REVIEWED
By Anne Nord at 4:39 pm, Sep 10, 2018

9/4/2018 TS

Worklist: 2674

LAB_CASE	ITEM	TASK_ID	DESCRIPTION
P2018-2115	1	126193	AM 28 Blood Multi-Drug Quant Panel 2 by LC-Q(
P2018-2330	1	126194	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: 09/05/18 Analyst: Sarah Pickle
Plate lot#: 0530563 Plate Expiration: 05/21/19

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: 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.
- ☒ 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: 090518 mDQ P1 P2 SP
  Worklist path: _ Batch Name: Click here to enter text. Batch Name: mDQ P2a compounds removed
- ☒ 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: *Only pseudoephedrine, zopiclone, amitriptyline, nortriptyline, alpha-hydroxymidazolam, midazolam, and chlordiazepoxide were evaluated in this run.*
Curve range limited for pseudoephedrine 5-500, amitriptyline 10-1000, and nortriptyline 5-250. TS

Case sample P2018-2123-1 from worklist 2681was ran with worklist 2674. Sarah Pickle acted as the primary analyst. I witnessed and approved of all actions and methods performed.

TSS

Idaho State Police Forensic Services

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

Analyst: Sarah Pickle
Extraction Date: 09/05/18
Worklist Number: 2674

Reagent	*Lot Number*	*Expiration Date*	*Date in Service*	*Date Out of Service*	*Initials*
ToxBox Benzo/Opiate Quant Plate	0530563	5/21/19			
Negative Blood	361331-1		05/25/18		
Methanol External Control Solution	022018	02/20/19	02/20/18		
Blood External Control Solution	081518	02/20/19	08/15/18		
0.5M Ammonium Hydroxide	082818	02/29/19	08/28/18		
Formic Acid (LCMS Grade)	095180B		11/15/17		
Water (LCMS Grade)	181370		06/21/18		
Methanol (LCMS Grade)	177145		04/11/18		
Ammonium Formate (LCMS Grade)	A0287238		01/30/17		
Ammonium Hydroxide (ACS grade or better)	053200		08/03/07		
Ethyl Acetate (ACS grade or better)	100362		06/26/17		
20% LCMS Methanol in LCMS Water	082818		08/28/18		
5mM Ammonium Formate + 0.01% Formic Acid in Water (Mobile Phase A)	090518		09/05/18		
0.01% Formic Acid in Methanol (Mobile Phase B)	082818		08/28/18		
Needle Rinse--75% LCMS MeOH in LCMS Water	090418		09/04/18		

Methanol External Control Solution (Lot: 022018)
100 ul each 1 mg/mL stock solution in 9700 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		

TSP

Blood External Control Solution (Lot: WS081518)

50 ul of methanol external control solution was added to 9950 ul of blood.

Component	*Source*	*Source Lot Number*
Negative Blood	Hemostat	361331-1
Methanol External Control Solution		022018
Prepared:	08/15/18	
Prepared by:	Sarah Pickle	
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:	*02/29/19*	

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

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

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

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

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

Component	*Source*	*Source Lot Number*
Formic Acid	Fisher	095180B
MeOH (LCMS Grade)	Fisher	172517
Prepared:	08/28/18	
Prepared By:	Tamara Salazar	

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

Component	*Source*	*Source Lot Number*
MeOH (LCMS Grade)	Fisher	177145
Water (LCMS Grade)	Fisher	177528
Prepared:	09/04/18	
Prepared By:	Sarah Pickle	

TS P

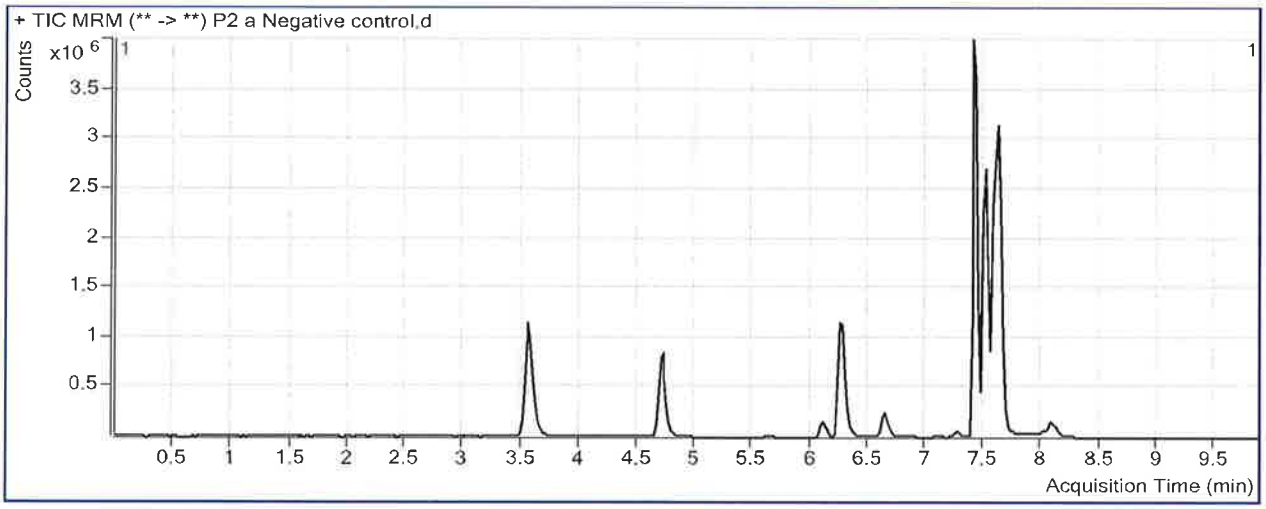
ISP FORENSICS - Pocatello Instrument # 59740
Multi-Drug Confirmatory Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds r		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:14 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 12:30	**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 P

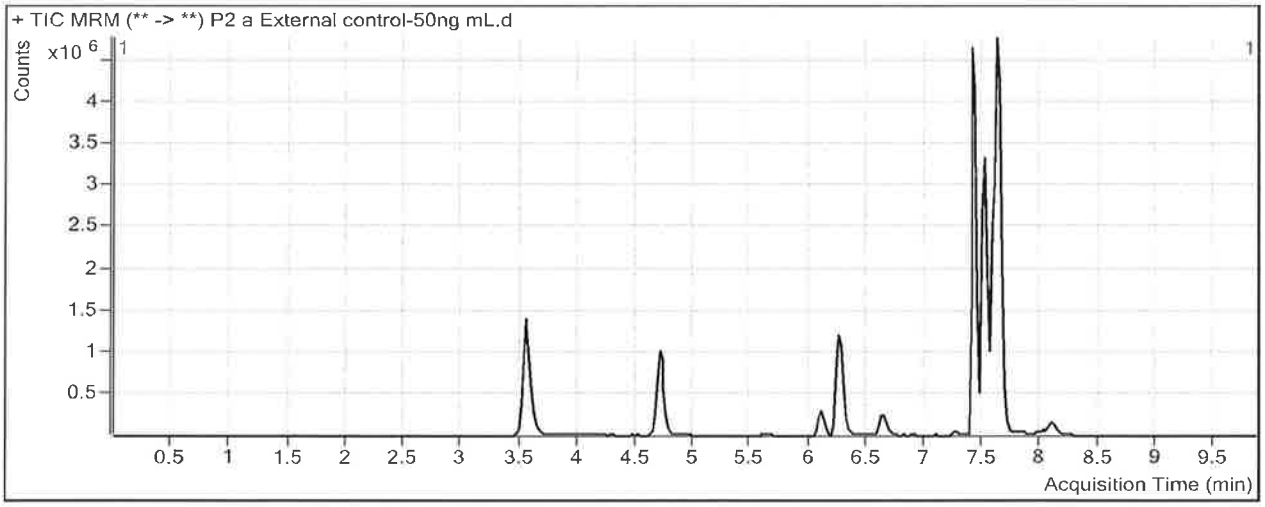
ISP FORENSICS - Pocatello Instrument # 59740
Multi-Drug Confirmatory Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:14 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 12:55	**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; 361331-1 + WS022018 50 ng flunitrazepam, zopiclone, chlorodia:

Sample Chromatogram



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Zopiclone	Zopiclone-D4	6.091	451196	480368	0.9393	30.7866
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	1659949	7439295	0.2231	47.0669

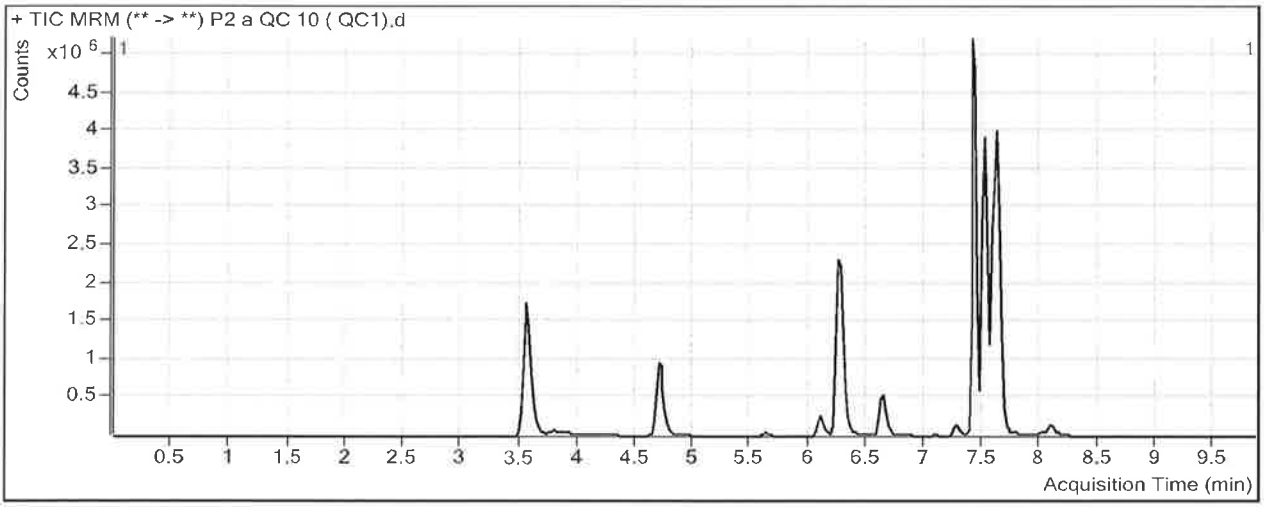
ISP FORENSICS - Pocatello Instrument # 59740
Multi-Drug Confirmatory Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:14 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 13:46	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.576	1588185	7526680	0.2110	10.2259
Zopiclone	Zopiclone-D4	6.091	189034	741656	0.2549	10.3996
Amitriptyline	Amitriptyline-D3	7.490	148175	320362	0.4625	13.5024
Nortriptyline	Nortriptyline-D3	7.514	48267	168023	0.2873	8.6980
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	455491	4671416	0.0975	11.2400
Midazolam	Midazolam-D4	7.585	193095	3815606	0.0506	9.5014
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	267340	6443034	0.0415	10.8491

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

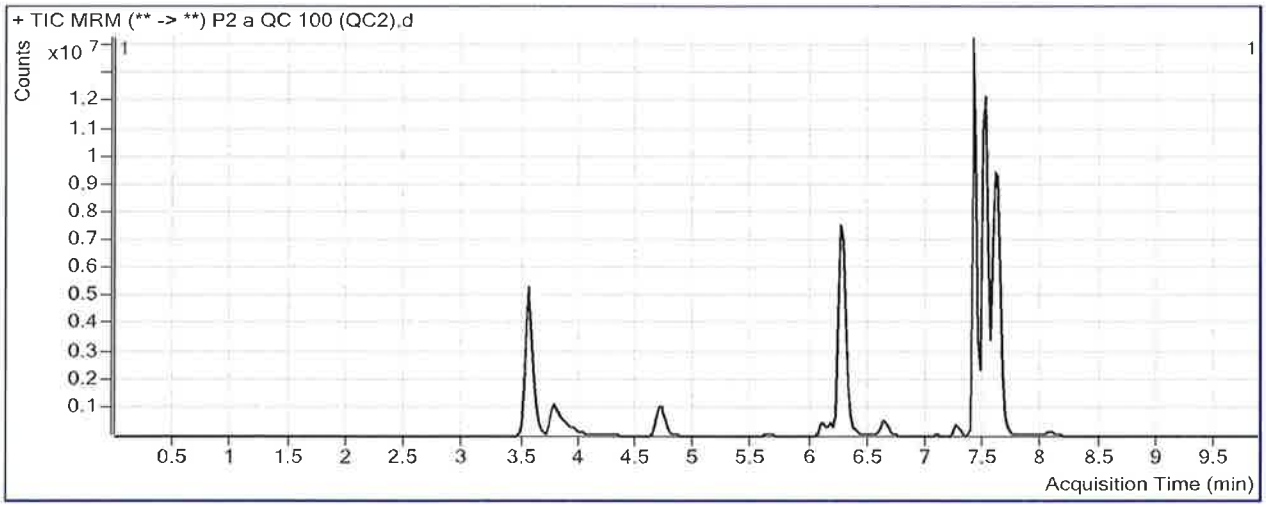
TS P

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:14 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-07 09:16	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.576	18154920	7624146	2.3812	105.6521
Zopiclone	Zopiclone-D4	6.091	1130660	342429	3.3019	101.1656
Amitriptyline	Amitriptyline-D3	7.490	1219235	251152	4.8546	94.2070
Nortriptyline	Nortriptyline-D3	7.514	435957	116601	3.7389	100.4283
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	4511803	4169463	1.0821	110.0076
Midazolam	Midazolam-D4	7.565	2436667	3698961	0.6587	100.5751
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	2764821	5866489	0.4713	96.5479

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

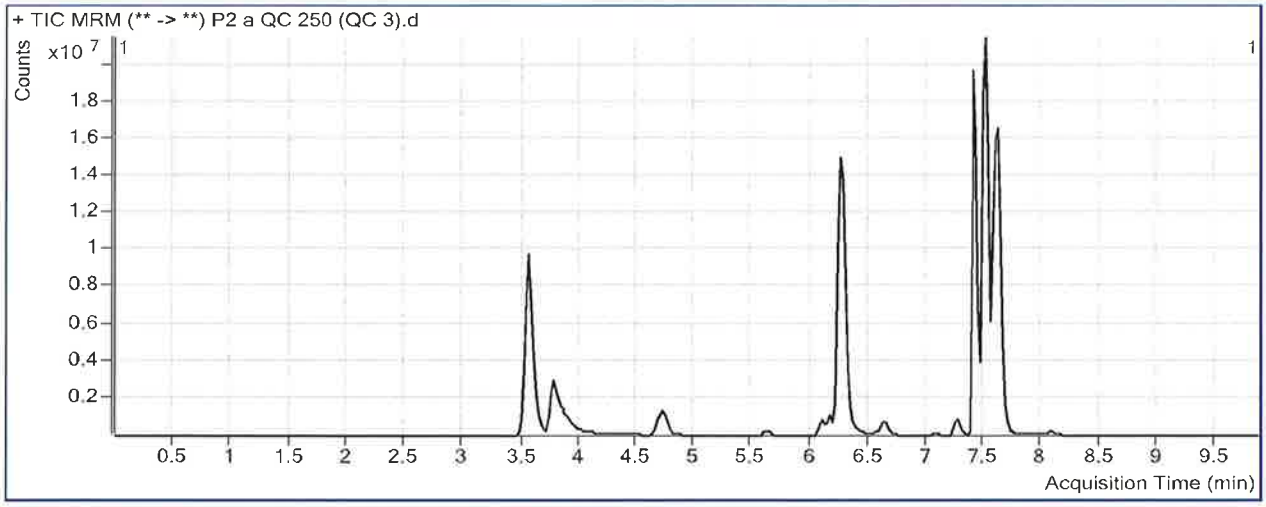
TS

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:14 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-07 10:32	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.556	41390323	7049300	5.8716	259.1230
Zopiclone	Zopiclone-D4	6.091	2053744	253876	8.0896	243.7839
Amitriptyline	Amitriptyline-D3	7.490	2998380	241548	12.4132	233.0978
Nortriptyline	Nortriptyline-D3	7.514	1055846	112905	9.3516	249.5916
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	9596377	3576131	2.6835	270.6424
Midazolam	Midazolam-D4	7.565	5908468	3622408	1.6311	246.1921
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	5677848	4552162	1.2473	251.2763

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

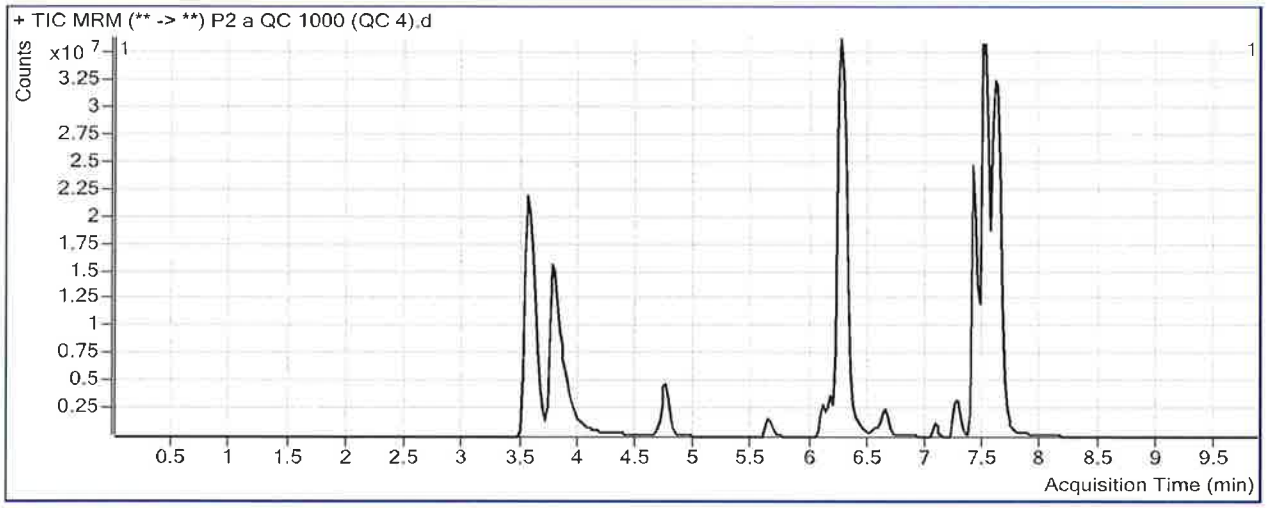
TS P

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:15 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-07 11:23	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
~~Pseudoephedrine~~	~~Pseudoephedrine-D3~~	~~3.576~~	~~123961321~~	~~7048060~~	~~17.5880~~	~~774.3017~~ *
Zopiclone	Zopiclone-D4	6.091	7810406	219430	35.5941	1063.1069
Amitriptyline	Amitriptyline-D3	7.490	7992824	158241	50.5106	933.1458
~~Nortriptyline~~	~~Nortriptyline-D3~~	~~7.514~~	~~2245738~~	~~55153~~	~~40.7180~~	~~1083.1849~~ *
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.563	20241158	1821152	11.1145	1116.3789
Midazolam	Midazolam-D4	7.565	18529149	2982233	6.2132	932.3993
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	13530379	2617216	5.1698	1033.3916

* outside curve range P TS

ISP Forensics
Calibration Curve Report

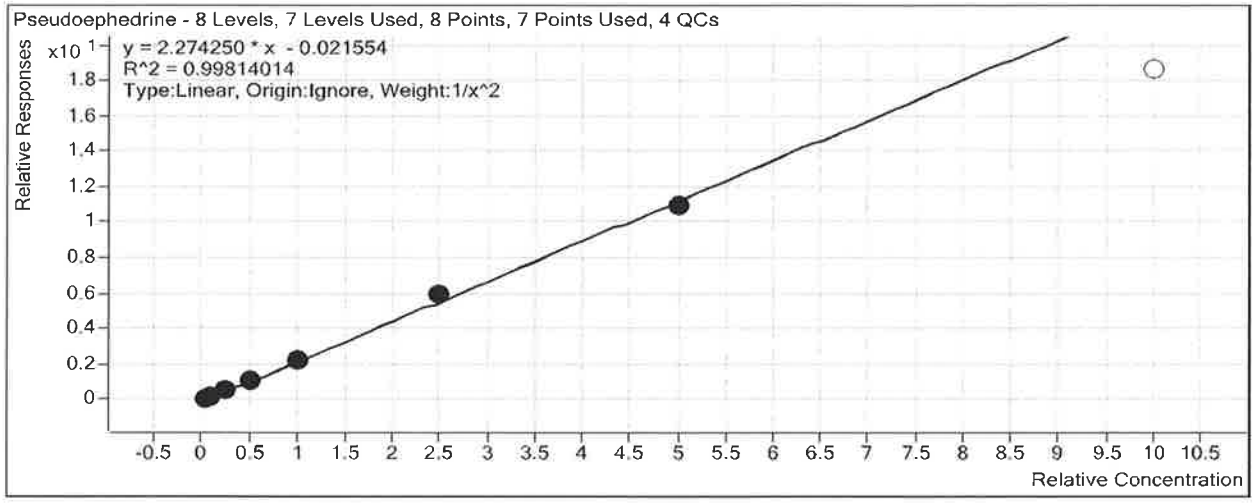
TS D

Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.batch.bin

Last Calib Update 9/7/2018 2:12 PM **Analyst Name** ISP TOX

Target Compound *Pseudoephedrine*

Internal Standard *Pseudoephedrine-D3*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	5.1	102.8
P2 a cal 2-10ng.d	2	☑	10	9.4	94.2
P2 a QC 10 (QC1).d	2	☑	10	10.2	102.3
P2 a cal 3-25ng.d	3	☑	25	25.0	100.2
P2 a cal 4-50ng.d	4	☑	50	49.5	99.1
P2 a cal 5-100ng.d	5	☑	100	101.4	101.4
P2 a QC 100 (QC2).d	5	☑	100	105.7	105.7
P2 a cal 6-250ng.d	6	☑	250	263.1	105.2
P2 a QC 250 (QC 3).d	6	☑	250	259.1	103.6
P2 a cal 7-500ng.d	7	☑	500	485.3	97.1
P2 a cal 8-1000ng.d	8	☐	1000	819.3	81.9
P2 a QC 1000 (QC 4).d	8	☐	1000	774.3	77.4

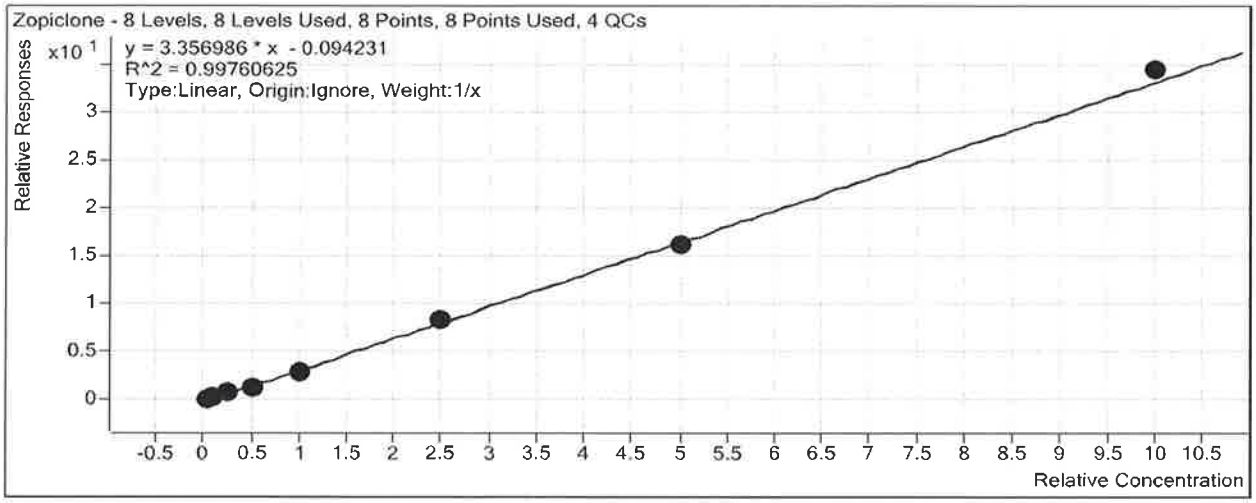
ISP Forensics
Calibration Curve Report

TS P

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.batch.bin		
Last Calib Update	9/7/2018 2:12 PM	**Analyst Name**	ISP TOX

Target Compound *Zopiclone*

Internal Standard *Zopiclone-D4*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	6.4	128.4
P2 a cal 2-10ng.d	2	☑	10	10.4	103.5
P2 a QC 10 (QC1).d	2	☑	10	10.4	104.0
P2 a cal 3-25ng.d	3	☑	25	23.3	93.2
P2 a cal 4-50ng.d	4	☑	50	41.9	83.8
P2 a cal 5-100ng.d	5	☑	100	90.1	90.1
P2 a QC 100 (QC2).d	5	☑	100	101.2	101.2
P2 a cal 6-250ng.d	6	☑	250	252.4	101.0
P2 a QC 250 (QC 3).d	6	☑	250	243.8	97.5
P2 a cal 7-500ng.d	7	☑	500	484.8	97.0
P2 a cal 8-1000ng.d	8	☑	1000	1030.7	103.1
P2 a QC 1000 (QC 4).d	8	☑	1000	1063.1	106.3

ISP Forensics
Calibration Curve Report

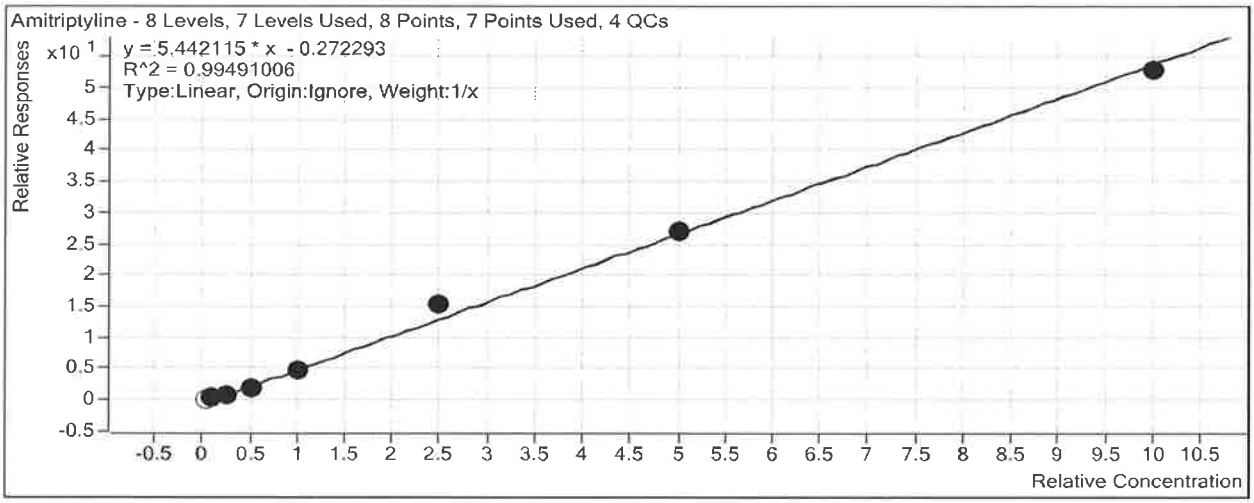
P
TS

Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.batch.bin

Last Calib Update 9/7/2018 2:12 PM **Analyst Name** ISP TOX

Target Compound *Amitriptyline*

Internal Standard *Amitriptyline-D3*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
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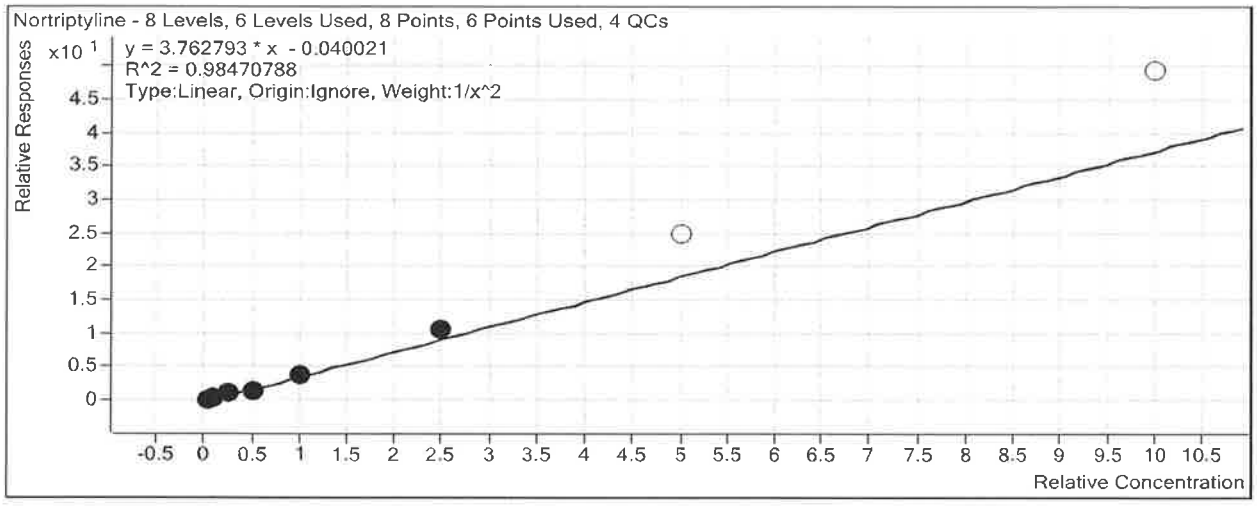
P2 a cal 2-10ng.d	2	☑	10	11.8	117.5
P2 a QC 10 (QC1).d	2	☑	10	13.5	135.0
P2 a cal 3-25ng.d	3	☑	25	22.5	89.8
P2 a cal 4-50ng.d	4	☑	50	42.7	85.5
P2 a cal 5-100ng.d	5	☑	100	94.2	94.2
P2 a QC 100 (QC2).d	5	☑	100	94.2	94.2
P2 a cal 6-250ng.d	6	☑	250	288.4	115.3
P2 a QC 250 (QC 3).d	6	☑	250	233.1	93.2
P2 a cal 7-500ng.d	7	☑	500	500.8	100.2
P2 a cal 8-1000ng.d	8	☑	1000	974.7	97.5
P2 a QC 1000 (QC 4).d	8	☑	1000	933.1	93.3

ISP Forensics
Calibration Curve Report

TS P

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.batch.bin		
Last Calib Update	9/7/2018 2:12 PM	**Analyst Name**	ISP TOX

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



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	4.9	98.1
P2 a cal 2-10ng.d	2	☑	10	10.6	106.5
P2 a QC 10 (QC1).d	2	☑	10	8.7	87.0
P2 a cal 3-25ng.d	3	☑	25	25.2	100.9
P2 a cal 4-50ng.d	4	☑	50	40.8	81.6
P2 a cal 5-100ng.d	5	☑	100	101.8	101.8
P2 a QC 100 (QC2).d	5	☑	100	100.4	100.4
P2 a cal 6-250ng.d	6	☑	250	278.0	111.2
P2 a QC 250 (QC 3).d	6	☑	250	249.6	99.8
P2 a cal 7-500ng.d	7	☐	500	659.9	132.0
P2 a cal 8-1000ng.d	8	☐	1000	1310.1	131.0
P2 a QC 1000 (QC 4).d	8	☐	1000	1083.2	108.3

ISP Forensics
Calibration Curve Report

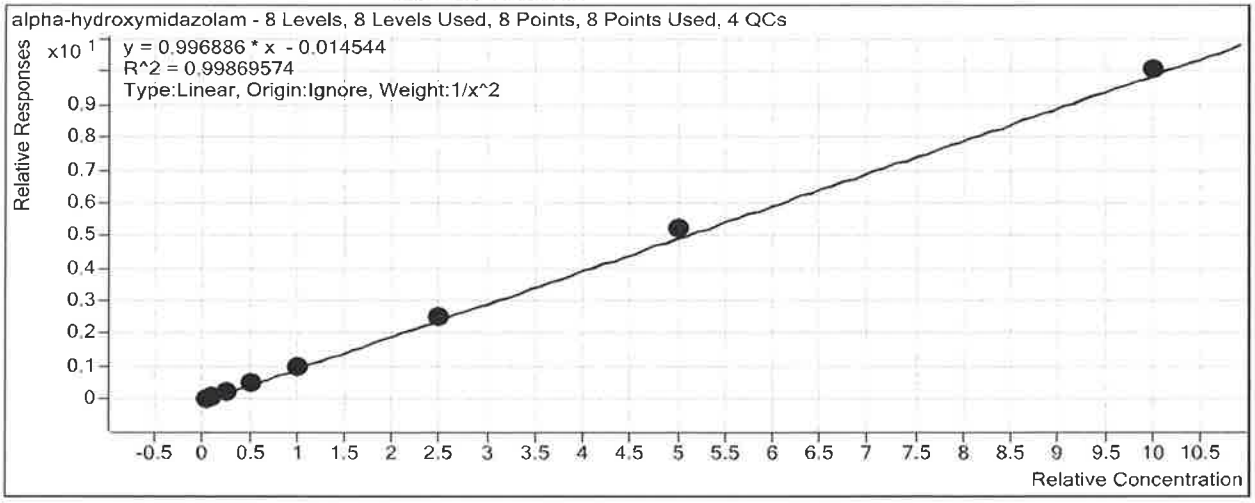
TS P

Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.batch.bin

Last Calib Update 9/7/2018 2:12 PM **Analyst Name** ISP TOX

Target Compound *alpha-hydroxymidazolam*

Internal Standard *alpha-hydroxymidazolam-D4*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	5.1	102.5
P2 a cal 2-10ng.d	2	☑	10	9.7	96.8
P2 a QC 10 (QC1).d	2	☑	10	11.2	112.4
P2 a cal 3-25ng.d	3	☑	25	24.2	96.9
P2 a cal 4-50ng.d	4	☑	50	48.5	97.1
P2 a cal 5-100ng.d	5	☑	100	98.2	98.2
P2 a QC 100 (QC2).d	5	☑	100	110.0	110.0
P2 a cal 6-250ng.d	6	☑	250	255.9	102.4
P2 a QC 250 (QC 3).d	6	☑	250	270.6	108.3
P2 a cal 7-500ng.d	7	☑	500	524.6	104.9
P2 a cal 8-1000ng.d	8	☑	1000	1011.8	101.2
P2 a QC 1000 (QC 4).d	8	☑	1000	1116.4	111.6

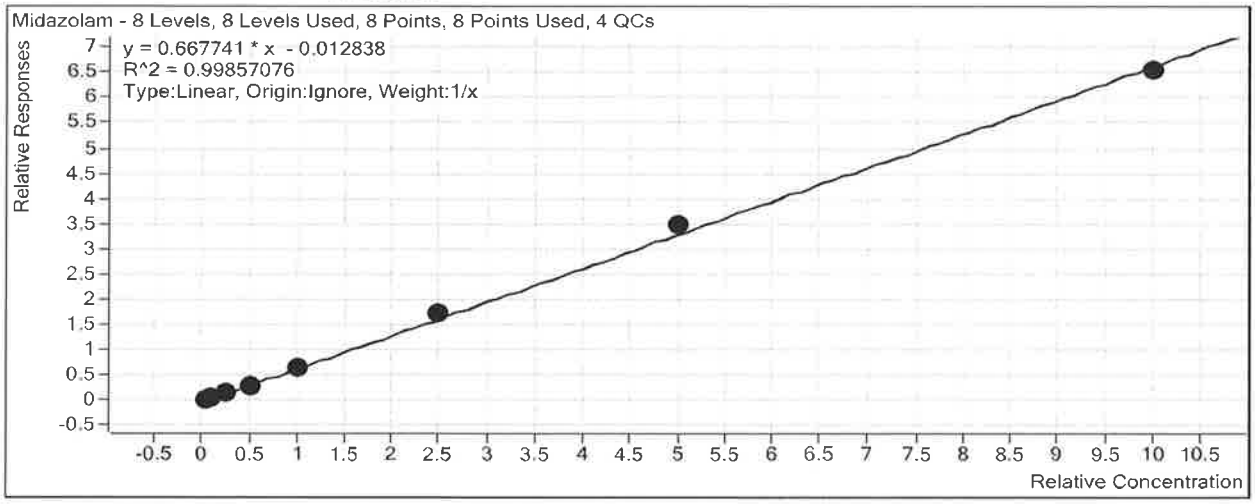
ISP Forensics
Calibration Curve Report

TS

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.batch.bin		
Last Calib Update	9/7/2018 2:12 PM	**Analyst Name**	ISP TOX

Target Compound *Midazolam*

Internal Standard *Midazolam-D4*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	6.2	123.0
P2 a cal 2-10ng.d	2	☑	10	9.0	90.5
P2 a QC 10 (QC1).d	2	☑	10	9.5	95.0
P2 a cal 3-25ng.d	3	☑	25	23.6	94.3
P2 a cal 4-50ng.d	4	☑	50	45.9	91.9
P2 a cal 5-100ng.d	5	☑	100	94.8	94.8
P2 a QC 100 (QC2).d	5	☑	100	100.6	100.6
P2 a cal 6-250ng.d	6	☑	250	258.1	103.3
P2 a QC 250 (QC 3).d	6	☑	250	246.2	98.5
P2 a cal 7-500ng.d	7	☑	500	521.0	104.2
P2 a cal 8-1000ng.d	8	☑	1000	981.4	98.1
P2 a QC 1000 (QC 4).d	8	☑	1000	932.4	93.2

ISP Forensics
Calibration Curve Report

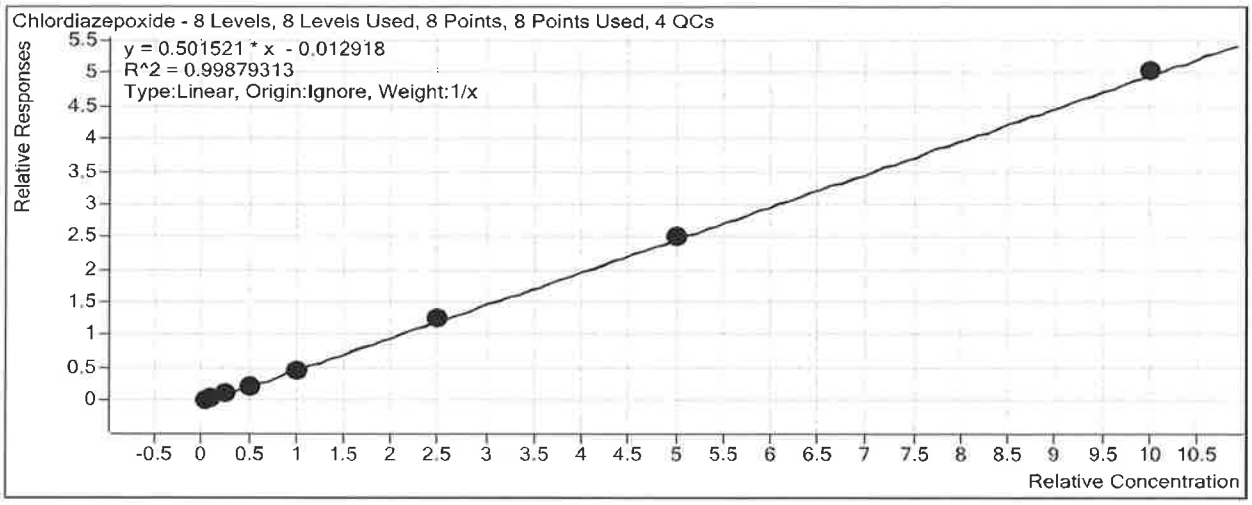
TS P

Batch Data Path C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.batch.bin

Last Calib Update 9/7/2018 2:12 PM **Analyst Name** ISP TOX

Target Compound *Chlordiazepoxide*

Internal Standard *Chlordiazepoxide-D5*



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
P2 a cal 1-5ng.d	1	☑	5	6.2	124.0
P2 a cal 2-10ng.d	2	☑	10	9.9	99.4
P2 a QC 10 (QC1).d	2	☑	10	10.8	108.5
P2 a cal 3-25ng.d	3	☑	25	24.1	96.2
P2 a cal 4-50ng.d	4	☑	50	42.4	84.8
P2 a cal 5-100ng.d	5	☑	100	92.7	92.7
P2 a QC 100 (QC2).d	5	☑	100	96.5	96.5
P2 a cal 6-250ng.d	6	☑	250	252.7	101.1
P2 a QC 250 (QC 3).d	6	☑	250	251.3	100.5
P2 a cal 7-500ng.d	7	☑	500	505.1	101.0
P2 a cal 8-1000ng.d	8	☑	1000	1006.9	100.7
P2 a QC 1000 (QC 4).d	8	☑	1000	1033.4	103.3

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

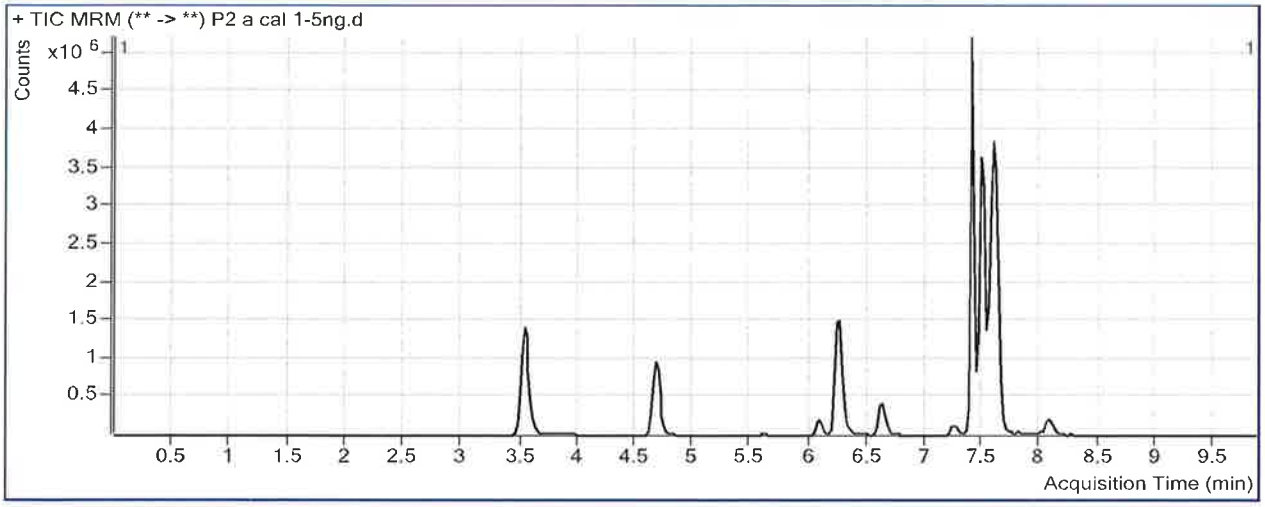
TS P

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:13 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 08:40	**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	3.556	655188	6872894	0.0953	5.1394
Zopiclone	Zopiclone-D4	6.071	79667	657058	0.1212	6.4188
Amitriptyline	Amitriptyline-D3	7.490	103098	470976	0.2189	9.0258
Nortriptyline	Nortriptyline-D3	7.514	38478	266126	0.1446	4.9062
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	185198	5067940	0.0365	5.1246
Midazolam	Midazolam-D4	7.565	112830	3996032	0.0282	6.1511
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	133271	7327941	0.0182	6.2020

TS P

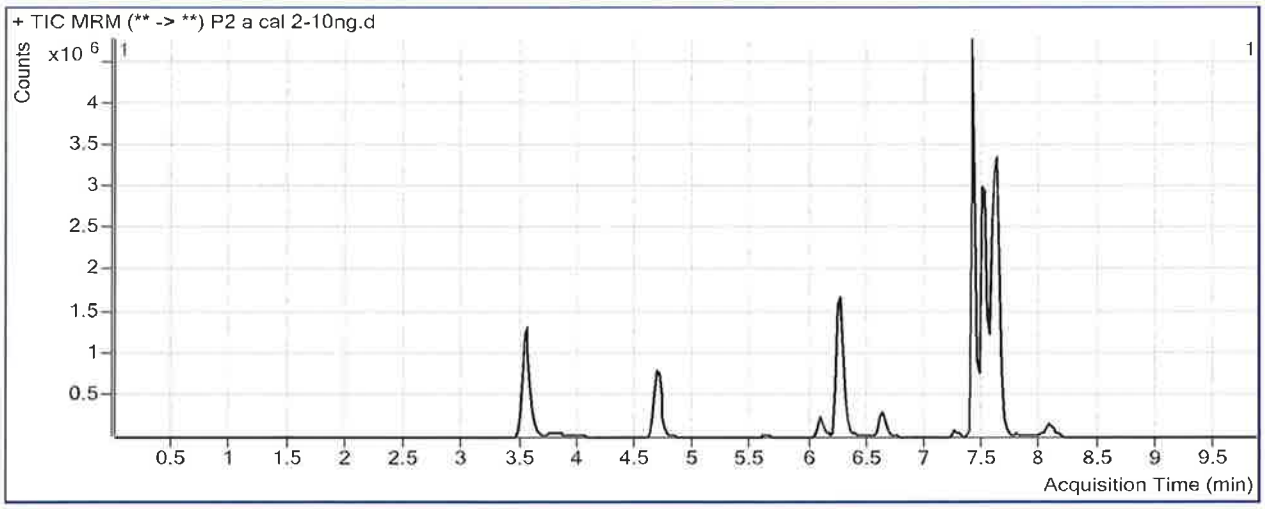
ISP FORENSICS - Pocatello Instrument # 59740
Multi-Drug Confirmatory Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:13 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 09:05	**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	3.556	1122101	5820573	0.1928	9.4245
Zopiclone	Zopiclone-D4	6.071	156785	619076	0.2533	10.3512
Amitriptyline	Amitriptyline-D3	7.490	49664	135184	0.3674	11.7542
Nortriptyline	Nortriptyline-D3	7.514	20691	57382	0.3606	10.6466
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	334066	4075759	0.0820	9.6809
Midazolam	Midazolam-D4	7.565	159212	3347220	0.0476	9.0459
Chlordiazepoxide	Chlordiazepoxide-D5	7.607	223437	6045962	0.0370	9.9446

TS D

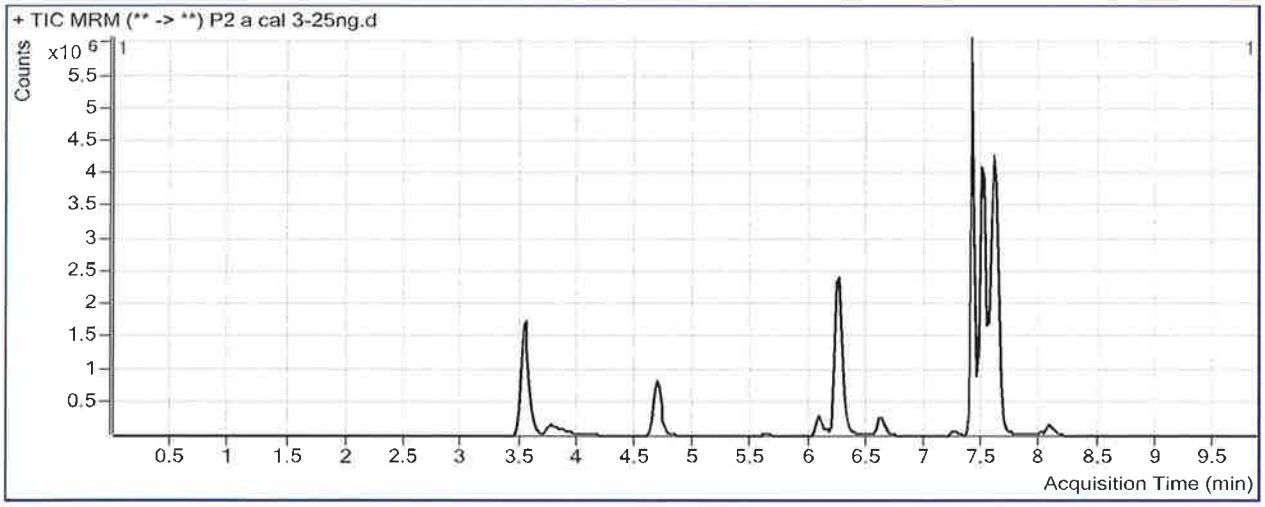
ISP FORENSICS - Pocatello Instrument # 59740
Multi-Drug Confirmatory Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:13 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 09:31	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.556	3245263	5922105	0.5480	25.0432
Zopiclone	Zopiclone-D4	6.071	420633	611454	0.6879	23.2993
Amitriptyline	Amitriptyline-D3	7.490	98009	103153	0.9501	22.4624
Nortriptyline	Nortriptyline-D3	7.514	34041	37451	0.9089	25.2197
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	903846	3982291	0.2270	24.2264
Midazolam	Midazolam-D4	7.565	447310	3094873	0.1445	23.5676
Chlordiazepoxide	Chlordiazepoxide-D5	7.607	633129	5877438	0.1077	24.0547

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

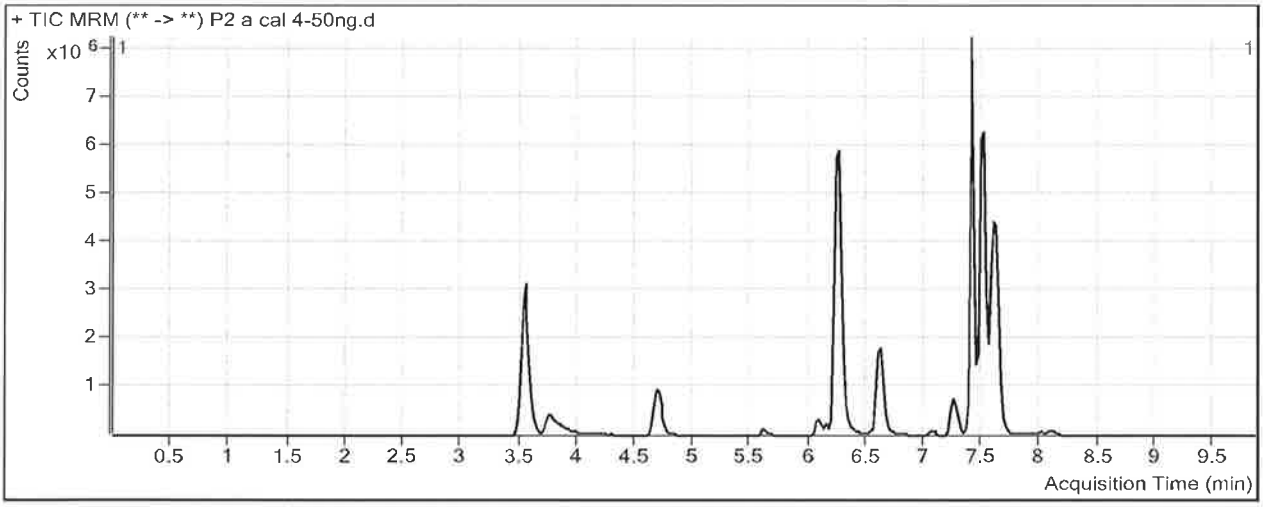
TS D

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:13 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 09:56	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.556	7989344	7229276	1.1051	49.5412
Zopiclone	Zopiclone-D4	6.071	620159	472524	1.3124	41.9028
Amitriptyline	Amitriptyline-D3	7.490	1183897	576646	2.0531	42.7291
Nortriptyline	Nortriptyline-D3	7.514	222971	149206	1.4944	40.7784
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.563	1366463	2911778	0.4693	48.5343
Midazolam	Midazolam-D4	7.565	862828	2935024	0.2940	45.9481
Chlordiazepoxide	Chlordiazepoxide-D5	7.607	981269	4912282	0.1998	42.4062

TS P

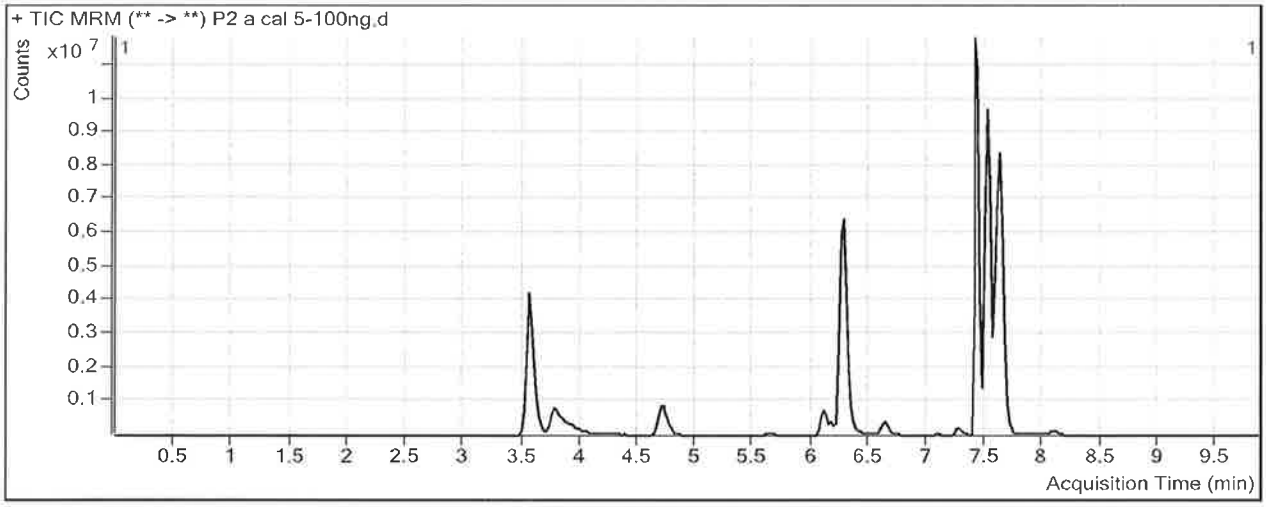
ISP FORENSICS - Pocatello Instrument # 59740
Multi-Drug Confirmatory Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:13 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 10:22	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.576	13996227	6125040	2.2851	101.4241
Zopiclone	Zopiclone-D4	6.091	1604636	547452	2.9311	90.1205
Amitriptyline	Amitriptyline-D3	7.490	568269	117093	4.8531	94.1807
Nortriptyline	Nortriptyline-D3	7.514	162952	43003	3.7893	101.7687
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	3672344	3806074	0.9649	98.2467
Midazolam	Midazolam-D4	7.585	2010405	3243216	0.6199	94.7550
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	2348840	5196374	0.4520	92.7045

TS D

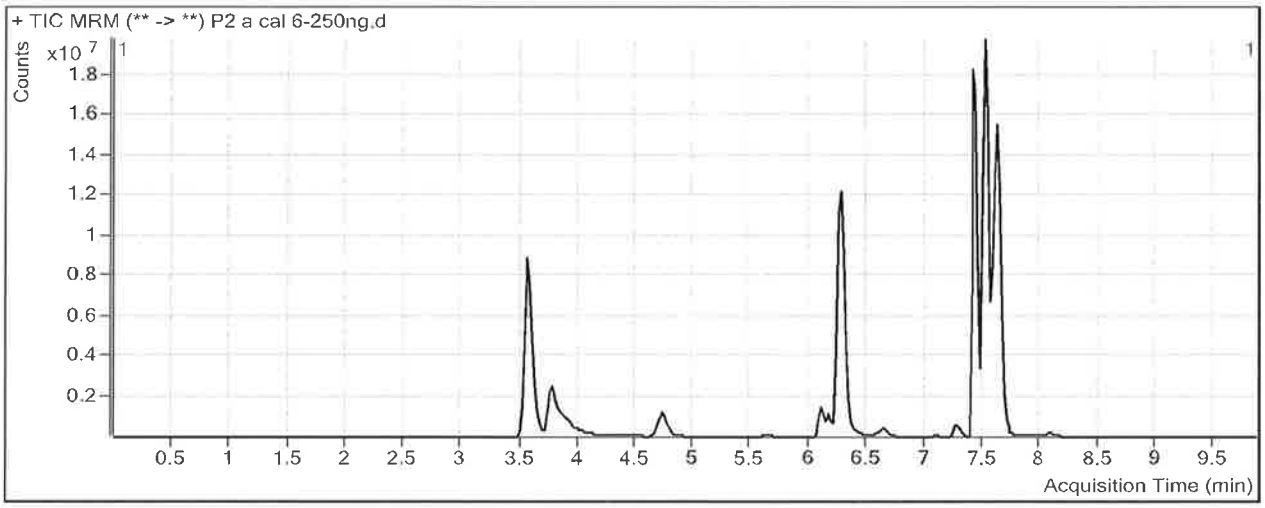
ISP FORENSICS - Pocatello Instrument # 59740
Multi-Drug Confirmatory Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:13 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 10:47	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.576	36241238	6079003	5.9617	263.0872
Zopiclone	Zopiclone-D4	6.091	3592469	428763	8.3787	252.3963
Amitriptyline	Amitriptyline-D3	7.490	2378600	154254	15.4201	288.3503
Nortriptyline	Nortriptyline-D3	7.514	803539	77106	10.4212	278.0170
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	8214003	3237822	2.5369	255.9406
Midazolam	Midazolam-D4	7.585	5201733	3040303	1.7109	258.1484
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	5578043	4447429	1.2542	252.6584

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

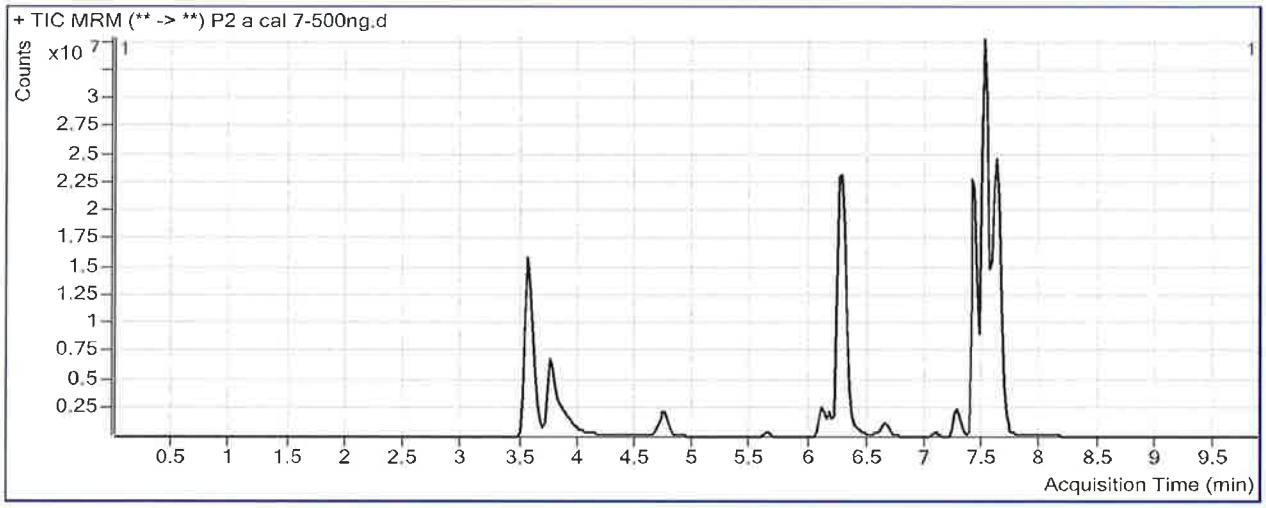
TS D

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:14 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 11:13	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.576	75935286	6894095	11.0145	485.2630
Zopiclone	Zopiclone-D4	6.091	6747750	417042	16.1800	484.7881
Amitriptyline	Amitriptyline-D3	7.490	11679084	432871	26.9805	500.7763
Nortriptyline	Nortriptyline-D3	7.534	4113709	165929	24.7920	659.9362
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	14011196	2686710	5.2150	524.5883
Midazolam	Midazolam-D4	7.565	11327383	3268157	3.4660	520.9835
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	9708138	3851842	2.5204	505.1245

TS P

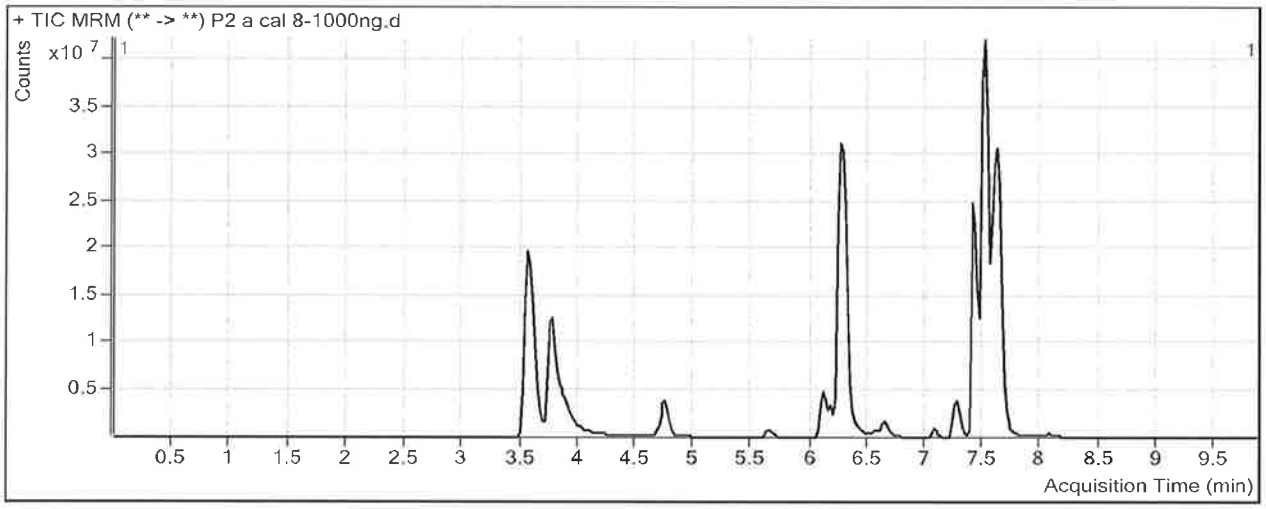
ISP FORENSICS - Pocatello Instrument # 59740
Multi-Drug Confirmatory Analysis Report

Batch Data Path	C:\MassHunter\Data\2018\MD Quant\090518 MDQ P1 P2 SP\QuantResults\MDQ P2a compounds removed.bat		
Analysis Time	9/7/2018 2:12 PM	**Analyst Name**	ISPUser
Report Time	9/7/2018 2:14 PM	**Reporter Name**	ISPUser
Last Calib Update	9/7/2018 2:12 PM	**Batch State**	Processed

Analysis Info

Acq Time	2018-09-06 11:39	**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



Results

Compound	ISTD Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
Pseudoephedrine	Pseudoephedrine-D3	3.576	103996677	5588074	18.6105	819.2600
Zopiclone	Zopiclone-D4	6.091	12945256	375149	34.5070	1030.7231
Amitriptyline	Amitriptyline-D3	7.490	16328510	309401	52.7746	974.7471
Nortriptyline	Nortriptyline-D3	7.514	5420316	110045	49.2554	1310.0762
alpha-hydroxymidazolam	alpha-hydroxymidazolam-D4	7.583	18108198	1797825	10.0723	1011.8336
Midazolam	Midazolam-D4	7.565	16006020	2447262	6.5404	981.4003
Chlordiazepoxide	Chlordiazepoxide-D5	7.627	13378942	2656172	5.0369	1006.9052