

* AM 7 central data available upon request. -TS















1/3/2019

TS

Worklist: 2855

REVIEWED

By Sarah Pickle at 8:14 am, Jan 07, 2019

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
M2018-5240	1	135310	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-5240	2	135307	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-5240	3	135306	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-5597	1	134340	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-6077	3	134331	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-6100	3	134362	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-6182	2	135177	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-6203	2	135128	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-6243	2	135119	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3281	2	133786	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3284	1	132512	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3295	1	132531	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3296	1	132536	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3310	1	132792	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3341	1	132955	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3442	1	133813	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3444	1	133836	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3490	1	134334	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3491	1	134337	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3492	1	134358	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3498	1	134403	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3531	3	134774	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-3566	1	135104	AM 25 Blood Multi-Drug Screen by LC-QQQ	

TS

Worklist: 2855

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>
P2018-3570	1	135122	AM 25 Blood Multi-Drug Screen by LC-QQQ
P2018-3584	1	135288	AM 25 Blood Multi-Drug Screen by LC-QQQ



TS

AM# 25: Multi-Drug Screen in Blood by LC-MS/MS

Extraction Date: 12/26/18
Plate lot#: 0543908

Analyst: Tamara Salazar
Plate Expiration: 11/28/19

Mobile phase A: 10mM Amm Form
0.5M Ammonium Hydroxide

Mobile phase B: 0.1% Formic Acid in MeOH
Ethyl Acetate LC Methanol

Blank Blood Lot: 445283-1
LCMS-QQ ID: 59740

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

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: Data Path Name: _____

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 0.5M 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 100% LC MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Open quantitation software and create a new quantitation batch.
Batch Name: *P1 MDS TS 122618*
P2 MDS TS 122618
Worklist path: C:\MassHunter\Data\2018\MD Screen\122618 MDS wklst 2855 TS
- 2. Make necessary changes to integration limits
- 3. 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. > 1/3 the response of administrative control.
- 4. Did all QCs pass for each analyte? Y / N _____
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:



Idaho State Police Forensic Services

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

Analyst: Tamara Salazar
Extraction Date: 12/26/18
Worklist Number: 2855

<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	0543908	11/28/19	12/05/18		
Negative Blood	445283-1		10/25/18		
Methanol External Control Solution	042618	04/26/19	04/26/18		
Blood External Control Solution	WS122618	04/26/19	12/26/18		
0.5M Ammonium Hydroxide	082818	02/28/19	08/28/19		
Formic Acid (LCMS Grade)	095180B		11/15/17		
Water (LCMS Grade)	183905		12/14/18		
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		
10mM Ammonium Formate in LCMS Water (Mobile Phase A)	121418		12/14/18		
0.1% Formic Acid in LCMS Methanol (Mobile Phase B)	111318		11/13/18		
Needle Rinse--75% LCMS MeOH in LCMS Water	122618		12/26/18		

Methanol External Control Solution (Lot: 042618)

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)	Fisher	177145	
Oxycodone	Cerilliant	FE01181701	March 2022
Diazepam	Cerilliant	FE05201602	June 2021
Metoprolol	Cerilliant	FN06091510	July 2020
Meperidine	Cerilliant	FE01271602	June 2021
Prepared:	04/26/18		
Prepared By:	Tamara Salazar		
Expires:	04/26/19		

Blood External Control Solution (Lot: WS122618)*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	445283-1
Methanol External Control Solution		042618
Prepared:	12/26/18	
Prepared by:	Tamara Salazar	
Expires:	04/26/19	

0.5M Ammonium Hydroxide (Lot: 082818)

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

10mM Ammonium Formate in LCMS Water (Mobile Phase A) (Lot: 121418)

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Ammonium Formate	Arcos Organics	A0287238
LCMS Water	Fisher	183905
Prepared:	12/14/18	
Prepared By:	Tamara Salazar	

0.1% Formic Acid in LCMS Methanol (Mobile Phase B) (Lot: 111318)

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Formic Acid	Fisher	095180B
MeOH (LCMS Grade)	Fisher	177145
Prepared:	11/13/18	
Prepared By:	Tamara Salazar	

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

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

12

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.	Transition	RT	Resp.		
6-MAM	328.2 -> 165...	12/26/2018 1:02 PM	5.218	4497	1271.02	328.2 -> 211...	722	179.25	6-MAM-D6	334.2 -> 165...	5.197	137072							
7-Aminoclonazepam	286.1 -> 121...	12/26/2018 1:02 PM	5.471	54015	127.02	286.1 -> 222...	11059	1494...	7-Aminoclonazepam-D4	290.1 -> 121...	5.469	175418							
Benzoyllecgonine	290.1 -> 168...	12/26/2018 1:02 PM	5.243	15806	61.72	290.1 -> 105...	15283	1444...	Benzoyllecgonine-D8	298.2 -> 171...	5.243	54484							
a-hydroxyalprazolam	325.1 -> 297...	12/26/2018 1:02 PM	6.320	25111	63.58	325.1 -> 215...	7991	39.33	a-hydroxyalprazolam-D5	330.1 -> 302...	6.319	162494							
alpha-PVP	232.2 -> 91.0	12/26/2018 1:02 PM	5.682	143474	18225.40	232.2 -> 77.1	102857	37.48	alpha-PVP-D8	240.2 -> 91.1	5.640	13837...							
Alprazolam	309.1 -> 281...	12/26/2018 1:02 PM	6.426	277045	40504.65	309.1 -> 205...	94456	212.64	Alprazolam-D5	314.1 -> 286...	6.405	11840...							
Amphetamine	136.1 -> 91.1	12/26/2018 1:02 PM	4.831	218955	23.19	136.1 -> 119...	76279	12.08	Amphetamine-D11	147.2 -> 130...	4.770	71911							
Cocaine	304.2 -> 182...	12/26/2018 1:02 PM	5.652	389294	Infinity	304.2 -> 105...	52978	5333...	Cocaine-D3	307.2 -> 185...	5.630	635057							
Bupropion	240.1 -> 184...	12/26/2018 1:02 PM	5.906	131924	73.84	240.1 -> 131...	210211	Infinity	Bupropion-D9	249.2 -> 185...	5.865	200362							
Carisoprodol	261.2 -> 176...	12/26/2018 1:02 PM	6.067	41585	7784.94	261.2 -> 55.3	83041	15.96	Carisoprodol-D7	268.2 -> 183...	6.045	145424							
Citalopram	325.2 -> 109...	12/26/2018 1:02 PM	6.035	471690	115.46	325.2 -> 262...	60750	8032...	Citalopram-D6	331.2 -> 109...	6.014	657883							
Clonazepam	316.1 -> 269...	12/26/2018 1:02 PM	6.281	54413	13115.52	316.1 -> 213...	5830	17.72	Clonazepam-D4	320.1 -> 217...	6.281	48497							
Codeine	300.2 -> 215...	12/26/2018 1:02 PM	5.181	32084	96.19	300.2 -> 165...	31755	83.27	Codeine-D6	306.2 -> 218...	5.138	157096							
Cyclobenzaprine	276.2 -> 214...	12/26/2018 1:02 PM	6.329	173000	4424.58	276.2 -> 231...	28978	6.63	Cyclobenzaprine-D3	279.2 -> 215...	6.328	10134...							
Dextromethorphan	272.2 -> 171...	12/26/2018 1:02 PM	6.044	215703	1953.53	272.2 -> 147...	181054	64.65	Dextromethorphan-D3	275.2 -> 171...	6.044	722244							
Dextropropam	258.2 -> 157...	12/26/2018 1:02 PM	5.434	99002	12594.29	258.2 -> 133...	106714	559.44	Dextropropam-D3	261.2 -> 157...	5.433	5485377							
Diazepam	285.1 -> 193...	12/26/2018 1:02 PM	6.653	114262	26.98	285.1 -> 153...	192169	57.66	Diazepam-D5	290.1 -> 198...	6.652	584413							
Dihydrocodeine	302.2 -> 198...	12/26/2018 1:02 PM	4.917	74127	36.89	302.2 -> 128...	50965	11.58	Dihydrocodeine-D6	308.2 -> 202...	4.875	391652							
Diphenhydramine	256.2 -> 167...	12/26/2018 1:02 PM	5.986	204999	6.48	256.2 -> 152...	178538	8.99	Diphenhydramine-D3	259.2 -> 167...	5.986	18706...							
Doxylamine	271.2 -> 182...	12/26/2018 1:02 PM	5.617	141935	70.00	271.2 -> 167...	349112	51.41	Doxylamine-D5	276.2 -> 187...	5.616	326626							
EDDP	279.2 -> 235...	12/26/2018 1:02 PM	5.961	652410	987.03	279.2 -> 250...	324896	2356...	EDDP-D3	282.2 -> 235...	5.961	41923...							
Fentanyl	337.2 -> 105...	12/26/2018 1:02 PM	6.237	38702	48.43	337.2 -> 188...	16756	5.97	Fentanyl-D5	342.3 -> 105...	6.237	30953...							
Fluoxetine	310.1 -> 44.3	12/26/2018 1:02 PM	6.242	954436	340.03	310.1 -> 148...	12775	1822...	Fluoxetine-D6	316.2 -> 44.3	6.240	36044...							
Hydrocodone	300.2 -> 198...	12/26/2018 1:02 PM	5.365	91541	10.14	300.2 -> 128...	57672	8.89	Hydrocodone-D6	306.2 -> 202...	5.322	585990							
Hydromorphone	286.2 -> 184...	12/26/2018 1:02 PM	4.740	59953	28.50	286.2 -> 157...	71655	11.58	Hydromorphone-D6	292.2 -> 185...	4.697	279536							
Ketamine	238.1 -> 125...	12/26/2018 1:02 PM	5.866	361577	69.90	238.1 -> 220...	36739	4.53	Ketamine-D4	242.1 -> 129...	5.865	14909...							
Metoprolol	268.2 -> 116...	12/26/2018 1:02 PM	5.432	63571	39.52	268.2 -> 56.3	64785	38.96	Carisoprodol-D7	268.2 -> 183...	6.045	145424							
Mirtazapine	266.2 -> 195...	12/26/2018 1:02 PM	6.250	395368	55.75	266.2 -> 72.3	326960	68.18	Carisoprodol-D7	268.2 -> 183...	6.045	145424							
Meprobramate	219.1 -> 158...	12/26/2018 1:02 PM	5.540	36076	5817.49	219.1 -> 97.1	14215	3298...	Meprobramate-D7	226.2 -> 165...	5.540	3907							
Methadone	310.2 -> 265...	12/26/2018 1:02 PM	6.282	491914	1236.10	310.2 -> 105...	390757	Infinity	Methadone-D9	319.3 -> 268...	6.261	16705...							
Methamphetamine	150.1 -> 91.1	12/26/2018 1:02 PM	4.972	141172	Infinity	150.1 -> 119...	32699	11.70	Methamphetamine-D11	161.2 -> 97.1	4.951	501766							
Morphine	286.2 -> 201...	12/26/2018 1:02 PM	4.519	16995	6.84	286.2 -> 165...	14655	4642...	Morphine-D6	292.2 -> 152...	4.437	42458							
Norbuprenorphine	414.3 -> 101...	12/26/2018 1:02 PM	5.868	13492	31.25	414.3 -> 57.3	17489	23.71	Norbuprenorphine-D3	417.3 -> 101...	5.868	38595							
Nordiazepam	271.1 -> 140...	12/26/2018 1:02 PM	6.513	79990	77.59	271.1 -> 208...	19596	173.73	Nordiazepam-D5	276.1 -> 140...	6.492	217775							
Norfentanyl	233.2 -> 84.2	12/26/2018 1:02 PM	5.314	325435	679.29	233.2 -> 55.3	117838	39.17	Norfentanyl-D5	238.2 -> 84.2	5.294	14985...							
Norhydrocodone	286.2 -> 199...	12/26/2018 1:02 PM	5.022	15947	2430.49	286.2 -> 171...	5084	685.23	Norhydrocodone-D3	289.2 -> 202...	5.002	194412							
Noroxycodone	302.1 -> 284...	12/26/2018 1:02 PM	4.918	94497	17384.43	302.1 -> 186...	24747	8.59	Noroxycodone-D3	305.2 -> 287...	4.916	487821							
O-desmethyl-tramad-	250.2 -> 58.3	12/26/2018 1:02 PM	4.907	591983	144.42	250.2 -> 42.3	14331	19.69	O-desmethyl-tramad-	256.2 -> 64.3	4.907	15706...							
Oxazepam	287.1 -> 240...	12/26/2018 1:02 PM	6.347	27156	37.75	287.1 -> 268...	31880	Infinity	Oxazepam-D5	292.1 -> 246...	6.326	149717							
Oxycodone	316.2 -> 298...	12/26/2018 1:02 PM	5.137	266323	42.76	316.2 -> 241...	57252	159.04	Oxycodone-D6	322.2 -> 304...	5.097	508324							
Oxymorphone	302.1 -> 284...	12/26/2018 1:02 PM	4.453	284872	Infinity	302.1 -> 227...	36841	10.29	Oxymorphone-D3	305.2 -> 287...	4.390	995699							
Phentermine	150.1 -> 65.2	12/26/2018 1:02 PM	5.114	40098	8.73	150.1 -> 133...	4452	1649...	Phentermine-D5	155.2 -> 96.2	5.113	621216							
Promethazine	285.1 -> 86.2	12/26/2018 1:02 PM	6.389	666878	116.05	285.1 -> 71.3	155129	322.51	Promethazine-D3	288.2 -> 89.2	6.368	24186...							
Quetiapine	384.2 -> 253...	12/26/2018 1:02 PM	6.561	739015	166294...	384.2 -> 221...	358107	611.02	Quetiapine-D8	392.2 -> 226...	6.519	879818							
Sertraline	306.1 -> 158...	12/26/2018 1:02 PM	6.508	365697	194.44	306.1 -> 275...	141007	Infinity	Sertraline-D3	309.1 -> 275...	6.507	11359...							
Temazepam	301.1 -> 255...	12/26/2018 1:02 PM	6.468	256747	1041.70	301.1 -> 283...	69376	Infinity	Temazepam-D5	306.1 -> 260...	6.467	16593...							
Tramadol	264.2 -> 58.3	12/26/2018 1:02 PM	5.433	664358	194.81	264.2 -> 43.3	10321	62.44	Tramadol-13C-D3	268.2 -> 58.3	5.432	35516...							
Trazodone	372.2 -> 176...	12/26/2018 1:02 PM	6.784	919394	224.66	372.2 -> 148...	10580...	335.49	Trazodone-D6	378.2 -> 182...	6.763	28298...							

15

Compound Method	p1 cal 1a				p1 cal 1a Results				ISTD Method				ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Qualifier 1 M.	Area	S/N	MI	Name	Transition	RT	Resp.
Venlafaxine	278.2 -> 58.3	12/26/2018 1:02 PM	5.758	785142	92.25		278.2 -> 260...	16678	57.29		Venlafaxine-D6	284.2 -> 64.3	5.757	11505...
Zolpidem	308.2 -> 235...	12/26/2018 1:02 PM	6.324	799811	892.87		308.2 -> 263...	216293	Infinity		Zolpidem-D6	314.2 -> 235...	6.302	46491...
Mirtazapine	399.2 -> 174...	12/26/2018 1:02 PM	6.275	206758	30369.85		399.2 -> 238...	30902	4144...		Quetiapine-D8	392.2 -> 226...	6.519	879818

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	Name	Transition	RT	Resp.			
6-MAM	328.2 -> 165...	12/26/2018 1:56 PM					328.2 -> 211...				6-MAM-D6	334.2 -> 165...	5.177	146941			
7-aminoclonazepam	286.1 -> 121...	12/26/2018 1:56 PM					286.1 -> 222...				7-Aminoclonazepam-D4	290.1 -> 121...	5.449	269218			
Benzylecgonine	290.1 -> 168...	12/26/2018 1:56 PM					290.1 -> 105...				Benzylecgonine-D8	298.2 -> 171...	5.243	46183			
a-hydroxylprazolam	325.1 -> 297...	12/26/2018 1:56 PM					325.1 -> 215...				a-hydroxylprazolam-D5	330.1 -> 302...	6.340	147398			
alpha-PVP	232.2 -> 91.0	12/26/2018 1:56 PM					232.2 -> 77.1				alpha-PVP-d8	240.2 -> 91.1	5.641	12938...			
Alprazolam	309.1 -> 281...	12/26/2018 1:56 PM					309.1 -> 205...				Alprazolam-D5	314.1 -> 286...	6.405	11842...			
Amphetamine	136.1 -> 91.1	12/26/2018 1:56 PM					136.1 -> 119...				Amphetamine-D11	147.2 -> 130...	4.770	101253			
Cocaine	304.2 -> 182...	12/26/2018 1:56 PM					304.2 -> 105...				Cocaine-D3	307.2 -> 185...	5.631	589870			
Bupropion	240.1 -> 184...	12/26/2018 1:56 PM					240.1 -> 131...				Bupropion-D9	249.2 -> 185...	5.885	206632			
Carisoprodol	261.2 -> 176...	12/26/2018 1:56 PM					261.2 -> 55.3				Carisoprodol-D7	268.2 -> 183...	6.045	135193			
Citalopram	325.2 -> 109...	12/26/2018 1:56 PM					325.2 -> 262...				Citalopram-D6	331.2 -> 109...	6.034	611670			
Clonazepam	316.1 -> 269...	12/26/2018 1:56 PM					316.1 -> 213...				Clonazepam-D4	320.1 -> 217...	6.281	56680			
Codeine	300.2 -> 215...	12/26/2018 1:56 PM					300.2 -> 165...				Codeine-D6	306.2 -> 218...	5.118	151867			
Cyclobenzaprine	276.2 -> 214...	12/26/2018 1:56 PM					276.2 -> 231...				Cyclobenzaprine-D3	279.2 -> 215...	6.328	915232			
Dextromethorphan	272.2 -> 171...	12/26/2018 1:56 PM					272.2 -> 147...				Dextromethorphan-D3	275.2 -> 171...	6.044	712362			
Dextropropfan	258.2 -> 157...	12/26/2018 1:56 PM					258.2 -> 133...				Dextropropfan-D3	261.2 -> 157...	5.433	448460			
Diazepam	285.1 -> 193...	12/26/2018 1:56 PM					285.1 -> 153...	14823...	722.51		Diazepam-D5	290.1 -> 198...	6.653	463582			
Dihydrocodeine	302.2 -> 198...	12/26/2018 1:56 PM					302.2 -> 128...				Dihydrocodeine-D6	308.2 -> 202...	4.875	351174			
Diphenhydramine	256.2 -> 167...	12/26/2018 1:56 PM					256.2 -> 152...				Diphenhydramine-D3	259.2 -> 167...	5.986	17982...			
Doxylamine	271.2 -> 182...	12/26/2018 1:56 PM					271.2 -> 167...				Doxylamine-D5	276.2 -> 187...	5.596	325799			
EDDP	279.2 -> 235...	12/26/2018 1:56 PM					279.2 -> 250...				EDDP-D3	282.2 -> 235...	5.961	39647...			
Fentanyl	337.2 -> 105...	12/26/2018 1:56 PM					337.2 -> 188...				Fentanyl-D5	342.3 -> 105...	6.237	28905...			
Fluoxetine	310.1 -> 44.3	12/26/2018 1:56 PM					310.1 -> 148...				Fluoxetine-D6	316.2 -> 44.3	6.240	33064...			
Hydrocodone	300.2 -> 198...	12/26/2018 1:56 PM					300.2 -> 128...				Hydrocodone-D6	306.2 -> 202...	5.322	529906			
Hydromorphone	286.2 -> 184...	12/26/2018 1:56 PM					286.2 -> 157...				Hydromorphone-D6	292.2 -> 185...	4.697	259452			
Ketamine	238.1 -> 125...	12/26/2018 1:56 PM					238.1 -> 220...				Ketamine-D4	242.1 -> 129...	5.865	15569...			
Metoprolol	268.2 -> 116...	12/26/2018 1:56 PM					268.2 -> 56.3	658007	387.70		Carisoprodol-D7	268.2 -> 183...	6.045	135193			
Miltazapine	266.2 -> 195...	12/26/2018 1:56 PM					266.2 -> 72.3				Carisoprodol-D7	268.2 -> 183...	6.045	135193			
Meprobamate	219.1 -> 158...	12/26/2018 1:56 PM					219.1 -> 97.1				Meprobamate-D7	226.2 -> 165...	5.520	5344			
Methadone	310.2 -> 265...	12/26/2018 1:56 PM					310.2 -> 105...				Methadone-D9	319.3 -> 268...	6.281	15773...			
Methamphetamine	150.1 -> 91.1	12/26/2018 1:56 PM					150.1 -> 119...				Methamphetamine-D11	161.2 -> 97.1	4.931	481171			
Morphine	286.2 -> 201...	12/26/2018 1:56 PM					286.2 -> 165...				Morphine-D6	292.2 -> 152...	4.416	35959			
Norbuprenorphine	414.3 -> 101...	12/26/2018 1:56 PM					414.3 -> 57.3				Norbuprenorphine-D3	417.3 -> 101...	5.848	31865			
Nordiazepam	271.1 -> 140...	12/26/2018 1:56 PM					271.1 -> 208...				Nordiazepam-D5	276.1 -> 140...	6.513	185881			
Norfentanyl	233.2 -> 84.2	12/26/2018 1:56 PM					233.2 -> 55.3				Norfentanyl-D5	238.2 -> 84.2	5.294	13819...			
Norhydrocodone	286.2 -> 199...	12/26/2018 1:56 PM					286.2 -> 171...				Norhydrocodone-D3	289.2 -> 202...	4.982	199587			
Noroxycodone	302.1 -> 284...	12/26/2018 1:56 PM					302.1 -> 186...				Noroxycodone-D3	305.2 -> 287...	4.896	482413			
O-desmethyl-tramad.	250.2 -> 58.3	12/26/2018 1:56 PM					250.2 -> 42.3				O-desmethyl-tramadol...	256.2 -> 64.3	4.887	13988...			
Oxazepam	287.1 -> 240...	12/26/2018 1:56 PM					287.1 -> 268...				Oxazepam-D5	292.1 -> 246...	6.326	138405			
Oxycodone	316.2 -> 298...	12/26/2018 1:56 PM					316.2 -> 241...	567793	366.95		Oxycodone-D6	322.2 -> 304...	5.077	493374			
Oxycodone	302.1 -> 284...	12/26/2018 1:56 PM					302.1 -> 227...				Oxycodone-D3	305.2 -> 287...	4.390	11294...			
Phentermine	150.1 -> 65.2	12/26/2018 1:56 PM					150.1 -> 133...				Phentermine-D5	155.2 -> 96.2	5.093	673674			
Promethazine	285.1 -> 86.2	12/26/2018 1:56 PM					285.1 -> 71.3				Promethazine-D3	288.2 -> 89.2	6.368	21894...			
Quetiapine	384.2 -> 253...	12/26/2018 1:56 PM					384.2 -> 221...				Quetiapine-D8	392.2 -> 226...	6.540	797757			
Serrtraline	306.1 -> 158...	12/26/2018 1:56 PM					306.1 -> 275...				Serrtraline-D3	309.1 -> 275...	6.507	10248...			
Temazepam	301.1 -> 255...	12/26/2018 1:56 PM					301.1 -> 283...				Temazepam-D5	306.1 -> 260...	6.467	15971...			
Tramadol	264.2 -> 58.3	12/26/2018 1:56 PM					264.2 -> 43.3				Tramadol-13C-D3	268.2 -> 58.3	5.432	33024...			
Trazodone	372.2 -> 176...	12/26/2018 1:56 PM					372.2 -> 148...				Trazodone-D6	378.2 -> 182...	6.763	27693...			

15

Compound Method	p1 external control	p1 external control Results	Qualifier 1 M ₂	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.
Venlafaxine	278.2 -> 58.3	12/26/2018 1:56 PM					278.2 -> 260..				Venlafaxine-D6	284.2 -> 64.3	5.757	10013...
Zolpidem	308.2 -> 235...	12/26/2018 1:56 PM					308.2 -> 263...				Zolpidem-D6	314.2 -> 235...	6.302	42534...
Mirtazapine	399.2 -> 174...	12/26/2018 1:56 PM	6.519	149	0.86		399.2 -> 238...	101	0.85		Quetiapine-D8	392.2 -> 226...	6.540	797757

Compound Method		p1 negative			p1 negative Results			ISTD Method			ISTD Results			
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Qualifier 1 M...	Area	S/N	MI	Name	Transition	RT	Resp.
6-MAM	328.2 -> 165...	12/26/2018 1:37 PM					328.2 -> 211...				6-MAM-D6	334.2 -> 165...	5.177	144935
7-aminoclonazepam	286.1 -> 121...	12/26/2018 1:37 PM					286.1 -> 222...				7-Aminoclonazepam-D4	290.1 -> 121...	5.469	166372
Benzylecgonine	290.1 -> 168...	12/26/2018 1:37 PM					290.1 -> 105...				Benzylecgonine-D8	298.2 -> 171...	5.243	52185
a-hydroxylprazosin	325.1 -> 297...	12/26/2018 1:37 PM					325.1 -> 215...				a-hydroxylprazosin-D5	330.1 -> 302...	6.340	178459
alpha-PVP	232.2 -> 91.0	12/26/2018 1:37 PM					232.2 -> 77.1				alpha-PVP-d8	240.2 -> 91.1	5.641	12817...
Alprazolam	309.1 -> 281...	12/26/2018 1:37 PM					309.1 -> 205...				Alprazolam-D5	314.1 -> 286...	6.425	10737...
Amphetamine	136.1 -> 91.1	12/26/2018 1:37 PM					136.1 -> 119...				Amphetamine-D11	147.2 -> 130...	4.750	73763
Cocaine	304.2 -> 182...	12/26/2018 1:37 PM					304.2 -> 105...				Cocaine-D3	307.2 -> 185...	5.631	581796
Bupropion	240.1 -> 184...	12/26/2018 1:37 PM					240.1 -> 131...				Bupropion-D9	249.2 -> 185...	5.885	194074
Carisoprodol	261.2 -> 176...	12/26/2018 1:37 PM					261.2 -> 55.3				Carisoprodol-D7	268.2 -> 183...	6.066	134467
Citalopram	325.2 -> 109...	12/26/2018 1:37 PM					325.2 -> 262...				Citalopram-D6	331.2 -> 109...	6.034	599874
Clonazepam	316.1 -> 269...	12/26/2018 1:37 PM					316.1 -> 213...				Clonazepam-D4	320.1 -> 217...	6.281	47878
Codeine	300.2 -> 215...	12/26/2018 1:37 PM					300.2 -> 165...				Codeine-D6	306.2 -> 218...	5.118	137589
Cyclobenzaprine	276.2 -> 214...	12/26/2018 1:37 PM					276.2 -> 231...				Cyclobenzaprine-D3	279.2 -> 215...	6.328	858690
Dextromethorphan	272.2 -> 171...	12/26/2018 1:37 PM					272.2 -> 147...				Dextromethorphan-D3	275.2 -> 171...	6.044	736156
Dextropropofol	258.2 -> 157...	12/26/2018 1:37 PM					258.2 -> 133...				Dextropropofol-D3	261.2 -> 157...	5.433	450018
Diazepam	285.1 -> 193...	12/26/2018 1:37 PM					285.1 -> 153...				Diazepam-D5	290.1 -> 198...	6.673	487214
Dihydrocodeine	302.2 -> 198...	12/26/2018 1:37 PM					302.2 -> 128...				Dihydrocodeine-D6	308.2 -> 202...	4.855	350824
Diphenhydramine	256.2 -> 167...	12/26/2018 1:37 PM					256.2 -> 152...				Diphenhydramine-D3	259.2 -> 167...	6.006	17276...
Doxylamine	271.2 -> 182...	12/26/2018 1:37 PM					271.2 -> 167...				Doxylamine-D5	276.2 -> 187...	5.616	312220
EDDP	279.2 -> 235...	12/26/2018 1:37 PM					279.2 -> 250...				EDDP-D3	282.2 -> 235...	5.982	37241...
Fentanyl	337.2 -> 105...	12/26/2018 1:37 PM					337.2 -> 188...				Fentanyl-D5	342.3 -> 105...	6.257	27271...
Fluoxetine	310.1 -> 44.3	12/26/2018 1:37 PM					310.1 -> 148...				Fluoxetine-D6	316.2 -> 44.3	6.240	29523...
Hydrocodone	300.2 -> 198...	12/26/2018 1:37 PM					300.2 -> 128...				Hydrocodone-D6	306.2 -> 202...	5.301	519929
Hydromorphone	286.2 -> 184...	12/26/2018 1:37 PM					286.2 -> 157...				Hydromorphone-D6	292.2 -> 185...	4.637	242189
Ketamine	238.1 -> 125...	12/26/2018 1:37 PM					238.1 -> 220...				Ketamine-D4	242.1 -> 129...	5.865	13948...
Metoprolol	268.2 -> 116...	12/26/2018 1:37 PM					268.2 -> 56.3				Carisoprodol-D7	268.2 -> 183...	6.066	134467
Miltazapine	266.2 -> 195...	12/26/2018 1:37 PM					266.2 -> 72.3				Carisoprodol-D7	268.2 -> 183...	6.066	134467
Meprobamate	219.1 -> 158...	12/26/2018 1:37 PM					219.1 -> 97.1				Meprobamate-D7	226.2 -> 165...	5.540	3205
Methadone	310.2 -> 265...	12/26/2018 1:37 PM					310.2 -> 105...				Methadone-D9	319.3 -> 268...	6.281	14880...
Methamphetamine	150.1 -> 91.1	12/26/2018 1:37 PM					150.1 -> 119...				Methamphetamine-D11	161.2 -> 97.1	4.910	477438
Morphine	286.2 -> 201...	12/26/2018 1:37 PM					286.2 -> 165...				Morphine-D6	292.2 -> 152...	4.335	29168
Norbuprenorphine	414.3 -> 101...	12/26/2018 1:37 PM					414.3 -> 57.3				Norbuprenorphine-D3	417.3 -> 101...	5.889	30299
Nordiazepam	271.1 -> 140...	12/26/2018 1:37 PM					271.1 -> 208...				Nordiazepam-D5	276.1 -> 140...	6.513	152318
Norfentanyl	233.2 -> 84.2	12/26/2018 1:37 PM					233.2 -> 55.3				Norfentanyl-D5	238.2 -> 84.2	5.294	13043...
Norhydrocodone	286.2 -> 199...	12/26/2018 1:37 PM					286.2 -> 171...				Norhydrocodone-D3	289.2 -> 202...	4.961	164307
Noroxycodone	302.1 -> 284...	12/26/2018 1:37 PM					302.1 -> 186...				Noroxycodone-D3	305.2 -> 287...	4.896	506577
O-desmethyl-tramadol	250.2 -> 58.3	12/26/2018 1:37 PM					250.2 -> 42.3				O-desmethyl-tramadol-...	256.2 -> 64.3	4.867	13918...
Oxazepam	287.1 -> 240...	12/26/2018 1:37 PM					287.1 -> 268...				Oxazepam-D5	292.1 -> 246...	6.326	167403
Oxycodone	316.2 -> 298...	12/26/2018 1:37 PM					316.2 -> 241...				Oxycodone-D6	322.2 -> 304...	5.056	467160
Oxymorphone	302.1 -> 284...	12/26/2018 1:37 PM					302.1 -> 227...				Oxymorphone-D3	305.2 -> 287...	4.350	973471
Phentermine	150.1 -> 65.2	12/26/2018 1:37 PM					150.1 -> 133...				Phentermine-D5	155.2 -> 96.2	5.093	647871
Promethazine	285.1 -> 86.2	12/26/2018 1:37 PM					285.1 -> 71.3				Promethazine-D3	288.2 -> 89.2	6.388	20447...
Quetiapine	384.2 -> 253...	12/26/2018 1:37 PM					384.2 -> 221...				Quetiapine-D8	392.2 -> 226...	6.540	731576
Serrtraline	306.1 -> 158...	12/26/2018 1:37 PM					306.1 -> 275...				Serrtraline-D3	309.1 -> 275...	6.527	879468
Temazepam	301.1 -> 255...	12/26/2018 1:37 PM					301.1 -> 283...				Temazepam-D5	306.1 -> 260...	6.488	14784...
Tramadol	264.2 -> 58.3	12/26/2018 1:37 PM					264.2 -> 43.3				Tramadol-13C-D3	268.2 -> 58.3	5.432	31042...
Trazodone	372.2 -> 176...	12/26/2018 1:37 PM					372.2 -> 148...				Trazodone-D6	378.2 -> 182...	6.784	25620...

5

Compound Method	p1 negative			p1 negative Results			Qualifier 1 M...	Qualifier 1 R...	ISTD Method	ISTD Results				
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	RT	Resp.
Venlafaxine	278.2 -> 58.3	12/26/2018 1:37 PM					278.2 -> 260...				Venlafaxine-D6	284.2 -> 64.3	5.757	10638..
Zolpidem	308.2 -> 235...	12/26/2018 1:37 PM					308.2 -> 263...				Zolpidem-D6	314.2 -> 235...	6.322	40382..
Mirtazapine	399.2 -> 174...	12/26/2018 1:37 PM	6.316	600	4.58		399.2 -> 238...				Quetiapine-D8	392.2 -> 226...	6.540	731576

VOID

Negative control was re-injected due to morphine internal standard peak shifting outside of the acceptable range.

TS

15

Compound Method				p1 negative_reinject				p1 negative_reinject Results				ISTD Method			
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Qualifier 1 M...	Area	S/N	MI	Qualifier 1 Re...	Name	Transition	RT	Resp.
6-MAM	328.2 -> 165...	12/27/2018 8:32 AM					328.2 -> 211...				6-MAM-D6	334.2 -> 165...	5.259	117571	
7-Aminoclonazepam	286.1 -> 121...	12/27/2018 8:32 AM					286.1 -> 222...				7-Aminoclonazepam-D4	290.1 -> 121...	5.469	32127	
Benzoylcegonine	290.1 -> 168...	12/27/2018 8:32 AM					290.1 -> 105...				Benzoylcegonine-D8	298.2 -> 171...	5.243	34652	
a-hydroxyalprazolam	325.1 -> 297...	12/27/2018 8:32 AM					325.1 -> 215...				a-hydroxyalprazolam-D5	330.1 -> 302...	6.340	125713	
alpha-PVP	232.2 -> 91.0	12/27/2018 8:32 AM					232.2 -> 77.1				alpha-PVP-d8	240.2 -> 91.1	5.702	855797	
Alprazolam	309.1 -> 281...	12/27/2018 8:32 AM					309.1 -> 205...				Alprazolam-D5	314.1 -> 286...	6.425	979323	
Amphetamine	136.1 -> 91.1	12/27/2018 8:32 AM					136.1 -> 119...				Amphetamine-D11	147.2 -> 130...	4.790	49672	
Cocaine	304.2 -> 182...	12/27/2018 8:32 AM					304.2 -> 105...				Cocaine-D3	307.2 -> 185...	5.692	500403	
Bupropion	240.1 -> 184...	12/27/2018 8:32 AM					240.1 -> 131...				Bupropion-D9	249.2 -> 185...	5.926	35071	
Carisoprodol	261.2 -> 176...	12/27/2018 8:32 AM	6.067	1586	301.35		261.2 -> 55.3	368...	0.61		Carisoprodol-D7	268.2 -> 183...	6.066	119624	
Citalopram	325.2 -> 109...	12/27/2018 8:32 AM					325.2 -> 262...				Citalopram-D6	331.2 -> 109...	6.054	542625	
Clonazepam	316.1 -> 269...	12/27/2018 8:32 AM					316.1 -> 213...				Clonazepam-D4	320.1 -> 217...	6.281	49130	
Codeine	300.2 -> 215...	12/27/2018 8:32 AM					300.2 -> 165...				Codeine-D6	306.2 -> 218...	5.199	131029	
Cyclobenzaprine	276.2 -> 214...	12/27/2018 8:32 AM					276.2 -> 231...				Cyclobenzaprine-D3	279.2 -> 215...	6.349	798565	
Dextromethorphan	272.2 -> 171...	12/27/2018 8:32 AM					272.2 -> 147...				Dextromethorphan-D3	275.2 -> 171...	6.065	680899	
Dextropropofol	258.2 -> 157...	12/27/2018 8:32 AM					258.2 -> 133...				Dextropropofol-D3	261.2 -> 157...	5.455	379207	
Diazepam	285.1 -> 193...	12/27/2018 8:32 AM					285.1 -> 153...				Diazepam-D5	290.1 -> 198...	6.653	432376	
Dihydrocodeine	302.2 -> 198...	12/27/2018 8:32 AM					302.2 -> 128...				Dihydrocodeine-D6	308.2 -> 202...	4.936	311732	
Diphenhydramine	256.2 -> 167...	12/27/2018 8:32 AM					256.2 -> 152...				Diphenhydramine-D3	259.2 -> 167...	6.006	14226...	
Doxylamine	271.2 -> 182...	12/27/2018 8:32 AM					271.2 -> 167...				Doxylamine-D5	276.2 -> 187...	5.636	264918	
EDDP	279.2 -> 235...	12/27/2018 8:32 AM					279.2 -> 250...				EDDP-D3	282.2 -> 235...	5.982	30441...	
Fentanyl	337.2 -> 105...	12/27/2018 8:32 AM					337.2 -> 188...				Fentanyl-D5	342.3 -> 105...	6.278	25891...	
Fluoxetine	310.1 -> 44.3	12/27/2018 8:32 AM					310.1 -> 148...				Fluoxetine-D6	316.2 -> 44.3	6.261	25148...	
Hydrocodone	300.2 -> 198...	12/27/2018 8:32 AM					300.2 -> 128...				Hydrocodone-D6	306.2 -> 202...	5.384	525335	
Hydromorphone	286.2 -> 184...	12/27/2018 8:32 AM					286.2 -> 157...				Hydromorphone-D6	292.2 -> 185...	4.778	211702	
Ketamine	238.1 -> 125...	12/27/2018 8:32 AM					238.1 -> 220...				Ketamine-D4	242.1 -> 129...	5.926	11976...	
Metoprolol	268.2 -> 116...	12/27/2018 8:32 AM					268.2 -> 56.3				Carisoprodol-D7	268.2 -> 183...	6.066	119624	
Mirtazapine	266.2 -> 195...	12/27/2018 8:32 AM					266.2 -> 72.3				Carisoprodol-D7	268.2 -> 183...	6.066	119624	
Meprobarbital	219.1 -> 158...	12/27/2018 8:32 AM					219.1 -> 97.1				Meprobarbital-D7	226.2 -> 165...	5.540	3319	
Methadone	310.2 -> 265...	12/27/2018 8:32 AM					310.2 -> 105...				Methadone-D9	319.3 -> 268...	6.281	12820...	
Methamphetamine	150.1 -> 91.1	12/27/2018 8:32 AM					150.1 -> 119...				Methamphetamine-D11	161.2 -> 97.1	4.971	421835	
Morphine	286.2 -> 201...	12/27/2018 8:32 AM					286.2 -> 165...				Morphine-D6	292.2 -> 152...	4.516	30771	
Norbuprenorphine	414.3 -> 101...	12/27/2018 8:32 AM					414.3 -> 57.3				Norbuprenorphine-D3	417.3 -> 101...	5.889	34471	
Nordiazepam	271.1 -> 140...	12/27/2018 8:32 AM					271.1 -> 208...				Nordiazepam-D5	276.1 -> 140...	6.513	155584	
Norfentanyl	233.2 -> 84.2	12/27/2018 8:32 AM					233.2 -> 55.3				Norfentanyl-D5	238.2 -> 84.2	5.314	984810	
Norhydrocodone	286.2 -> 199...	12/27/2018 8:32 AM					286.2 -> 171...				Norhydrocodone-D3	289.2 -> 202...	5.022	146386	
Noroxycodone	302.1 -> 284...	12/27/2018 8:32 AM					302.1 -> 186...				Noroxycodone-D3	305.2 -> 287...	4.937	416146	
O-desmethyl-tramadol	250.2 -> 58.3	12/27/2018 8:32 AM					250.2 -> 42.3				O-desmethyl-tramadol-...	256.2 -> 64.3	4.927	11468...	
Oxazepam	287.1 -> 240...	12/27/2018 8:32 AM					287.1 -> 268...				Oxazepam-D5	292.1 -> 246...	6.326	131125	
Oxycodone	316.2 -> 298...	12/27/2018 8:32 AM					316.2 -> 241...				Oxycodone-D6	322.2 -> 304...	5.158	404565	
Oxymorphone	302.1 -> 284...	12/27/2018 8:32 AM					302.1 -> 227...				Oxymorphone-D3	305.2 -> 287...	4.472	867703	
Phentermine	150.1 -> 65.2	12/27/2018 8:32 AM					150.1 -> 133...				Phentermine-D5	155.2 -> 96.2	5.134	536742	
Promethazine	285.1 -> 86.2	12/27/2018 8:32 AM					285.1 -> 71.3				Promethazine-D3	288.2 -> 89.2	6.409	17168...	
Quetiapine	384.2 -> 253...	12/27/2018 8:32 AM					384.2 -> 221...				Quetiapine-D8	392.2 -> 226...	6.560	759905	
Serrraline	306.1 -> 158...	12/27/2018 8:32 AM					306.1 -> 275...				Serrraline-D3	309.1 -> 275...	6.527	822750	
Temazepam	301.1 -> 255...	12/27/2018 8:32 AM					301.1 -> 283...				Temazepam-D5	306.1 -> 260...	6.488	13210...	
Tramadol	264.2 -> 58.3	12/27/2018 8:32 AM					264.2 -> 43.3				Tramadol-13C-D3	268.2 -> 58.3	5.453	25086...	
Trazodone	372.2 -> 176...	12/27/2018 8:32 AM					372.2 -> 148...				Trazodone-D6	378.2 -> 182...	6.784	22792...	

5

Compound Method	p1 negative_reinject	p1 negative_reinject Results	Qualifier 1 M...	Qualifier 1 Re...	ISTD Method	ISTD Results								
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Qualifier 1 M...	Area	S/N	MI	Name	Transition	RT	Resp.
Venlafaxine	278.2 -> 58.3	12/27/2018 8:32 AM					<input type="checkbox"/>	278.2 -> 260...			Venlafaxine-D6	284.2 -> 64.3	5.778	848825
Zolpidem	308.2 -> 235...	12/27/2018 8:32 AM					<input type="checkbox"/>	308.2 -> 263...			Zolpidem-D6	314.2 -> 235...	6.322	35418...
Mirtazapine	399.2 -> 174...	12/27/2018 8:32 AM					<input type="checkbox"/>	399.2 -> 238...			Quetiapine-D8	392.2 -> 226...	6.560	759905

15

Compound Method			p2 cal 1b			p2 cal 1b 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.						
7-amino-flunitrazepam	284.1 -> 135...	12/26/2018 1:12 PM	5.663	91998	313.26	284.1 -> 93.2	7549	57.51	7-amino-flunitrazepam-D7	291.2 -> 138...	5.643	508472								
alpha-hydroxymidazol...	342.1 -> 324...	12/26/2018 1:12 PM	6.407	91367	406.55	342.1 -> 203...	65264	103.18	alpha-hydroxymidazola...	346.1 -> 328...	6.406	948238								
Amtripyline	278.2 -> 91.2	12/26/2018 1:12 PM	6.417	547968	Infinity	278.2 -> 105...	1901...	Infinity	Amtripyline-D3	281.2 -> 91.2	6.395	1353707								
Acetyl Fentanyl	333.2 -> 105...	12/26/2018 1:12 PM	6.065	43846	160.34	323.2 -> 188...	16426	34.03	Acetyl Fentanyl-D5	328.2 -> 105...	6.064	2744067								
Acetyl Norfentanyl	219.1 -> 84.2	12/26/2018 1:12 PM	4.837	16932	55.78	219.1 -> 56.3	7480	414.76	Acetyl Norfentanyl-D5	224.2 -> 84.2	4.836	974546								
Carbamazepine	237.1 -> 193...	12/26/2018 1:12 PM	6.079	94532	185.11	237.1 -> 194...	5332	269.98	Carbamazepine-D5	243.1 -> 200...	6.078	3450067								
Chlordiazepoxide	300.1 -> 227...	12/26/2018 1:12 PM	6.555	61643	278.16...	300.1 -> 282...	91219	21.01	Chlordiazepoxide-D5	305.1 -> 286...	6.554	1171860								
Sulfentanil	387.2 -> 238...	12/26/2018 1:12 PM	6.648	55241	11978...	387.2 -> 111...	37523	10178...	Sulfentanil-D5	392.2 -> 238...	6.626	3931776								
Desipramine	267.2 -> 72.3	12/26/2018 1:12 PM	6.317	712736	216.38	267.2 -> 44.3	3166...	97.53	Desipramine-D3	270.2 -> 75.3	6.317	4150387								
Doxepin	280.2 -> 107...	12/26/2018 1:12 PM	6.172	178584	376.11...	280.2 -> 77.2	77818	Infinity	Doxepin-D3	283.2 -> 107...	6.151	677789								
Estazolam	295.1 -> 267...	12/26/2018 1:12 PM	6.353	230711	15058...	295.1 -> 205...	1122...	421.91	Estazolam-D5	300.1 -> 272...	6.331	1499407								
Flunitrazepam	314.1 -> 268...	12/26/2018 1:12 PM	6.390	201607	142.95	314.1 -> 239...	65624	86.77	Flunitrazepam-D7	321.1 -> 245...	6.370	82585								
Furazepam	388.2 -> 315...	12/26/2018 1:12 PM	6.283	497648	183.34	388.2 -> 317...	72462	318.59	Furazepam-D4	393.1 -> 244...	6.302	513316								
Imipramine	281.2 -> 86.2	12/26/2018 1:12 PM	6.375	775379	Infinity	281.2 -> 58.3	5023...	51.44	Imipramine-D3	284.2 -> 61.3	6.353	2958792								
Levamisole	205.1 -> 91.2	12/26/2018 1:12 PM	5.308	122475	25.62	205.1 -> 178...	1179...	35.14	MDMA-D6	200.2 -> 166...	5.105	79476								
Maprotiline	278.2 -> 91.2	12/26/2018 1:12 PM	5.970	369543	712.24	278.2 -> 117...	2286	3.76	Meperidine-D4	252.2 -> 224...	5.689	825605								
MDA	180.1 -> 163...	12/26/2018 1:12 PM	5.006	138809	56.22	180.1 -> 105...	57211	14.28	MDA-D5	185.1 -> 168...	4.985	445425								
MDEA	208.1 -> 163...	12/26/2018 1:12 PM	5.267	274176	Infinity	208.1 -> 105...	1314...	Infinity	MDEA-D6	214.2 -> 166...	5.267	999393								
MDMA	194.1 -> 163...	12/26/2018 1:12 PM	5.126	282064	135.62	194.1 -> 105...	1279...	37.73	MDMA-D6	200.2 -> 166...	5.105	79476								
Meperidine	248.2 -> 220...	12/26/2018 1:12 PM	5.689	171343	433.79	248.2 -> 174...	1168...	50.90	Meperidine-D4	252.2 -> 224...	5.689	825605								
Methylphenidate	234.2 -> 84.2	12/26/2018 1:12 PM	5.549	684879	Infinity	234.2 -> 56.3	1374...	Infinity	Meperidine-D4	252.2 -> 224...	5.689	825605								
Mildazolam	326.1 -> 223...	12/26/2018 1:12 PM	6.571	79261	167.06	326.1 -> 249...	1047...	227.33	Mildazolam-D4	330.1 -> 295...	6.570	1223838								
Normeperidine	234.1 -> 42.3	12/26/2018 1:12 PM	5.591	147627	37.11	234.1 -> 160...	63144	150.56	Normeperidine-D4	238.2 -> 164...	5.590	863904								
Nortriptyline	264.2 -> 91.2	12/26/2018 1:12 PM	6.358	196619	135.57	264.2 -> 233...	1034...	59.40	Nortriptyline-D3	267.2 -> 233...	6.357	795042								
Phenazepam	349.0 -> 206...	12/26/2018 1:12 PM	6.467	74882	86.96	349.0 -> 183...	47002	123.62	Phenazepam-D4	353.0 -> 183...	6.446	339694								
Phencyclidine	244.2 -> 86.2	12/26/2018 1:12 PM	5.852	170308	46371...	244.2 -> 91.1	2137...	93.62	Phencyclidine-D5	249.2 -> 86.2	5.851	1208129								
Phenytoln	253.1 -> 104...	12/26/2018 1:12 PM	5.994	5591	10.56	253.1 -> 182...	1510	Infinity	Phenytoln-D10	263.2 -> 192...	5.973	28419								
Pseudoephedrine	166.1 -> 148...	12/26/2018 1:12 PM	4.584	3470993	157.56	166.1 -> 133...	7112...	355.88	Pseudoephedrine-D3	169.1 -> 151...	4.584	142607...								
Tapentadol	222.2 -> 107...	12/26/2018 1:12 PM	5.428	332894	129.66	222.2 -> 121...	1444...	79.23	Tapentadol-D3	225.2 -> 107...	5.428	1283493								
Zaleplon	306.1 -> 236...	12/26/2018 1:12 PM	6.168	228082	63943...	306.1 -> 264...	2434...	56601...	Zaleplon-D4	310.2 -> 240...	6.168	806837								
Zopiclone	389.1 -> 244...	12/26/2018 1:12 PM	6.303	116814	26127...	389.1 -> 216...	47159	454.00	Zopiclone-D4	393.1 -> 244...	6.302	513316								

Compound Method			p2 external control	p2 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	Name	Transition	RT	Resp.			
7-aminoflunitrazepam	284.1 -> 135...	12/26/2018 2:06 P...					284.1 -> 93.2				7-aminoflunitrazepam-...	291.2 -> 138...	5.622	821133			
alpha-hydroxymidazola...	342.1 -> 324...	12/26/2018 2:06 P...					342.1 -> 203...				alpha-hydroxymidazola...	346.1 -> 328...	6.406	1023613			
Amtripyline	278.2 -> 91.2	12/26/2018 2:06 P...					278.2 -> 105...				Amtripyline-D3	281.2 -> 91.2	6.415	1312294			
Acetyl Fentanyl	323.2 -> 105...	12/26/2018 2:06 P...					323.2 -> 188...				Acetyl Fentanyl-D5	328.2 -> 105...	6.064	2590193			
Acetyl Norfentanyl	219.1 -> 84.2	12/26/2018 2:06 P...					219.1 -> 56.3				Acetyl Norfentanyl-D5	224.2 -> 84.2	4.836	902488			
Carbamazepine	237.1 -> 193...	12/26/2018 2:06 P...					237.1 -> 194...				Carbamazepine-13C6	243.1 -> 200...	6.078	3124252			
Chlordiazepoxide	300.1 -> 227...	12/26/2018 2:06 P...					300.1 -> 282...				Chlordiazepoxide-D5	305.1 -> 286...	6.554	1267238			
Sufentanil	387.2 -> 238...	12/26/2018 2:06 P...					387.2 -> 111...				Sufentanil-D5	392.2 -> 238...	6.626	3404815			
Desipramine	267.2 -> 72.3	12/26/2018 2:06 P...					267.2 -> 44.3				Desipramine-D3	270.2 -> 75.3	6.337	3917670			
Doxepin	280.2 -> 107...	12/26/2018 2:06 P...					280.2 -> 77.2				Doxepin-D3	283.2 -> 107...	6.151	641852			
Estazolam	295.1 -> 267...	12/26/2018 2:06 P...					295.1 -> 205...				Estazolam-D5	300.1 -> 272...	6.331	1580760			
Flunitrazepam	314.1 -> 268...	12/26/2018 2:06 P...					314.1 -> 239...				Flunitrazepam-D7	321.1 -> 245...	6.370	100465			
Flurazepam	388.2 -> 315...	12/26/2018 2:06 P...					388.2 -> 317...				Zopiclone-D4	393.1 -> 244...	6.302	347064			
Imipramine	281.2 -> 86.2	12/26/2018 2:06 P...					281.2 -> 58.3				Imipramine-D3	284.2 -> 61.3	6.374	2794151			
Levamisole	205.1 -> 91.2	12/26/2018 2:06 P...					205.1 -> 178...				MDMA-D6	200.2 -> 166...	5.105	75875			
Maprotiline	278.2 -> 91.2	12/26/2018 2:06 P...					278.2 -> 117...				Meprotiline-D4	252.2 -> 224...	5.689	747211			
MDA	180.1 -> 163...	12/26/2018 2:06 P...					180.1 -> 105...				MDA-D5	185.1 -> 168...	5.005	480442			
MDEA	208.1 -> 163...	12/26/2018 2:06 P...					208.1 -> 105...				MDEA-D6	214.2 -> 166...	5.267	879380			
MDMA	194.1 -> 163...	12/26/2018 2:06 P...					194.1 -> 105...				MDMA-D6	200.2 -> 166...	5.105	75875			
Mepertidine	248.2 -> 220...	12/26/2018 2:06 P...					248.2 -> 174...	11877...	2672...		Mepertidine-D4	252.2 -> 224...	5.689	747211			
Methylphenidate	234.2 -> 84.2	12/26/2018 2:06 P...					234.2 -> 56.3				Mepertidine-D4	252.2 -> 224...	5.689	747211			
Midazolam	326.1 -> 223...	12/26/2018 2:06 P...					326.1 -> 249...				Midazolam-D4	330.1 -> 295...	6.570	1108808			
Normeperidine	234.1 -> 42.3	12/26/2018 2:06 P...					234.1 -> 160...				Normeperidine-D4	238.2 -> 164...	5.590	744573			
Nortriptyline	264.2 -> 91.2	12/26/2018 2:06 P...					264.2 -> 233...				Nortriptyline-D3	267.2 -> 233...	6.357	820069			
Phenazepam	349.0 -> 206...	12/26/2018 2:06 P...					349.0 -> 183...				Phenazepam-D4	353.0 -> 183...	6.446	384423			
Phencyclidine	244.2 -> 86.2	12/26/2018 2:06 P...					244.2 -> 91.1				Phencyclidine-D5	249.2 -> 86.2	5.851	1185729			
Phenyloln	253.1 -> 104...	12/26/2018 2:06 P...					253.1 -> 182...				Phenyloln-D10	263.2 -> 192...	5.973	30128			
Pseudoephedrine	166.1 -> 148...	12/26/2018 2:06 P...					166.1 -> 133...				Pseudoephedrine-D3	169.1 -> 151...	4.584	15092057			
Tapentadol	222.2 -> 107...	12/26/2018 2:06 P...					222.2 -> 121...				Tapentadol-D3	225.2 -> 107...	5.428	1122675			
Zaleplon	306.1 -> 236...	12/26/2018 2:06 P...					306.1 -> 264...				Zaleplon-D4	310.2 -> 240...	6.168	771707			
Zopiclone	389.1 -> 244...	12/26/2018 2:06 P...					389.1 -> 216...				Zopiclone-D4	393.1 -> 244...	6.302	347064			

15

Compound Method				p2 negative				p2 negative Results				ISTD Method				ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Qualifier 1 M..	Transition	Area	S/N	MI	Qualifier 1 R...	Name	Transition	RT	Resp.	
7-aminoflunitrazepam	284.1 -> 135...	12/26/2018 1:46 PM					284.1 -> 93.2					7-aminoflunitrazepam-D7	291.2 -> 138...	5.643	443754		
alpha-hydroxymidazol...	342.1 -> 324...	12/26/2018 1:46 PM					342.1 -> 203...					alpha-hydroxymidazolam-...	346.1 -> 328...	6.406	1009044		
Amiripryline	278.2 -> 91.2	12/26/2018 1:46 PM					278.2 -> 105...					Amiripryline-D3	281.2 -> 91.2	6.415	1257959		
Acetyl Norfentanyl	323.2 -> 105...	12/26/2018 1:46 PM					323.2 -> 188...					Acetyl Norfentanyl-D5	328.2 -> 105...	6.064	2470326		
Acetyl Norfentanyl	219.1 -> 84.2	12/26/2018 1:46 PM					219.1 -> 56.3					Acetyl Norfentanyl-D5	224.2 -> 84.2	4.816	818918		
Carbamazepine	237.1 -> 193...	12/26/2018 1:46 PM					237.1 -> 194...					Carbamazepine-13C6	243.1 -> 200...	6.078	3112991		
Chlordiazepoxide	300.1 -> 227...	12/26/2018 1:46 PM					300.1 -> 282...					Chlordiazepoxide-D5	305.1 -> 286...	6.554	1317298		
Sufentanil	387.2 -> 238...	12/26/2018 1:46 PM					387.2 -> 111...					Sufentanil-D5	392.2 -> 238...	6.626	3214246		
Desipramine	267.2 -> 72.3	12/26/2018 1:46 PM					267.2 -> 44.3					Desipramine-D3	270.2 -> 75.3	6.317	3688691		
Doxepin	280.2 -> 107...	12/26/2018 1:46 PM					280.2 -> 77.2					Doxepin-D3	283.2 -> 107...	6.151	584089		
Estazolam	295.1 -> 267...	12/26/2018 1:46 PM					295.1 -> 205...					Estazolam-D5	300.1 -> 272...	6.331	1602955		
Flunitrazepam	314.1 -> 268...	12/26/2018 1:46 PM					314.1 -> 239...					Flunitrazepam-D7	321.1 -> 245...	6.390	94227		
Flurazepam	388.2 -> 315...	12/26/2018 1:46 PM					388.2 -> 317...					Zopiclone-D4	393.1 -> 244...	6.302	383821		
Imipramine	281.2 -> 86.2	12/26/2018 1:46 PM					281.2 -> 58.3					Imipramine-D3	284.2 -> 61.3	6.353	2607050		
Levamisole	205.1 -> 91.2	12/26/2018 1:46 PM					205.1 -> 178...					MDMA-D6	200.2 -> 166...	5.105	68019		
Maprotiline	278.2 -> 91.2	12/26/2018 1:46 PM					278.2 -> 117...					MDMA-D5	252.2 -> 224...	5.668	753430		
MDA	180.1 -> 163...	12/26/2018 1:46 PM					180.1 -> 105...					MDA-D5	185.1 -> 168...	4.985	436564		
MDEA	208.1 -> 163...	12/26/2018 1:46 PM					208.1 -> 105...					MDEA-D6	214.2 -> 166...	5.245	831433		
MDMA	194.1 -> 163...	12/26/2018 1:46 PM					194.1 -> 105...					MDMA-D6	200.2 -> 166...	5.105	68019		
Meperidine	248.2 -> 220...	12/26/2018 1:46 PM					248.2 -> 174...					Meperidine-D4	252.2 -> 224...	5.668	753430		
Methylphenidate	234.2 -> 84.2	12/26/2018 1:46 PM					234.2 -> 56.3					Meperidine-D4	252.2 -> 224...	5.668	753430		
Midazolam	326.1 -> 223...	12/26/2018 1:46 PM					326.1 -> 249...					Midazolam-D4	330.1 -> 295...	6.570	1153177		
Normeperidine	234.1 -> 42.3	12/26/2018 1:46 PM					234.1 -> 160...					Normeperidine-D4	238.2 -> 164...	5.590	699968		
Nortriptyline	264.2 -> 91.2	12/26/2018 1:46 PM					264.2 -> 233...					Nortriptyline-D3	267.2 -> 233...	6.357	737655		
Phenazepam	349.0 -> 206...	12/26/2018 1:46 PM					349.0 -> 183...					Phenazepam-D4	353.0 -> 183...	6.446	401591		
Phencyclidine	244.2 -> 86.2	12/26/2018 1:46 PM					244.2 -> 91.1					Phencyclidine-D5	249.2 -> 86.2	5.851	1116905		
Phenylethylamine	253.1 -> 104...	12/26/2018 1:46 PM					253.1 -> 182...					Phenylethylamine-D10	263.2 -> 192...	5.973	31679		
Pseudoephedrine	166.1 -> 148...	12/26/2018 1:46 PM					166.1 -> 133...					Pseudoephedrine-D3	169.1 -> 151...	4.563	134950...		
Tapentadol	222.2 -> 107...	12/26/2018 1:46 PM					222.2 -> 121...					Tapentadol-D3	225.2 -> 107...	5.428	1129837		
Zaleplon	306.1 -> 236...	12/26/2018 1:46 PM					306.1 -> 264...					Zaleplon-D4	310.2 -> 240...	6.168	774275		
Zopiclone	389.1 -> 244...	12/26/2018 1:46 PM					389.1 -> 216...					Zopiclone-D4	393.1 -> 244...	6.302	383821		