



Worklist: 2254

reviewed 4/10/18 amn

*D*

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
M2018-0328	1	105558	AM 25 Blood Multi-Drug Screer	
M2018-0448	1	106045	AM 25 Blood Multi-Drug Screer	
M2018-0448	2	106049	AM 25 Blood Multi-Drug Screer	
M2018-0573	1	106619	AM 25 Blood Multi-Drug Screer	
M2018-0574	1	108815	AM 25 Blood Multi-Drug Screer	
M2018-0675	1	107206	AM 25 Blood Multi-Drug Screer	
M2018-0799	3	107734	AM 25 Blood Multi-Drug Screer	
M2018-0836	1	107912	AM 25 Blood Multi-Drug Screer	
M2018-0916	1	108300	AM 25 Blood Multi-Drug Screer	
M2018-0916	2	108304	AM 25 Blood Multi-Drug Screer	
M2018-0917	1	108308	AM 25 Blood Multi-Drug Screer	
M2018-1067	1	108979	AM 25 Blood Multi-Drug Screer	
P2018-0234	1	105613	AM 25 Blood Multi-Drug Screer	
P2018-0328	2	106181	AM 25 Blood Multi-Drug Screer	
P2018-0363	1	106469	AM 25 Blood Multi-Drug Screer	
P2018-0632	1	108809	AM 25 Blood Multi-Drug Screer	
P2018-0633	1	108812	AM 25 Blood Multi-Drug Screer	
P2018-0636	1	108832	AM 25 Blood Multi-Drug Screer	
P2018-0640	1	108839	AM 25 Blood Multi-Drug Screer	
P2018-0651	1	108958	AM 25 Blood Multi-Drug Screer	
P2018-0699	1	109352	AM 25 Blood Multi-Drug Screer	
P2018-0725	1	109477	AM 25 Blood Multi-Drug Screer	
P2018-0726	1	109483	AM 25 Blood Multi-Drug Screer	

**Worklist: 2254**

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>
P2018-0737	1	109739	AM 25 Blood Multi-Drug Screer
P2018-0759	1	109870	AM 25 Blood Multi-Drug Screer



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

SP

Extraction Date: 03/30/18

Analyst: Sarah Pickle

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: 361331-3

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 ID: 067105
- 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 ID 067103
- 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. 033018 MDS SP Worklist 2254  
Worklist path: 033018 MDS SP worklist 2254 Batch Name: 033018 MDS SP Panel 2 Worklist 2254
- 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:

Did not evaluate: Phentermine → low S/N + peak shape of secondary  
Protriptyline → missing secondary peak



# Idaho State Police Forensic Services

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

**Analyst:** Sarah Pickle  
**Extraction Date:** 3/30/18  
**Worklist Number:** 2254

<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	5/31/18	5/31/17		
Blood External Control Solution	WS122717	6/27/18	12/27/17		
0.5M Ammonium Hydroxide	032918	9/29/18	3/29/18		
Formic Acid (LCMS Grade)	095180B		11/15/17		
Water (LCMS Grade)	102501		6/26/17		
Methanol (LCMS Grade)	172517		3/19/18		
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)	030818		3/8/18		
0.1% Formic Acid in LCMS Methanol (Mobile Phase B)	111517		11/15/17		
Needle Rinse--75% LCMS MeOH in LCMS Water	030818		3/8/18		

**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		

**Blood External Control Solution (Lot: 122717)***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: 032918)**

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
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: 030818)**

<i>Component</i>	<i>Source</i>	<i>Source Lot Number</i>
Ammonium Formate	Arcos Organics	A0287238
LCMS Water	Fisher	102501
Prepared:	03/08/18	
Prepared By:	Tamara Salazar	

**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	172516
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)	BDH	172516
Water (LCMS Grade)	Fisher	102501
Prepared:	3/8/18	
Prepared By:	Tamara Salazar	

Compound Name				p.i cal. la				p.i cal. la Results				Qualifier   Results				ISU Method				ISU Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	Area	S/N	MI	Name	Transition	Area	S/N	MI	RT	Resp
6-MAM	328.2 -> 165...	3/30/2018 11:42 AM	5.102	1306	11.09	328.2 -> 211...	700	3.70	6-MAM-D6	334.2 -> 165...	5.081	4830										
7-aminoclonazepam	286.1 -> 121...	3/30/2018 11:42 AM	5.415	22240	3956.53	286.1 -> 222...	8988	46.10	7-Aminoclonazepam-D4	290.1 -> 121...	5.415	63778										
Acetyl Fentanyl	323.2 -> 105...	3/30/2018 11:42 AM	5.897	12386	39.12	323.2 -> 188...	4652	17.93	Acetyl Fentanyl-D5	328.2 -> 105...	5.895	11595										
Acetyl Norfentanyl	219.1 -> 84.2	3/30/2018 11:42 AM	4.873	9053	1132.69	219.1 -> 56.3	2514	5.61	Acetyl Norfentanyl-D5	224.2 -> 84.2	4.853	46289										
a-hydroxylprazolam	325.1 -> 257...	3/30/2018 11:42 AM	6.180	3774	7.56	325.1 -> 215...	1349	3.06	a-hydroxylprazolam-D5	330.1 -> 302...	6.179	2194										
alpha-PVP	232.2 -> 91.0	3/30/2018 11:42 AM	5.586	86172	149.42	232.2 -> 77.1	54162	103.96	alpha-PVP-d8	240.2 -> 91.1	5.544	57785										
Alprazolam	309.1 -> 281...	3/30/2018 11:42 AM	6.286	70869	Infinity	309.1 -> 205...	27885	128.49	Alprazolam-D5	314.1 -> 286...	6.285	30014										
Amphetamine	136.1 -> 91.1	3/30/2018 11:42 AM	4.794	129522	Infinity	136.1 -> 119...	40090	112.47	Amphetamine-D11	147.2 -> 130...	4.754	824										
Bupropion	240.1 -> 184...	3/30/2018 11:42 AM	5.767	77107	19282.59	240.1 -> 131...	86181	12130	Bupropion-D9	249.2 -> 185...	5.746	17202										
Carisoprodol	261.2 -> 176...	3/30/2018 11:42 AM	5.969	7105	920.49	261.2 -> 55.3	27191	Infinity	Carisoprodol-D7	268.2 -> 183...	5.928	4385										
Citalopram	325.2 -> 109...	3/30/2018 11:42 AM	5.956	164364	24555.48	325.2 -> 262...	44844	8988.29	Citalopram-D6	331.2 -> 109...	5.955	57924										
Clonazepam	316.1 -> 269...	3/30/2018 11:42 AM	6.142	11231	90.52	316.1 -> 213...	590	3.05	Clonazepam-D4	320.1 -> 217...	6.121	1152										
Codeine	300.2 -> 215...	3/30/2018 11:42 AM	5.066	12025	33.84	300.2 -> 165...	8441	1437.00	Codeine-D6	306.2 -> 218...	5.003	4577										
Cyclobenzaprine	276.2 -> 214...	3/30/2018 11:42 AM	6.272	78158	10252.43	276.2 -> 231...	28502	5324.39	Cyclobenzaprine-D3	279.2 -> 215...	6.250	40015										
Dextromethorphan	272.2 -> 171...	3/30/2018 11:42 AM	6.028	88671	205.48	272.2 -> 147...	1005	18613	Dextromethorphan-D3	275.2 -> 171...	6.028	28405										
Dextropropam	258.2 -> 157...	3/30/2018 11:42 AM	5.379	36546	41.29	258.2 -> 133...	43542	86.86	Dextropropam-D5	261.2 -> 157...	5.399	22822										
Diazepam	285.1 -> 193...	3/30/2018 11:42 AM	6.512	32171	Infinity	285.1 -> 153...	49966	188.67	Diazepam-D5	290.1 -> 198...	6.491	13750										
Dihydrocodeine	302.2 -> 198...	3/30/2018 11:42 AM	4.861	17522	73.34	302.2 -> 128...	17103	167.64	Dihydrocodeine-D6	308.2 -> 202...	4.819	7975										
Diphenhydramine	256.2 -> 167...	3/30/2018 11:42 AM	5.949	322957	142969.29	256.2 -> 152...	80108	31.17	Diphenhydramine-D3	259.2 -> 167...	5.929	14404										
Doxylamine	271.2 -> 182...	3/30/2018 11:42 AM	5.622	127133	17046.29	271.2 -> 167...	1849	371.67	Doxylamine-D5	276.2 -> 187...	5.600	34077										
EDDP	279.2 -> 235...	3/30/2018 11:42 AM	5.986	286096	675.96	279.2 -> 250...	1404	25243	EDDP-D3	282.2 -> 235...	5.986	12094										
Fentanyl	337.2 -> 105...	3/30/2018 11:42 AM	6.097	11758	44.78	337.2 -> 188...	7416	16.65	Fentanyl-D5	342.3 -> 105...	6.077	91166										
Fluoxetine	310.1 -> 44.3	3/30/2018 11:42 AM	6.184	307595	646.26	310.1 -> 148...	7296	1842.29	Fluoxetine-D6	316.2 -> 44.3	6.162	14255										
Hydrocodone	300.2 -> 198...	3/30/2018 11:42 AM	5.290	32571	19.46	300.2 -> 128...	23373	195.33	Hydrocodone-D6	306.2 -> 202...	5.248	18893										
Hydromorphone	286.2 -> 184...	3/30/2018 11:42 AM	4.580	22797	Infinity	286.2 -> 157...	28660	Infinity	Hydromorphone-D6	292.2 -> 185...	4.539	7068										
Ketamine	238.1 -> 125...	3/30/2018 11:42 AM	5.687	139295	197.50	238.1 -> 220...	25275	Infinity	Ketamine-D4	242.1 -> 129...	5.665	56524										
Meprobamate	219.1 -> 158...	3/30/2018 11:42 AM	5.464	7238	27.69	219.1 -> 97.1	2125	9.11	Meprobamate-D7	226.2 -> 165...	5.464	359										
Methadone	310.2 -> 265...	3/30/2018 11:42 AM	6.285	251717	344.55	310.2 -> 105...	1476	Infinity	Methadone-D9	319.3 -> 268...	6.263	94990										
Methamphetamine	150.1 -> 91.1	3/30/2018 11:42 AM	4.976	53910	Infinity	150.1 -> 119...	15078	29.91	Methamphetamine-D11	161.2 -> 97.1	4.935	11969										
Morphine	286.2 -> 201...	3/30/2018 11:42 AM	4.259	6299	21.16	286.2 -> 165...	6518	40.47	Morphine-D6	292.2 -> 152...	4.198	1233										
Naloxone	328.2 -> 309...	3/30/2018 11:42 AM	5.429	18775	1886.28	328.2 -> 211...	3907	738.93	Naloxone-D5	333.2 -> 315...	5.367	3588										
Naltrexol	344.2 -> 326...	3/30/2018 11:42 AM	4.978	111982	591.52	344.2 -> 308...	24498	4909.05	Naltrexol-D3	347.2 -> 329...	4.978	18615										
Naltrexone	342.2 -> 324...	3/30/2018 11:42 AM	5.162	23854	Infinity	342.2 -> 55.3	27953	86.58	Naltrexone-D3	345.2 -> 327...	5.120	22781										
Norbuprenorphine	414.3 -> 101...	3/30/2018 11:42 AM	5.749	427	8.61	414.3 -> 57.3	2089	12.79	Norbuprenorphine-D3	417.3 -> 101...	5.790	276										
Nordiazepam	271.1 -> 140...	3/30/2018 11:42 AM	6.354	15855	3632.28	271.1 -> 208...	4429	15.11	Nordiazepam-D5	276.1 -> 140...	6.353	4452										
Norfentanyl	233.2 -> 84.2	3/30/2018 11:42 AM	5.320	166860	29862.10	233.2 -> 55.3	55418	Infinity	Norfentanyl-D5	238.2 -> 84.2	5.299	72060										
Norhydrocodone	286.2 -> 199...	3/30/2018 11:42 AM	4.965	2842	8.12	286.2 -> 171...	1424	7.48	Norhydrocodone-D3	289.2 -> 202...	4.944	4898										
Noroxycodone	302.1 -> 284...	3/30/2018 11:42 AM	4.882	7542	8.16	302.1 -> 186...	7763	6.60	Noroxycodone-D3	305.2 -> 287...	4.881	8591										
O-desmethyl-tramadol	250.2 -> 58.3	3/30/2018 11:42 AM	4.910	266449	109.41	250.2 -> 42.3	5816	44.06	O-desmethyl-tramadol-...	256.2 -> 64.3	4.890	75365										
Oxazepam	287.1 -> 240...	3/30/2018 11:42 AM	6.208	4369	7.37	287.1 -> 268...	3498	48.25	Oxazepam-D5	292.1 -> 246...	6.187	2883										
Oxycodone	316.2 -> 298...	3/30/2018 11:42 AM	5.043	91837	Infinity	316.2 -> 241...	17496	3572.46	Oxycodone-D6	322.2 -> 304...	5.022	19292										
Oxymorphone	302.1 -> 284...	3/30/2018 11:42 AM	4.256	71896	Infinity	302.1 -> 227...	8122	Infinity	Oxymorphone-D3	305.2 -> 287...	4.194	34401										
Phentermine	150.1 -> 65.2	3/30/2018 11:42 AM	5.118	22717	Infinity	150.1 -> 133...	806	2.69	Phentermine-D5	155.2 -> 96.2	5.098	25473										
Promethazine	285.1 -> 86.2	3/30/2018 11:42 AM	6.290	313399	71928.99	285.1 -> 71.3	63250	124.36	Promethazine-D3	288.2 -> 89.2	6.268	12107										
Quetiapine	384.2 -> 253...	3/30/2018 11:42 AM	6.399	255974	Infinity	384.2 -> 221...	1076	50.70	Quetiapine-D8	392.2 -> 226...	6.358	25439										
Sertraline	306.1 -> 158...	3/30/2018 11:42 AM	6.469	93302	80.40	306.1 -> 275...	50475	6837.42	Sertraline-D3	309.1 -> 275...	6.468	35786										
Sufentanil	387.2 -> 238...	3/30/2018 11:42 AM	6.439	10588	5849.65	387.2 -> 111...	11797	35.13	Sufentanil-D5	392.2 -> 238...	6.439	47267										
Temazepam	301.1 -> 255...	3/30/2018 11:42 AM	6.328	39930	303.32	301.1 -> 283...	14764	Infinity	Temazepam-D5	306.1 -> 260...	6.328	24206										

Compound Name	PI cal la			PI cal la Results			Qualifier   M...			ISIL Method			ISIL 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	3/30/2018 11:42 AM	5.419	336091	Infinity			264.2 -> 43.3	4840	919.46		Tramadol-13C-D3	268.2 -> 58.3	5.419	13742..
Trazodone	372.2 -> 176...	3/30/2018 11:42 AM	6.562	283808	55.05			372.2 -> 148...	3114...	32994...		Trazodone-D6	378.2 -> 182...	6.521	826417
Venlafaxine	278.2 -> 58.3	3/30/2018 11:42 AM	5.742	302372	Infinity			278.2 -> 260...	20221	44.96		Venlafaxine-D6	284.2 -> 64.3	5.721	718094
Zolpidem	308.2 -> 235...	3/30/2018 11:42 AM	6.165	251238	80.62			308.2 -> 263...	92265	12911...		Zolpidem-D6	314.2 -> 235...	6.163	15611..

Did not evaluate Phentermine

Compound name			p.i negative			p.i negative results			Qualifier   MI...			Qualifier   Res...			IS1D Method			IS1D Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	Resp.	RT	IS1D Method	Resp.				
6-MAM	328.2 -> 165...	3/30/2018 12:01 PM					328.2 -> 211...				6-MAM-D6	334.2 -> 165...	5.081	53078						
7-aminoclonazepam	286.1 -> 121...	3/30/2018 12:01 PM					286.1 -> 222...				7-Aminoclonazepam-D4	290.1 -> 121...	5.415	64671						
Acetyl Fentanyl	323.2 -> 105...	3/30/2018 12:01 PM	5.917	124	0.60		323.2 -> 188...				Acetyl Fentanyl-D5	328.2 -> 105...	5.875	11429...						
Acetyl Norfentanyl	219.1 -> 84.2	3/30/2018 12:01 PM					219.1 -> 56.3				Acetyl Norfentanyl-D5	224.2 -> 84.2	4.853	441570						
a-hydroxylprazosolam	325.1 -> 297...	3/30/2018 12:01 PM	6.382	331	0.69		325.1 -> 215...				a-hydroxylprazosolam-D5	330.1 -> 302...	6.179	28617						
alpha-PVP	232.2 -> 91.0	3/30/2018 12:01 PM	5.586	287	3.19		232.2 -> 77.1	2453	3.72		alpha-PVP-d8	240.2 -> 91.1	5.544	541474						
Alprazolam	309.1 -> 281...	3/30/2018 12:01 PM	6.103	1729	1.36		309.1 -> 205...	294	2.10		Alprazolam-D5	314.1 -> 286...	6.264	297003						
Amphetamine	136.1 -> 91.1	3/30/2018 12:01 PM	4.815	4709	1.09		136.1 -> 119...	310	0.58		Amphetamine-D11	147.2 -> 130...	4.774	8221						
Bupropion	240.1 -> 184...	3/30/2018 12:01 PM					240.1 -> 131...				Bupropion-D9	249.2 -> 185...	5.746	181006						
Carisoprodol	261.2 -> 176...	3/30/2018 12:01 PM					261.2 -> 55.3				Carisoprodol-D7	268.2 -> 183...	5.908	47512						
Citalopram	325.2 -> 109...	3/30/2018 12:01 PM	5.936	244	0.72		325.2 -> 262...				Citalopram-D6	331.2 -> 109...	5.955	587748						
Clonazepam	316.1 -> 269...	3/30/2018 12:01 PM	6.304	49	0.50		316.1 -> 213...				Clonazepam-D4	320.1 -> 217...	6.121	9126						
Codeine	300.2 -> 215...	3/30/2018 12:01 PM					300.2 -> 165...				Codeine-D6	306.2 -> 218...	5.023	45270						
Cyclobenzaprine	276.2 -> 214...	3/30/2018 12:01 PM					276.2 -> 231...				Cyclobenzaprine-D3	279.2 -> 215...	6.250	380755						
Dextromethorphan	272.2 -> 171...	3/30/2018 12:01 PM	6.028	619	1.57		272.2 -> 147...				Dextromethorphan-D3	275.2 -> 171...	6.008	273869						
Dextropropriphan	258.2 -> 157...	3/30/2018 12:01 PM	5.400	262	0.72		258.2 -> 133...	64	0.59		Dextropropriphan-D3	261.2 -> 157...	5.399	222536						
Diazepam	285.1 -> 193...	3/30/2018 12:01 PM	6.330	780	5.51		285.1 -> 153...	69	0.26		Diazepam-D5	290.1 -> 198...	6.491	83764						
Dihydrocodeine	302.2 -> 198...	3/30/2018 12:01 PM	4.922	206	3.24		302.2 -> 128...	47	0.62		Dihydrocodeine-D6	308.2 -> 202...	4.840	76836						
Diphenhydramine	256.2 -> 167...	3/30/2018 12:01 PM	5.929	664	1.46		256.2 -> 152...	203	0.34		Diphenhydramine-D3	259.2 -> 167...	5.929	13977...						
Doxylamine	271.2 -> 182...	3/30/2018 12:01 PM	5.622	894	3.72		271.2 -> 167...				Doxylamine-D5	276.2 -> 187...	5.600	334523						
EDDP	279.2 -> 235...	3/30/2018 12:01 PM	6.046	399	0.85		279.2 -> 250...	89	1.01		EDDP-D3	282.2 -> 235...	5.986	125302						
Fentanyl	337.2 -> 105...	3/30/2018 12:01 PM	6.158	72	0.50		337.2 -> 188...				Fentanyl-D5	342.3 -> 105...	6.077	893004						
Fluoxetine	310.1 -> 44.3	3/30/2018 12:01 PM	6.184	1172	0.46		310.1 -> 148...	52	2.27		Fluoxetine-D6	316.2 -> 44.3	6.162	13690...						
Hydrocodone	300.2 -> 198...	3/30/2018 12:01 PM					300.2 -> 128...				Hydrocodone-D6	306.2 -> 202...	5.248	195619						
Hydromorphone	286.2 -> 184...	3/30/2018 12:01 PM					286.2 -> 157...				Hydromorphone-D6	292.2 -> 185...	4.559	58496						
Ketamine	238.1 -> 125...	3/30/2018 12:01 PM	5.747	1382	3.11		238.1 -> 220...	305	0.44		Ketamine-D4	242.1 -> 129...	5.665	533335						
Meprobamate	219.1 -> 158...	3/30/2018 12:01 PM					219.1 -> 97.1				Meprobamate-D7	226.2 -> 165...	5.464	3379						
Methadone	310.2 -> 265...	3/30/2018 12:01 PM					310.2 -> 105...				Methadone-D9	319.3 -> 268...	6.263	891930						
Methamphetamine	150.1 -> 91.1	3/30/2018 12:01 PM	5.016	10638	Infinity		150.1 -> 119...				Methamphetamine-D11	161.2 -> 97.1	4.935	138978						
Morphine	286.2 -> 201...	3/30/2018 12:01 PM	4.219	133	7.07		286.2 -> 165...				Morphine-D6	292.2 -> 152...	4.218	13249						
Naloxone	328.2 -> 309...	3/30/2018 12:01 PM	5.286	157	0.98		328.2 -> 211...				Naloxone-D5	333.2 -> 315...	5.387	32376						
Naltrexol	344.2 -> 326...	3/30/2018 12:01 PM	5.141	6592	15.88		344.2 -> 308...				Naltrexol-D3	347.2 -> 329...	4.978	174955						
Naltrexone	342.2 -> 324...	3/30/2018 12:01 PM	5.019	100	49.94		342.2 -> 55.3	88	0.50		Naltrexone-D3	345.2 -> 327...	5.140	229228						
Norbuprenorphine	414.3 -> 101...	3/30/2018 12:01 PM					414.3 -> 57.3				Norbuprenorphine-D3	417.3 -> 101...	5.770	378-						
Nordiazepam	271.1 -> 140...	3/30/2018 12:01 PM	6.374	30	10.36		271.1 -> 208...	786	1.69		Nordiazepam-D5	276.1 -> 140...	6.353	80593						
Norfentanyl	233.2 -> 84.2	3/30/2018 12:01 PM	5.299	267	2.16		233.2 -> 55.3	2965	9.92		Norfentanyl-D5	238.2 -> 84.2	5.299	690835						
Norhydrocodone	286.2 -> 199...	3/30/2018 12:01 PM	5.128	314	80.82		286.2 -> 171...				Norhydrocodone-D3	289.2 -> 202...	4.965	49223						
Noroxycodone	302.1 -> 284...	3/30/2018 12:01 PM	4.902	134	1.54		302.1 -> 186...				Noroxycodone-D3	305.2 -> 287...	4.881	85923						
O-desmethyl-tramadol	250.2 -> 58.3	3/30/2018 12:01 PM	4.890	3765	Infinity		250.2 -> 42.3				O-desmethyl-tramadol...	256.2 -> 64.3	4.890	733737						
Oxazepam	287.1 -> 240...	3/30/2018 12:01 PM	6.167	177	2.05		287.1 -> 268...				Oxazepam-D5	292.1 -> 246...	6.187	32637						
Oxycodone	316.2 -> 298...	3/30/2018 12:01 PM					316.2 -> 241...				Oxycodone-D6	322.2 -> 304...	5.022	176617						
Oxymorphone	302.1 -> 284...	3/30/2018 12:01 PM	4.175	43	0.36		302.1 -> 227...				Oxymorphone-D3	305.2 -> 287...	4.234	350754						
Phentermine	150.1 -> 65.2	3/30/2018 12:01 PM	5.118	1399	Infinity		150.1 -> 133...				Phentermine-D5	155.2 -> 96.2	5.118	249836						
Promethazine	285.1 -> 86.2	3/30/2018 12:01 PM					285.1 -> 71.3				Promethazine-D3	288.2 -> 89.2	6.268	11486...						
Quetiapine	384.2 -> 253...	3/30/2018 12:01 PM	6.420	401	124.21		384.2 -> 221...	28	0.30		Quetiapine-D8	392.2 -> 226...	6.358	258188						
Sertraline	306.1 -> 158...	3/30/2018 12:01 PM					306.1 -> 275...				Sertraline-D3	309.1 -> 275...	6.448	233472						
Sufentanil	387.2 -> 238...	3/30/2018 12:01 PM	6.460	381	131.78		387.2 -> 111...	442	1.75		Sufentanil-D5	392.2 -> 238...	6.419	381495						
Temazepam	301.1 -> 255...	3/30/2018 12:01 PM	6.166	421	0.74		301.1 -> 283...	11874	4.00		Temazepam-D5	306.1 -> 260...	6.328	41735-						

Compound Name		p.i negative			p.i negative Results			Qualifier   M...			ISIU Method			ISIU Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	M	Transition	Area	S/N	M	Name	Transition	RT	Resp.		
Tramadol	264.2 -> 58.3	3/30/2018 12:01 PM	5.419	7833	3911.66	☐	264.2 -> 43.3	585	1.49	☐	Tramadol-13C-D3	268.2 -> 58.3	5.419	13033...		
Trazodone	372.2 -> 176...	3/30/2018 12:01 PM	6.542	1973	35.62	☐	372.2 -> 148...	2471	2.30	☐	Trazodone-D6	378.2 -> 182...	6.521	625120		
Venlafaxine	278.2 -> 58.3	3/30/2018 12:01 PM				☐	278.2 -> 260...			☐	Venlafaxine-D6	284.2 -> 64.3	5.721	699340		
Zolpidem	308.2 -> 235...	3/30/2018 12:01 PM	6.388	1383	4.29	☐	308.2 -> 263...	114	1.02	☐	Zolpidem-D6	314.2 -> 235...	6.143	15368...		

Compound method				p i external control				p i external control results				Qualifier   M...				IS ID method				IS ID Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	RT	R <sub>exp</sub>							
6-MAM	328.2 -> 165...	3/30/2018 12:21 PM	4.980	278	7.37	328.2 -> 211...					6-MAM-D6	334.2 -> 165...	5.081	48708							
7-aminoclonazepam	286.1 -> 121...	3/30/2018 12:21 PM				286.1 -> 222...					7-Aminoclonazepam-D4	290.1 -> 121...	5.415	71080							
Acetyl Fentanyl	323.2 -> 105...	3/30/2018 12:21 PM	6.059	220	0.46	323.2 -> 188...					Acetyl Fentanyl-D5	328.2 -> 105...	5.895	11300...							
Acetyl Norfentanyl	219.1 -> 84.2	3/30/2018 12:21 PM				219.1 -> 56.3					Acetyl Norfentanyl-D5	224.2 -> 84.2	4.853	433905							
a-hydroxyalprazolam	325.1 -> 297...	3/30/2018 12:21 PM	6.220	348	100.46	325.1 -> 215...					a-hydroxyalprazolam-D5	330.1 -> 302...	6.179	125465							
alpha-PVP	232.2 -> 91.0	3/30/2018 12:21 PM				232.2 -> 77.1					alpha-PVP-d8	240.2 -> 91.1	5.544	564163							
Alprazolam	309.1 -> 281...	3/30/2018 12:21 PM	6.123	6661	1795.94	309.1 -> 205...	1348		534.93		Alprazolam-D5	314.1 -> 286...	6.264	302150							
Amphetamine	136.1 -> 91.1	3/30/2018 12:21 PM	4.794	28039	Infinity	136.1 -> 119...	153		0.50		Amphetamine-D11	147.2 -> 130...	4.754	10583							
Bupropion	240.1 -> 184...	3/30/2018 12:21 PM	5.808	34	0.24	240.1 -> 131...					Bupropion-D9	249.2 -> 185...	5.746	183506							
Carisoprodol	261.2 -> 176...	3/30/2018 12:21 PM				261.2 -> 55.3					Carisoprodol-D7	268.2 -> 183...	5.908	47281							
Citalopram	325.2 -> 109...	3/30/2018 12:21 PM				325.2 -> 262...					Citalopram-D6	331.2 -> 109...	5.955	572907							
Clonazepam	316.1 -> 269...	3/30/2018 12:21 PM	6.284	537	2.47	316.1 -> 213...					Clonazepam-D4	320.1 -> 217...	6.121	20107							
Codeine	300.2 -> 215...	3/30/2018 12:21 PM				300.2 -> 165...					Codeine-D6	306.2 -> 218...	5.023	45540							
Cyclobenzaprine	276.2 -> 214...	3/30/2018 12:21 PM	6.292	46	0.50	276.2 -> 231...	222		0.54		Cyclobenzaprine-D3	279.2 -> 215...	6.250	342278							
Dextromethorphan	272.2 -> 177...	3/30/2018 12:21 PM	6.049	133	1.16	272.2 -> 147...	144		0.51		Dextromethorphan-D3	275.2 -> 171...	6.028	268328							
Dextropropion	258.2 -> 157...	3/30/2018 12:21 PM	5.359	923	155.91	258.2 -> 133...	55		53.75		Dextropropion-D3	261.2 -> 157...	5.399	218621							
Diazepam	285.1 -> 193...	3/30/2018 12:21 PM	6.350	173	0.38	285.1 -> 153...	2042		0.86		Diazepam-D5	290.1 -> 198...	6.491	140941							
Dihydrocodeine	302.2 -> 198...	3/30/2018 12:21 PM				302.2 -> 128...					Dihydrocodeine-D6	308.2 -> 202...	4.840	75332							
Diphenhydramine	256.2 -> 167...	3/30/2018 12:21 PM	5.909	824	1.18	256.2 -> 152...	135		8.91		Diphenhydramine-D3	259.2 -> 167...	5.600	330650							
Doxylamine	271.2 -> 182...	3/30/2018 12:21 PM	5.642	118	0.51	271.2 -> 167...					Doxylamine-D5	276.2 -> 187...	5.986	117707							
EDDP	279.2 -> 235...	3/30/2018 12:21 PM	5.864	113	0.55	279.2 -> 250...					EDDP-D3	282.2 -> 235...	5.986	117707							
Fentanyl	337.2 -> 105...	3/30/2018 12:21 PM	6.117	31	0.73	337.2 -> 188...					Fentanyl-D5	342.3 -> 105...	6.077	873659							
Fluoxetine	310.1 -> 44.3	3/30/2018 12:21 PM	6.041	746	0.55	310.1 -> 148...					Fluoxetine-D6	316.2 -> 44.3	6.162	11885...							
Hydrocodone	300.2 -> 198...	3/30/2018 12:21 PM				300.2 -> 128...					Hydrocodone-D6	306.2 -> 202...	5.248	181227							
Hydromorphone	286.2 -> 184...	3/30/2018 12:21 PM				286.2 -> 157...					Hydromorphone-D6	292.2 -> 185...	4.539	69419							
Ketamine	238.1 -> 125...	3/30/2018 12:21 PM	5.605	273	3.16	238.1 -> 220...					Ketamine-D4	242.1 -> 129...	5.665	584322							
Meprobamate	219.1 -> 158...	3/30/2018 12:21 PM				219.1 -> 97.1					Meprobamate-D7	226.2 -> 165...	5.464	4617							
Methadone	310.2 -> 265...	3/30/2018 12:21 PM	6.163	5324	6.52	310.2 -> 105...					Methadone-D9	319.3 -> 268...	6.263	813040							
Methamphetamine	150.1 -> 91.1	3/30/2018 12:21 PM				150.1 -> 119...					Methamphetamine-D11	161.2 -> 97.1	4.935	169456							
Morphine	286.2 -> 201...	3/30/2018 12:21 PM				286.2 -> 165...					Morphine-D6	292.2 -> 152...	4.198	11522							
Naloxone	328.2 -> 309...	3/30/2018 12:21 PM				328.2 -> 211...					Naloxone-D5	333.2 -> 315...	5.387	31558							
Naltrexol	344.2 -> 326...	3/30/2018 12:21 PM	5.141	5578	165.22	344.2 -> 308...					Naltrexol-D3	347.2 -> 329...	4.978	175877							
Naltrexone	342.2 -> 324...	3/30/2018 12:21 PM				342.2 -> 55.3					Naltrexone-D3	345.2 -> 327...	5.120	231742							
Norbuprenorphine	414.3 -> 101...	3/30/2018 12:21 PM				414.3 -> 57.3					Norbuprenorphine-D3	417.3 -> 101...	5.770	4415							
Nordiazepam	271.1 -> 140...	3/30/2018 12:21 PM	6.455	57	3.03	271.1 -> 208...	1420		23.91		Nordiazepam-D5	276.1 -> 140...	6.353	133249							
Norfentanyl	233.2 -> 84.2	3/30/2018 12:21 PM				233.2 -> 55.3					Norfentanyl-D5	238.2 -> 84.2	5.299	718386							
Norhydrocodone	286.2 -> 199...	3/30/2018 12:21 PM	4.882	93	37.44	286.2 -> 171...					Norhydrocodone-D3	289.2 -> 202...	4.965	48476							
Noroxycodone	302.1 -> 284...	3/30/2018 12:21 PM	4.882	93	37.44	302.1 -> 186...					Noroxycodone-D3	305.2 -> 287...	4.881	80473							
O-desmethyl-tramadol	250.2 -> 58.3	3/30/2018 12:21 PM	5.012	3836	1.72	250.2 -> 42.3	96		5.78		O-desmethyl-tramadol...	256.2 -> 64.3	4.890	757365							
Oxazepam	287.1 -> 240...	3/30/2018 12:21 PM	6.350	50	0.72	287.1 -> 268...	336		0.40		Oxazepam-D5	292.1 -> 246...	6.187	226403							
Oxycodone	316.2 -> 298...	3/30/2018 12:21 PM	5.144	326	0.70	316.2 -> 241...	166		1.83		Oxycodone-D6	322.2 -> 304...	5.022	192611							
Oxymorphone	302.1 -> 284...	3/30/2018 12:21 PM	4.356	160	0.62	302.1 -> 227...					Oxymorphone-D3	305.2 -> 287...	4.214	344183							
Phentermine	150.1 -> 65.2	3/30/2018 12:21 PM				150.1 -> 133...					Phentermine-D5	155.2 -> 96.2	5.118	267976							
Promethazine	285.1 -> 86.2	3/30/2018 12:21 PM	6.290	73	0.59	285.1 -> 71.3	171		0.98		Promethazine-D3	288.2 -> 89.2	6.268	894996							
Quetiapine	384.2 -> 253...	3/30/2018 12:21 PM	6.399	25121...	3193.58	384.2 -> 221...	11601...		454769...		Quetiapine-D8	392.2 -> 226...	6.358	252053							
Sertraline	306.1 -> 158...	3/30/2018 12:21 PM				306.1 -> 275...					Sertraline-D3	309.1 -> 275...	6.468	347393							
Sufentanil	387.2 -> 238...	3/30/2018 12:21 PM	6.439	476	116.57	387.2 -> 111...	1376		10.92		Sufentanil-D5	392.2 -> 238...	6.439	426947							
Temazepam	301.1 -> 255...	3/30/2018 12:21 PM	6.328	13625...	Infinity	301.1 -> 283...	489801		Infinity		Temazepam-D5	306.1 -> 260...	6.328	777433							

Compound method		p   external control			p   external control Results			Qualimer   M...			Qualimer   Results			IS   U Method			IS   U 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	3/30/2018 12:21 PM	5.419	10109	2799.95	74	264.2 -> 43.3	0.48	74	Tramadol-13C-D3	268.2 -> 58.3	5.419	13370...						
Trazodone	372.2 -> 176...	3/30/2018 12:21 PM	6.562	997	2.16	1755	372.2 -> 148...	3.24	1755	Trazodone-D6	378.2 -> 182...	6.521	823680						
Venlafaxine	278.2 -> 58.3	3/30/2018 12:21 PM	5.762	367	1.09	600	278.2 -> 260...	2.82	600	Venlafaxine-D6	284.2 -> 64.3	5.721	693640						
Zolpidem	308.2 -> 235...	3/30/2018 12:21 PM	6.165	21384...	4701.11	805564	308.2 -> 263...	5132.21	805564	Zolpidem-D6	314.2 -> 235...	6.143	13923...						

ISIU Results

ISIU Method

Qualifier | Results

p2 cal ID Results

p2 cal ID

Compound Name

Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	RT	Resp.
7-aminoflunitrazepam	284.1 -> 135...	3/30/2018 11:52 A...	5.547	69020	115.29		284.1 -> 93.2	5976	79.89		7-aminoflunitrazepam-...	291.2 -> 138...	5.546	504234
alpha-hydroxymidazolam	342.1 -> 324...	3/30/2018 11:52 A...	6.251	51748	59.50		342.1 -> 203...	21830	88.43		alpha-hydroxymidazolam...	346.1 -> 328...	6.231	237420
Amiripryline	278.2 -> 91.2	3/30/2018 11:52 A...	6.322	231397	Infinity		278.2 -> 105...	84719	Infinity		Amiripryline-D3	281.2 -> 91.2	6.321	595553
Amoxapine	314.1 -> 271...	3/30/2018 11:52 A...	6.316	49735	93.48		314.1 -> 193...	32637	89.11		Amiripryline-D3	281.2 -> 91.2	6.321	595553
Benzoyllecgonine	290.1 -> 168...	3/30/2018 11:52 A...	5.179	18015	205.92		290.1 -> 105...	6303	192.43		Benzoyllecgonine-D8	298.2 -> 171...	5.178	6909
Carbamazepine	237.1 -> 193...	3/30/2018 11:52 A...	5.922	35005	76.57		237.1 -> 194...	1808...	131.03		Carbamazepine-13C6	243.1 -> 200...	5.921	10263...
Chlordiazepoxide	300.1 -> 227...	3/30/2018 11:52 A...	6.379	16380	67.61		300.1 -> 282...	22913	Infinity		Chlordiazepoxide-D5	305.1 -> 286...	6.358	380037
Clomipramine	315.2 -> 86.2	3/30/2018 11:52 A...	6.599	327809	Infinity		315.2 -> 58.3	1930...	295.01		Clomipramine-D3	318.2 -> 89.2	6.578	10815...
Cocaine	304.2 -> 182...	3/30/2018 11:52 A...	5.544	129334	63.95		304.2 -> 105...	20154	122.41		Cocaine-D3	307.2 -> 185...	5.543	509859
Desipramine	267.2 -> 72.3	3/30/2018 11:52 A...	6.243	306807	Infinity		267.2 -> 44.3	1345...	173.08		Desipramine-D3	270.2 -> 75.3	6.243	833994
Doxepin	280.2 -> 107...	3/30/2018 11:52 A...	6.058	65111	364.46		280.2 -> 77.2	34732	25.56		Doxepin-D3	283.2 -> 107...	6.057	188604
Estazolam	295.1 -> 267...	3/30/2018 11:52 A...	6.178	58017	129.63		295.1 -> 205...	30230	164.16		Estazolam-D5	300.1 -> 272...	6.177	388154
Flunitrazepam	314.1 -> 268...	3/30/2018 11:52 A...	6.214	69669	228.02		314.1 -> 239...	13784	50.04		Flunitrazepam-D7	321.1 -> 245...	6.214	21683
Flurazepam	388.2 -> 315...	3/30/2018 11:52 A...	6.128	162784	808.41		388.2 -> 317...	23407	4738.00		Zopiclone-D4	393.1 -> 244...	6.107	68168
Imipramine	281.2 -> 86.2	3/30/2018 11:52 A...	6.281	339105	207.85		281.2 -> 58.3	1925...	111.57		Imipramine-D3	304.2 -> 61.3	6.280	13723...
Levamisole	205.1 -> 91.2	3/30/2018 11:52 A...	5.151	53029	782.66		205.1 -> 178...	60338	3.10		Cocaine-D3	307.2 -> 185...	5.543	509859
Maprotiline	278.2 -> 91.2	3/30/2018 11:52 A...	5.957	191617	40.84		278.2 -> 117...	1658	3.58		Meperidine-D4	252.2 -> 224...	5.574	94203
MDA	180.1 -> 163...	3/30/2018 11:52 A...	4.949	30371	16.12		180.1 -> 105...	15813	316.11		MDA-D5	185.1 -> 168...	4.928	66722
MDEA	208.1 -> 163...	3/30/2018 11:52 A...	5.231	144674	671.04		208.1 -> 105...	61822	27256...		MDEA-D6	214.2 -> 166...	5.211	492617
MDMA	194.1 -> 163...	3/30/2018 11:52 A...	5.070	76049	67.25		194.1 -> 105...	37933	31.81		MDMA-D6	200.2 -> 166...	5.050	18209
Meperidine	248.2 -> 220...	3/30/2018 11:52 A...	5.575	50399	4194.95		248.2 -> 174...	43448	208.76		Meperidine-D4	252.2 -> 224...	5.574	94203
Methylphenidate	234.2 -> 84.2	3/30/2018 11:52 A...	5.494	310784	1013.18		234.2 -> 56.3	53057	553.64		Meperidine-D4	252.2 -> 224...	5.574	94203
Metoprolol	268.2 -> 116...	3/30/2018 11:52 A...	5.407	22441	71.79		268.2 -> 56.3	29238	37.90		Meperidine-D4	252.2 -> 224...	5.574	94203
Midazolam	326.1 -> 223...	3/30/2018 11:52 A...	6.415	22486	74.89		326.1 -> 249...	21095	132.71		Midazolam-D4	330.1 -> 295...	6.394	387288
Mirtazapine	266.2 -> 195...	3/30/2018 11:52 A...	6.019	161634	421.54		266.2 -> 72.3	1408...	320.41		Midazolam-D4	330.1 -> 295...	6.394	387288
Mitragynine	399.2 -> 174...	3/30/2018 11:52 A...	6.126	69400	257.81		399.2 -> 238...	17719	3670.30		Carbamazepine-13C6	243.1 -> 200...	5.921	10263...
Normeperidine	234.1 -> 42.3	3/30/2018 11:52 A...	5.536	59279	423.09		234.1 -> 160...	25184	90.32		Normeperidine-D4	238.2 -> 164...	5.535	403271
Norpropoxyphene	326.2 -> 44.3	3/30/2018 11:52 A...	6.110	19859	56.95		326.2 -> 252...	6387	1177.48		Norpropoxyphene-D5	331.2 -> 44.3	6.110	81501
Nortriptyline	284.2 -> 91.2	3/30/2018 11:52 A...	6.284	109472	Infinity		284.2 -> 233...	67977	Infinity		Nortriptyline-D3	267.2 -> 233...	6.283	395014
Ondansetron	294.2 -> 184...	3/30/2018 11:52 A...	5.790	90936	132.41		294.2 -> 212...	13551	20.05		Pentazocine-13C3	289.2 -> 72.3	5.588	652814
Pentazocine	286.2 -> 218...	3/30/2018 11:52 A...	5.608	100886	504.69		286.2 -> 41.3	53003	127.45		Pentazocine-13C3	289.2 -> 72.3	5.588	652814
Phenazepam	349.0 -> 206...	3/30/2018 11:52 A...	6.291	10876	84.45		349.0 -> 183...	12384	112.31		Phenazepam-D4	353.0 -> 183...	6.290	5189
Phencyclidine	244.2 -> 86.2	3/30/2018 11:52 A...	5.839	83637	340.73		244.2 -> 91.1	1008...	117.38		Phencyclidine-D5	249.2 -> 86.2	5.818	620737
Phenytolol	253.1 -> 104...	3/30/2018 11:52 A...	5.838	2520	6.40		253.1 -> 182...	1310	563.15		Phenytolol-D10	263.2 -> 192...	5.797	8216
Prazepam	325.1 -> 271...	3/30/2018 11:52 A...	6.760	229761	1067.30		325.1 -> 140...	77340	124.61		Prazepam-D5	330.1 -> 276...	6.758	11795...
Primidone	219.1 -> 91.2	3/30/2018 11:52 A...	5.230	7301	8.77		219.1 -> 162...	5457	12.14		Prazepam-D5	330.1 -> 276...	6.758	11795...
Propoxyphene	340.2 -> 58.3	3/30/2018 11:52 A...	6.170	228298	197.55		340.2 -> 266...	32698	130.03		Propoxyphene-D11	351.3 -> 277...	6.149	100351
Protriptyline	264.2 -> 155...	3/30/2018 11:52 A...	6.183	10154	Infinity		264.2 -> 161...				Nortriptyline-D3	267.2 -> 233...	6.283	395014
Pseudoephedrine	166.1 -> 148...	3/30/2018 11:52 A...	4.566	11974...	Infinity		166.1 -> 133...	2559...	43.09		Pseudoephedrine-D3	169.1 -> 151...	4.545	324306
Tapentadol	222.2 -> 107...	3/30/2018 11:52 A...	5.393	119383	267.16		222.2 -> 121...	60893	94.55		Tapentadol-D3	225.2 -> 107...	5.393	538255
Trimipramine	295.2 -> 100...	3/30/2018 11:52 A...	6.380	348393	846.21		295.2 -> 58.3	2206...	50501...		Trimipramine-D3	298.2 -> 103...	6.380	18180...
Verapamil	455.3 -> 165...	3/30/2018 11:52 A...	6.146	271580	1026.90		455.3 -> 150...	80698	338.96		Trimipramine-D3	298.2 -> 103...	6.380	18180...
Zaleplon	306.1 -> 236...	3/30/2018 11:52 A...	6.032	59070	387.74		306.1 -> 264...	74561	418.42		Zaleplon-D4	310.2 -> 240...	6.012	139784
Zopiclone	389.1 -> 244...	3/30/2018 11:52 A...	6.127	7430	1141.76		389.1 -> 216...	2477	11.55		Zopiclone-D4	393.1 -> 244...	6.107	68168

Did not evaluate Protriptyline

Compound Method			p2 negative			p2 negative Results			Qualifier   Wt...			Qualifier   Res...			ISID Method			ISID 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...	3/30/2018 12:11 PM	5.731	2070	7.68		284.1 -> 93.2	37	29.54		7-aminoflunitrazepam-D7	291.2 -> 138...	5.567	495955					
alpha-hydroxymidazolam	342.1 -> 324...	3/30/2018 12:11 PM	6.251	235	0.55		342.1 -> 203...	84	0.93		alpha-hydroxymidazolam-...	346.1 -> 328...	6.251	270212					
Amtriptyline	278.2 -> 91.2	3/30/2018 12:11 PM	6.444	2026	0.92		278.2 -> 105...	594	0.33		Amtriptyline-D3	281.2 -> 91.2	6.341	5281C1					
Amoxapine	314.1 -> 271...	3/30/2018 12:11 PM	6.255	439	4.73		314.1 -> 193...	539	25.57		Amtriptyline-D3	281.2 -> 91.2	6.341	5281C1					
Benzylecgonine	290.1 -> 168...	3/30/2018 12:11 PM	5.200	236	1.36		290.1 -> 105...	649	6.07		Benzylecgonine-D8	298.2 -> 171...	5.199	6459					
Carbamazepine	237.1 -> 193...	3/30/2018 12:11 PM	6.044	659	2.43		237.1 -> 194...				Carbamazepine-13C6	243.1 -> 200...	5.942	10198...					
Chlordiazepoxide	300.1 -> 227...	3/30/2018 12:11 PM	6.197	756	203.52		300.1 -> 282...				Chlorazepoxide-D5	305.1 -> 286...	6.379	571218					
Clomipramine	315.2 -> 86.2	3/30/2018 12:11 PM	6.781	68	0.55		315.2 -> 58.3				Clomipramine-D3	318.2 -> 89.2	6.599	660056					
Cocaine	304.2 -> 182...	3/30/2018 12:11 PM	5.626	414	0.37		304.2 -> 105...	72	0.68		Cocaine-D3	307.2 -> 185...	5.564	456531					
Desipramine	267.2 -> 72.3	3/30/2018 12:11 PM	6.283	2319	15.95		267.2 -> 44.3	354	7.54		Desipramine-D3	270.2 -> 75.3	6.263	801181					
Doxepin	280.2 -> 107...	3/30/2018 12:11 PM	6.038	214	1.25		280.2 -> 77.2	662	0.25		Doxepin-D3	283.2 -> 107...	6.078	196351					
Estazolam	295.1 -> 267...	3/30/2018 12:11 PM	6.260	119	1.25		295.1 -> 205...				Estazolam-D5	300.1 -> 272...	6.197	420839					
Flunitrazepam	314.1 -> 268...	3/30/2018 12:11 PM	6.255	598	2.35		314.1 -> 239...	121	2.84		Flunitrazepam-D7	321.1 -> 245...	6.214	25195					
Flurazepam	388.2 -> 315...	3/30/2018 12:11 PM	6.391	69	0.85		388.2 -> 317...				Zopiclone-D4	393.1 -> 244...	6.127	65712					
Imipramine	281.2 -> 86.2	3/30/2018 12:11 PM	6.362	2440	9.59		281.2 -> 58.3	140	1.47		Imipramine-D3	284.2 -> 61.3	6.300	1304C...					
Levamisole	205.1 -> 91.2	3/30/2018 12:11 PM	5.151	413	0.79		205.1 -> 178...	245	1.79		Cocaine-D3	307.2 -> 185...	5.564	456531					
Maprotiline	278.2 -> 91.2	3/30/2018 12:11 PM	5.957	564	0.93		278.2 -> 117...				Mepexidine-D4	252.2 -> 224...	5.594	78350					
MDA	180.1 -> 163...	3/30/2018 12:11 PM	5.071	317	0.64		180.1 -> 105...				MDA-D5	185.1 -> 168...	4.949	63954					
MDEA	208.1 -> 163...	3/30/2018 12:11 PM	5.394	493	0.67		208.1 -> 105...				MDEA-D6	214.2 -> 166...	5.231	478304					
MDMA	194.1 -> 163...	3/30/2018 12:11 PM	4.645	79	0.89		194.1 -> 105...	200	0.50		MDMA-D6	200.2 -> 166...	5.070	20806					
Meperidine	248.2 -> 220...	3/30/2018 12:11 PM	5.288	20	0.18		248.2 -> 174...	49	1.89		Mepexidine-D4	252.2 -> 224...	5.594	78350					
Methylphenidate	234.2 -> 84.2	3/30/2018 12:11 PM	5.433	420	0.63		234.2 -> 56.3				Mepexidine-D4	252.2 -> 224...	5.594	78350					
Metoprolol	268.2 -> 116...	3/30/2018 12:11 PM					268.2 -> 56.3				Mepexidine-D4	252.2 -> 224...	5.594	78350					
Midazolam	326.1 -> 223...	3/30/2018 12:11 PM					326.1 -> 249...				Midazolam-D4	330.1 -> 295...	6.414	349413					
Mirtazapine	266.2 -> 195...	3/30/2018 12:11 PM					266.2 -> 72.3				Midazolam-D4	330.1 -> 295...	6.414	349413					
Mitragynine	399.2 -> 174...	3/30/2018 12:11 PM	6.106	62	2.00		399.2 -> 238...				Carbamazepine-13C6	243.1 -> 200...	5.942	10198...					
Normeperidine	234.1 -> 42.3	3/30/2018 12:11 PM	5.189	23	0.22		234.1 -> 160...	42	0.22		Normeperidine-D4	238.2 -> 164...	5.555	386829					
Norpropoxyphene	326.2 -> 44.3	3/30/2018 12:11 PM	5.948	31	0.49		326.2 -> 252...				Norpropoxyphene-D5	331.2 -> 44.3	6.130	84261					
Nortriptyline	264.2 -> 91.2	3/30/2018 12:11 PM	6.325	236	0.76		264.2 -> 233...	206	0.66		Nortriptyline-D3	267.2 -> 233...	6.303	373745					
Ondansetron	294.2 -> 184...	3/30/2018 12:11 PM					294.2 -> 212...				Pentazocine-13C3	289.2 -> 72.3	5.608	652600					
Pentazocine	286.2 -> 218...	3/30/2018 12:11 PM	5.403	78	0.66		286.2 -> 41.3	191	0.82		Pentazocine-13C3	289.2 -> 72.3	5.608	652600					
Phenazepam	349.0 -> 206...	3/30/2018 12:11 PM	6.331	71	39.47		349.0 -> 183...	65	0.56		Phenazepam-D4	353.0 -> 183...	6.290	7667					
Phencyclidine	244.2 -> 86.2	3/30/2018 12:11 PM	5.839	174	0.77		244.2 -> 91.1	164	13.39		Phencyclidine-D5	249.2 -> 86.2	5.838	582126					
Phenylethylamine	253.1 -> 104...	3/30/2018 12:11 PM					253.1 -> 182...				Phenylethylamine-D10	263.2 -> 192...	5.837	9621					
Praxepam	325.1 -> 271...	3/30/2018 12:11 PM	7.185	91	0.35		325.1 -> 140...	105	0.46		Praxepam-D5	330.1 -> 276...	6.758	11723...					
Primidone	219.1 -> 91.2	3/30/2018 12:11 PM					219.1 -> 162...				Praxepam-D5	330.1 -> 276...	6.758	11723...					
Propoxyphene	340.2 -> 58.3	3/30/2018 12:11 PM	6.413	53	0.43		340.2 -> 266...	381	1.81		Propoxyphene-D11	351.3 -> 277...	6.169	100730					
Protriptyline	264.2 -> 155...	3/30/2018 12:11 PM					264.2 -> 161...				Nortriptyline-D3	267.2 -> 233...	6.303	373745					
Pseudoephedrine	166.1 -> 148...	3/30/2018 12:11 PM	4.728	161	0.38		166.1 -> 133...	412	1.21		Pseudoephedrine-D3	169.1 -> 151...	4.566	298148					
Tapentadol	222.2 -> 107...	3/30/2018 12:11 PM	5.454	123	1.40		222.2 -> 121...	118	0.32		Tapentadol-D3	225.2 -> 107...	5.414	508841					
Trimipramine	295.2 -> 100...	3/30/2018 12:11 PM	6.441	110	0.79		295.2 -> 58.3	141	0.54		Trimipramine-D3	298.2 -> 103...	6.400	15795...					
Verapamil	455.3 -> 165...	3/30/2018 12:11 PM	6.126	99	0.45		455.3 -> 150...				Trimipramine-D3	298.2 -> 103...	6.400	15795...					
Zaleplon	306.1 -> 236...	3/30/2018 12:11 PM	6.317	217	0.75		306.1 -> 264...	159	1.03		Zaleplon-D4	310.2 -> 240...	6.032	142270					
Zopiclone	389.1 -> 244...	3/30/2018 12:11 PM	6.370	94	2.65		389.1 -> 216...				Zopiclone-D4	393.1 -> 244...	6.127	65712					

Compound method		pL external control				pL external control Results				Qualifier 1 MI...				Qualifier 1 Results				ISLJ method				ISLJ Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	Area	S/N	MI	Name	Transition	Area	S/N	MI	Name	Transition	Area	S/N	MI	RT	Resp.	
7-aminoflunitrazepam	284.1 -> 135...	3/30/2018 12:31 PM	5.731	1619	7.55		284.1 -> 93.2				7-aminoflunitrazepam-D7	291.2 -> 138...				7-aminoflunitrazepam-D7	291.2 -> 138...				5.567	476610	
alpha-hydroxymidazolam	342.1 -> 324...	3/30/2018 12:31 PM	6.251	529	0.86		342.1 -> 203...	321	3.89		alpha-hydroxymidazolam...	346.1 -> 328...				alpha-hydroxymidazolam...	346.1 -> 328...				6.251	297453	
Amtriptyline	278.2 -> 91.2	3/30/2018 12:31 PM					278.2 -> 105...				Amtriptyline-D3	281.2 -> 91.2				Amtriptyline-D3	281.2 -> 91.2				6.362	532962	
Amoxapine	314.1 -> 271...	3/30/2018 12:31 PM	6.255	1059	5.34		314.1 -> 193...	5919	53.66		Amtriptyline-D3	281.2 -> 91.2				Amtriptyline-D3	281.2 -> 91.2				6.362	532962	
Benzoylcegonine	290.1 -> 168...	3/30/2018 12:31 PM	5.179	275	6.52		290.1 -> 105...	339	0.55		Benzoylcegonine-D8	298.2 -> 171...				Benzoylcegonine-D8	298.2 -> 171...				5.219	6477	
Carbamazepine	237.1 -> 193...	3/30/2018 12:31 PM	6.003	59	0.19		237.1 -> 194...				Carbamazepine-13C6	243.1 -> 200...				Carbamazepine-13C6	243.1 -> 200...				5.942	10143...	
Chlordiazepoxide	300.1 -> 227...	3/30/2018 12:31 PM					300.1 -> 282...				Chlordiazepoxide-D5	305.1 -> 286...				Chlordiazepoxide-D5	305.1 -> 286...				6.379	372548	
Clomipramine	315.2 -> 86.2	3/30/2018 12:31 PM	6.619	133	0.29		315.2 -> 58.3	537	0.87		Clomipramine-D3	318.2 -> 89.2				Clomipramine-D3	318.2 -> 89.2				6.619	967075	
Cocaine	304.2 -> 182...	3/30/2018 12:31 PM	5.605	498	0.59		304.2 -> 105...	169	0.74		Cocaine-D3	307.2 -> 185...				Cocaine-D3	307.2 -> 185...				5.564	482777	
Desipramine	267.2 -> 72.3	3/30/2018 12:31 PM	6.303	2156	12.49		267.2 -> 44.3	5625	9.12		Desipramine-D3	270.2 -> 75.3				Desipramine-D3	270.2 -> 75.3				6.263	769597	
Doxepin	280.2 -> 107...	3/30/2018 12:31 PM	6.281	447	0.45		280.2 -> 77.2	8060	Infini...		Doxepin-D3	283.2 -> 107...				Doxepin-D3	283.2 -> 107...				6.078	183228	
Estazolam	295.1 -> 267...	3/30/2018 12:31 PM	6.543	73	1.00		295.1 -> 205...	249	2.45		Estazolam-D5	300.1 -> 272...				Estazolam-D5	300.1 -> 272...				6.197	532195	
Flunitrazepam	314.1 -> 268...	3/30/2018 12:31 PM	6.275	966	2.22		314.1 -> 239...				Flunitrazepam-D7	321.1 -> 245...				Flunitrazepam-D7	321.1 -> 245...				6.234	29951	
Flurazepam	388.2 -> 315...	3/30/2018 12:31 PM					388.2 -> 317...				Zopiclone-D4	393.1 -> 244...				Zopiclone-D4	393.1 -> 244...				6.127	71328	
Imipramine	281.2 -> 86.2	3/30/2018 12:31 PM	6.341	2389	2.82		281.2 -> 58.3	515	1.54		Imipramine-D3	284.2 -> 61.3				Imipramine-D3	284.2 -> 61.3				6.300	13448...	
Levamisole	205.1 -> 91.2	3/30/2018 12:31 PM	5.151	81	0.24		205.1 -> 178...				Cocaine-D3	307.2 -> 185...				Cocaine-D3	307.2 -> 185...				5.564	482777	
Maprotiline	278.2 -> 91.2	3/30/2018 12:31 PM	5.916	352	0.43		278.2 -> 117...				Meperidine-D4	252.2 -> 224...				Meperidine-D4	252.2 -> 224...				5.615	89525	
MDA	180.1 -> 163...	3/30/2018 12:31 PM	5.152	1271	0.81		180.1 -> 105...	137	0.52		MDA-D5	185.1 -> 168...				MDA-D5	185.1 -> 168...				4.970	63988	
MDEA	208.1 -> 163...	3/30/2018 12:31 PM	5.517	1176	318.39		208.1 -> 105...	702	2.83		MDEA-D6	214.2 -> 166...				MDEA-D6	214.2 -> 166...				5.251	470615	
MDMA	194.1 -> 163...	3/30/2018 12:31 PM					194.1 -> 105...				MDMA-D6	200.2 -> 166...				MDMA-D6	200.2 -> 166...				5.090	18331	
Meperidine	248.2 -> 220...	3/30/2018 12:31 PM	5.086	40	0.61		248.2 -> 174...	76	0.45		Meperidine-D4	252.2 -> 224...				Meperidine-D4	252.2 -> 224...				5.615	89525	
Methylphenidate	234.2 -> 84.2	3/30/2018 12:31 PM	5.494	118	0.80		234.2 -> 56.3				Meperidine-D4	252.2 -> 224...				Meperidine-D4	252.2 -> 224...				5.615	89525	
Metoprolol	268.2 -> 116...	3/30/2018 12:31 PM					268.2 -> 56.3				Meperidine-D4	252.2 -> 224...				Meperidine-D4	252.2 -> 224...				5.615	89525	
Midazolam	326.1 -> 223...	3/30/2018 12:31 PM					326.1 -> 249...				Midazolam-D4	330.1 -> 295...				Midazolam-D4	330.1 -> 295...				6.414	368353	
Mirtazapine	266.2 -> 195...	3/30/2018 12:31 PM	5.856	78	0.45		266.2 -> 72.3	195	0.87		Midazolam-D4	330.1 -> 295...				Midazolam-D4	330.1 -> 295...				6.414	368353	
Mitragynine	399.2 -> 174...	3/30/2018 12:31 PM					399.2 -> 238...				Carbamazepine-13C6	243.1 -> 200...				Carbamazepine-13C6	243.1 -> 200...				5.942	10143...	
Normeperidine	234.1 -> 42.3	3/30/2018 12:31 PM	5.311	40	0.38		234.1 -> 160...				Normeperidine-D4	238.2 -> 164...				Normeperidine-D4	238.2 -> 164...				5.555	403041	
Norpropoxyphene	326.2 -> 44.3	3/30/2018 12:31 PM	5.907	35	0.60		326.2 -> 252...				Normeperidine-D4	238.2 -> 164...				Normeperidine-D4	238.2 -> 164...				6.130	84845	
Nortriptyline	264.2 -> 91.2	3/30/2018 12:31 PM	6.345	2429	2.37		264.2 -> 233...	94	3.38		Norpropoxyphene-D5	331.2 -> 44.3				Norpropoxyphene-D5	331.2 -> 44.3				6.303	357630	
Ondansetron	294.2 -> 184...	3/30/2018 12:31 PM					294.2 -> 212...				Nortriptyline-D3	267.2 -> 233...				Nortriptyline-D3	267.2 -> 233...				6.629	641234	
Pentazocine	286.2 -> 218...	3/30/2018 12:31 PM					286.2 -> 41.3				Pentazocine-13C3	289.2 -> 72.3				Pentazocine-13C3	289.2 -> 72.3				5.629	641234	
Phenazepam	349.0 -> 206...	3/30/2018 12:31 PM	6.250	534	4.65		349.0 -> 183...				Pentazocine-13C3	289.2 -> 72.3				Pentazocine-13C3	289.2 -> 72.3				5.629	641234	
Phencyclidine	244.2 -> 86.2	3/30/2018 12:31 PM	5.859	318	1.56		244.2 -> 91.1	456	0.74		Phenazepam-D4	353.0 -> 183...				Phenazepam-D4	353.0 -> 183...				6.290	9495	
Phenylethanolamine	253.1 -> 104...	3/30/2018 12:31 PM					253.1 -> 182...				Phencyclidine-D5	249.2 -> 86.2				Phencyclidine-D5	249.2 -> 86.2				5.859	614305	
Prazepam	325.1 -> 271...	3/30/2018 12:31 PM	6.760	44	0.20		325.1 -> 140...	29	0.52		Phencyclidine-D5	249.2 -> 86.2				Phencyclidine-D5	249.2 -> 86.2				5.837	11749	
Primidone	219.1 -> 91.2	3/30/2018 12:31 PM	5.394	361	1.57		219.1 -> 162...				Phenylethanolamine-D10	263.2 -> 192...				Phenylethanolamine-D10	263.2 -> 192...				6.758	10519...	
Propoxyphene	340.2 -> 58.3	3/30/2018 12:31 PM	6.008	85	0.50		340.2 -> 266...	55	0.32		Prazepam-D5	330.1 -> 276...				Prazepam-D5	330.1 -> 276...				6.758	10519...	
Protriptyline	264.2 -> 155...	3/30/2018 12:31 PM	6.203	240	0.67		264.2 -> 161...	41	1.06		Prazepam-D5	330.1 -> 276...				Prazepam-D5	330.1 -> 276...				6.169	100617	
Pseudoephedrine	166.1 -> 148...	3/30/2018 12:31 PM	4.465	162	0.48		166.1 -> 133...	132	0.43		Propoxyphene-D11	351.3 -> 277...				Propoxyphene-D11	351.3 -> 277...				6.303	357630	
Tapentadol	222.2 -> 107...	3/30/2018 12:31 PM	5.291	83	0.50		222.2 -> 121...	33	0.39		Nortriptyline-D3	267.2 -> 233...				Nortriptyline-D3	267.2 -> 233...				4.566	362559	
Trimipramine	295.2 -> 100...	3/30/2018 12:31 PM	6.401	183	1.12		295.2 -> 58.3	21	0.25		Pseudoephedrine-D3	169.1 -> 151...				Pseudoephedrine-D3	169.1 -> 151...				5.414	517534	
Verapamil	455.3 -> 165...	3/30/2018 12:31 PM	6.248	37	0.28		455.3 -> 150...				Tapentadol-D3	225.2 -> 107...				Tapentadol-D3	225.2 -> 107...				6.400	18341...	
Zaleplon	306.1 -> 236...	3/30/2018 12:31 PM	6.155	239	1.43		306.1 -> 264...	74	0.82		Trimipramine-D3	298.2 -> 103...				Trimipramine-D3	298.2 -> 103...				6.400	18341...	
Zopiclone	389.1 -> 244...	3/30/2018 12:31 PM	6.127	60182	199.65		389.1 -> 216...	17646	25.86		Zaleplon-D4	310.2 -> 240...				Zaleplon-D4	310.2 -> 240...				6.052	146177	
Zopiclone	389.1 -> 244...	3/30/2018 12:31 PM	6.127	60182	199.65		389.1 -> 216...	17646	25.86		Zopiclone-D4	393.1 -> 244...				Zopiclone-D4	393.1 -> 244...				6.127	71328	