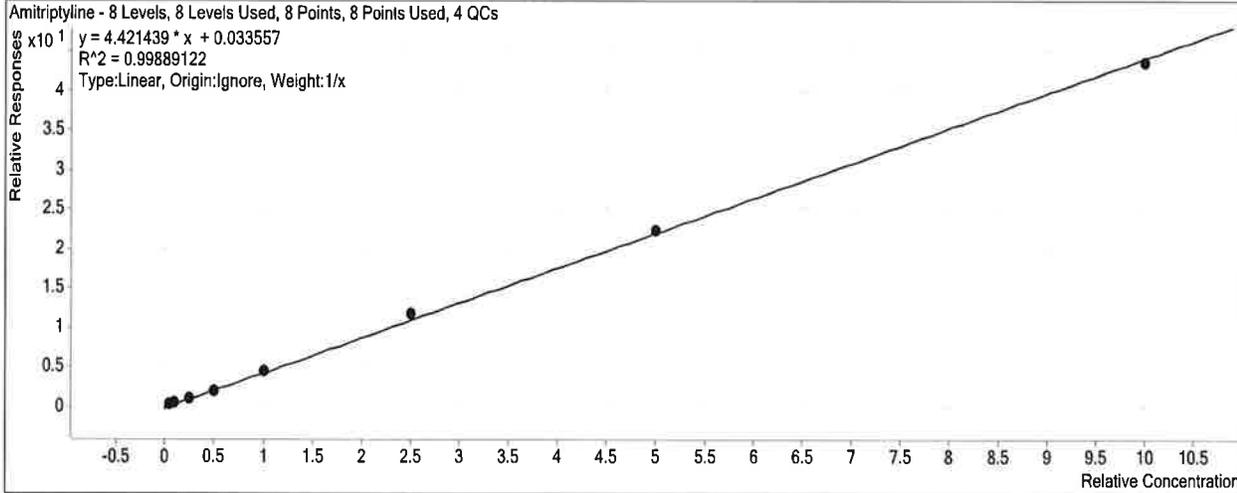### *Target Compound*   *Zopiclone*
Internal Standard   *Zopiclone-D4*

Zopiclone - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs
$y = 3.173012 * x - 0.054871$
$R^2 = 0.99856115$
Type:Linear, Origin:Ignore, Weight:1/x

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	5.5	110.0
P2 a cal 2-10ng.d	2	☑	10	10.1	100.9
P2 a QC 10 (QC1).d	2	☑	10	9.7	96.8
P2 a cal 3-25ng.d	3	☑	25	23.5	94.1
P2 a cal 4-50ng.d	4	☑	50	46.4	92.9
P2 a cal 5-100ng.d	5	☑	100	100.2	100.2
P2 a QC 100 (QC2).d	5	☑	100	104.0	104.0
P2 a cal 6-250ng.d	6	☑	250	245.5	98.2
P2 a QC 250 (QC 3).d	6	☑	250	262.7	105.1
P2 a cal 7-500ng.d	7	☑	500	528.9	105.8
P2 a cal 8-1000ng.d	8	☑	1000	979.8	98.0
P2 a QC 1000 (QC 4).d	8	☑	1000	979.3	97.9

ISP Forensics
Calibration Curve Report

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bin
Last Calib Update	1/7/2019 2:14 PM

Analyst Name   ISP TOX

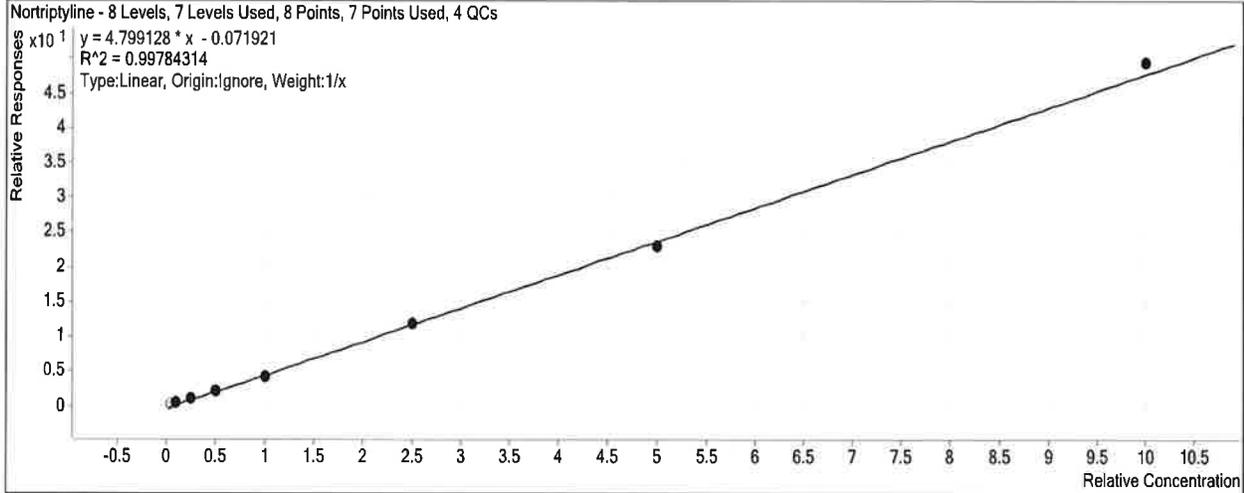**Target Compound**   *Amitriptyline*
Internal Standard   *Amitriptyline-D3*

Amitriptyline - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs

y = 4.421439 * x + 0.033557
R^2 = 0.99889122
Type:Linear, Origin:Ignore, Weight:1/x

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	5.1	101.9
P2 a cal 2-10ng.d	2	☑	10	10.8	107.6
P2 a QC 10 (QC1).d	2	☑	10	8.8	88.4
P2 a cal 3-25ng.d	3	☑	25	23.6	94.4
P2 a cal 4-50ng.d	4	☑	50	44.4	88.8
P2 a cal 5-100ng.d	5	☑	100	101.9	101.9
P2 a QC 100 (QC2).d	5	☑	100	102.3	102.3
P2 a cal 6-250ng.d	6	☑	250	265.5	106.2
P2 a QC 250 (QC 3).d	6	☑	250	262.6	105.0
P2 a cal 7-500ng.d	7	☑	500	502.7	100.5
P2 a cal 8-1000ng.d	8	☑	1000	986.1	98.6
P2 a QC 1000 (QC 4).d	8	☑	1000	935.3	93.5

ISP Forensics
Calibration Curve Report

Batch Data Path   C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a
MDQ TS.batch.bin

Last Calib Update   1/7/2019 2:14 PM   **Analyst Name**   ISP TOX

Target Compound   *Nortriptyline*
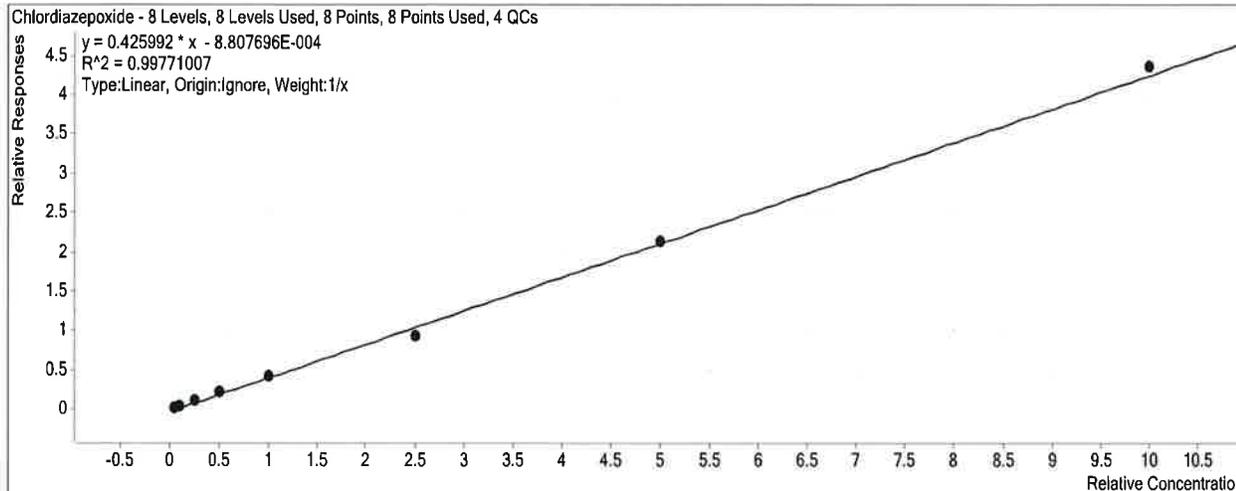*Internal Standard*   *Nortriptyline-D3*

Nortriptyline - 8 Levels, 7 Levels Used, 8 Points, 7 Points Used, 4 QCs

y = 4.799128 * x - 0.071921
R^2 = 0.99784314
Type:Linear, Origin:Ignore, Weight:1/x

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☐	5	7.3	145.7
P2 a cal 2-10ng.d	2	☑	10	12.0	120.4
P2 a QC 10 (QC1).d	2	☑	10	10.6	106.0
P2 a cal 3-25ng.d	3	☑	25	24.4	97.7
P2 a cal 4-50ng.d	4	☑	50	47.1	94.1
P2 a cal 5-100ng.d	5	☑	100	88.8	88.8
P2 a QC 100 (QC2).d	5	☑	100	90.2	90.2
P2 a cal 6-250ng.d	6	☑	250	248.5	99.4
P2 a QC 250 (QC 3).d	6	☑	250	244.3	97.7
P2 a cal 7-500ng.d	7	☑	500	481.7	96.3
P2 a cal 8-1000ng.d	8	☑	1000	1032.5	103.2
P2 a QC 1000 (QC 4).d	8	☑	1000	1144.0	114.4

ISP Forensics
Calibration Curve Report

Batch Data Path C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bin

Last Calib Update 1/7/2019 2:14 PM   **Analyst Name**   ISP TOX

Target Compound   *Chlordiazepoxide*
Internal Standard   *Chlordiazepoxide-D5*

Chlordiazepoxide - 8 Levels, 8 Levels Used, 8 Points, 8 Points Used, 4 QCs
$y = 0.425992 * x - 8.807696E-004$
$R^2 = 0.99771007$
Type:Linear, Origin:Ignore, Weight:1/x

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	5.2	104.5
P2 a cal 2-10ng.d	2	☑	10	9.9	98.8
P2 a QC 10 (QC1).d	2	☑	10	10.1	100.7
P2 a cal 3-25ng.d	3	☑	25	25.7	102.7
P2 a cal 4-50ng.d	4	☑	50	51.8	103.5
P2 a cal 5-100ng.d	5	☑	100	99.2	99.2
P2 a QC 100 (QC2).d	5	☑	100	103.6	103.6
P2 a cal 6-250ng.d	6	☑	250	221.2	88.5
P2 a QC 250 (QC 3).d	6	☑	250	240.3	96.1
P2 a cal 7-500ng.d	7	☑	500	501.8	100.4
P2 a cal 8-1000ng.d	8	☑	1000	1025.3	102.5
P2 a QC 1000 (QC 4).d	8	☑	1000	940.5	94.0

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

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bii
Analysis Time	1/7/2019 2:14 PM
Report Time	1/7/2019 2:15 PM
Last Calib Update	1/7/2019 2:14 PM

Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:15 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-03 18:41	**Data File**	P2 a cal 1-5ng.d
Sample Type	Calibration	**Sample Name**	P2 a cal 1-5ng.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-A5	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2
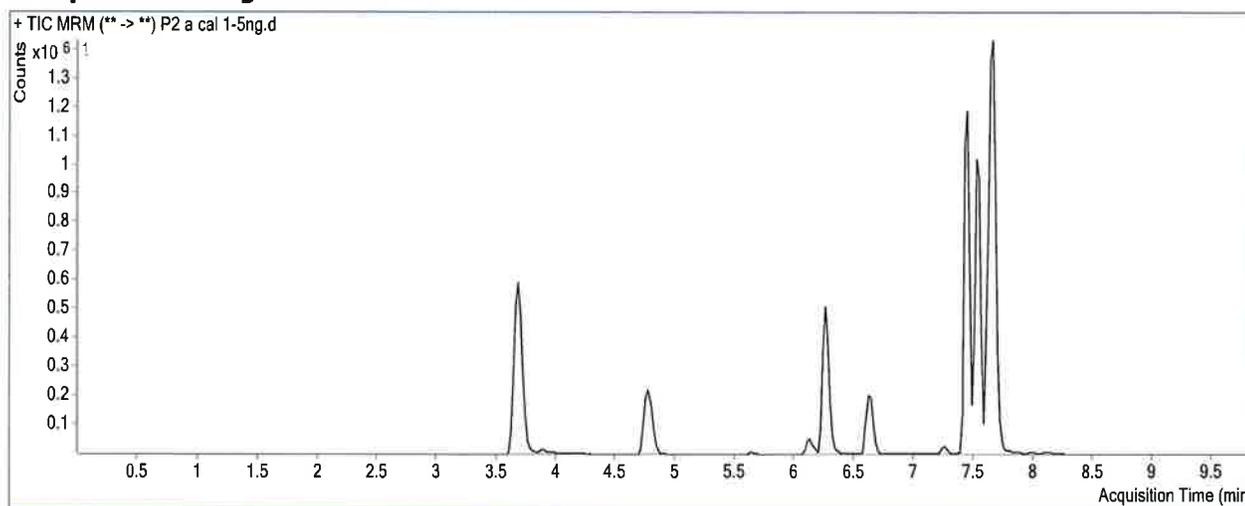
Sample Chromatogram

Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.715	287918	2668628	0.1079	5.7790
Zopiclone	Zopiclone-D4	6.130	21300	178094	0.1196	5.4986
Amitriptyline	Amitriptyline-D3	7.509	12312	47549	0.2589	5.0972
Nortriptyline	Nortriptyline-D3	7.533	4454	16033	0.2778	7.2871
Chlordiazepoxide	Chlordiazepoxide-D5	7.667	60630	2837272	0.0214	5.2230

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bi		
Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:15 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-03 18:54	**Data File**	P2 a cal 2-10ng.d
Sample Type	Calibration	**Sample Name**	P2 a cal 2-10ng.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-B5	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2
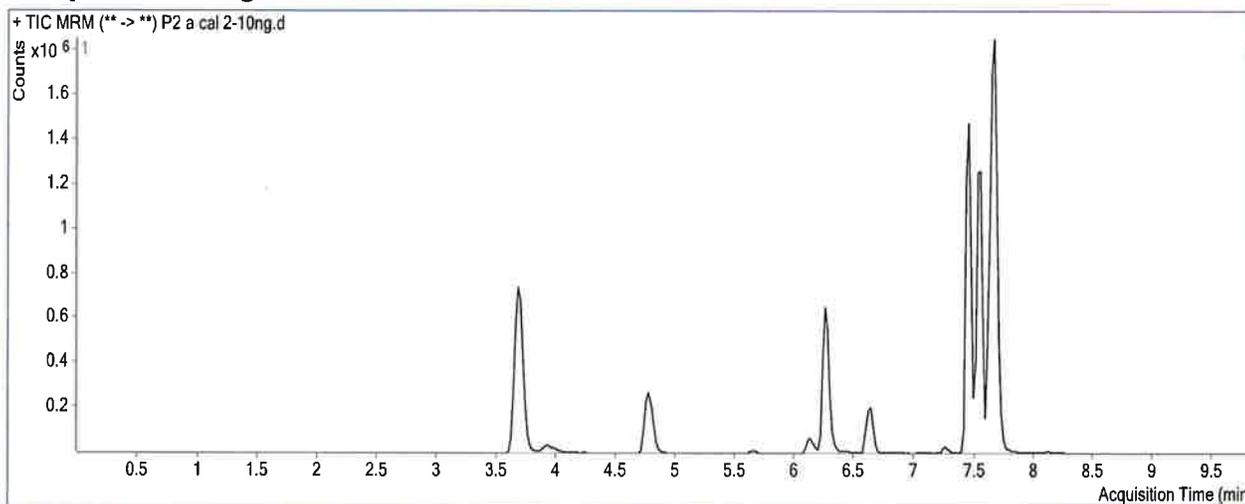
Sample Chromatogram

Results

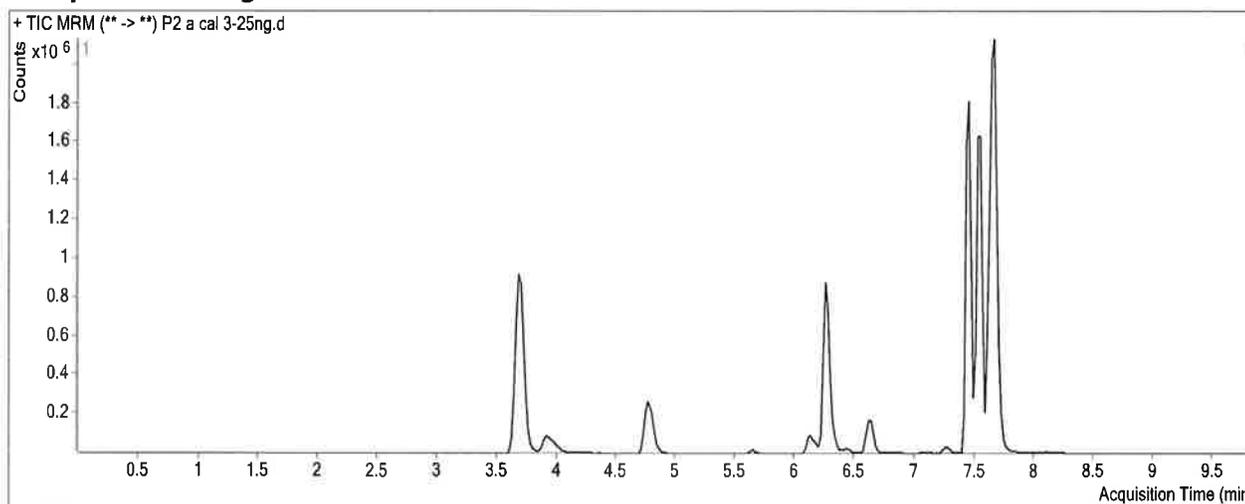| Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.715	688660	3105400	0.2218	10.1208
Zopiclone	Zopiclone-D4	6.130	51031	192418	0.2652	10.0876
Amitriptyline	Amitriptyline-D3	7.509	22002	43182	0.5095	10.7647
Nortriptyline	Nortriptyline-D3	7.533	5860	11588	0.5057	12.0358
Chlordiazepoxide	Chlordiazepoxide-D5	7.687	134847	3272482	0.0412	9.8798

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

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bii
Analysis Time	1/7/2019 2:14 PM
Report Time	1/7/2019 2:15 PM
Last Calib Update	1/7/2019 2:14 PM

		Analyst Name	ISPUser
		Reporter Name	ISPUser
		Batch State	Processed

Analysis Info

Acq Time	2019-01-03 19:07	**Data File**	P2 a cal 3-25ng.d
Sample Type	Calibration	**Sample Name**	P2 a cal 3-25ng.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-C5	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2

Sample Chromatogram

+ TIC MRM (** -> **) P2 a cal 3-25ng.d

Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.715	1673569	2928694	0.5714	23.4533
Zopiclone	Zopiclone-D4	6.130	125671	181737	0.6915	23.5225
Amitriptyline	Amitriptyline-D3	7.509	44881	41670	1.0771	23.6010
Nortriptyline	Nortriptyline-D3	7.533	13549	12310	1.1006	24.4329
Chlordiazepoxide	Chlordiazepoxide-D5	7.667	335577	3093607	0.1085	25.6707

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bii		
Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:15 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-03 19:19	**Data File**	P2 a cal 4-50ng.d
Sample Type	Calibration	**Sample Name**	P2 a cal 4-50ng.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-D5	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2
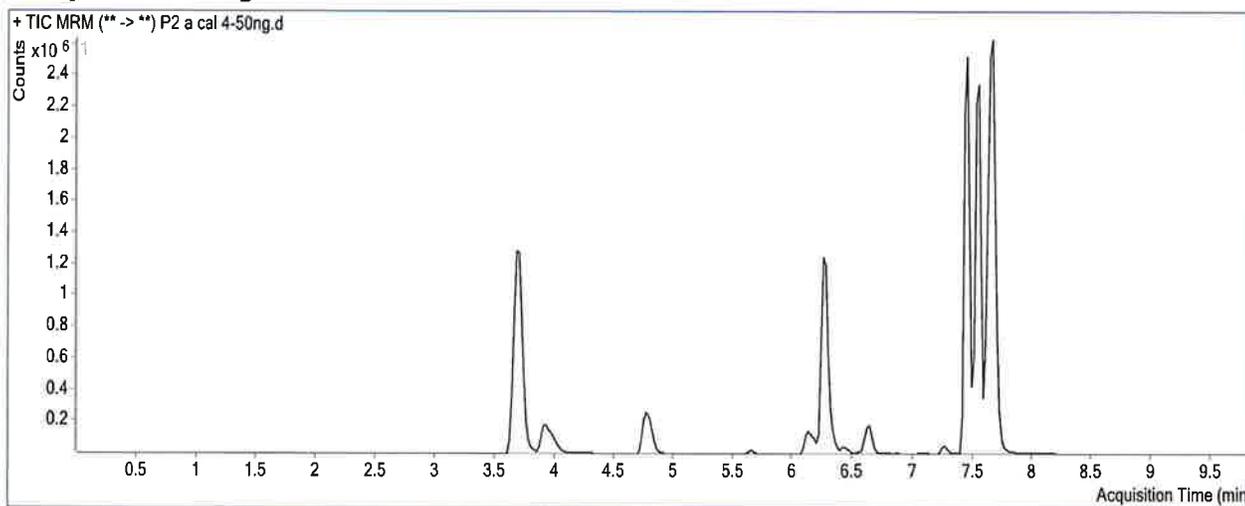
Sample Chromatogram

+ TIC MRM (** -> **) P2 a cal 4-50ng.d

Results

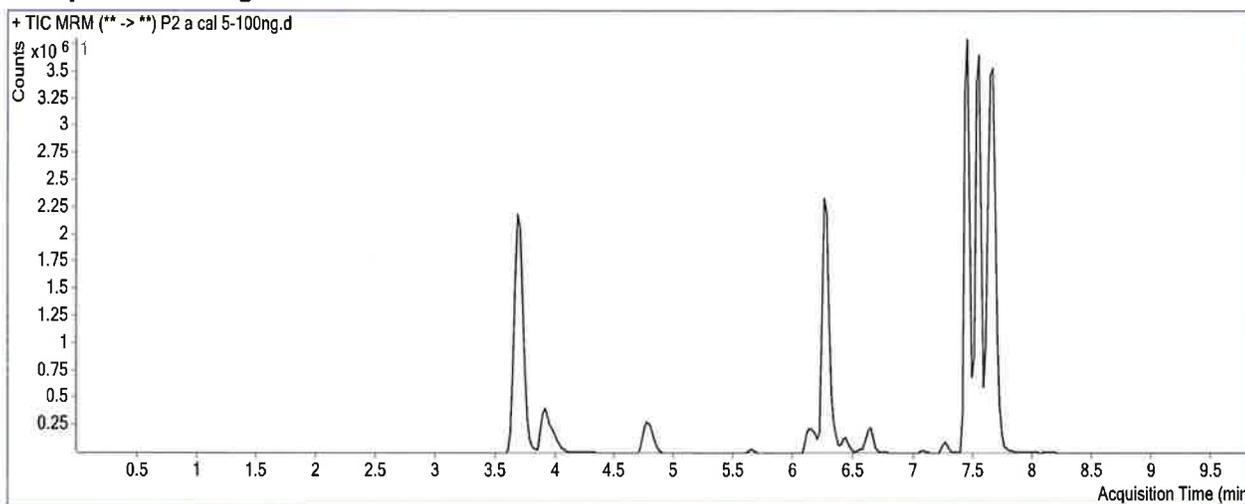| Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.715	3428337	2912487	1.1771	46.5467
Zopiclone	Zopiclone-D4	6.130	256281	180638	1.4188	46.4424
Amitriptyline	Amitriptyline-D3	7.509	77612	38866	1.9969	44.4052
Nortriptyline	Nortriptyline-D3	7.533	21445	9808	2.1864	47.0579
Chlordiazepoxide	Chlordiazepoxide-D5	7.667	632730	2880862	0.2196	51.7646

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

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bi		
Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:15 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-03 19:32	**Data File**	P2 a cal 5-100ng.d
Sample Type	Calibration	**Sample Name**	P2 a cal 5-100ng.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-E5	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2

Sample Chromatogram

+ TIC MRM (** -> **) P2 a cal 5-100ng.d

Results

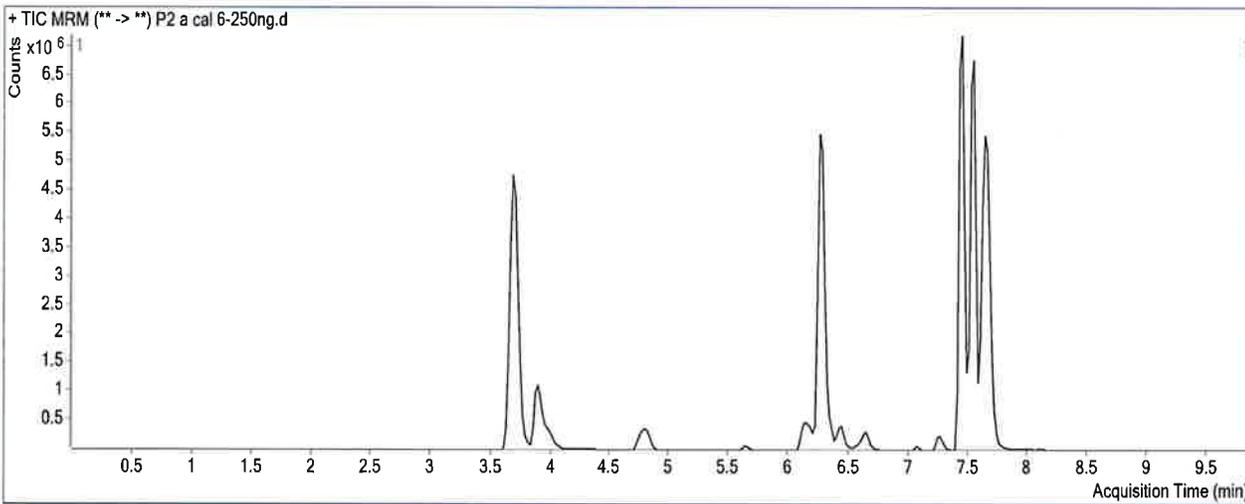| Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.715	7293803	2998065	2.4328	94.4251
Zopiclone	Zopiclone-D4	6.130	497615	159265	3.1244	100.1985
Amitriptyline	Amitriptyline-D3	7.509	201485	44410	4.5369	101.8534
Nortriptyline	Nortriptyline-D3	7.533	54188	12930	4.1907	88.8213
Chlordiazepoxide	Chlordiazepoxide-D5	7.667	1098812	2606686	0.4215	99.1607

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

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bii
Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:15 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-03 19:45	**Data File**	P2 a cal 6-250ng.d
Sample Type	Calibration	**Sample Name**	P2 a cal 6-250ng.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-F5	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2

Sample Chromatogram

+ TIC MRM (** -> **) P2 a cal 6-250ng.d

Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.695	18486773	2884307	6.4094	246.0455
Zopiclone	Zopiclone-D4	6.130	1055535	136440	7.7362	245.5428
Amitriptyline	Amitriptyline-D3	7.509	531010	45110	11.7714	265.4762
Nortriptyline	Nortriptyline-D3	7.533	165288	13946	11.8518	248.4552
Chlordiazepoxide	Chlordiazepoxide-D5	7.667	1799147	1911064	0.9414	221.2055

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bii		
Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:15 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-04 08:29	**Data File**	P2 a cal 7-500ng.d
Sample Type	Calibration	**Sample Name**	P2 a cal 7-500ng.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-G5	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2
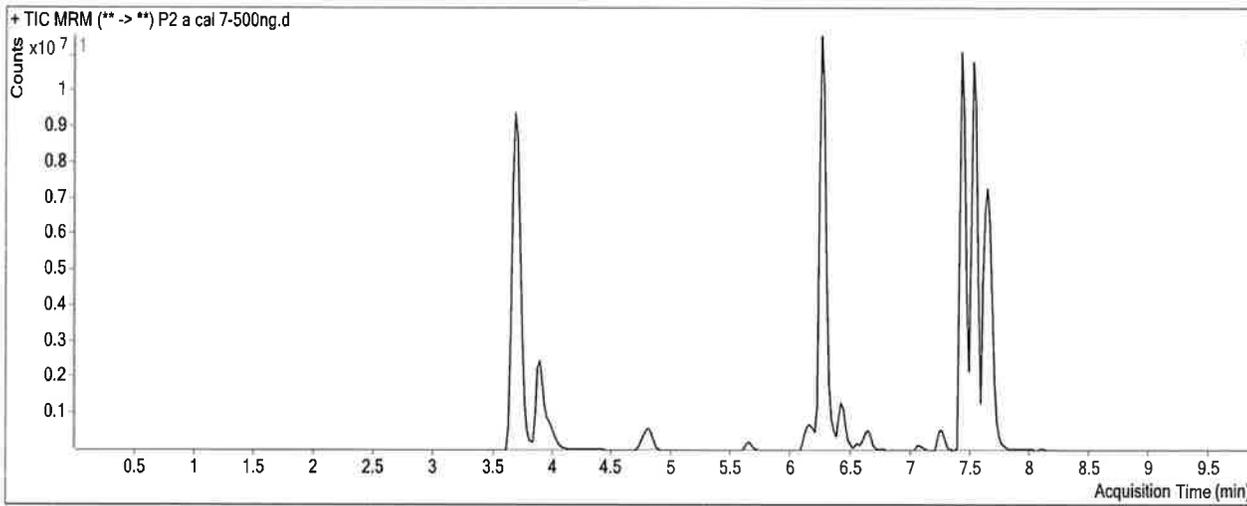
Sample Chromatogram

+ TIC MRM (** -> **) P2 a cal 7-500ng.d

Results

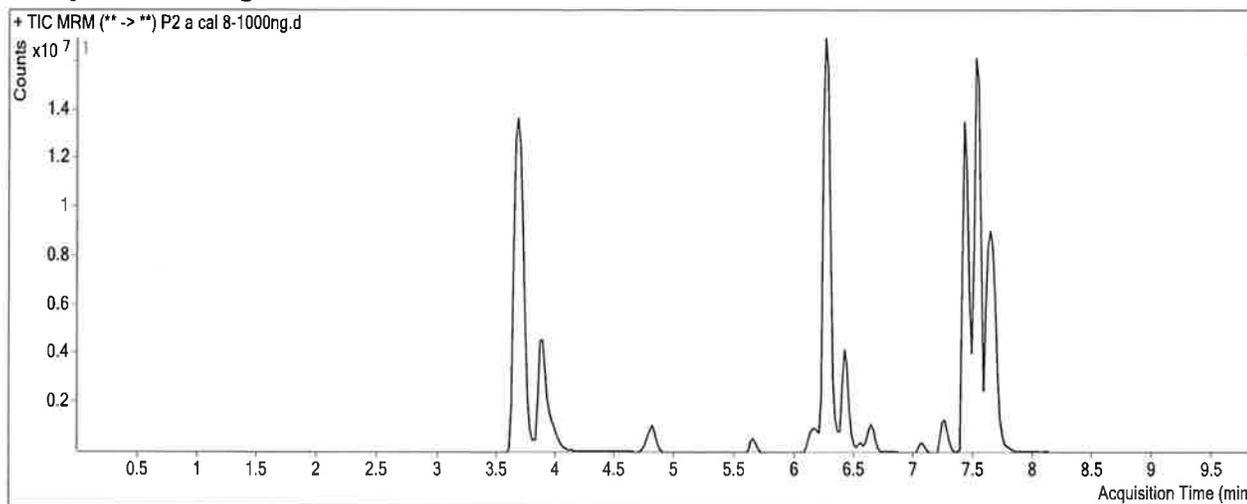| Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.695	40216564	2952707	13.6202	520.9804
Zopiclone	Zopiclone-D4	6.130	1261471	75413	16.7276	528.9118
Amitriptyline	Amitriptyline-D3	7.509	1505229	67619	22.2603	502.7043
Nortriptyline	Nortriptyline-D3	7.533	461431	20022	23.0459	481.7093
Chlordiazepoxide	Chlordiazepoxide-D5	7.687	2671558	1250377	2.1366	501.7657

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

Batch Data Path	C:\MassHunter\Data\2019\AM 28\010219 MDQ P1 P2 wklst 2862 2863 TS\QuantResults\P2a MDQ TS.batch.bi		
Analysis Time	1/7/2019 2:14 PM	**Analyst Name**	ISPUser
Report Time	1/7/2019 2:15 PM	**Reporter Name**	ISPUser
Last Calib Update	1/7/2019 2:14 PM	**Batch State**	Processed

Analysis Info

Acq Time	2019-01-04 08:42	**Data File**	P2 a cal 8-1000ng.d
Sample Type	Calibration	**Sample Name**	P2 a cal 8-1000ng.d
Dilution	1	**Acq Method**	MDQ Panel 2a 06-22-18.m
Position	P1-H5	**Sample Info**	
Inj Vol	-1	**Comment**	AM 28-Panel 2

Sample Chromatogram

+ TIC MRM (** -> **) P2 a cal 8-1000ng.d

Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.695	67920916	2613264	25.9908	992.6490
Zopiclone	Zopiclone-D4	6.130	1585977	51104	31.0342	979.7958
Amitriptyline	Amitriptyline-D3	7.509	3522796	80736	43.6333	986.0980
Nortriptyline	Nortriptyline-D3	7.533	1081965	21867	49.4785	1032.4875
Chlordiazepoxide	Chlordiazepoxide-D5	7.687	3528659	808039	4.3669	1025.3299