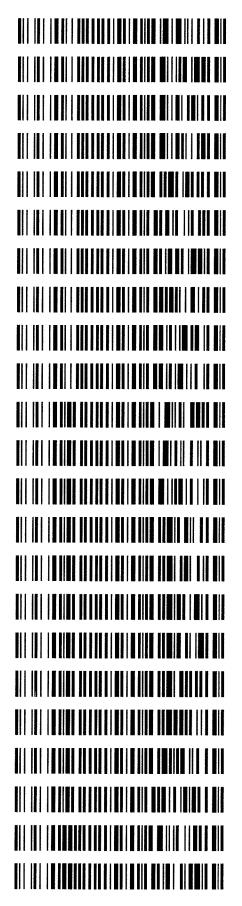
### By Britany Wylie at 4:03 pm, Oct 15, 2018

#### Worklist: 2722

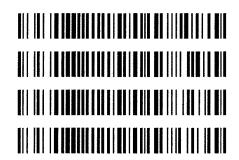
LAB CASE	ITEM	TASK ID	DESCRIPTION
C2018-1903	1	127074	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt
C2018-1928	1	127193	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
C2018-1931	1	127205	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
C2018-1932	1	127208	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
C2018-1948	1	127441	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
C2018-1960	1	127675	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
C2018-1971	1	127711	AM 25/AM 26 Blood MultiDrug/THC Screen by Lu
C2018-1997	1	128018	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
C2018-2018	1	128163	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
C2018-2019	1	128165	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4653	1	126745	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4737	1	127115	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt
M2018-4791	1	127307	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4823	1	127389	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4824	1	127394	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4825	1	127397	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4826	1	127401	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4826	2	127405	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4826	3	127409	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4836	1	127485	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
M2018-4919	1	127869	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
P2018-2727	1	127284	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
P2018-2797	1	127725	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo





### Worklist: 2722

<u>LAB CASE</u> P2018-2844	ITEM 1	<u>TASK ID</u> 128209	DESCRIPTION  AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
P2018-2845	1	128212	AM 25/AM 26 Blood MultiDrug/THC Screen by Lu
P2018-2846	1	128215	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo
P2018-2847	1	128218	AM 25/AM 26 Blood MultiDrug/THC Screen by Lo



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

Extraction Date:	10/9/18	Analyst:	Anne Nord	
Plate lot#: 0515207	Plate Expiration:	10/18/2018		

Mobile phase A: 10mM Amm Form<br/>0.5M Ammonium HydroxideMobile phase B: 0.1% Formic Acid in MeOH<br/>Ethyl AcetateLC Methanol

Blank Blood Lot: 18G207D7 Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

**LCMS-QQQ ID**: 62340

### **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.

### Analytic:

- ☑ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- Σ 2. Pipette 250μL blood (calibrated pipette) Pipette ID: 1926134 in wells of analytical (standards) plate.
- □ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID: 66759
- □ A. Pipette 250μL 00.5M ammonium hydroxide in wells of analytical plate.
- ☑ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- ✓ 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: 66792
- ⊠ 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.
- $\boxtimes$  13. Wait 5 minutes.
- △ 14. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- 🗵 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: \_\_mds p1, \_mds p2 \_\_\_\_\_\_\_ Worklist path: 100918 am 25-26
- ☑ 2. Make necessary changes to integration limits
- ☑ 4. Did all QCs pass for each analyte? Y / N Click here to enter text.

**COMMENTS**: Click here to enter text.

A



working solution 10000 ng/ml in meoh Hydromorphone, Hydrocodone, Nortriptyline, Sertraline Toxicology AM method 25 external prep information Stock solution 1mg/ml 100 ul each in 9600ul meOH

by Amn Ppd 4/23/18 Exp: 4/23/19 lot 42318

8/1/2020 3/1/2020 6/1/2020 9/1/2020 expiration FN06191503 FN01081501 FE09091505 FE04101502 lot Hydromorphone Hydrocodone nortriptyline sertraline Drug

neg blood lot 17J20718 AM 25 control 100 ul working solution (42318) in 9900 ul neg blood

ppd 04/23/18 exp 4/23/19 lot 42318

by Amn

Concentration 100ng/ml hydrocodone, nortriptyline, sertraline, hydromorphone

Name	1	ACCUPATION AND ADDRESS OF THE PROPERTY OF THE											
	Transition	Acq. Date-Time	늄	Resp.	N/S	MI Transition		S/N	Area MI		Name	RT	Resp.
C BAABA	328 2 -> 165	10/9/2018 12:24 PM	5 400	1096	14.86	328.2 ->	211	9.58	983	F-MAM-D6	1-D6	5.339	46410
0-WAW	326.2 -7 103	10/9/2018 12:24 PM	5 612	18941	76.31	1	222	2658.95	13926	7-Amin	7-Aminoclonazepam-D4	5.590	80122
Penzoylecdonine	290.1 -> 121	10/9/2018 12:24 PM	5.406	12999	2437.12	1	105	32.44	7793	Benzoy	Benzoylecgonine-D8	5.385	4486
Metoprolol	268.2 -> 116	10/9/2018 12:24 PM	5.594	17193	153.88	268.2 ->	56.3	29.40	16086	Noroxy	Noroxycodone-D3	5.037	102648
a hydroxyalarazolam	325.1 -> 297	10/9/2018 12:24 PM	6.379	5779	18.59	325.1 ->	215	559.67	3101	" a-hydrc	a-hydroxyalprazolam-D5	6.358	30083
a-liyulOxyaipiazoialii	23.2 23.7	10/9/2018 12:24 PM	5.946	126349	118.36	232.2 ->	-> 77.1	35.06	48434	" alpha-f	alpha-PVP-d8	5.884	583785
Alprozolom	309 1 -> 281	10/9/2018 12:24 PM	6.465	41255	136.50	309.1 ->	<u> </u>	192.95	42209	" Alprazo	Alprazolam-D5	6.443	168710
Alpiazoialli	136 1 -> 911	10/9/2018 12:24 PM	4.972	140880	Infinity	136.1 ->	119	66.79	61284	_ Amphe	Amphetamine-D11	4.931	127662
Cocaino	304.2 -> 182	10/9/2018 12:24 PM	5.874	133567	191.94	304.2 ->		141.72	31970	Cocaine-D3	ne-D3	5.853	620811
Distorion	240.1 -> 184	10/9/2018 12:24 PM	6.169	109779	16927.60	240.1 ->	131	15188	56516	Buprop	Bupropion-D9	6.128	521631
Corisoprodol	251.0 - 107	10/9/2018 12:24 PM	6.127	56620	231.90	1 1	55.3	206.13	52936	Cariso	Carisoprodol-D7	6.126	355433
Citalogram	325.2 -> 170		6.196	160519	168.83	325.2 ->	262	352.02	38984	Citalop	Citalopram-D6	6.175	764397
Clonogram	316.1 -> 269		6.320	15160	3886.52	316.1 ->	. 213	992.51	4342	Clonaz	Clonazepam-D4	6.299	23686
Codoiso	300.2 > 215	· ~	5 344	8933	359.96	300.2 -> 165	165	20.26	6584	Codeine-D6	ne-D6	5.301	42758
Codelile	276.2 -> 210		6.552	108297	23529.46	276.2 ->	. 231	85.03	30852	Cyclob	Cyclobenzaprine-D3	6.530	538877
Dovtromothornhan	272.2 - 2.17.		6.268	49079	840.78	272.2 -> 147		7095.70	45250	Dextro	Dextromethorphan-D3	6.267	251518
Doxfrombon	25.2 - 15.1 - 25.2 - 2 15.7	~·!~··	5.596	37029	59.10	258.2 -> 133.	133	175.18	24993	T Dextro	Dextrorphan-D3	5.595	199522
Disagnam	285.1 -> 193		6.671	34572	90.53	285.1 ->	153	124.78	22575	Diazer	Diazepam-D5	6.670	149529
Dibudrooodoino	302.2 - 198	~{~~	5.099	21669	249.93	302.2 ->	128	74.12	14239	Dihydr	Dihydrocodeine-D6	5.056	110463
Dinhanhydramine	256.2 -> 167		6.189	269583	97.17	256.2 ->	152	16941	64745	Dipher	Diphenhydramine-D3	6.188	1432756
Dovdamine	271.2 -> 182		5.839	230960	195.13	271.2 ->	167	249.96	1505	Doxyle	Doxylamine-D5	5.818	1156493
EDDP	279.2 -> 235	~!~~~	6.143	155437	1326.02	279.2 ->	250	631.62	47027	EDDP-D3	-D3	6.143	70199
Fantanyl	337.2 -> 105		6.581	25885	28.48	337.2 ->	188	152.96	17236	Fentar	Fentanyl-D5	6.561	1416199
Fluovatina	310 1 -> 44 3	10/9/2018 12:24 PM	6.362	184214	Infinity	310.1 -> 148.	, 148	127.31	] 6689	Fluoxe	Fluoxetine-D6	6.361	968527
Lidocodono	300.2 -> 198		5.569	23262	14.30	300.2 -> 128	128	Infinity	10840	Hydro	Hydrocodone-D6	5.526	177894
Hydromorphone	286.2 -> 184		4.881	19216	132.49	[ 286.2 -> 157	, 157	82.93	11917	- Hydro	Hydromorphone-D6	4.818	70272
Liyaioiiioipiio	238.1 -> 125	···	6.149	90540	183.75	7 238.1 ->	> 220	21.28	35553	Ketam	Ketamine-D4	6.128	422492
Mirtazanine	266.2 -> 195	~	6.534	200038	620.99	7 266.2 ->	72.3	320.30	1202	Trame	Tramadol-13C-D3	5.614	961750
Mitradynina	399.2 -> 238		6.578	27576	314.13	<- 399.2	-> 174	190.81	71570	Trame	Tramadol-13C-D3	5.614	961750
Menrohamate	219 1 -> 158	~ ~~~	5.681	22536	159.70	[ 219.1 -> 97.1	. 97.1	79.73	18612	Mepro	Meprobamate-D7	2.660	122853
Methadone	310.2 -> 265		6.464	-	267.67	310.2 ->	> 105	241.98	1804	Metha	Methadone-D9	6.442	992718
Methamphetamine	150 1 -> 91 1	~ [~~~~	5.153	54242	13.75	150.1 ->	× 119	Infinity	19690	Metha	Methamphetamine-D11	5.112	154802
Mornhine	286.2 -> 201	-[	4.598	4473	29.55	[ 286.2 ->	-> 165	30.69	3059	Morph	Morphine-D6	4.537	3609
Northing	414.3 -> 101		6.029	6500	36.49	414.3 ->	> 57.3	102.33	4809	Norbu	Norbuprenorphine-D3	6.009	27151
Nordiogene	271 1 -> 140	u-luum	6.533	14745	154.64	271.1 ->	> 208	77.59	11065	Nordi	Nordiazepam-D5	6.532	47564
Nofortony	2332-5842	~	5.496		685.88	233.2 ->	> 55.3	35.24	43499	Norfe	Norfentanyl-D5	5.475	578263
Norbydrooodona	286.2 -> 199		5.143		9.70	[ 286.2 -> 171	> 171	Infinity	832	Norhy	Norhydrocodone-D3	5.123	08809
Norwandone	302 1 -> 284	~{~~~	5.038	14609	12.80	302.1	-> 186	39.68	7447	Norox	Noroxycodone-D3	5.037	102648
O-desmethyl-tramadol	250.2 -> 58.3		5.088	166835	649.30	[ 250.2 ->	> 42.3	1237.26	10125	O-des	O-desmethyl-tramadol	5.068	762576
Oxazenam	287.1 -> 240	1	6.365	11455	83.49	287.1 ->	> 268	12.76	5614	Oxazı	Oxazepam-D5	6.365	48345
Oxycodone	316.2 -> 298		5.279	41543	483.84	7 316.2 ->	> 241	38.89	13599	Oxyg	Oxycodone-D6	5.238	2186/9
Oxymorphone	302 1 -> 284	~}~~~	4.554	38062	49.48	302.1 ->	-> 227	143.49	8853	Oxym	Oxymorphone-D3	4.512	202914



Compound Method	ро	p1 cal 1-2a	d	p1 cal 1-2a Results	Results	Qualifier 1 M	Qualifier 1 Results	1 Results	ISTD Method	ISTD	ISTD Results
Name	Transition	Acq. Date-Time	RI	Resp.	S/N MI	S/N MI Transition	S/N	Area MI	Name	RT	Resp.
Phentermine	150.1 -> 65.2	150.1 -> 65.2 10/9/2018 12:24 PM	5.295	22057	Infinity	Infinity 🔽   150.1 -> 133	Infinity		381 🔽 Phentermine-D5	5.274	306511
Promethazine	285.1 -> 86.2	285.1 -> 86.2   10/9/2018 12:24 PM	6.691	397161	2122.13	2122.13 [   285.1 -> 71.3	67.62	81471	81471 Fromethazine-D3	0.670	2122297
Quetiapine	384.2 -> 253	384.2 -> 253   10/9/2018 12:24 PM	6.681	241400	1107.03	107.03	38989	1350	1350	6:629	330022
Sertraline	306.1 -> 158	306.1 -> 158   10/9/2018 12:24 PM	6.689	49955	188.90	188.90 [""   306.1 -> 275	Infinity	46454	46454   Sertraline-D3	6.667	247760
Temazepam	301.1 -> 255	301.1 -> 255 10/9/2018 12:24 PM	6.507	64087	234.27	234.27   301.1 -> 283	17.24	23536	23536 Temazepam-D5	6.506	316616
Tramadol	264.2 -> 58.3	264.2 -> 58.3   10/9/2018 12:24 PM	5.615	198687	110.79	110.79 [   264.2 -> 43.3	19.17	12701	12701  Tramadol-13C-D3	5.614	961750
Trazodone	372.2 -> 176	372.2 -> 176   10/9/2018 12:24 PM	6.844	231661	283.70	283.70 [ 372.2 -> 148	Infinity	1618	1618  🗂   Trazodone-D6	6.823	1029745
Venlafaxine	278.2 -> 58.3	278.2 -> 58.3   10/9/2018 12:24 PM	5.940	194666	276.12	276.12  ¯" 278.2 -> 260	260.40	39976	39976     Venlafaxine-D6	5.939	920087
Zolpidem	308.2 -> 235	308.2 -> 235   10/9/2018 12:24 PM	6.404	192717	141461	141461  [***   308.2 -> 263	204.72	68028	68028   ["   Zolpidem-D6	6.402	1015731



Compound Method	po	pinegalive control	<u> </u>	discourse company		- 2						
Name	Transition	Acq. Date-Time	RT	Resp.	N/S	MI Transition	S/N	Area	Ē	Name	RT	Resp.
S-MAM	П.	10/9/2018 12:43 PM				328.2 -> 211	<b> </b>		Š L	6-MAM-D6	5.359	46097
7-aminoclonazenam	286.1 -> 121	10/9/2018 12:43 PM			. S	286.1 -> 222	2	30000	7.	7-Aminoclonazepam-D4	5.590	89791
Benzovlecdonine	290.1 -> 168	10/9/2018 12:43 PM			-	290.1 -> 105	5		B	Benzoylecgonine-D8	5.385	4340
Metoprolol	268.2 -> 116					268.2 -> 56.3	3		Z	Noroxycodone-D3	5.037	103968
a-hvdroxvalprazolam	325.1 -> 297				<u> </u>	325.1 -> 215.	5		ġ	a-hydroxyalprazolam-D5	6.358	34840
a ilyaroxyarpiazoram alnha-PVP	232.2 -> 91.0				3	232.2 -> 77.1	-		a	alpha-PVP-d8	5.884	546853
Alprazolam	309.1 -> 281	~l~~~			3	309.1 -> 205	5		A	Alprazolam-D5	6.464	189569
Amphetamine	136.1 -> 91.1		5.032	36240	140.05	136.1 -> 119	96		A	Amphetamine-D11	4.931	117900
Cocaine	304.2 -> 182	~ i~~~			***************************************	304.2 -> 105.	5			Cocaine-D3	5.853	633655
Rinconion	240.1 -> 184				3	240.1 -> 131	1		B	Bupropion-D9	6.128	487023
Carisoprodol	2612 -> 176	~[~~~			3	261.2 -> 55.3	6			Carisoprodol-D7	6.126	351781
Citalonram	325.2 -> 109	~[~~~			3	325.2 -> 262	2		C	Citalopram-D6	6.175	798078
Clonazenam	316.1 -> 269	~[~~~				316.1 -> 21	213			Clonazepam-D4	6.299	24293
Codeine	300.2 -> 215					300.2 -> 16	165			Codeine-D6	5.301	36129
Cyclobenzantine	276.2 -> 214					276.2 -> 231				Cyclobenzaprine-D3	6.530	547090
Dextromethornhan	272.2 -> 171	~!~~~				272.2 -> 147	.7			Dextromethorphan-D3	6.267	244177
Dextrorphan	258 2 -> 157					258.2 -> 13	133			Dextrorphan-D3	5.595	215762
Diazenam	285.1 -> 193			-		285.1 -> 15	153			Diazepam-D5	6.670	169839
Dihydrocodeine	302.2 -> 198					302.2 -> 128	8			Dihydrocodeine-D6	5.056	113910
Diphenhydramine	256.2 -> 167					256.2 -> 152	[		]	Diphenhydramine-D3	6.188	14727
Doxylamine	271.2 -> 182					271.2 -> 16	167			Doxylamine-D5	5.818	10871
EDDP	279.2 -> 235	~{~~~				279.2 -> 25	250		<u>ш</u>	EDDP-D3	6.143	71734
Fentanvl	337.2 -> 105	10/9/2018 12:43 PM				337.2 -> 18	188		<u>L</u>	Fentanyl-D5	6.561	14164
Fluoxetine	310.1 -> 44.3					310.1 -> 1	148		<u> </u>	Fluoxetine-D6	6.361	10313
Hydrocodone	300.2 -> 198					300.2 -> 12	128		<u>-</u>	Hydrocodone-D6	5.526	183006
Hydromorphone	286.2 -> 184					7   286.2 -> 15	157			Hydromorphone-D6	4.818	68875
Ketamine	238.1 -> 125	.f				238.1 -> 220	20		L	Ketamine-D4	6.128	407442
Mirtazapine	266.2 -> 195	4				266.2 <b>-&gt;</b> 72.3	ε.			Tramadol-13C-D3	5.614	989234
Mitragynine	399.2 -> 238				•••••	399.2 -> 174.	74			Tramadol-13C-D3	5.614	989234
Menrobamate	219.1 -> 158					7 219.1 -> 97.1	Τ.		_	Meprobamate-D7	5.660	125598
Methadone	310.2 -> 265	10/9/2018 12:43 PM				310.2 -> 105.	)5		_	Methadone-D9	6.442	10270
Methamphetamine	150.1 -> 91.1		5.153	21402	0.74	[   150.1 -> 119 <u></u>	19 0.72	548		Methamphetamine-D11	5.112	162344
Morphine	286.2 -> 201					286.2 -> 165.	35			Morphine-D6	4.537	4003
Norbuprenorphine	414.3 -> 101	•}*****				[ 414.3 -> 57.3	.3		_	Norbuprenorphine-D3	600.9	29109
Nordiazenam	271.1 -> 140					[ 271.1 -> 208	38		<u>-</u>	Nordiazepam-D5	6.532	64990
Norfentanvl	233.2 -> 84.2	~{				7 233.2 -> 55.3	6.3		L	Norfentanyl-D5	5.475	591001
Norhydrocodone	286.2 -> 199					[7] 286.2 -> 171	71			Norhydrocodone-D3	5.123	58465
Noroxycodone	302.1 -> 284	. 10/9/2018 12:43 PM			*******	302.1 -> 186	36			Noroxycodone-D3	5.037	103968
O-desmethyl-tramadol	250.2 -> 58.3	10/9/2018 12:43 PM	*********			[ 250.2 -> 42.3	3.3			O-desmethyl-tramadol	5.068	746916
Oxazepam	287.1 -> 240	. 10/9/2018 12:43 PM				7 287.1 -> 268	89			Oxazepam-D5	6.365	55550
Oxycodone	316.2 -> 298	. 10/9/2018 12:43 PM				<b>^</b>	241			Oxycodone-D6	5.238	78/917
O.o.morrahono	700 7 7 000	***************************************		_		0000	-					



Compound Method	pol	p1negative control	p1negative control Results	ntrol Results	Qualifier 1 M   Qualifier 1 Re	Qualifier 1 Re	ISTD Method	OTS!	ISTD Results
ama <sub>N</sub>	Transition		RT Resp.	S/N MI	Transition	S/N Area MI	/// Name	L H	Resp.
	7504 5650	ç			150.1 -> 133	7	Phentermine-D5	5.274	311347
Pnentermine	130.1 03.2	10/0/2010 12:431 W			2851->713		Promethazine-D3	6.670	22444
Promethazine	283.1 -> 60.2	Z83.1 -> 60.2 10/3/2010 12.43 F M			384.2 -> 221		Onetiapine-D8	6.680	362784
Quetiapine	384.2 -> 253	384.2 -> 253 10/9/2018 12:43 FIN		30000	3.1.7.			6 600	MUZLAC
Sertraline	306.1 -> 158	306.1 -> 158 10/9/2018 12:43 PM			306.1 -> 2/5		Sertialine-D3	0.000	1
	204 4 × 2EE	201 1 2 2EE 10/0/2018 12:13 DM			301.1 -> 283		Temazepam-D5	6.506	364076
Гетахерат	301.1 -7 233	W - CF.31 O102(C)			264 2 -> 43 3		Tramadol-13C-D3	5.614	989234
Tramadol	264.2 -> 58.3	264.2 -> 58.3   10/9/2018   2:43 FIN		\$ 1 mm.	2.57 7 7.502		T	6 242	11417
Trazodone	372.2 -> 176	372.2 -> 176 10/9/2018 12:43 PM			372.2 -> 148		l razodone-Do	0.040	::/-+-
Vicing-forcing	278 2 -> 58 3	278 2 -> 58 3 10/9/2018 12:43 PM		<u></u>	7 278.2 -> 260		Venlafaxine-D6	5.939	931560
Velilalaxiire	270.2	0.0000		3.	000		Zolpidom D6	6 402	10511
Zolpidem	308.2 -> 235	308.2 -> 235 10/9/2018 12:43 PM			308.2 -> 203		Zolbingili-Do	10	



Compound Method	pou	pi exterita control	) 1	אופו וושו כחוו	pi external control nesalts	3	Cualifici - Mi	)       	Kuaiiiici i ivesuiis	4		2	
Name	Transition	Acq. Date-Time	늄	Resp.	N/S	×	Transition	N/S	Area	Ξ	Name	ᅜ	Resp.
6-MAM	328.2 -> 165	10/9/2018 1:03 PM				32	328.2 -> 211			9	6-MAM-D6	5.359	49247
7-aminoclonazepam	286.1 -> 121	10/9/2018 1:03 PM				28	286.1 -> 222		3	7	7-Aminoclonazepam-D4	5.611	81528
Benzoylecgonine	290.1 -> 168	10/9/2018 1:03 PM				29	290.1 -> 105	~~~	3	Δ	Benzoylecgonine-D8	5.385	4994
Metoprolol	268.2 -> 116	10/9/2018 1:03 PM				26	268.2 -> 56.3	.,,,,,,,	3	Z	Noroxycodone-D3	5.037	110952
a-hydroxyalprazolam	325.1 -> 297	10/9/2018 1:03 PM				32	325.1 -> 215		**************************************	Ö 	a-hydroxyalprazolam-D5	6.379	36561
alpha-PVP	232.2 -> 91.0	10/9/2018 1:03 PM				23	232.2 -> 77.1	**********	300000.	o I	alpha-PVP-d8	5.884	580307
Alprazolam	309.1 -> 281	10/9/2018 1:03 PM				30	309.1 -> 205		300000,	▼ I	Alprazolam-D5	6.464	191964
Amphetamine	136.1 -> 91.1	10/9/2018 1:03 PM	5.032	27055	59.83	13	136.1 -> 119			A	Amphetamine-D11	4.931	159518
Cocaine	304.2 -> 182	10/9/2018 1:03 PM				30	304.2 -> 105		340000 *********************************	O	Cocaine-D3	5.853	585518
Bupropion	240.1 -> 184	10/9/2018 1:03 PM				24	240.1 -> 131	********	******	m	Bupropion-D9	6.128	570612
Carisoprodol		10/9/2018 1:03 PM				26	261.2 -> 55.3			0	Carisoprodol-D7	6.126	338362
Citalopram	325.2 -> 109	10/9/2018 1:03 PM				32	325.2 -> 262	create and other	3000000.	) 	Citalopram-D6	6.175	780059
Clonazepam	316.1 -> 269	10/9/2018 1:03 PM				31	316.1 -> 213	134/94/79/8935	30,000		Clonazepam-D4	6.319	28955
Codeine	300.2 -> 215	10/9/2018 1:03 PM	5,589	8630	43.20	30	300.2 -> 165	54.99	22685		Codeine-D6	5.301	36424
Cvclobenzaprine	276.2 -> 214	10/9/2018 1:03 PM				7	276.2 -> 231			l I	Cyclobenzaprine-D3	6.530	541895
Dextromethorphan	272.2 -> 171					27	272.2 -> 147				Dextromethorphan-D3	6.267	254784
Dextrorphan	258.2 -> 157	10/9/2018 1:03 PM				7 25	258.2 -> 133				Dextrorphan-D3	5.595	207293
Diazepam	285.1 -> 193	10/9/2018 1:03 PM				7 28	285.1 -> 153				Diazepam-D5	6.670	101542
Dihydrocodeine	302.2 -> 198	·}				30	302.2 -> 128	wmamo			Dihydrocodeine-D6	5.056	105913
Diphenhydramine	256.2 -> 167					7 25	256.2 -> 152				Diphenhydramine-D3	6.188	14667.
Doxylamine	271.2 -> 182					27	271.2 -> 167				Doxylamine-D5	5.838	10973
EDDP	279.2 -> 235	10/9/2018 1:03 PM				7 27	279.2 -> 250	***********	******	ш	EDDP-D3	6.163	71264
Fentanyl	337.2 -> 105	10/9/2018 1:03 PM				33	337.2 -> 188			L	Fentanyl-D5	6.561	14471
Fluoxetine	310.1 -> 44.3					31	310.1 -> 148		AND NO.	L	Fluoxetine-D6	6.361	10841
Hydrocodone	300.2 -> 198	300.2 -> 198 10/9/2018 1:03 PM	5.589	266555	Infinity	38	300.2 -> 128	Infinity	1191.	L	Hydrocodone-D6	5.526	172495
Hydromorphone	286.2 -> 184	10/9/2018 1:03 PM	4.881	180106	173.63	38 	286.2 -> 157	122.03	1265	1	Hydromorphone-D6	4.818	67050
Ketamine	238.1 -> 125	10/9/2018 1:03 PM				23	238.1 -> 220			7	Ketamine-D4	6.128	434866
Mirtazapine	266.2 -> 195	10/9/2018 1:03 PM				7 26	266.2 -> 72.3		·**********		Tramadol-13C-D3	5.614	977471
Mitragynine	399.2 -> 238	10/9/2018 1:03 PM				38	399.2 -> 174		<i>-</i>		Tramadol-13C-D3	5.614	977471
Meprobamate	219.1 -> 158		www.			7	219.1 -> 97.1	aram			Meprobamate-D7	2.660	121358
Methadone	310.2 -> 265	10/9/2018 1:03 PM				31	310.2 -> 105	шанны			Methadone-D9	6.463	976179
Methamphetamine	150.1 -> 91.1		5.153	33385	10.69	137	150.1 -> 119	Infinity	7053	_	Methamphetamine-D11	5.112	358648
Morphine	286.2 -> 201	10/9/2018 1:03 PM				T   28	286.2 -> 165	***************************************	************		Morphine-D6	4.537	4448
Norbuprenorphine	414.3 -> 101					41	414.3 -> 57.3			_	Norbuprenorphine-D3	6.029	31776
Nordiazepam	271.1 -> 140	10/9/2018 1:03 PM				7	271.1 -> 208	***************************************			Nordiazepam-D5	6.532	65641
Norfentanyl	233.2 -> 84.2	10/9/2018 1:03 PM				7 23	233.2 -> 55.3		.,		Norfentanyl-D5	5.475	613247
Norhydrocodone	286.2 -> 199					- 1 - 1 - 2 - 3	286.2 -> 171			L	Norhydrocodone-D3	5.123	63378
Noroxycodone	302.1 -> 284	10/9/2018 1:03 PM				] 30	302.1 -> 186				Noroxycodone-D3	5.037	110952
O-desmethyl-tramadol	250.2 -> 58.3	10/9/2018 1:03 PM				7 25	250.2 -> 42.3	*********			O-desmethyl-tramadol	5.068	758965
Oxazepam	287.1 -> 240	10/9/2018 1:03 PM				F   28	287.1 -> 268				Oxazepam-D5	6.365	57178
Oxycodone	316.2 -> 298	. 10/9/2018 1:03 PM				3	316.2 -> 241				Oxycodone-D6	5.238	212238
Campan	1000	110 00 1 0100 0101	_			7	700 4 4 000			_			10000



Compound Method	thod	p1 external control	p1e	p1 external control Results	rol Results	Qualifier 1 M   Qualifier 1 Results	Qualifier	1 Result	s ISTD Method	pot	ISTD Results	esults
Name	Transition	Acq, Date-Time	R	Resp.	S/N MI	Transition	S/N	Area	VII Name		RT	Resp.
Dhantarmina	150 1 -> 65 2	150 1 -> 65 2 10/9/2018 1:03 PM			***************************************	150.1 -> 133			Phentermine-D5		5.274	500197
Dromothozine	285 1 -> 86.2	285 1 -> 86.2   10/9/2018 1:03 PM				285.1 -> 71.3		**********	Promethazine-D3	**********	6.670	18467
Orietianina	384.2 -> 253	384.2 -> 253   10/9/2018 1:03 PM			<u> </u>	384.2 -> 221			Quetiapine-D8		6:659	302027
Cortrolling	306.1.> 158	306.1 -> 158   10/9/2018 1:03 PM	6 709	307495	957.64	306.1 -> 275	Infinity	2942	306.1 -> 275   Infinity   2942		6.688	128218
Tomozonom	301 1 -> 255	301 1 -> 255   10/9/2018 1:03 PM			-	301.1 -> 283			Temazepam-D5		6.506	348460
Tromodol	264.2 -> 58.3	264.2 -> 58.3 10/9/2018 1:03 PM				264.2 -> 43.3			Tramadol-13C-D3		5.614	977471
Transform	372 2 - 20:5	372 2 -> 176 10/9/2018 1:03 PM		-	-	372.2 -> 148			Trazodone-D6		6.843	11207
Venlafavine	278.2 -> 58.3	278 2 -> 58 3 10/9/2018 1:03 PM			. 1	278.2 -> 260			Wenlafaxine-D6		5.939	955186
Zolnidem	308.2 -> 235	308.2 -> 235 10/9/2018 1:03 PM				308.2 -> 263			Zolpidem-D6		6.402	10435
- 7010107	1000		~		> C			-				



Compound Method	thod	p2 cal 1-2b	d	p2 cal 1-2b Results	Results	Qualifier 1 M	Qualifier	Qualifier 1 Results	ISTD Method	ISTD Results	esults
Name	Transition	Acq. Date-Time	RT	Resp.	S/N Mi	Transition	N/S	Area MI	Name	Ш	Resp.
Acetylfentanyl	323.2 -> 188	10/9/2018 12:34 PM	6.388	17722	86.10	323.2 -> 105	27.49	25615	Acetylfentanyl-D5	6.387	15031
aloba-hydroxymidazolam		10/9/2018 12:34 PM	6.446	56745	215.80	342.1 -> 203	95.81	34424	alpha-hydroxymidazolam	6.426	317006
Amitriotyline	278.2 -> 91.2	10/9/2018 12:34 PM	6.679	173444	171.64	278.2 -> 105	166.96	83889	Amitriptyline-D3	6.657	493985
Acetylnorfentanyl	219.1 -> 84.2	10/9/2018 12:34 PM	5.039	8421	61.62	219.1 -> 56.3	35.13	2117	Acetylnorfentanyl-D5	5.018	449113
Carbamazenine	237.1 -> 193		6.157	23508	103.92	237.1 -> 194	702.16	2249	Carbamazepine-13C6	6.156	11333
Chlordiazenoxide	300.1 -> 227		6.573	22170	14046.81	300.1 -> 282	50.97	19084	Chlordiazepoxide-D5	6.573	214169
Zoniclone	389.1 -> 244	10/9/2018 12:34 PM	6.423	16594	325.63	389.1 -> 216	38.34	10152	Zopiclone-D4	6.403	217648
Sufentanil	387.2 -> 238	-	6.948	31145	102.42	387.2 -> 111	95.46	26844	Sufentanil-D5	6.927	12852
Desintamine	267.2 -> 72.3		6.459	221161	273.95	267.2 -> 44.3	201.09	1151	Desipramine-D3	6.438	10715
Doxenin	280.2 -> 107	. vurne	6.395	116234	77.72	280.2 -> 77.2	35.81	39536	Doxepin-D3	6.373	598193
Fstazolam	295 1 -> 267		6.392	47090	246.03	295.1 -> 205	200.96	44165	Estazolam-D5	6.370	236139
Fluitrazenam	314 1 -> 268	314 1 -> 268 10/9/2018 12:34 PM	6.409	45027	299.49	314.1 -> 239	71.60	17265	Flunitrazepam-D7	6.409	9652
Filipzenam	388.2 -> 315	10/9/2018 12:34 PM	6.586	180861	67048.53	388.2 -> 317	14948	40722	Zopiclone-D4	6.403	217648
Impromine	2812->862		6.616	374187	686.73	281.2 -> 58.3	Infinity	2010	Imipramine-D3	6.595	10320
I womicole	205 1 -> 91 2	10/9/2018 12:34 PM	5.469	47934	25.02	205.1 -> 178	42.74	43449	Sufentanil-D5	6.927	12852
Manrotiline	278.2 -> 91.2	10/9/2018 12:34 PM	6.679	170155	78.07	278.2 -> 117	54386	54654	Amitriptyline-D3	6.657	493985
MDA	180 1 -> 163		5.126	57648	103.71	180.1 -> 105	30.86	36552	MDA-D5	5.125	328743
MORA	208 1 -> 163	208 1 -> 163   10/9/2018 12:34 PM	5.406	113565	312.36	208.1 -> 105	100.11	85468	MDEA-D6	5.406	541662
MDMA	194 1 -> 163	194 1 -> 163   10/9/2018 12:34 PM	5.266	119836	497.84	194.1 -> 105	45.96	75676	MDMA-D6	5.245	65863
Monoridina	248.2 -> 220	10/9/2018 12:34 PM	5.912	64252	65.68	248.2 -> 174	72.20	36295	Meperidine-D4	5.911	323229
Methylphenidate	234 2 -> 84 2	.	5.751	292274	292.21	234.2 -> 56.3	111.44		Meperidine-D4	5.911	323229
Midazolam	326.1 -> 223	··· Success	6.610	22764	275.37	326.1 -> 249	1915.01	18964	Midazolam-D4	6.609	343664
Normeperidine	234.1 -> 42.3	-[	5.752	60887	85.56	7   234.1 -> 160	303.15	47093	Normeperidine-D4	5.750	229331
7-Aminoflunitrazepam	284.1 -> 135		5.783	30999	170.78	284.1 -> 93.2	144.30	commercial in		5.762	139406
Nortrintyline	264.2 -> 91.2		6.500	73570	Infinity	7   264.2 -> 233	Infinity	71067	Nortriptyline-D3	6.499	327512
Phenazenam	349.0 -> 206	1	6.486	36141	5751.02 F	349.0 -> 183	682.89	24126	Phenazepam-D4	6.486	12925
Phenovolidine	244.2 -> 86.2	1	6.054	191697	99.27	244.2 -> 91.1	160.24	1436	Phencydlidine-D5	6.054	926618
Phenytoin	253.1 -> 104	• •	6.073	3298	37.19	253.1 -> 182	1002.82	2866	Phenytoin-D10	6.052	16480
Pseudoephedrine	166.1 -> 148		4.764	988137	1070.76	166.1 -> 133	180.87	1893	Pseudoephedrine-D3	4.764	476502
Tapentadol	222.2 -> 107	·[	5.609	142223	145.36	222.2 -> 121	116.65	54796	Tapentadol-D3	5.609	760248
Zalenlon	306.1 -> 236	306.1 -> 236 10/9/2018 12:34 PM	6.227	55299	15818.23	306.1 -> 264	441.44	39028	Zaleplon-D4	6.227	211524
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								



Compound Method	роф	p2 negative control	p2 neg	ative contr	p2 negative control Results	Qualifier 1 M	Qualifier 1 R	ISTD Method	ISTD	ISTD Results
Name	Transition	Acq. Date-Time	RT	Resp.	S/N MI	Transition	S/N Area MI	Name	R	Resp.
Acetylfentanyl	323.2 -> 188	. 10/9/2018 12:53 PM				323.2 -> 105		Acetylfentanyl-D5	6.367	14965
alpha-hydroxymidazolam	342.1 -> 324	. 10/9/2018 12:53 PM	*******		_	342.1 -> 203	L	alpha-hydroxymidazolam	6.426	335702
Amitriptyline	278.2 -> 91.2	10/9/2018 12:53 PM			<u> </u>	278.2 -> 105	1	Amitriptyline-D3	6.657	461602
Acetylnorfentanyl	219.1 -> 84.2	10/9/2018 12:53 PM	~~~~		<u>L</u>	219.1 -> 56.3		Acetylnorfentanyl-D5	5.018	455135
Carbamazepine	237.1 -> 193	.   10/9/2018 12:53 PM			<u> </u>	237.1 -> 194		Carbamazepine-13C6	6.136	11824
Chlordiazepoxide	300.1 -> 227	300.1 -> 227   10/9/2018 12:53 PM	,,,,,,,,,,,	•••••	<u> </u>	300.1 -> 282	1	Chlordiazepoxide-D5	6.553	233564
Zopiclone	389.1 -> 244	.   10/9/2018 12:53 PM			<b></b>	389.1 -> 216		Zopiclone-D4	6.403	234885
Sufentanil	387.2 -> 238	387.2 -> 238 10/9/2018 12:53 PM			<u>L</u>	387.2 -> 111		Sufentanil-D5	6.927	12837
Desipramine	267.2 -> 72.3	10/9/2018 12:53 PM	**********		<u>L</u>	267.2 -> 44.3		Desipramine-D3	6.438	11021
Doxepin	280.2 -> 107	. 10/9/2018 12:53 PM			<u>L_</u>	280.2 -> 77.2	1	Doxepin-D3	6.353	587629
Estazolam	295.1 -> 267	. 10/9/2018 12:53 PM			<u>L</u>	295.1 -> 205		Estazolam-D5	6.370	263145
Flunitrazepam	314.1 -> 268			•••••	<u>L</u>	314.1 -> 239		Flunitrazepam-D7	6.409	11322
Flurazepam	388.2 -> 315	.   10/9/2018 12:53 PM	**********		<u> </u>	388.2 -> 317		Zopiclone-D4	6.403	234885
Imipramine	281.2 -> 86.2	10/9/2018 12:53 PM			<u>L</u>	281.2 -> 58.3		Imipramine-D3	6.575	10435
Levamisole	205.1 -> 91.2	10/9/2018 12:53 PM			I	205.1 -> 178	<u>L</u>	Sufentanil-D5	6.927	12837
Maprotiline	278.2 -> 91.2	10/9/2018 12:53 PM			1	[ 278.2 -> 117	1	Amitriptyline-D3	6.657	461602
MDA	180.1 -> 163	. 10/9/2018 12:53 PM				180.1 -> 105		MDA-D5	5.125	336426
MDEA	208.1 -> 163	208.1 -> 163   10/9/2018 12:53 PM	~~~~		<u></u>	208.1 -> 105	1	MDEA-D6	5.406	532336
MDMA	194.1 -> 163	194.1 -> 163   10/9/2018 12:53 PM	********	••••	L	194.1 -> 105		MDMA-D6	5.245	67958
Meperidine	248.2 -> 220	248.2 -> 220   10/9/2018 12:53 PM			<u> </u>	7 248.2 -> 174		Meperidine-D4	5.911	317281
Methylphenidate	234.2 -> 84.2	10/9/2018 12:53 PM			<u> </u>	234.2 -> 56.3		Meperidine-D4	5.911	317281
Midazolam	326.1 -> 223	10/9/2018 12:53 PM			<u>L</u>	326.1 -> 249		Midazolam-D4	6.589	380182
Normeperidine	234.1 -> 42.3	10/9/2018 12:53 PM		***************************************	<u> </u>	234.1 -> 160		Normeperidine-D4	5.750	231760
7-Aminoflunitrazepam	284.1 -> 135	10/9/2018 12:53 PM	5.926	1376	8.12	284.1 -> 93.2		7-aminoflunitrazepam-D7	5.762	155818
Nortriptyline	264.2 -> 91.2	10/9/2018 12:53 PM	0.7787317		<b>L</b>	Ž 264.2 -> 233		Nortriptyline-D3	6.479	338387
Phenazepam	349.0 -> 206	349.0 -> 206 10/9/2018 12:53 PM			<u> </u>	349.0 -> 183		Phenazepam-D4	6.465	13836
Phencyclidine	244.2 -> 86.2	10/9/2018 12:53 PM			Lun	244.2 -> 91.1		Phencydlidine-D5	6.054	860722
Phenytoin	253.1 -> 104	10/9/2018 12:53 PM	5.911	2076	15.50	253.1 -> 182		Phenytoin-D10	6.052	16546
Pseudoephedrine	166.1 -> 148	10/9/2018 12:53 PM				<b>166.1 -&gt; 133</b>		Pseudoephedrine-D3	4.764	444976
Tapentadol	222.2 -> 107	10/9/2018 12:53 PM			<b>I</b>	"   222.2 -> 121		Tapentadol-D3	5.609	756492
Zaleplon	306.1 -> 236	306.1 -> 236   10/9/2018 12:53 PM			1	306.1 -> 264		Zalepion-D4	6.227	219040



Compound Method		p2 external control	ře pze	pz external control results	CHINCOL IO			Craim	Qualifica i results	3	ISI D MEIIO		3
Name	Transition	Acq. Date-Time	RT	Resp.	N/S	Ξ	Transition	S/N	Area	≅	Name	F.	Resp.
Acetylfentanyl	323.2 -> 188	10/9/2018 1:13 PM				7 32	323.2 -> 105			Ĺ	Acetylfentanyl-D5	6.387	14769
alpha-hvdroxymidazolam		10/9/2018 1:13 PM				34	342.1 -> 203			L	alpha-hydroxymidazolam	6.426	353124
Amitriotyline	278.2 -> 91.2	10/9/2018 1:13 PM				27	278.2 -> 105			<u></u>	Amitriptyline-D3	6.657	422035
Acetylnorfentanyl	219.1 -> 84.2	10/9/2018 1:13 PM	vmm			7 21	219.1 -> 56.3			L	Acetylnorfentanyl-D5	5.018	450198
Carbamazepine	237.1 -> 193	10/9/2018 1:13 PM				7 23	237.1 -> 194			<u></u>	Carbamazepine-13C6	6.156	11654
Chlordiazepoxide	300.1 -> 227	10/9/2018 1:13 PM				30	300.1 -> 282			L	Chlordiazepoxide-D5	6.553	236314
Zopiclone	389.1 -> 244	10/9/2018 1:13 PM				88 L	389.1 -> 216			L	Zopiclone-D4	6.403	233717
Sufentanil	387.2 -> 238	10/9/2018 1:13 PM				38	387.2 -> 111			L	Sufentanil-D5	6.927	12438
Desipramine	267.2 -> 72.3	10/9/2018 1:13 PM				T   26	267.2 -> 44.3			L	Desipramine-D3	6.438	11193
Doxepin	280.2 -> 107	10/9/2018 1:13 PM			*********	28	280.2 -> 77.2			L	Doxepin-D3	6.373	597001
Estazolam	295.1 -> 267	.t				7 26	295.1 -> 205			L	Estazolam-D5	6.370	264441
Flimitrazenam	314.1 -> 268	.f			**************************************	7 31	314.1 -> 239			L	Flunitrazepam-D7	6.409	11411
Flurazepam	388.2 -> 315					38   L	388.2 -> 317			<u></u>	Zopiclone-D4	6.403	233717
Imipramine	281.2 -> 86.2					28	281.2 -> 58.3			<u>L</u>	Imipramine-D3	6.595	10245
Levamisole	205.1 -> 91.2	10/9/2018 1:13 PM				T 20	205.1 -> 178			L	Sufentanil-D5	6.927	12438
Maprotiline	278.2 -> 91.2	10/9/2018 1:13 PM				[ 27	278.2 -> 117				Amitriptyline-D3	6.657	422035
MDA	180.1 -> 163	10/9/2018 1:13 PM			***************************************	18	180.1 -> 105			L	MDA-D5	5.125	334470
MDEA	208.1 -> 163					7 20	208.1 -> 105				MDEA-D6	5.406	528179
MDMA	194.1 -> 163	194.1 -> 163 10/9/2018 1:13 PM				15	194.1 -> 105			L	MDMA-D6	5.245	64863
Meperidine	248.2 -> 220	248.2 -> 220 10/9/2018 1:13 PM				27	248.2 -> 174				Meperidine-D4	5.911	320500
Methylphenidate	234.2 -> 84.2	10/9/2018 1:13 PM				7 23	234.2 -> 56.3			L	Meperidine-D4	5.911	320500
Midazolam	326.1 -> 223	10/9/2018 1:13 PM				32	326.1 -> 249			L	Midazolam-D4	6.589	363417
Normeperidine	234.1 -> 42.3	10/9/2018 1:13 PM	•••••			7	234.1 -> 160			L	Normeperidine-D4	5.750	228432
7-Aminoflunitrazepam	284.1 -> 135	10/9/2018 1:13 PM				28	284.1 -> 93.2	~*******		L	7-aminoflunitrazepam-D7	5.762	143215
Nortriptyline	264.2 -> 91.2	-	6.500	768876	Infinity	L   2(	264.2 -> 233	Infini	6978	L	Nortriptyline-D3	6.479	317453
Phenazepam	349.0 -> 206	349.0 -> 206   10/9/2018 1:13 PM				3	349.0 -> 183	www.		<u></u>	Phenazepam-D4	6.465	13675
Phencyclidine	244.2 -> 86.2	10/9/2018 1:13 PM				7 2	244.2 -> 91.1			1	Phencydlidine-D5	6.054	924241
Phenytoin	253.1 -> 104	10/9/2018 1:13 PM	5.911	2133	13.08	<u></u>	253.1 -> 182				Phenytoin-D10	6.052	19387
Pseudoephedrine	166.1 -> 148	10/9/2018 1:13 PM					166.1 -> 133			L	Pseudoephedrine-D3	4.764	525321
Tapentadol	222.2 -> 107	10/9/2018 1:13 PM				2	222.2 -> 121			L	Tapentadol-D3	5.609	767239
	ANG C4.4 0400/0/04	***************************************		_		the state of the s		w					



## AM# 26: THC and Metabolites Screen in Blood by LC-MS/MS

Extraction Date: 10/9/18 Analyst: Anne Nord

Plate lot#: 0539904 Plate Expiration: 09/10/2019

Mobile phase A: 10mM Ammonium Formate Mobile phase B: 0.1% Formic acid in MeOH

0.1% Formic Acid in Water MTBE Hexane

**Blank Blood Lot**: 18G20707 Column: Phenomenex Phenyl Hexyl (4.6x50mm: 2.6 um)

**LCMS-QQQ ID**: 62340

### **Pre-Analytic:**

- ☑ 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- ⊠ 3. Create worklist:

### **Analytic:**

- ☑ 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- - Blank blood for locations containing standards/QCs and internal standards
  - Sample blood for locations containing only internal standards
- □ 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID: 66759
- Δ 4. Pipette 500 μL 0.1% formic acid in wells of analytical plate.
- ☑ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 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: 66792
- ✓ 8. Wait 5 minutes.
- Ø 9. Add 2.25 mL MTBE (add in 3 increments of 750uL).
- $\boxtimes$  10. Wait 5 minutes.
- ☑ 11. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- ☑ 12. Add 2.25 mL hexane (add in 3 increments of 750uL).
- ☑ 13. Wait 5 minutes.
- △ 14. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- Δ 16. Reconstitute in 100μL 100% MeOH and heat seal plate with foil. Place in autosampler and run worklist.

### Post-Analytic

- $\boxtimes$  1. Create batch and process data.
  - Worklist path: 100918 am 25-26 Batch Name: cann screen
- $\boxtimes$  3. Retention time within +/- 2% or +/-.100 min whichever is greater of the average retention time of the calibrators.
- □ A. Did all QCs pass for each analyte? Y / N

**COMMENTS**: dropped 10 ng cal from THC curve the primary peak is cut off.

2

Batch Data Path D:\2018 Data\100918 AM 25-26\QuantResults\cann screen.batch.bin

 Analysis Time
 10/11/2018 1:18 PM
 Analyst Name
 ISP Tox

 Report Time
 10/11/2018 1:19 PM
 Reporter Name
 ISP Tox

 Last Calib Update
 10/11/2018 1:18 PM
 Batch State
 Processed

**Analysis Info** 

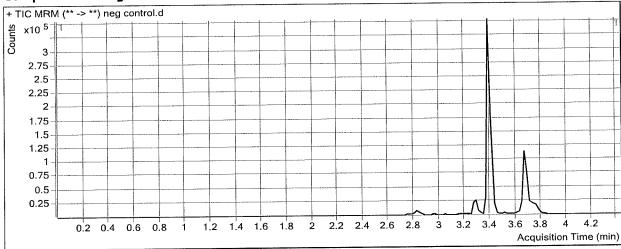
Acq Time2018-10-10 00:08Data Fileneg control.dSample TypeSampleSample Nameneg control

**Dilution** 1 **Acq Method** Screen THC 8-2017.m

Position P1-A2 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



8

**Batch Data Path** 

D:\2018 Data\100918 AM 25-26\QuantResults\cann screen.batch.bin

**Analysis Time** 

10/11/2018 1:18 PM

**Analyst Name** ISP Tox

**Report Time** Last Calib Update 10/11/2018 1:19 PM

Reporter Name ISP Tox

10/11/2018 1:18 PM

**Batch State** 

Processed

**Analysis Info** 

**Acq Time** 

2018-10-09 23:55

**Data File** 

QC 5 -10ng.d

Sample Type

QC

Sample Name

QC 5 -10ng

Dilution

1

**Acq Method** 

Screen THC 8-2017.m

**Position** 

P1-H1

Sample Info

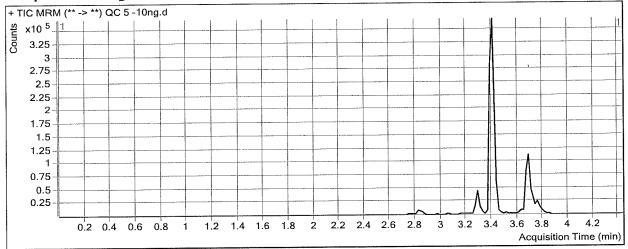
Inj Vol

-1

Comment

AM 26 Cannabinoid screen 5 ng THC, THC-OH, 10 ng C-TH

### Sample Chromatogram



Results					
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.286	14942	82462	0.1812	10.6491
THC-OH	3,412	32806	827099	0.0397	5.0218
THC	3.760	1454	33620	0.0433	4.7600

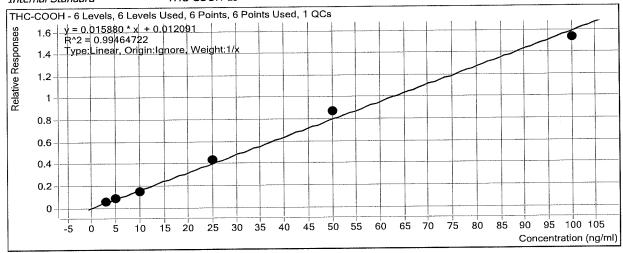


# ISP Forensics Calibration Curve Report

Batch Data Path Last Calib Update D:\2018 Data\100918 AM 25-26\QuantResults\cann screen.batch.bin 10/11/2018 1:18 PM **Analyst Name** ISP TOX

Target Compound
Internal Standard

THC-COOH-d9



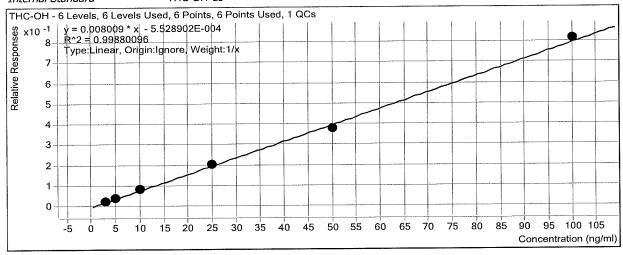
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	$\square$	3	3.1	103.3
cal 2 - 5ng	2	☑	5	4.9	98.6
cal 3 - 10ng	3	$\square$	10	8.8	87.9
cal 4 - 25ng	4	☑	25	26.7	106.9
cal 5 - 50ng	5	☑	50	53.9	107.7
cal 6 - 100ng	6	☑	100	95.6	95.6
QC 5 -10ng	7		10	10.6	106.5



# ISP Forensics Calibration Curve Report

Batch Data Path Last Calib Update Target Compound
Internal Standard

THC-OH THC-OH-d3



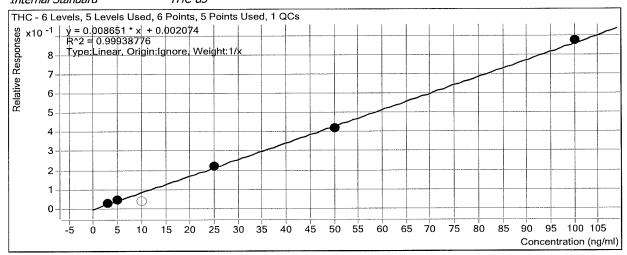
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	$\square$	3	3.0	101.4
cal 2 - 5ng	2	$\square$	5	4.9	98.1
cal 3 - 10ng	3	$\square$	10	10.2	102.0
cal 4 - 25ng	4	$\square$	25	25.4	101.5
cal 5 - 50ng	5	$\square$	50	47.5	95.1
cal 6 - 100ng	6	Ø	100	101.9	101.9
QC 5 -10ng	7		5	5.0	100.4



# ISP Forensics Calibration Curve Report

Batch Data Path Last Calib Update Target Compound
Internal Standard

THC THC-d3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	$\square$	3	3.2	105.8
cal 2 - 5ng	2	$\square$	5	4.7	93.8
cal 3 - 10ng	3		10	4.4	43.5
cal 4 - 25ng	4	$\square$	25	25.5	102.1
cal 5 - 50ng	5	$\square$	50	48.6	97.3
cal 6 - 100ng	6	$\square$	100	101.0	101.0
OC 5 -10ng	7		5	4.8	95.2

Dropped cal 3 top of primary peak cut off.

A

Batch Data Path D:\2018 Data\100918 AM 25-26\QuantResults\cann screen.batch.bin

 Analysis Time
 10/11/2018 1:18 PM
 Analyst Name
 ISP Tox

 Report Time
 10/11/2018 1:19 PM
 Reporter Name
 ISP Tox

 Last Calib Update
 10/11/2018 1:18 PM
 Batch State
 Processed

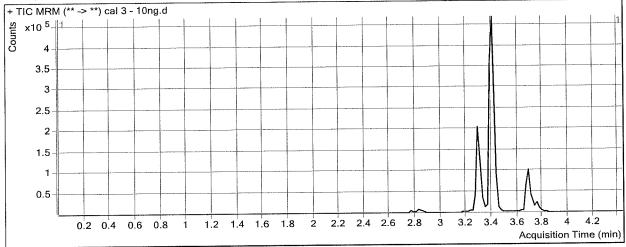
**Analysis Info** 

Acq Time2018-10-09 23:22Data Filecal 3 - 10ng.dSample TypeCalibrationSample Namecal 3 - 10ngDilution1Acq MethodScreen THC 8-2017.m

Position p1-d1 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### Sample Chromatogram



Results					
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	65876	434545	0.1516	8.7852
THC-OH	3.412	83424	1027847	0.0812	10.2037
THC	3,780	1178	29652	0.0397	4.3532

 $\mathcal{A}$ 

ISP cann screen report.xlsx Printed at: 1:22 PM on: 10/11/2018

Batch Data Path D:\2018 Data\100918 AM 25-26\QuantResults\cann screen.batch.bin

 Analysis Time
 10/11/2018 1:18 PM
 Analyst Name
 ISP Tox

 Report Time
 10/11/2018 1:19 PM
 Reporter Name
 ISP Tox

 Last Calib Update
 10/11/2018 1:18 PM
 Batch State
 Processed

**Analysis Info** 

 Acq Time
 2018-10-09 23:08
 Data File
 cal 1 - 3ng.d

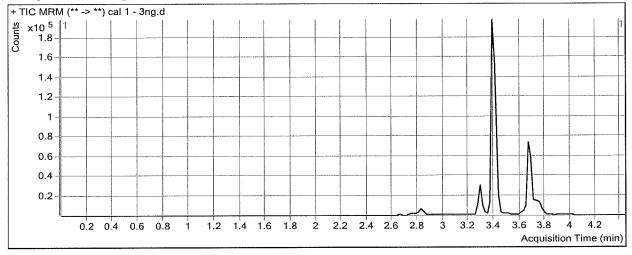
 Sample Type
 Calibration
 Sample Name
 cal 1 - 3ng.d

**Dilution** 1 **Acq Method** Screen THC 8-2017.m

Position p1-b1 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



Results					
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.286	3782	61672	0.0613	3.1002
THC-OH	3.392	10740	451287	0.0238	3.0407
THC	3,760	624	21139	0.0295	3.1746



ISP cann screen report.xlsx Printed at: 1:22 PM on: 10/11/2018

Batch Data Path D:\2018 Data\100918 AM 25-26\QuantResults\cann screen.batch.bin

 Analysis Time
 10/11/2018 1:18 PM
 Analyst Name
 ISP Tox

 Report Time
 10/11/2018 1:19 PM
 Reporter Name
 ISP Tox

 Last Calib Update
 10/11/2018 1:18 PM
 Batch State
 Processed

**Analysis Info** 

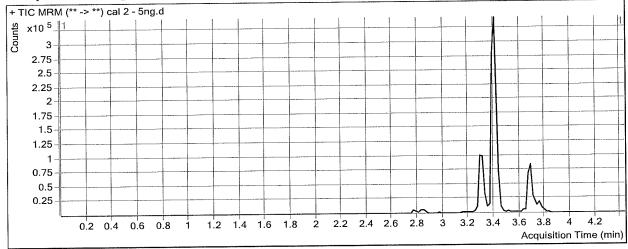
 Acq Time
 2018-10-09 23:15
 Data File
 cal 2 - 5ng.d

 Sample Type
 Calibration
 Sample Name
 cal 2 - 5ng

Dilution 1 Acq Method Screen THC 8-2017.m
Position P1-C1 Sample Info

Position P1-C1 Sample Info
Inj Vol -1 Comment AM 26 Cannabinoid screen

**Sample Chromatogram** 



Results						
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc	
THC-COOH	3.306	25974	287401	0.0904	4.9298	
THC-OH	3.412	31359	810094	0.0387	4.9026	
THC	3.760	1135	26593	0.0427	4.6920	



Batch Data Path D:\2018 Data\100918 AM 25-26\QuantResults\cann screen.batch.bin

 Analysis Time
 10/11/2018 1:18 PM
 Analyst Name
 ISP Tox

 Report Time
 10/11/2018 1:19 PM
 Reporter Name
 ISP Tox

 Last Calib Update
 10/11/2018 1:18 PM
 Batch State
 Processed

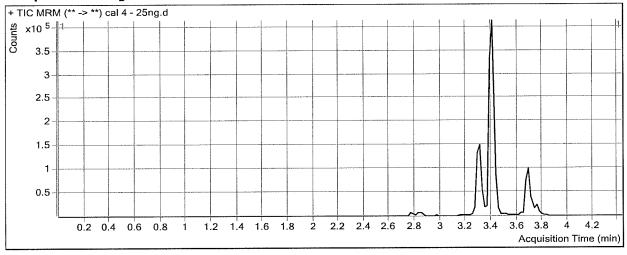
**Analysis Info** 

Acq Time2018-10-09 23:28Data Filecal 4 - 25ng.dSample TypeCalibrationSample Namecal 4 - 25ngDilution1Acq MethodScreen THC 8-2017.m

Position P1-E1 Sample Info

Inj Voi -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



Results					
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	127446	292047	0.4364	26.7195
THC-OH	3.412	166274	820075	0.2028	25.3864
THC	3.760	5825	26139	0.2229	25.5238

A

Batch Data Path D:\2018 Data\100918 AM 25-26\QuantResults\cann screen.batch.bin

 Analysis Time
 10/11/2018 1:18 PM
 Analyst Name
 ISP Tox

 Report Time
 10/11/2018 1:19 PM
 Reporter Name
 ISP Tox

 Last Calib Update
 10/11/2018 1:18 PM
 Batch State
 Processed

**Analysis Info** 

 Acq Time
 2018-10-09 23:35
 Data File
 cal 5 - 50ng.d

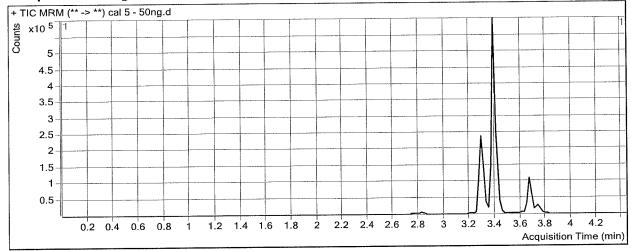
 Sample Type
 Calibration
 Sample Name
 cal 5 - 50ng

 Dilution
 1
 Acq Method
 Screen THC 8-2017.m

 Position
 p1-f1
 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### Sample Chromatogram



Results					
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.286	260816	300654	0.8675	53.8678
THC-OH	3,392	318972	838957	0.3802	47.5435
THC	3.740	11301	26728	0.4228	48.6370
ITIC	2.7.10	11301			



Batch Data Path D:\2018 Data\100918 AM 25-26\QuantResults\cann screen.batch.bin

 Analysis Time
 10/11/2018 1:18 PM
 Analyst Name
 ISP Tox

 Report Time
 10/11/2018 1:19 PM
 Reporter Name
 ISP Tox

 Last Calib Update
 10/11/2018 1:18 PM
 Batch State
 Processed

**Analysis Info** 

ISP cann screen report.xlsx

 Acq Time
 2018-10-09 23:41
 Data File
 cal 6 - 100ng.d

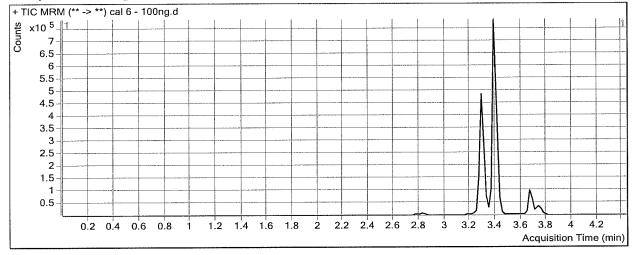
 Sample Type
 Calibration
 Sample Name
 cal 6 - 100ng

 Dilution
 1
 Acq Method
 Screen THC 8-2017.m

 Position
 P1-G1
 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



Results					
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.286	609461	398301	1.5302	95.5975
THC-OH	3,392	714852	876364	0.8157	101.9232
THC	3.740	23478	26815	0.8755	100.9727

A