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Worklist: 2234

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
M2018-0331	1	105575	AM 25 Blood Multi-Drug Screer	
M2018-0557	1	106543	AM 25 Blood Multi-Drug Screer	
M2018-0925	2	108465	AM 25 Blood Multi-Drug Screer	
P2018-0504	1	107657	AM 25 Blood Multi-Drug Screer	
P2018-0505	1	107669	AM 25 Blood Multi-Drug Screer	
P2018-0506	1	107675	AM 25 Blood Multi-Drug Screer	
P2018-0507	1	107678	AM 25 Blood Multi-Drug Screer	
P2018-0508	1	107681	AM 25 Blood Multi-Drug Screer	
P2018-0527	1	107780	AM 25 Blood Multi-Drug Screer	
P2018-0528	3	107787	AM 25 Blood Multi-Drug Screer	
P2018-0533	1	107802	AM 25 Blood Multi-Drug Screer	
P2018-0544	1	107896	AM 25 Blood Multi-Drug Screer	
P2018-0563	1	108086	AM 25 Blood Multi-Drug Screer	
P2018-0564	1	108089	AM 25 Blood Multi-Drug Screer	
P2018-0565	1	108092	AM 25 Blood Multi-Drug Screer	
P2018-0566	1	108095	AM 25 Blood Multi-Drug Screer	
P2018-0569	1	108195	AM 25 Blood Multi-Drug Screer	
P2018-0573	1	108212	AM 25 Blood Multi-Drug Screer	
P2018-0574	1	108215	AM 25 Blood Multi-Drug Screer	
P2018-0580	1	108234	AM 25 Blood Multi-Drug Screer	
P2018-0581	1	108243	AM 25 Blood Multi-Drug Screer	
P2018-0582	1	108411	AM 25 Blood Multi-Drug Screer	
P2018-0602	1	108459	AM 25 Blood Multi-Drug Screer	

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Worklist: 2234

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>
P2018-0603	1	108462	AM 25 Blood Multi-Drug Screer
P2018-0606	1	108538	AM 25 Blood Multi-Drug Screer



Multi-Drug Screen in Blood by LC-MS/MS

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Extraction Date: 03/08/2018

Analyst: Tamara Salazar

Plate lot#:0515207

Plate Expiration: 10/18/18

Mobile phase A: 10mM Ammonium Formate
0.5M Ammonium Hydroxide

Mobile phase B 0.1% Formic acid in MeOH
Ethyl Acetate

Blank Blood Lot: 361331-2

Column: Phenomenex Phenyl Hexyl (4.6x50mm: 2.6 um)

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 ID067105*
- 4. Pipette **250µL 0.5M ammonium hydroxide** buffer 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. 4 seconds (or until no liquid remains on top of sorbent).
(Load at 85-100 PSI- Selector to the right) Manifold ID: 067104
Wait 5 minutes
- 8. Add **900µL ethyl acetate** and allow to flow for 5 minutes under gravity.
- 9. Apply positive pressure for approx. 15 seconds. **(10-15 PSI- Selector to the left)**
- 10. Add **900µL ethyl acetate** and allow to flow for 5 minutes under gravity.
- 11. Apply positive pressure for approx. 15 seconds. **(10-15 PSI- Selector to the left)**
- 12. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
SPE Dry ID067103
- 13. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

POST- ANALYTIC

- 1. Create batch and process data.
Worklist path: *C:\MassHunter\Data\2018\MD Screen\030818 MDS TS_wklst 2234*
Batch Name: *P1 MDS 030818 TS_wklst 2234.batch.bin*
P2 MDS 030818 TS_wklst 2234.batch.bin
- 2. Evaluate samples, S/N of primary transition >5 and S/N of secondary transition >3 or evaluation of peak symmetry and resolution. Within +/- 2% or 0.1 min RT of administrative control. > 1/5 the response of administrative control.
- 3. Did all QCs pass for each analyte? Y / N _____
- 4. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

Amphetamine, Oxycodone, and Hydromorphone not evaluated in P2018-0505
due to shifted retention time and/or poor peak shape. -TS



Idaho State Police Forensic Services

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AM #25 Blood Multi-Drug Screen by LCMS-QQQ

Analyst: Tamara Salazar
Extraction Date: 03/08/18
Worklist Number: 2234

<i>Reagent</i>	<i>Lot Number</i>	<i>Expiration Date</i>	<i>Date in Service</i>	<i>Date Out of Service</i>	<i>Initials</i>
ToxBox Benzo/Opiate Screening Plate	0515207	10/18/18			
Negative Blood	361331-2		12/27/17		
Methanol External Control Solution	053117	05/31/18	05/31/17		
Blood External Control Solution	WS122717	06/27/18	12/27/17		
0.5M Ammonium Hydroxide	092517	03/25/18	09/25/17		
Formic Acid (LCMS Grade)	095180B		11/15/17		
Water (LCMS Grade)	102501		06/26/17		
Methanol (LCMS Grade)	172516		12/12/17		
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		
10mM Ammonium Formate in LCMS Water (Mobile Phase A)	021518		02/15/18		
0.1% Formic Acid in LCMS Methanol (Mobile Phase B)	111517		11/15/17		
Needle Rinse--75% LCMS MeOH in LCMS Water	030818		03/08/18		

Methanol External Control Solution (Lot: 053117)

100 ul of 1mg/mL stock was added to each drug to 9600 ul of LC MeOH.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>	<i>Expiration Date</i>
Methanol (LCMS)	BDH	15H250514	
Temazepam	Cerilliant	FE08191401	October 2019
Quetiapine	Cerilliant	FN02021502	February 2020
Zolpidem	Cerilliant	FE12181402	February 2020
Zopiclone	Cerilliant	FE12031501	December 2020
Prepared:	05/31/17		
Prepared By:	Celena Shrum		
Expires:	05/31/18		

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Blood External Control Solution (Lot: WS122717)

100 ul of methanol external control solution was added to 9900 ul of blood.

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Negative Blood	Hemostat	361331-3
Methanol External Control Solution		053117
Prepared:	12/27/17	
Prepared by:	Tamara Salazar	
Expires:	05/31/18	

0.5M Ammonium Hydroxide (Lot: 092517)

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Ammonium Hydroxide (ACS grade or better)	Fisher	053200
DI Water	-	-
Prepared:	09/25/17	
Prepared By:	Sarah Pickle	
Expires:	03/25/18	

10mM Ammonium Formate in LCMS Water (Mobile Phase A) (Lot: 021518)

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Ammonium Formate	Arcos Organics	A0287238
LCMS Water	Fisher	102501
Prepared:	02/15/18	
Prepared By:	Sarah Pickle	

0.1% Formic Acid in LCMS Methanol (Mobile Phase B) (Lot: 111517)

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Formic Acid	Fisher	095180B
MeOH (LCMS Grade)	BDH	15H250514
Prepared:	11/15/17	
Prepared By:	Tamara Salazar	

Needle Rinse (75% LCMS MeOH in LCMS Water) (Lot: 030818)

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
MeOH (LCMS Grade)	Fisher	172516
Water (LCMS Grade)	Fisher	102501
Prepared:	03/08/18	
Prepared By:	Tamara Salazar	

Compound Method		p1 cal 1a			p1 cal 1a Results			Qualifier 1 M...			Qualifier 1 Results			ISTD Method			ISTD Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	RT	Resp.	MI				
Temazepam	301.1 -> 255...	3/8/2018 12:20 PM	6.147	59725	Infinity		301.1 -> 283...	20253	6936.38		Temazepam-D5	306.1 -> 260...	6.125	347355					
Tramadol	264.2 -> 58.3	3/8/2018 12:20 PM	5.215	396476	92.20		264.2 -> 43.3	4878	25.62		Tramadol-13C-D3	268.2 -> 58.3	5.194	16742...					
Trazodone	372.2 -> 176...	3/8/2018 12:20 PM	6.320	444600	958.05		372.2 -> 148...	4602...	Infinity		Trazodone-D6	378.2 -> 182...	6.279	12286...					
Venlafaxine	278.2 -> 58.3	3/8/2018 12:20 PM	5.540	376375	99161.5...		278.2 -> 260...	25718	108.55		Venlafaxine-D6	284.2 -> 64.3	5.539	824459					
Zolpidem	308.2 -> 235...	3/8/2018 12:20 PM	5.942	434963	2319.51		308.2 -> 263...	1265...	467.43		Zolpidem-D6	314.2 -> 235...	5.940	24493...					

Compound Method		p1 negative			p1 negative Results			Qualifier 1 M...		Qualifier 1 Result...			ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	RT	Resp.		
Temazepam	301.1 -> 255...	3/8/2018 12:39 PM	6.147	193	0.58	∞	301.1 -> 283...	180...	0.73	∞	Temazepam-D5	306.1 -> 260...	6.125	387519		
Tramadol	264.2 -> 58.3	3/8/2018 12:39 PM	5.215	8577	Infinity	∞	264.2 -> 43.3	260	0.75	∞	Tramadol-13C-D3	268.2 -> 58.3	5.194	19210...		
Trazodone	372.2 -> 176...	3/8/2018 12:39 PM	6.320	1966	19.10	∞	372.2 -> 148...	396...	2.04	∞	Trazodone-D6	378.2 -> 182...	6.279	13319...		
Venlafaxine	278.2 -> 58.3	3/8/2018 12:39 PM				∞	278.2 -> 260...				Venlafaxine-D6	284.2 -> 64.3	5.539	857350		
Zolpidem	308.2 -> 235...	3/8/2018 12:39 PM				∞	308.2 -> 263...				Zolpidem-D6	314.2 -> 235...	5.940	26007...		

Compound Method		p1 external control			p1 external control Results			Qualifier 1 M...			Qualifier 1 Results			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Transition	Name	Transition	RT	Resp.			
Temazepam	301.1 -> 255...	3/8/2018 12:59 PM	6.147	694093	Infinity		301.1 -> 283...	205104	113.77		306.1 -> 260...	Temazepam-D5	306.1 -> 260...	6.125	394678			
Tramadol	264.2 -> 58.3	3/8/2018 12:59 PM	5.215	8506	8.86		264.2 -> 43.3	291	0.93		268.2 -> 58.3	Tramadol-13C-D3	268.2 -> 58.3	5.194	17075...			
Trazodone	372.2 -> 176...	3/8/2018 12:59 PM	6.320	2177	2.75		372.2 -> 148...	2275	23.93		378.2 -> 182...	Trazodone-D6	378.2 -> 182...	6.279	12201...			
Venlafaxine	278.2 -> 58.3	3/8/2018 12:59 PM	5.418	324	0.85		278.2 -> 260...	136	1.95		284.2 -> 64.3	Venlafaxine-D6	284.2 -> 64.3	5.539	866370			
Zolpidem	308.2 -> 235...	3/8/2018 12:59 PM	5.962	40032...	Infinity		308.2 -> 263...	12821...	22497...		314.2 -> 235...	Zolpidem-D6	314.2 -> 235...	5.940	23693...			

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