reviewed 6/7/18 amn

6/4/2018

Worklist: 2431

LAB CASE	ITEM	TASK ID	DESCRIPTION	
M2018-1755	1	117504	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-1986	1	116348	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-2248	1	114709	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-2300	1	114958	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-2361	1	115094	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-2495	7	116069	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-2571	3	116185	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-2617	1	116103	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-2628	2	116188	AM 25 Blood Multi-Drug Screen by LC-QQQ	
M2018-2670	2	116710	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1475	1	115883	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1491	1	115955	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1494	1	116072	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1516	2	116140	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1531	1	116325	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1550	1	116488	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1551	1	116491	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1563	1	116798	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1567	1	116809	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1575	1	116822	AM 25 Blood Multi-Drug Screen by LC-QQQ	
P2018-1576	1	116825	AM 25 Blood Multi-Drug Screen by LC-QQQ	

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

Extraction Date: <u>06/01/18</u>   Analyst: <u>Sarah Pickle</u>

Plate lot#: 0515207   Plate Expiration: 10/18/18

Mobile phase A: 10mM Amm Form   **Mobile phase B:** 0.1% Formic Acid in MeOH
   0.5M Ammonium Hydroxide   Ethyl Acetate   LC Methanol
Blank Blood Lot: 361331-1   **Column**: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)
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: 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 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 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: *060118 MDS SP Worklist 2431*
       Worklist path: *060118 MDS P1 SP, 060118 MDS P2 SP*

☒ 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: Sarah Pickle
Extraction Date: 06/01/18
Worklist Number: 2431

Reagent	Lot Number	Expiration Date	Date in Service	Date Out of Service	Initials
ToxBox Benzo/Opiate Screening Plate	0515207	10/18/18			
Negative Blood	361331-1		05/25/18		
Methanol External Control Solution	042618	04/26/19	04/26/18		
Blood External Control Solution	WS042618	04/26/19	04/26/18		
0.5M Ammonium Hydroxide	032918	9/29/18	3/29/18		
Formic Acid (LCMS Grade)	095180B		11/15/17		
Water (LCMS Grade)	177528		03/05/18		
Methanol (LCMS Grade)	177145		04/11/18		
Ammonium Formate (LCMS Grade)	A0287238		1/30/17		
Ammonium Hydroxide (ACS grade or better)	053200		8/3/07		
Ethyl Acetate(ACS grade or better)	100362		6/26/17		
10mM Ammonium Formate in LCMS Water (Mobile Phase A)	050818		05/08/18		
0.1% Formic Acid in LCMS Methanol (Mobile Phase B)	050718		05/07/18		
Needle Rinse--75% LCMS MeOH in LCMS Water	052918		05/29/18		

Methanol External Control Solution (Lot: 042618)
100 ul of 1mg/mL stock was added to each drug to 9600 ul of LC MeOH.

Component	Source	Source Lot Number	Expiration Date
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: 042618)

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

Component	Source	Source Lot Number
Negative Blood	Hemostat	361331-2
Methanol External Control Solution		042618
Prepared:	04/26/18	
Prepared by:	Tamara Salazar	
Expires:	04/26/19	

0.5M Ammonium Hydroxide (Lot: 032918)

Component	Source	Source Lot Number
Ammonium Hydroxide (ACS grade or better)	Fisher	053200
DI Water	-	-
Prepared:	03/29/18	
Prepared By:	Tamara Salazar	
Expires:	09/29/18	

10mM Ammonium Formate in LCMS Water (Mobile Phase A) (Lot: 050818)

Component	Source	Source Lot Number
Ammonium Formate	Arcos Organics	A0287238
LCMS Water	Fisher	177528
Prepared:	05/08/18	
Prepared By:	Tamara Salazar	

0.1% Formic Acid in LCMS Methanol (Mobile Phase B) (Lot: 050718)

Component	Source	Source Lot Number
Formic Acid	Fisher	095180B
MeOH (LCMS Grade)	Fisher	177145
Prepared:	05/07/18	
Prepared By:	Sarah Pickle	

Needle Rinse (75% LCMS MeOH in LCMS Water)(Lot: 052918)

Component	Source	Source Lot Number
MeOH (LCMS Grade)	Fisher	177145
Water (LCMS Grade)	Fisher	177528
Prepared:	05/29/18	
Prepared By:	Sarah Pickle	

Name (Compound Method)	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Qualifier 1 Transition	Qualifier 1 S/N	Qualifier 1 Area	MI	ISTD Name	ISTD Transition	ISTD RT	ISTD Resp.
6-MAM	328.2 -> 165...	6/1/2018 11:15 AM	5.224	2851	441.29		328.2 -> 211	583.85	1571		6-MAM-D6	334.2 -> 165...	5.183	147828
7-aminoclonazepam	286.1 -> 121...	6/1/2018 11:15 AM	5.395	77181	149.48		286.1 -> 222	3730.07	24244		7-Aminoclonazepam-D4	290.1 -> 121...	5.415	198373
Acetyl Fentanyl	323.2 -> 105...	6/1/2018 11:15 AM	5.856	20232	24.83		323.2 -> 188...	41.41	9008		Acetyl Fentanyl-D5	328.2 -> 105...	5.834	25589...
Acetyl Norfentanyl	219.1 -> 84.2	6/1/2018 11:15 AM	4.893	20271	4424.48		219.1 -> 56.3	1309.38	4957		Acetyl Norfentanyl-D5	224.2 -> 84.2	4.893	10532...
a-hydroxyalprazolam	325.1 -> 297...	6/1/2018 11:15 AM	6.180	14275	2114.01		325.1 -> 215...	485.46	2751		a-hydroxyalprazolam-D5	330.1 -> 302...	6.159	91270
alpha-PVP	232.2 -> 91.0	6/1/2018 11:15 AM	5.545	179926	153.58		232.2 -> 77.1	1079.39	1142...		alpha-PVP-d8	240.2 -> 91.1	5.543	12172...
Alprazolam	309.1 -> 281...	6/1/2018 11:15 AM	6.266	181168	34880.01		309.1 -> 205...	10400...	66187		Alprazolam-D5	314.1 -> 286...	6.264	789510
Amphetamine	136.1 -> 91.1	6/1/2018 11:15 AM	4.855	294360	Infinity		136.1 -> 119...	118.92	74387		Amphetamine-D11	147.2 -> 130...	4.814	14496
Bupropion	240.1 -> 184...	6/1/2018 11:15 AM	5.747	180029	30028.61		240.1 -> 131...	Infinity	2270...		Bupropion-D9	249.2 -> 185...	5.726	308666
Carisoprodol	261.2 -> 176...	6/1/2018 11:15 AM	5.969	13112	159.07		261.2 -> 55.3	Infinity	84369		Carisoprodol-D7	268.2 -> 183...	5.908	126495
Citalopram	325.2 -> 109...	6/1/2018 11:15 AM	5.936	380074	315.51		325.2 -> 262...	212.93	99983		Citalopram-D6	331.2 -> 109...	5.935	10710...
Clonazepam	316.1 -> 269...	6/1/2018 11:15 AM	6.102	33577	7589.08		316.1 -> 213...	35.68	6917		Clonazepam-D4	320.1 -> 217...	6.101	34576
Codeine	300.2 -> 215...	6/1/2018 11:15 AM	5.188	27443	95.79		300.2 -> 165...	157.31	19815		Codeine-D6	306.2 -> 218...	5.105	115611
Cyclobenzaprine	276.2 -> 214...	6/1/2018 11:15 AM	6.211	170116	354.72		276.2 -> 231...	2768.86	69995		Cyclobenzaprine-D3	279.2 -> 215...	6.210	877764
Dextromethorphan	272.2 -> 171...	6/1/2018 11:15 AM	5.988	189102	93.88		272.2 -> 147...	36217...	1946...		Dextromethorphan-D3	275.2 -> 171...	5.988	549189
Dextrorphan	258.2 -> 157...	6/1/2018 11:15 AM	5.420	72474	20777.79		258.2 -> 133...	601.99	89224		Dextrorphan-D3	261.2 -> 157...	5.419	436004
Diazepam	285.1 -> 193...	6/1/2018 11:15 AM	6.492	81782	Infinity		285.1 -> 153...	Infinity	1414...		Diazepam-D5	290.1 -> 198...	6.491	368880
Dihydrocodeine	302.2 -> 198...	6/1/2018 11:15 AM	4.942	43573	51704.38		302.2 -> 128...	190.43	45053		Dihydrocodeine-D6	308.2 -> 202...	4.921	156592
Diphenhydramine	256.2 -> 167...	6/1/2018 11:15 AM	5.909	788237	Infinity		256.2 -> 152...	42.69	1648...		Diphenhydramine-D3	259.2 -> 167...	5.909	28310...
Doxylamine	271.2 -> 182...	6/1/2018 11:15 AM	5.602	258429	81549.89		271.2 -> 167...	Infinity	4194...		Doxylamine-D5	276.2 -> 187...	5.580	604698
EDDP	279.2 -> 235...	6/1/2018 11:15 AM	5.946	677176	986.73		279.2 -> 250...	241.01	3532...		EDDP-D3	282.2 -> 235...	5.946	287201
Fentanyl	337.2 -> 105...	6/1/2018 11:15 AM	6.036	26752	5495.48		337.2 -> 188...	832.91	15789		Fentanyl-D5	342.3 -> 105...	6.036	21570...
Fluoxetine	310.1 -> 44.3	6/1/2018 11:15 AM	6.144	757446	6214.41		310.1 -> 148...	55.46	15928		Fluoxetine-D6	316.2 -> 44.3	6.142	30788...
Hydrocodone	300.2 -> 198...	6/1/2018 11:15 AM	5.372	51188	Infinity		300.2 -> 128...	23151...	31016		Hydrocodone-D6	306.2 -> 202...	5.330	443272
Hydromorphone	286.2 -> 184...	6/1/2018 11:15 AM	4.741	54062	Infinity		286.2 -> 157...	39.31	66733		Hydromorphone-D6	292.2 -> 185...	4.680	143219
Ketamine	238.1 -> 125...	6/1/2018 11:15 AM	5.626	314862	484.11		238.1 -> 220...	43.03	65200		Ketamine-D4	242.1 -> 129...	5.625	12122...
Meprobamate	219.1 -> 158...	6/1/2018 11:15 AM	5.443	28418	99.40		219.1 -> 97.1	1426.94	7761		Meprobamate-D7	226.2 -> 165...	5.464	9978
Methadone	310.2 -> 265...	6/1/2018 11:15 AM	6.244	510769	408.20		310.2 -> 105...	Infinity	3253...		Methadone-D9	319.3 -> 268...	6.243	20403...
Methamphetamine	150.1 -> 91.1	6/1/2018 11:15 AM	5.016	210047	Infinity		150.1 -> 119...	Infinity	36046		Methamphetamine-D11	161.2 -> 97.1	4.975	256403
Morphine	286.2 -> 201...	6/1/2018 11:15 AM	4.458	13681	5499.35		286.2 -> 165...	39.36	11413		Morphine-D6	292.2 -> 152...	4.377	22146
Naloxone	328.2 -> 309...	6/1/2018 11:15 AM	5.509	95296	Infinity		328.2 -> 211...	40.61	16776		Naloxone-D5	333.2 -> 315...	5.488	205307
Naltrexol	344.2 -> 326...	6/1/2018 11:15 AM	5.039	252127	Infinity		344.2 -> 308...	10571...	56749		Naltrexol-D3	347.2 -> 329...	5.018	335904
Naltrexone	342.2 -> 324...	6/1/2018 11:15 AM	5.264	63416	158.57		342.2 -> 55.3	218.21	83223		Naltrexone-D3	345.2 -> 327...	5.222	840048
Norbuprenorphine	414.3 -> 101...	6/1/2018 11:15 AM	5.749	6202	50.60		414.3 -> 57.3	703.13	7909		Norbuprenorphine-D3	417.3 -> 101...	5.749	12917
Nordiazepam	271.1 -> 140...	6/1/2018 11:15 AM	6.334	58047	202.89		271.1 -> 208...	Infinity	20039		Nordiazepam-D5	276.1 -> 140...	6.333	151117
Norfentanyl	233.2 -> 84.2	6/1/2018 11:15 AM	5.340	358454	86309.97		233.2 -> 55.3	386.39	1334...		Norfentanyl-D5	238.2 -> 84.2	5.320	15922...
Norhydrocodone	286.2 -> 199...	6/1/2018 11:15 AM	5.005	7560	1263.54		286.2 -> 171...	11.51	5456		Norhydrocodone-D3	289.2 -> 202...	5.005	151784
Noroxycodone	302.1 -> 284...	6/1/2018 11:15 AM	4.922	14576	9.41		302.1 -> 186...	22.94	23181		Noroxycodone-D3	305.2 -> 287...	4.921	194669
O-desmethyl-tramadol	250.2 -> 58.3	6/1/2018 11:15 AM	4.951	638170	319.27		250.2 -> 42.3	72.84	12151		O-desmethyl-tramadol...	256.2 -> 64.3	4.931	14388...
Oxazepam	287.1 -> 240...	6/1/2018 11:15 AM	6.167	21053	41.86		287.1 -> 268...	Infinity	18577		Oxazepam-D5	292.1 -> 246...	6.147	122526
Oxycodone	316.2 -> 298...	6/1/2018 11:15 AM	5.124	205942	180.08		316.2 -> 241...	34.46	41631		Oxycodone-D6	322.2 -> 304...	5.083	398019
Oxymorphone	302.1 -> 284...	6/1/2018 11:15 AM	4.395	201240	Infinity		302.1 -> 227...	11368...	27834		Oxymorphone-D3	305.2 -> 287...	4.355	10231...
Phentermine	150.1 -> 65.2	6/1/2018 11:15 AM	5.159	41931	Infinity		150.1 -> 133...	Infinity	2485...	✓	Phentermine-D5	155.1 -> 96.2	5.138	500141
Promethazine	285.1 -> 86.2	6/1/2018 11:15 AM	6.249	580829	161107...		285.1 -> 71.3	268.49	1301...		Promethazine-D3	288.2 -> 89.2	6.228	23134...
Quetiapine	384.2 -> 253...	6/1/2018 11:15 AM	6.339	614252	260439...		384.2 -> 221...	51461...	2532...		Quetiapine-D8	392.2 -> 226...	6.297	567906
Sertraline	306.1 -> 158...	6/1/2018 11:15 AM	6.429	249555	917.90		306.1 -> 275...	232.44	1304...		Sertraline-D3	309.1 -> 275...	6.428	909575
Sufentanil	387.2 -> 238...	6/1/2018 11:15 AM	6.379	23262	63.24		387.2 -> 111...	5466.29	27596		Sufentanil-D5	392.2 -> 238...	6.358	884562
Temazepam	301.1 -> 255...	6/1/2018 11:15 AM	6.308	186245	Infinity		301.1 -> 283...	Infinity	68382		Temazepam-D5	306.1 -> 260...	6.308	11221...

| Compound Method | | pl cal ia | | | | | 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.
Tramadol	264.2 -> 58.3	6/1/2018 11:15 AM	5.439	769393	Infinity		264.2 -> 43.3	9422	39.58		Tramadol-13C-D3	268.2 -> 58.3	5.439	29929...
Trazodone	372.2 -> 176...	6/1/2018 11:15 AM	6.502	601699	579.47		372.2 -> 148...	6495...	3360.40		Trazodone-D6	378.2 -> 182...	6.461	17636...
Venlafaxine	278.2 -> 58.3	6/1/2018 11:15 AM	5.702	667396	Infinity		278.2 -> 260...	40256	10542....		Venlafaxine-D6	284.2 -> 64.3	5.701	13007...
Zolpidem	308.2 -> 235...	6/1/2018 11:15 AM	6.124	605762	1201.64		308.2 -> 263...	2279...	50915...		Zolpidem-D6	314.2 -> 235...	6.122	35931...

Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Qual Transition	Area	S/N	MI	ISTD Name	ISTD Transition	RT	Resp.	MI
6-MAM	328.2 -> 165…	6/1/2018 11:35 AM					328.2 -> 211				6-MAM-D6	334 2 -> 165…	5.163	140220	
7-aminoclonazepam	286.1 -> 121…	6/1/2018 11:35 AM	5.354	149	13.09		286.1 -> 222…	284	3.06		7-Aminoclonazepam-D4	290.1 -> 121…	5.373	208291	
Acetyl Fentanyl	323.2 -> 105…	6/1/2018 11:35 AM	6.038	907	0.80		323.2 -> 188…				Acetyl Fentanyl-D5	328.2 -> 105…	5.834	25705…	
Acetyl Norfentanyl	219.1 -> 84.2	6/1/2018 11:35 AM	4.893	250	1.19		219.1 -> 56.3				Acetyl Norfentanyl-D5	224.2 -> 84.2	4.873	10694…	
a-hydroxyalprazolam	325.1 -> 297…	6/1/2018 11:35 AM	5.977	236	2.51		325.1 -> 215…				a-hydroxyalprazolam-D5	330.1 -> 302…	6.159	102638	
alpha-PVP	232.2 -> 91.0	6/1/2018 11:35 AM					232.2 -> 77.1				alpha-PVP-d8	240.2 -> 91.1	5.523	13127…	
Alprazolam	309.1 -> 281…	6/1/2018 11:35 AM	6.063	4954	54.29		309.1 -> 205…	819	2.27		Alprazolam-D5	314.1 -> 286…	6.244	818998	
Amphetamine	136.1 -> 91.1	6/1/2018 11:35 AM	4.814	29650	2.81		136.1 -> 119…	856	0.71		Amphetamine-D11	147.2 -> 130…	4.794	13257…	
Bupropion	240.1 -> 184…	6/1/2018 11:35 AM					240.1 -> 131…				Bupropion-D9	249.2 -> 185…	5.706	321532	
Carisoprodol	261.2 -> 176…	6/1/2018 11:35 AM					261.2 -> 55.3				Carisoprodol-D7	268.2 -> 183…	5.887	138104	
Citalopram	325.2 -> 109…	6/1/2018 11:35 AM	5.855	3008	0.50		325.2 -> 262…				Citalopram-D6	331.2 -> 109…	5.935	960678	
Clonazepam	316.1 -> 269…	6/1/2018 11:35 AM	6.061	1042	277.22		316.1 -> 213…	273	1.49		Clonazepam-D4	320.1 -> 217…	6.081	38635	
Codeine	300.2 -> 215…	6/1/2018 11:35 AM	5.086	574	349.68		300.2 -> 165…	274	1.00		Codeine-D6	306.2 -> 218…	5.105	114526	
Cyclobenzaprine	276.2 -> 214…	6/1/2018 11:35 AM	6.171	149	0.52		276.2 -> 231…	229	1.10		Cyclobenzaprine-D3	279.2 -> 215…	6.210	777051	
Dextromethorphan	272.2 -> 171…	6/1/2018 11:35 AM	5.988	655	80.52		272.2 -> 147…	125…	294.46		Dextromethorphan-D3	275.2 -> 171…	5.968	501590	
Dextrorphan	258.2 -> 157…	6/1/2018 11:35 AM	5.461	1680	5.88		258.2 -> 133…	455	4.48		Dextrorphan-D3	261.2 -> 157…	5.399	447598	
Diazepam	285.1 -> 193…	6/1/2018 11:35 AM	6.614	273	1.23		285.1 -> 153…	186	0.88		Diazepam-D5	290.1 -> 198…	6.491	354789	
Dihydrocodeine	302.2 -> 198…	6/1/2018 11:35 AM	4.881	99	1.64		302.2 -> 128…	389	182.77		Dihydrocodeine-D6	308.2 -> 202…	4.901	152134	
Diphenhydramine	256.2 -> 167…	6/1/2018 11:35 AM	5.889	9610	1.06		256.2 -> 152…		1.06		Diphenhydramine-D3	259.2 -> 167…	5.888	27887…	
Doxylamine	271.2 -> 182…	6/1/2018 11:35 AM	5.561	590	3.14		271.2 -> 167…	126…	1.43		Doxylamine-D5	276.2 -> 187…	5.560	620707	
EDDP	279.2 -> 235…	6/1/2018 11:35 AM	5.966	1055	5.22		279.2 -> 250…	111	2.51		EDDP-D3	282.2 -> 235…	5.946	252441	
Fentanyl	337.2 -> 105…	6/1/2018 11:35 AM	6.036	93	0.55		337.2 -> 188…	561	207.04		Fentanyl-D5	342.3 -> 105…	6.016	21008…	
Fluoxetine	310.1 -> 44.3	6/1/2018 11:35 AM	6.123	1285	441.36		310.1 -> 148…				Fluoxetine-D6	316.2 -> 44.3	6.122	30267…	
Hydrocodone	300.2 -> 198…	6/1/2018 11:35 AM	5.434	165	1.56		300.2 -> 128…				Hydrocodone-D6	306.2 -> 202…	5.330	415086	
Hydromorphone	286.2 -> 184…	6/1/2018 11:35 AM					286.2 -> 157…				Hydromorphone-D6	292.2 -> 185…	4.680	138534	
Ketamine	238.1 -> 125…	6/1/2018 11:35 AM					238.1 -> 220…				Ketamine-D4	242.1 -> 129…	5.604	12661…	
Meprobamate	219.1 -> 158…	6/1/2018 11:35 AM					219.1 -> 97.1				Meprobamate-D7	226.2 -> 165…	5.423	12370	
Methadone	310.2 -> 265…	6/1/2018 11:35 AM	6.285	332	0.27		310.2 -> 105…				Methadone-D9	319.3 -> 268…	6.223	19035…	
Methamphetamine	150.1 -> 91.1	6/1/2018 11:35 AM	5.057	69730	8.46		150.1 -> 119…				Methamphetamine-D11	161.2 -> 97.1	4.975	284744	
Morphine	286.2 -> 201…	6/1/2018 11:35 AM	4.438	479	2.61		286.2 -> 165…				Morphine-D6	292.2 -> 152…	4.397	21822	
Naloxone	328.2 -> 309…	6/1/2018 11:35 AM	5.631	108	1.20		328.2 -> 211…				Naloxone-D5	333.2 -> 315…	5.488	217201	
Naltrexol	344.2 -> 326…	6/1/2018 11:35 AM	5.222	17651	34.86		344.2 -> 308…				Naltrexol-D3	347.2 -> 329…	4.998	322184	
Naltrexone	342.2 -> 324…	6/1/2018 11:35 AM					342.2 -> 55.3				Naltrexone-D3	345.2 -> 327…	5.222	801902	
Norbuprenorphine	414.3 -> 101…	6/1/2018 11:35 AM					414.3 -> 57.3				Norbuprenorphine-D3	417.3 -> 101…	5.749	13149	
Nordiazepam	271.1 -> 140…	6/1/2018 11:35 AM	6.334	328	233.61		271.1 -> 208…				Nordiazepam-D5	276.1 -> 140…	6.333	159145	
Norfentanyl	233.2 -> 84.2	6/1/2018 11:35 AM	5.361	55	15.43		233.2 -> 55.3	822…	2458…		Norfentanyl-D5	238.2 -> 84.2	5.320	16541…	
Norhydrocodone	286.2 -> 199…	6/1/2018 11:35 AM					286.2 -> 171…				Norhydrocodone-D3	289.2 -> 202…	4.985	161651	
Noroxycodone	302.1 -> 284…	6/1/2018 11:35 AM					302.1 -> 186…				Noroxycodone-D3	305.2 -> 287…	4.901	192867	
O-desmethyl-tramadol	250.2 -> 58.3	6/1/2018 11:35 AM	4.991	48486	23.88		250.2 -> 42.3	483	2.34		O-desmethyl-tramadol…	256.2 -> 64.3	4.910	13155…	
Oxazepam	287.1 -> 240…	6/1/2018 11:35 AM	5.924	1562	1.36		287.1 -> 268…				Oxazepam-D5	292.1 -> 246…	6.147	127287	
Oxycodone	316.2 -> 298…	6/1/2018 11:35 AM	5.104	966	1.02		316.2 -> 241…				Oxycodone-D6	322.2 -> 304…	5.063	398580	
Oxymorphone	302.1 -> 284…	6/1/2018 11:35 AM	4.456	683	205.80		302.1 -> 227…				Oxymorphone-D3	305.2 -> 287…	4.355	10047…	
Phentermine	150.1 -> 65.2	6/1/2018 11:35 AM					150.1 -> 133…				Phentermine-D5	155.2 -> 96.2	5.138	524008	
Promethazine	285.1 -> 86.2	6/1/2018 11:35 AM	6.249	1316	0.57		285.1 -> 71.3	855	1.10		Promethazine-D3	288.2 -> 89.2	6.228	21848…	
Quetiapine	384.2 -> 253…	6/1/2018 11:35 AM	6.339	754	3.33		384.2 -> 221…				Quetiapine-D8	392.2 -> 226…	6.297	549805	
Sertraline	306.1 -> 158…	6/1/2018 11:35 AM	6.409	334	0.69		306.1 -> 275…				Sertraline-D3	309.1 -> 275…	6.428	920352	
Sufentanil	387.2 -> 238…	6/1/2018 11:35 AM	6.338	1850	4.90		387.2 -> 111…	630	1.96		Sufentanil-D5	392.2 -> 238…	6.358	818520	
Temazepam	301.1 -> 255…	6/1/2018 11:35 AM	6.227	1688	0.52		301.1 -> 283…				Temazepam-D5	306.1 -> 260…	6.308	11245…	

Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	RT	Resp.	MI
Tramadol	264.2 -> 58.3	6/1/2018 11:35 AM	5.419	15735	1.98		264.2 -> 43.3	317	14.85		Tramadol-13C-D3	268.2 -> 58.3	5.419	30628...	
Trazodone	372.2 -> 176...	6/1/2018 11:35 AM	6.522	2869	13.91		372.2 -> 148...				Trazodone-D6	378.2 -> 182...	6.461	16604...	
Venlafaxine	278.2 -> 58.3	6/1/2018 11:35 AM					278.2 -> 260...				Venlafaxine-D6	284.2 -> 64.3	5.681	13276...	
Zolpidem	308.2 -> 235...	6/1/2018 11:35 AM					308.2 -> 263...				Zolpidem-D6	314.2 -> 235...	6.102	35353...	

Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Qualifier Transition	Qualifier Area	Qualifier S/N	ISTD Name	ISTD Transition	ISTD RT	ISTD Resp.
6-MAM	328.2 -> 165...					328.2 -> 211...			6-MAM-D6	334.2 -> 165...	5.183	133010
7-aminoclonazepam	286.1 -> 121...	6/1/2018 11:54 AM	5.415	34	5.59	286.1 -> 222...			7-Aminoclonazepam-D4	290.1 -> 121...	5.415	212468
Acetyl Fentanyl	323.2 -> 105...	6/1/2018 11:54 AM	5.876	326	3.53	323.2 -> 188...			Acetyl Fentanyl-D5	328.2 -> 105...	5.834	23979...
Acetyl Norfentanyl	219.1 -> 84.2	6/1/2018 11:54 AM	4.934	212	2.00	219.1 -> 56.3			Acetyl Norfentanyl-D5	224.2 -> 84.2	4.893	963807
a-hydroxyalprazolam	325.1 -> 297	6/1/2018 11:54 AM	6.160	179	1.18	325.1 -> 215...			a-hydroxyalprazolam-D5	330.1 -> 302...	6.159	103467
alpha-PVP	232.2 -> 91.0	6/1/2018 11:54 AM	5.708	54	1.54	232.2 -> 77.1	586	1.19	alpha-PVP-d8	240.2 -> 91.1	5.543	11781...
Alprazolam	309.1 -> 281...	6/1/2018 11:54 AM	6.083	6281	3072.95	309.1 -> 205...	642	201.00	Alprazolam-D5	314.1 -> 286...	6.264	758707
Amphetamine	136.1 -> 91.1	6/1/2018 11:54 AM	4.814	10413	1.84	136.1 -> 119...	623	0.57	Amphetamine-D11	147.2 -> 130...	4.814	13950
Bupropion	240.1 -> 184...	6/1/2018 11:54 AM	5.666	127	0.74	240.1 -> 131...	3399	5.63	Bupropion-D9	249.2 -> 185...	5.726	302601
Carisoprodol	261.2 -> 176...					261.2 -> 55.3			Carisoprodol-D7	268.2 -> 183...	5.908	132413
Citalopram	325.2 -> 109...					325.2 -> 262...			Citalopram-D6	331.2 -> 109...	5.935	10257...
Clonazepam	316.1 -> 269.	6/1/2018 11:54 AM	6.081	477	2.74	316.1 -> 213...			Clonazepam-D4	320.1 -> 217...	6.121	36132
Codeine	300.2 -> 215...	6/1/2018 11:54 AM	5.270	191	0.36	300.2 -> 165...			Codeine-D6	306.2 -> 218...	5.125	113955
Cyclobenzaprine	276.2 -> 214...	6/1/2018 11:54 AM	6.191	698	200.34	276.2 -> 231...	113	0.96	Cyclobenzaprine-D3	279.2 -> 215...	6.210	806587
Dextromethorphan	272.2 -> 171...					272.2 -> 147...			Dextromethorphan-D3	275.2 -> 171...	5.988	485222
Dextrorphan	258.2 -> 157...	6/1/2018 11:54 AM	5.502	1852	298.40	258.2 -> 133...			Dextrorphan-D3	261.2 -> 157...	5.419	395325
Diazepam	285.1 -> 193...	6/1/2018 11:54 AM	6.492	948410	Infinity	285.1 -> 153...	14652...	17143...	Diazepam-D5	290.1 -> 198...	6.491	338747
Dihydrocodeine	302.2 -> 198...	6/1/2018 11:54 AM	5.929	3063	3.05	302.2 -> 128...	2137	0.69	Dihydrocodeine-D6	308.2 -> 202...	4.921	137564
Diphenhydramine	256.2 -> 167...	6/1/2018 11:54 AM	5.642	729	72.37	256.2 -> 152...			Diphenhydramine-D3	259.2 -> 167...	5.909	26407...
Doxylamine	271.2 -> 182...	6/1/2018 11:54 AM	5.966	549	9.04	271.2 -> 167...			Doxylamine-D5	276.2 -> 187...	5.580	543087
EDDP	279.2 -> 235...	6/1/2018 11:54 AM	6.057	139	2.31	279.2 -> 250...	153	1.57	EDDP-D3	282.2 -> 235...	5.946	261932
Fentanyl	337.2 -> 105...	6/1/2018 11:54 AM	6.144	1011	678.42	337.2 -> 188...			Fentanyl-D5	342.3 -> 105...	6.036	20398...
Fluoxetine	310.1 -> 44.3	6/1/2018 11:54 AM	5.352	122	4.64	310.1 -> 148...	205	2.11	Fluoxetine-D6	316.2 -> 44.3	6.142	28781...
Hydrocodone	300.2 -> 198...	6/1/2018 11:54 AM				300.2 -> 128...	301	70.13	Hydrocodone-D6	306.2 -> 202...	5.351	403640
Hydromorphone	286.2 -> 184...	6/1/2018 11:54 AM				286.2 -> 157...			Hydromorphone-D6	292.2 -> 185...	4.680	145087
Ketamine	238.1 -> 125...	6/1/2018 11:54 AM	5.768	485	0.39	238.1 -> 220...	1060	0.64	Ketamine-D4	242.1 -> 129...	5.625	11951...
Meprobamate	219.1 -> 158...	6/1/2018 11:54 AM	5.443	353	95.52	219.1 -> 97.1			Meprobamate-D7	226.2 -> 165...	5.464	9653
Methadone	310.2 -> 265...					310.2 -> 105...			Methadone-D9	319.3 -> 268...	6.243	17933...
Methamphetamine	150.1 -> 91.1	6/1/2018 11:54 AM	5.057	30533	20.61	150.1 -> 119...			Methamphetamine-D11	161.2 -> 97.1	4.996	271443
Morphine	286.2 -> 201...	6/1/2018 11:54 AM	4.620	459	7.43	286.2 -> 165...	53	0.67	Morphine-D6	292.2 -> 152...	4.397	26653
Naloxone	328.2 -> 309...	6/1/2018 11:54 AM	5.408	179	78.30	328.2 -> 211...			Naloxone-D5	333.2 -> 315...	5.509	200138
Naltrexol	344.2 -> 326...	6/1/2018 11:54 AM	5.243	15676	37.50	344.2 -> 308...			Naltrexol-D3	347.2 -> 329...	5.018	258826
Naltrexone	342.2 -> 324...					342.2 -> 55.3			Naltrexone-D3	345.2 -> 327...	5.222	684594
Norbuprenorphine	414.3 -> 101...					414.3 -> 57.3			Norbuprenorphine-D3	417.3 -> 101...	5.749	17297
Nordiazepam	271.1 -> 140...					271.1 -> 208...			Nordiazepam-D5	276.1 -> 140...	6.333	155579
Norfentanyl	233.2 -> 84.2					233.2 -> 55.3			Norfentanyl-D5	238.2 -> 84.2	5.340	14926...
Norhydrocodone	286.2 -> 199...	6/1/2018 11:54 AM	5.108	107	0.63	286.2 -> 171...			Norhydrocodone-D3	289.2 -> 202...	5.005	146111
Noroxycodone	302.1 -> 284...	6/1/2018 11:54 AM	4.922	535	3.51	302.1 -> 186...			Noroxycodone-D3	305.2 -> 287...	4.921	176286
O-desmethyl-tramadol	250.2 -> 58.3	6/1/2018 11:54 AM	5.032	42143	Infinity	250.2 -> 42.3	173	1.40	O-desmethyl-tramadol-...	256.2 -> 64.3	4.931	12999...
Oxazepam	287.1 -> 240...	6/1/2018 11:54 AM	6.147	220	0.75	287.1 -> 268...			Oxazepam-D5	292.1 -> 246...	6.167	126177
Oxycodone	316.2 -> 298...	6/1/2018 11:54 AM	5.144	21434...	83.49	316.2 -> 241...	416121	Infinity	Oxycodone-D6	322.2 -> 304...	5.083	351889
Oxymorphone	302.1 -> 284...	6/1/2018 11:54 AM	4.496	385	1.07	302.1 -> 227...			Oxymorphone-D3	305.2 -> 287...	4.374	951556
Phentermine	150.1 -> 65.2					150.1 -> 133...			Phentermine-D5	155.2 -> 96.2	5.138	504742
Promethazine	285.1 -> 86.2	6/1/2018 11:54 AM	6.229	787	0.62	285.1 -> 71.3	296	1.01	Promethazine-D3	288.2 -> 89.2	6.228	21807...
Quetiapine	384.2 -> 253...	6/1/2018 11:54 AM	6.400	1414	2.57	384.2 -> 221...			Quetiapine-D8	392.2 -> 226...	6.318	510952
Sertraline	306.1 -> 158...	6/1/2018 11:54 AM	6.368	338	2.12	306.1 -> 275...			Sertraline-D3	309.1 -> 275...	6.428	826762
Sufentanil	387.2 -> 238...	6/1/2018 11:54 AM	6.359	843	285.56	387.2 -> 111...			Sufentanil-D5	392.2 -> 238...	6.358	766261
Temazepam	301.1 -> 255...	6/1/2018 11:54 AM	6.288	1249	12.38	301.1 -> 283...			Temazepam-D5	306.1 -> 260...	6.308	10383.

Compound Method		p1 external control					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
Tramadol	264.2 -> 58.3	6/1/2018 11:54 AM	5.439	14701	3.66		264.2 -> 43.3	652	1.82		Tramadol-13C-D3	268.2 -> 58.3	5.439	29370.	
Trazodone	372.2 -> 176...	6/1/2018 11:54 AM	6.502	2322	4.20		372.2 -> 148...	5608	0.96		Trazodone-D6	378.2 -> 182...	6.461	15960...	
Venlafaxine	278.2 -> 58.3	6/1/2018 11:54 AM	5.885	2267	1.04		278.2 -> 260...	288	76.92		Venlafaxine-D6	284.2 -> 64.3	5.701	12568...	
Zolpidem	308.2 -> 235...	6/1/2018 11:54 AM	6.165	2024	15.39		308.2 -> 263...	156	0.47		Zolpidem-D6	314.2 -> 235...	6.122	33586...	

Compound Method		p2 cal ID		p2 cal ID 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...	6/1/2018 11:25 A...	5.568	156650	2893.32		284.1 -> 93.2	19129	944.68		7-aminoflunitrazepam-D7	291.2 -> 138...	5.567	11764...
alpha-hydroxymidazolam	342.1 -> 324...	6/1/2018 11:25 A...	6.250	175803	27743.44		342.1 -> 203...	67197	652.87		alpha-hydroxymidazolam-...	346.1 -> 328...	6.250	682650
Amitriptyline	278.2 -> 91.2	6/1/2018 11:25 A...	6.322	531347	Infinity		278.2 -> 105...	1918...	99.43		Amitriptyline-D3	281.2 -> 91.2	6.321	12274...
Amoxapine	314.1 -> 271...	6/1/2018 11:25 A...	6.295	127780	205.93		314.1 -> 193...	80931	28500....		Amitriptyline-D3	281.2 -> 91.2	6.321	12274...
Benzoylecgonine	290.1 -> 168...	6/1/2018 11:25 A...	5.219	43496	16296.23		290.1 -> 105...	19687	39.77		Benzoylecgonine-D8	298.2 -> 171...	5.198	15923
Carbamazepine	237.1 -> 193...	6/1/2018 11:25 A...	5.941	74243	19292.10		237.1 -> 194...	4534...	707.23		Carbamazepine-13C6	243.1 -> 200...	5.941	25995...
Chlordiazepoxide	300.1 -> 227...	6/1/2018 11:25 A...	6.379	44893	14980.62		300.1 -> 282...	53677	20.11		Chlordiazepoxide-D5	305.1 -> 286...	6.378	975668
Clomipramine	315.2 -> 86.2	6/1/2018 11:25 A...	6.558	743362	524.35		315.2 -> 58.3	4206...	852.24		Clomipramine-D3	318.2 -> 89.2	6.557	22539...
Cocaine	304.2 -> 182...	6/1/2018 11:25 A...	5.564	316538	149.89		304.2 -> 105...	43827	42652...		Cocaine-D3	307.2 -> 185...	5.543	11350...
Desipramine	267.2 ->72.3	6/1/2018 11:25 A...	6.243	692607	139706...		267.2 -> 44.3	2867...	168.08		Desipramine-D3	270.2 -> 75.3	6.222	17352...
Doxepin	280.2 -> 107...	6/1/2018 11:25 A...	6.058	148172	285.91		280.2 -> 77.2	64375	132.24		Doxepin-D3	283.2 -> 107...	6.036	407464
Estazolam	295.1 -> 267...	6/1/2018 11:25 A...	6.198	161406	40427.41		295.1 -> 205...	1058	419.93		Estazolam-D5	300.1 -> 272...	6.176	11136...
Flunitrazepam	314.1 -> 268...	6/1/2018 11:25 A...	6.214	210961	175.95		314.1 -> 239...	60844	337.28		Flunitrazepam-D7	321.1 -> 245...	6.213	78589
Flurazepam	388.2 -> 315...	6/1/2018 11:25 A...	6.106	385894	167.90		388.2 -> 317...	54771	198.68		Zopiclone-D4	393.1 -> 244...	6.086	224903
Imipramine	281.2 ->86.2	6/1/2018 11:25 A...	6.280	744313	Infinity		281.2 -> 58.3	4273...	615.31		Imipramine-D3	284.2 -> 61.3	6.280	27097...
Levamisole	205.1 -> 91.2	6/1/2018 11:25 A...	5.292	113840	84.91		205.1 -> 178...	1411...	70.55		Cocaine-D3	307.2 -> 185...	5.543	11350...
Maprotiline	278.2 -> 91.2	6/1/2018 11:25 A...	5.956	380695	Infinity		278.2 -> 117...	3361	1212.02		Meperidine-D4	252.2 -> 224...	5.573	205330
MDA	180.1 -> 163...	6/1/2018 11:25 A...	5.009	91850	148.56		180.1 -> 105...	45659	93.06		MDA-D5	185.1 -> 168...	5.009	187543
MDEA	208.1 -> 163...	6/1/2018 11:25 A...	5.271	335509	56.63		208.1 -> 105...	1292...	27.42		MDEA-D6	214.2 -> 166...	5.271	993070
MDMA	194.1 -> 163...	6/1/2018 11:25 A...	5.130	172384	Infinity		194.1 -> 105...	85163	78.01		MDMA-D6	200.2 -> 166...	5.109	41515
Meperidine	248.2 -> 220...	6/1/2018 11:25 A...	5.594	131400	590.63		248.2 -> 174...	99114	28632...		Meperidine-D4	252.2 -> 224...	5.573	205330
Methylphenidate	234.2 -> 84.2	6/1/2018 11:25 A...	5.514	710316	196.94		234.2 -> 56.3	1202...	40063...		Meperidine-D4	252.2 -> 224...	5.573	205330
Metoprolol	268.2 -> 116...	6/1/2018 11:25 A...	5.447	55111	164.68		268.2 -> 56.3	64956	15396...		Meperidine-D4	252.2 -> 224...	5.573	205330
Midazolam	326.1 -> 223...	6/1/2018 11:25 A...	6.414	60004	86.38		326.1 -> 249...	53112	201.36		Midazolam-D4	330.1 -> 295...	6.413	887428
Mirtazapine	266.2 -> 195...	6/1/2018 11:25 A...	5.999	354562	46048.36		266.2 -> 72.3	3101...	82075...		Midazolam-D4	330.1 -> 295...	6.413	887428
Mitragynine	399.2 -> 174...	6/1/2018 11:25 A...	6.105	162313	213.15		399.2 -> 238...	42810	407.58		Carbamazepine-13C6	243.1 -> 200...	5.941	25995...
Normeperidine	234.1 -> 42.3	6/1/2018 11:25 A...	5.555	116371	72.20		234.1 -> 160...	52146	11672...		Normeperidine-D4	238.2 -> 164...	5.533	996456
Norpropoxyphene	326.2 -> 44.3	6/1/2018 11:25 A...	6.110	60771	146.66		326.2 -> 252...	18350	156.69		Norpropoxyphene-D5	331.2 -> 44.3	6.109	289313
Ondansetron	294.2 -> 184...	6/1/2018 11:25 A...	5.790	220956	523.39		294.2 -> 212...	41598	9901.52		Pentazocine-13C3	289.2 -> 72.3	5.608	14717...
Pentazocine	286.2 -> 218...	6/1/2018 11:25 A...	5.608	228880	940.75		286.2 -> 41.3	1082...	43.99		Pentazocine-13C3	289.2 -> 72.3	5.608	14717...
Phenazepam	349.0 -> 206...	6/1/2018 11:25 A...	6.290	41969	184.44		349.0 -> 183...	46056	132.17		Phenazepam-D4	353.0 -> 183...	6.289	18728
Phencyclidine	244.2 -> 86.2	6/1/2018 11:25 A...	5.838	159298	50781.02		244.2 -> 91.1	2026...	106.04		Phencyclidine-D5	249.2 -> 86.2	5.817	12335...
Phenytoin	253.1 -> 104...	6/1/2018 11:25 A...	5.836	4015	20.59		253.1 -> 182...	5539	1759.55		Phenytoin-D10	263.2 -> 192...	5.836	28148
Prazepam	325.1 -> 271...	6/1/2018 11:25 A...	6.780	516447	564.89		325.1 -> 140...	1605...	265.86		Prazepam-D5	330.1 -> 276...	6.757	26172...
Primidone	219.1->91.2	6/1/2018 11:25 A...	5.249	21266	9.61		219.1 -> 162...	16592	6227.13		Prazepam-D5	330.1 -> 276...	6.757	26172...
Propoxyphene	340.2 ->58.3	6/1/2018 11:25 A...	6.149	558058	2483.52		340.2 -> 266...	83194	13111...		Propoxyphene-D11	351.3 -> 277...	6.128	253769
Pseudoephedrine	166.1 -> 148...	6/1/2018 11:25 A...	4.646	27884...	429.44		166.1 -> 133...	6183...	42.89		Pseudoephedrine-D3	169.1 -> 151...	4.646	715794
Tapentadol	222.2 -> 107...	6/1/2018 11:25 A...	5.433	260441	111.97		222.2 -> 121...	1430...	124.30		Tapentadol-D3	225.2 -> 107...	5.433	11132...
Trimipramine	295.2 -> 100...	6/1/2018 11:25 A...	6.360	775181	129.13		295.2 -> 58.3	4929...	109.59		Trimipramine-D3	298.2 -> 103...	6.360	40213...
Verapamil	455.3 -> 165...	6/1/2018 11:25 A...	6.125	576200	615.96		455.3 -> 150...	1729...	71.99		Trimipramine-D3	298.2 -> 103...	6.360	40213...
Zaleplon	306.1 -> 236...	6/1/2018 11:25 A...	6.032	177841	210.61		306.1 -> 264...	2104...	29197...		Zaleplon-D4	310.2 -> 240...	6.031	434570
Zopiclone	389.1 -> 244...	6/1/2018 11:25 A...	6.086	22397	31.48		389.1 -> 216...	10910	23.84		Zopiclone-D4	393.1 -> 244...	6.086	224903
Nortriptyline	264.2 -> 91.2	6/1/2018 11:25 A...	6.284	190309	Infinity	✓	264.2 -> 233...	1427...	Infinity	✓	Nortriptyline-D3	267.2 -> 233...	6.263	838730

Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	RT	Resp.
7-aminoflunitrazepam	284.1 -> 135...	6/1/2018 11:44 AM	5.690	4376	11.86		284.1 -> 93.2				7-aminoflunitrazepam-D7	291.2 -> 138...	5.545	11637...
alpha-hydroxymidazolam	342.1 -> 324...	6/1/2018 11:44 AM	6.271	1297	63.18		342.1 -> 203...				alpha-hydroxymidazolam-...	346.1 -> 328...	6.230	719577
Amitriptyline	278.2 -> 91.2	6/1/2018 11:44 AM	6.423	6471	1.44		278.2 -> 105...	1311	1.03		Amitriptyline-D3	281.2 -> 91.2	6.301	11832...
Amoxapine	314.1 -> 271...	6/1/2018 11:44 AM	6.255	1736	5.99		314.1 -> 193...	11663	28.02		Amitriptyline-D3	281.2 -> 91.2	6.301	11832...
Benzoylecgonine	290.1 -> 168...	6/1/2018 11:44 AM	5.199	1500	11.09		290.1 -> 105...	98	0.46		Benzoylecgonine-D8	298.2 -> 171...	5.198	14533
Carbamazepine	237.1 -> 193...	6/1/2018 11:44 AM	6.226	740	2.44		237.1 -> 194...	1081	0.52		Carbamazepine-13C6	243.1 -> 200...	5.920	25938...
Chlordiazepoxide	300.1 -> 227...	6/1/2018 11:44 AM	6.156	836	10.56		300.1 -> 282...				Chlordiazepoxide-D5	305.1 -> 286...	6.358	961168
Clomipramine	315.2 -> 86.2	6/1/2018 11:44 AM	6.477	550	1.39		315.2 -> 58.3...	402	0.78		Clomipramine-D3	318.2 -> 89.2	6.537	21116...
Cocaine	304.2 -> 182...	6/1/2018 11:44 AM	5.543	4640	1.70		304.2 -> 105...	151	0.95		Cocaine-D3	307.2 -> 185...	5.543	10418...
Desipramine	267.2 -> 72.3	6/1/2018 11:44 AM	6.263	5986	876.46		267.2 -> 44.3	9524	8.03		Desipramine-D3	270.2 -> 75.3	6.222	16449...
Doxepin	280.2 -> 107...	6/1/2018 11:44 AM	6.058	300	0.79		280.2 -> 77.2				Doxepin-D3	283.2 -> 107...	6.016	370578
Estazolam	295.1 -> 267...	6/1/2018 11:44 AM	6.523	218	1.30		295.1 -> 205...	709	2.15		Estazolam-D5	300.1 -> 272...	6.176	11958...
Flunitrazepam	314.1 -> 268...	6/1/2018 11:44 AM	6.255	4940	11.60		314.1 -> 239...	373	4.91		Flunitrazepam-D7	321.1 -> 245...	6.193	82125
Flurazepam	388.2 -> 315...	6/1/2018 11:44 AM	6.046	178	0.38		388.2 -> 317...				Zopiclone-D4	393.1 -> 244...	6.065	190432
Imipramine	281.2 -> 86.2	6/1/2018 11:44 AM	6.301	5198	1359.78		281.2 -> 58.3	1287	0.63		Imipramine-D3	284.2 -> 61.3	6.260	26068...
Levamisole	205.1 -> 91.2	6/1/2018 11:44 AM	5.942	2240	0.59		205.1 -> 178...	106	0.78		Cocaine-D3	307.2 -> 185...	5.543	10418...
Maprotiline	278.2 -> 91.2	6/1/2018 11:44 AM	5.833	183	61.34		278.2 -> 117...				Meperidine-D4	252.2 -> 224...	5.552	209028
MDA	180.1 -> 163...	6/1/2018 11:44 AM	5.029	723	1.48		180.1 -> 105...	117	1.20		MDA-D5	185.1 -> 168...	4.988	187796
MDEA	208.1 -> 163...	6/1/2018 11:44 AM	5.088	731	14.77		208.1 -> 105...	1218	2.56		MDEA-D6	214.2 -> 166...	5.250	10135...
MDMA	194.1 -> 163...	6/1/2018 11:44 AM	4.988	594	1.85		194.1 -> 105...	281	1.21		MDMA-D6	200.2 -> 166...	5.089	36704
Meperidine	248.2 -> 220...	6/1/2018 11:44 AM	5.532	352	1.22		248.2 -> 174...	374	1.51		Meperidine-D4	252.2 -> 224...	5.552	209028
Methylphenidate	234.2 -> 84.2	6/1/2018 11:44 AM	5.493	779	1.22		234.2 -> 56.3	280	1.76		Meperidine-D4	252.2 -> 224...	5.552	209028
Metoprolol	268.2 -> 116...	6/1/2018 11:44 AM					268.2 -> 56.3				Meperidine-D4	252.2 -> 224...	5.552	209028
Midazolam	326.1 -> 223...	6/1/2018 11:44 AM	6.273	53	1.30		326.1 -> 249...	299	187.79		Midazolam-D4	330.1 -> 295...	6.413	884555
Mirtazapine	266.2 -> 195...	6/1/2018 11:44 AM	6.061	795	2.42		266.2 -> 72.3	200	1.28		Midazolam-D4	330.1 -> 295...	6.413	884555
Mitragynine	399.2 -> 174...	6/1/2018 11:44 AM					399.2 -> 238...				Carbamazepine-13C6	243.1 -> 200...	5.920	25938...
Normeperidine	234.1 -> 42.3	6/1/2018 11:44 AM	5.473	95	0.48		234.1 -> 160...				Normeperidine-D4	238.2 -> 164...	5.533	911838
Norpropoxyphene	326.2 -> 44.3	6/1/2018 11:44 AM	5.886	63	0.61		326.2 -> 252...	254	3.29		Norpropoxyphene-D5	331.2 -> 44.3	6.089	265662
Ondansetron	294.2 -> 184...	6/1/2018 11:44 AM	5.769	80	4.12		294.2 -> 212...				Pentazocine-13C3	289.2 -> 72.3	5.588	14315...
Pentazocine	286.2 -> 218...	6/1/2018 11:44 AM	5.995	259	93.47		286.2 -> 41.3	139	0.42		Pentazocine-13C3	289.2 -> 72.3	5.588	14315...
Phenazepam	349.0 -> 206...	6/1/2018 11:44 AM	6.250	1756	395.12		349.0 -> 183...				Phenazepam-D4	353.0 -> 183...	6.269	21768
Phencyclidine	244.2 -> 86.2	6/1/2018 11:44 AM	5.818	196	1.20		244.2 -> 91.1	3152	1.17		Phencyclidine-D5	249.2 -> 86.2	5.817	11852...
Phenytoin	253.1 -> 104...	6/1/2018 11:44 AM	5.836	248	1.21		253.1 -> 182...				Phenytoin-D10	263.2 -> 192...	5.816	21319
Prazepam	325.1 -> 271...	6/1/2018 11:44 AM	6.903	304	0.82		325.1 -> 140...	124	0.33		Prazepam-D5	330.1 -> 276...	6.778	30798...
Primidone	219.1 -> 91.2	6/1/2018 11:44 AM	5.433	981	0.39		219.1 -> 162...				Prazepam-D5	330.1 -> 276...	6.778	30798...
Propoxyphene	340.2 -> 58.3	6/1/2018 11:44 AM	6.109	425	181.69		340.2 -> 266...				Propoxyphene-D11	351.3 -> 277...	6.128	221566
Pseudoephedrine	166.1 -> 148...	6/1/2018 11:44 AM	4.646	727	0.50		166.1 -> 133...	260	1.41		Pseudoephedrine-D3	169.1 -> 151...	4.625	786015
Tapentadol	222.2 -> 107...	6/1/2018 11:44 AM	5.351	135	0.47		222.2 -> 121...	1008	3.45		Tapentadol-D3	225.2 -> 107...	5.412	11318...
Trimipramine	295.2 -> 100...	6/1/2018 11:44 AM	6.360	985	158.63		295.2 -> 58.3				Trimipramine-D3	298.2 -> 103...	6.339	39443...
Verapamil	455.3 -> 165...	6/1/2018 11:44 AM	6.125	647	2.29		455.3 -> 150...				Trimipramine-D3	298.2 -> 103...	6.339	39443...
Zaleplon	306.1 -> 236...	6/1/2018 11:44 AM	5.337	891	186.57		306.1 -> 264...	2613	4.92		Zaleplon-D4	310.2 -> 240...	6.011	420769
Zopiclone	389.1 -> 244...	6/1/2018 11:44 AM	6.106	124	1.01		389.1 -> 216...				Zopiclone-D4	393.1 -> 244...	6.065	190432
Nortriptyline	264.2 -> 91.2	6/1/2018 11:44 AM	6.324	2383	1.66		264.2 -> 233...	892	2.16		Nortriptyline-D3	267.2 -> 233...	6.263	857786

Compound Method Name	Transition	p2 external control Acq. Date-Time	RT	Resp.	S/N	MI	Qualifier 1 M... Transition	Qualifier 1 Results Area	S/N	MI	ISTD Method Name	Transition	ISTD Results RT	Resp.
7-aminoflunitrazepam	284.1 -> 135...	6/1/2018 12:04 PM	5.731	4016	10.67		284.1 -> 93.2	237	210.12		7-aminoflunitrazepam-D7	291.2 -> 138...	5.567	10564...
alpha-hydroxymidazolam	342.1 -> 324...	6/1/2018 12:04 PM	6.372	225	1.70		342.1 -> 203...				alpha-hydroxymidazolam-...	346.1 -> 328...	6.230	725450
Amitriptyline	278.2 -> 91.2	6/1/2018 12:04 PM	6.160	1859	0.71		278.2 -> 105...				Amitriptyline-D3	281.2 -> 91.2	6.321	11633...
Amoxapine	314.1 -> 271...	6/1/2018 12:04 PM	6.275	1748	7.61		314.1 -> 193...	9689	23.40		Amitriptyline-D3	281.2 -> 91.2	6.321	11633...
Benzoylecgonine	290.1 -> 168...	6/1/2018 12:04 PM	5.219	1495	3.31		290.1 -> 105...	795	9.97		Benzoylecgonine-D8	298.2 -> 171...	5.218	14774
Carbamazepine	237.1 -> 193...	6/1/2018 12:04 PM	5.452	3369	10.70		237.1 -> 194...	1243	0.54		Carbamazepine-13C6	243.1 -> 200...	5.941	24828...
Chlordiazepoxide	300.1 -> 227...	6/1/2018 12:04 PM	6.197	946	31.74		300.1 -> 282...				Chlordiazepoxide-D5	305.1 -> 286...	6.378	932166
Clomipramine	315.2 -> 86.2	6/1/2018 12:04 PM	6.619	256	0.61		315.2 -> 58.3	511	1.08		Clomipramine-D3	318.2 -> 89.2	6.557	19978...
Cocaine	304.2 -> 182...	6/1/2018 12:04 PM	5.543	2619	2.14		304.2 -> 105...	730	3.20		Cocaine-D3	307.2 -> 185...	5.564	10024...
Desipramine	267.2 -> 72.3	6/1/2018 12:04 PM	6.283	3548	29.27		267.2 -> 44.3	9603	17.29		Desipramine-D3	270.2 -> 75.3	6.242	16122...
Doxepin	280.2 -> 107...	6/1/2018 12:04 PM	6.037	80	0.48		280.2 -> 77.2	1435	89.01		Doxepin-D3	283.2 -> 107...	6.036	365072
Estazolam	295.1 -> 267...	6/1/2018 12:04 PM	6.706	333	0.80		295.1 -> 205...	79	0.83		Estazolam-D5	300.1 -> 272...	6.197	11428...
Flunitrazepam	314.1 -> 268...	6/1/2018 12:04 PM	6.255	5764	12.63		314.1 -> 239...	704	3.05		Flunitrazepam-D7	321.1 -> 245...	6.213	80936
Flurazepam	388.2 -> 315...	6/1/2018 12:04 PM	6.370	186	2.09		388.2 -> 317...				Zopiclone-D4	393.1 -> 244...	6.086	198001
Imipramine	281.2 -> 86.2	6/1/2018 12:04 PM	6.321	5930	13.41		281.2 -> 58.3	3109	1.38		Imipramine-D3	284.2 -> 61.3	6.280	25155...
Levamisole	205.1 -> 91.2	6/1/2018 12:04 PM	5.292	956	0.43		205.1 -> 178...				Cocaine-D3	307.2 -> 185...	5.564	10024...
Maprotiline	278.2 -> 91.2	6/1/2018 12:04 PM	5.895	689	3.08		278.2 -> 117...				Meperidine-D4	252.2 -> 224...	5.573	176782
MDA	180.1 -> 163...	6/1/2018 12:04 PM	4.928	512	0.39		180.1 -> 105...	315	1.46		MDA-D5	185.1 -> 168...	5.009	172565
MDEA	208.1 -> 163...	6/1/2018 12:04 PM	5.169	434	1.64		208.1 -> 105...				MDEA-D6	214.2 -> 166...	5.271	908142
MDMA	194.1 -> 163...	6/1/2018 12:04 PM	5.028	330	1.66		194.1 -> 105...	234	0.32		MDMA-D6	200.2 -> 166...	5.129	35970
Meperidine	248.2 -> 220...	6/1/2018 12:04 PM	5.594	13370...	216.01		248.2 -> 174...	11865...	710.75		Meperidine-D4	252.2 -> 224...	5.573	176782
Methylphenidate	234.2 -> 84.2	6/1/2018 12:04 PM	5.493	493	1.22		234.2 -> 56.3	343	1.77		Meperidine-D4	252.2 -> 224...	5.573	176782
Metoprolol	268.2 -> 116...	6/1/2018 12:04 PM	5.447	732494	2913.72		268.2 -> 56.3	644577	1338...		Meperidine-D4	252.2 -> 224...	5.573	176782
Midazolam	326.1 -> 223...	6/1/2018 12:04 PM					326.1 -> 249...				Midazolam-D4	330.1 -> 295...	6.413	818059
Mirtazapine	266.2 -> 195...	6/1/2018 12:04 PM	5.856	1480	0.82		266.2 -> 72.3	420	1.25		Midazolam-D4	330.1 -> 295...	6.413	818059
Mitragynine	399.2 -> 174...	6/1/2018 12:04 PM					399.2 -> 238...				Carbamazepine-13C6	243.1 -> 200...	5.941	24828...
Normeperidine	234.1 -> 42.3	6/1/2018 12:04 PM	5.453	5977	24.28		234.1 -> 160...				Normeperidine-D4	238.2 -> 164...	5.554	897587
Norpropoxyphene	326.2 -> 44.3	6/1/2018 12:04 PM	6.110	217	2.92		326.2 -> 252...	231	1.64		Norpropoxyphene-D5	331.2 -> 44.3	6.109	254773
Ondansetron	294.2 -> 184...	6/1/2018 12:04 PM					294.2 -> 212...				Pentazocine-13C3	289.2 -> 72.3	5.608	13293...
Pentazocine	286.2 -> 218...	6/1/2018 12:04 PM	5.892	374	102.82		286.2 -> 41.3	106	0.40		Pentazocine-13C3	289.2 -> 72.3	5.608	13293...
Phenazepam	349.0 -> 206...	6/1/2018 12:04 PM	6.250	254	1.96		349.0 -> 183...	190	1.82		Phenazepam-D4	353.0 -> 183...	6.289	23761
Phencyclidine	244.2 -> 86.2	6/1/2018 12:04 PM	5.513	325	0.57		244.2 -> 91.1	596	0.26		Phencyclidine-D5	249.2 -> 86.2	5.837	11665...
Phenytoin	253.1 -> 104...	6/1/2018 12:04 PM	5.918	243	1.55		253.1 -> 182...				Phenytoin-D10	263.2 -> 192...	5.836	23119
Prazepam	325.1 -> 271...	6/1/2018 12:04 PM	6.903	120	0.46		325.1 -> 140...				Prazepam-D5	330.1 -> 276...	6.778	26640...
Primidone	219.1 -> 91.2	6/1/2018 12:04 PM	5.128	334	3.88		219.1 -> 162...				Prazepam-D5	330.1 -> 276...	6.778	26640...
Propoxyphene	340.2 -> 58.3	6/1/2018 12:04 PM	6.453	7257	1.14		340.2 -> 266...	243	1.97		Propoxyphene-D11	351.3 -> 277...	6.128	214824
Pseudoephedrine	166.1 -> 148...	6/1/2018 12:04 PM	4.646	246	0.50		166.1 -> 133...	217	0.51		Pseudoephedrine-D3	169.1 -> 151...	4.646	796421
Tapentadol	222.2 -> 107...	6/1/2018 12:04 PM	5.637	348	0.66		222.2 -> 121...	219	1.81		Tapentadol-D3	225.2 -> 107...	5.433	10521...
Trimipramine	295.2 -> 100...	6/1/2018 12:04 PM	6.340	710	2.94		295.2 -> 58.3				Trimipramine-D3	298.2 -> 103...	6.360	36110...
Verapamil	455.3 -> 165...	6/1/2018 12:04 PM	6.226	27	0.63		455.3 -> 150...	193	0.80		Trimipramine-D3	298.2 -> 103...	6.360	36110...
Zaleplon	306.1 -> 236...	6/1/2018 12:04 PM	5.584	330	33.58		306.1 -> 264...	385	0.29		Zaleplon-D4	310.2 -> 240...	6.031	389586
Zopiclone	389.1 -> 244...	6/1/2018 12:04 PM					389.1 -> 216...				Zopiclone-D4	393.1 -> 244...	6.086	198001
Nortriptyline	264.2 -> 91.2	6/1/2018 12:04 PM	6.264	1845	0.95		264.2 -> 233...	1141	3.12		Nortriptyline-D3	267.2 -> 233...	6.283	786703