





















*Buylee*

**Worklist: 2103**

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2017-2544	1	102946	AM 25/AM 26 Blood MultiDrug/	
C2017-2577	1	103187	AM 25/AM 26 Blood MultiDrug/	
C2017-2578	1	103189	AM 25/AM 26 Blood MultiDrug/	
C2017-2586	1	103313	AM 25/AM 26 Blood MultiDrug/	
C2017-2587	1	103315	AM 25/AM 26 Blood MultiDrug/	
C2017-2588	1	103330	AM 25/AM 26 Blood MultiDrug/	
C2017-2589	1	103332	AM 25/AM 26 Blood MultiDrug/	
C2017-2591	1	103337	AM 25/AM 26 Blood MultiDrug/	
C2017-2620	1	103600	AM 25/AM 26 Blood MultiDrug/	
C2017-2622	1	103741	AM 25/AM 26 Blood MultiDrug/	
C2017-2623	1	103747	AM 25/AM 26 Blood MultiDrug/	
C2017-2634	1	103803	AM 25/AM 26 Blood MultiDrug/	
C2018-0001	1	103869	AM 25/AM 26 Blood MultiDrug/	
M2017-5510	1	101332	AM 25/AM 26 Blood MultiDrug/	
M2017-5531	1	103866	AM 25/AM 26 Blood MultiDrug/	
M2017-5557	1	101677	AM 25/AM 26 Blood MultiDrug/	
M2017-5557	2	103865	AM 25/AM 26 Blood MultiDrug/	
M2017-5640	1	102015	AM 25/AM 26 Blood MultiDrug/	
M2017-5862	2	103743	AM 25/AM 26 Blood MultiDrug/	
M2017-5914	2	103745	AM 25/AM 26 Blood MultiDrug/	



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

Extraction Date: 1-2-18

Analyst: Anne Nord

Plate lot#: 0515207

Plate Expiration: 10/18/2018

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

Mobile phase B 0.1% Formic acid in MeOH  
Ethyl Acetate

Blank Blood Lot: 17J20718

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.
- 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: 1926134** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID66759*
- 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: 66729  
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 ID66819*
- 13. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

## POST- ANALYTIC

- 1. Create batch and process data.  
Worklist path: 01022018 blood screen AM25-26 Batch Name: 01022018 mds p1
- 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:

Toxicology AM method 25 external prep information

working solution 10000 ng/ml in meoh mirtazapine, amitriptyline, codeine, diphenhydramine, 20000 ng/ml meoh morphine

Stock solution 1mg/ml 100 ul each for all except morphine 200 ul in 9400 ul meoh

Ppd 3/31/17 Exp: 3/31/18 lot 92117 by Amn

Drug	lot	expiration
Morphine	fe08141515	11/1/2020
mirtazapine	fe04201503	4/1/2020
amitriptyline	fn07081401	9/1/2019
codeine	fe10271401	11/1/2019
diphenhydramine	fn09161502	9/1/2020

AM 25 control 100 ul working solution (92117) in 9900 ul neg blood

ppd 3/21/17 Exp 6/21/17 lot 62117	neg blood lot 321632-1	by Amn
Ppd 6-26-17 Exp 9-26-17 lot 92617 (may be listed as 92117)	neg blood lot 321632-1	by Amn
ppd 9-22-17 Exp 12-22-17 Lot 12-22-17	neg blood lot 17120718	by Amn
ppd 12/29/17 Exp 3/29/18 Lot 32918	neg blood lot 17120718	by Amn

Concentration 100ng/ml amitriptyline, codeine, diphenhydramine, mirtazapine  
200/ng/ml morphine

Compound Method	p1 cal 1-1a	p1 cal 1-1a Results	Qualifier 1 M...	Qualifier 1 Results	ISTD Method	ISTD Results							
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.
6-MAM	328.2 -> 165...	1/2/2018 4:49 PM	4.954	1379	222.87	328.2 -> 211...	951	6-MAM-D6	4.933	38634			
7-Aminoclonazepam	286.1 -> 121...	1/2/2018 4:49 PM	5.509	21273	35.49	286.1 -> 222...	28.87	7-Aminoclonazepam-D4	5.508	104441			
Acetyl Fentanyl	323.2 -> 105...	1/2/2018 4:49 PM	5.851	18556	3821.66	323.2 -> 188...	56.29	Acetyl Fentanyl-D5	5.849	11018...			
Acetyl Norfentanyl	219.1 -> 84.2	1/2/2018 4:49 PM	4.888	6269	17.98	219.1 -> 56.3	18.03	Acetyl Norfentanyl-D5	4.848	374116			
a-hydroxyalprazolam	325.1 -> 297...	1/2/2018 4:49 PM	6.379	5222	143.30	325.1 -> 215...	11.27	alpha-PVP-d8	6.378	289507			
alpha-PVP	232.2 -> 91.0	1/2/2018 4:49 PM	5.557	103485	16432.11	232.2 -> 77.1	63.86	alpha-PVP-d8	5.535	436507			
Alprazolam	309.1 -> 281...	1/2/2018 4:49 PM	6.485	48686	356.26	309.1 -> 205...	327.94	Alprazolam-D5	6.463	196564			
Amphetamine	136.1 -> 91.1	1/2/2018 4:49 PM	4.830	128460	21.11	136.1 -> 119...	33.68	Amphetamine-D11	4.789	123508			
Bupropion	240.1 -> 184...	1/2/2018 4:49 PM	5.781	96280	140.09	240.1 -> 131...	5520.75	Bupropion-D9	5.760	481327			
Carisoprodol	261.2 -> 176...	1/2/2018 4:49 PM	6.126	55717	187.88	261.2 -> 55.3	664.72	Carisoprodol-D7	6.105	319978			
Citalopram	325.2 -> 109...	1/2/2018 4:49 PM	6.053	161329	130.41	325.2 -> 262...	667.22	Citalopram-D6	6.052	762319			
Clonazepam	316.1 -> 269...	1/2/2018 4:49 PM	6.341	19174	71.01	316.1 -> 213...	33.69	Clonazepam-D4	6.320	30677			
Codeine	300.2 -> 215...	1/2/2018 4:49 PM	4.858	5360	202.76	300.2 -> 165...	6.79	Codeine-D6	4.815	25843			
Cyclobenzaprine	276.2 -> 214...	1/2/2018 4:49 PM	6.348	100331	794.48	276.2 -> 231...	74.56	Cyclobenzaprine-D3	6.347	496038			
Dextromethorphan	278.2 -> 171...	1/2/2018 4:49 PM	6.104	45237	287.95	278.2 -> 147...	86.85	Dextromethorphan-D3	6.104	217266			
Dextrorphan	258.2 -> 157...	1/2/2018 4:49 PM	5.411	37426	300.17	258.2 -> 133...	85.83	Dextrorphan-D3	5.410	218310			
Dihydrocodeine	302.2 -> 198...	1/2/2018 4:49 PM	4.776	19064	108.23	302.2 -> 128...	36.17	Dihydrocodeine-D6	4.754	196899			
Diphenhydramine	256.2 -> 167...	1/2/2018 4:49 PM	6.025	227868	136.37	256.2 -> 152...	320.19	Diphenhydramine-D3	6.024	129331			
Doxylamine	271.2 -> 182...	1/2/2018 4:49 PM	5.696	201947	104.68	271.2 -> 167...	53.29	Doxylamine-D5	5.695	10669...			
EDDP	279.2 -> 235...	1/2/2018 4:49 PM	6.061	106933	706.98	279.2 -> 250...	310.80	EDDP-D3	6.061	479933			
Fentanyl	337.2 -> 105...	1/2/2018 4:49 PM	6.052	20253	87.40	337.2 -> 188...	306.49	Fentanyl-D5	6.051	10692...			
Fluoxetine	310.1 -> 44.3	1/2/2018 4:49 PM	6.301	243897	235.41	310.1 -> 148...	Infinity	Fluoxetine-D6	6.280	12570...			
Hydrocodone	300.2 -> 198...	1/2/2018 4:49 PM	5.081	23328	53.76	300.2 -> 128...	14.83	Hydrocodone-D6	5.058	148414			
Hydromorphone	286.2 -> 184...	1/2/2018 4:49 PM	4.499	12954	Infinity	286.2 -> 157...	Infinity	Hydromorphone-D6	4.478	51682			
Ketamine	238.1 -> 125...	1/2/2018 4:49 PM	5.536	57356	82.35	238.1 -> 220...	51.84	Ketamine-D4	5.514	251804			
Meprobamate	219.1 -> 158...	1/2/2018 4:49 PM	5.619	13744	8.22	219.1 -> 97.1	12.71	Meprobamate-D7	5.598	97217			
Methadone	310.2 -> 265...	1/2/2018 4:49 PM	6.352	173344	Infinity	310.2 -> 105...	Infinity	Methadone-D9	6.351	10137...			
Methamphetamine	150.1 -> 91.1	1/2/2018 4:49 PM	4.991	131417	Infinity	150.1 -> 119...	20.38	Methamphetamine-D11	4.950	288665			
Morphine	286.2 -> 201...	1/2/2018 4:49 PM	4.258	2708	26.85	286.2 -> 165...	30.77	Morphine-D6	4.197	2295			
Naloxone	328.2 -> 309...	1/2/2018 4:49 PM	5.015	22944	256.21	328.2 -> 211...	55.50	Naloxone-D5	4.954	139130			
Naltrexol	344.2 -> 326...	1/2/2018 4:49 PM	4.892	61790	358.42	344.2 -> 308...	2953.36	Naltrexol-D3	4.891	218649			
Naltrexone	342.2 -> 324...	1/2/2018 4:49 PM	4.933	30673	Infinity	342.2 -> 55.3	73.22	Naltrexone-D3	4.912	155031			
Norbuprenorphine	414.3 -> 101...	1/2/2018 4:49 PM	5.825	6484	824.49	414.3 -> 57.3	15.98	Norbuprenorphine-D3	5.825	28693			
Nordiazepam	271.1 -> 140...	1/2/2018 4:49 PM	6.573	27764	119.11	271.1 -> 208...	24.84	Nordiazepam-D5	6.552	80422			
Norfentanyl	233.2 -> 84.2	1/2/2018 4:49 PM	5.333	130255	40482.97	233.2 -> 55.3	Infinity	Norfentanyl-D5	5.311	583322			
Norhydrocodone	286.2 -> 199...	1/2/2018 4:49 PM	4.940	2554	6.26	286.2 -> 171...	3.57	Norhydrocodone-D3	4.920	45130			
Noroxycodone	302.1 -> 284...	1/2/2018 4:49 PM	4.877	18289	Infinity	302.1 -> 186...	32.30	Noroxycodone-D3	4.856	90439			
O-desmethyl-tramadol	250.2 -> 58.3	1/2/2018 4:49 PM	4.905	154829	80.79	250.2 -> 42.3	98.25	O-desmethyl-tramadol-...	4.885	703167			
Oxazepam	287.1 -> 240...	1/2/2018 4:49 PM	6.386	22059	3641.41	287.1 -> 268...	Infinity	Oxazepam-D5	6.385	109506			
Oxycodone	316.2 -> 298...	1/2/2018 4:49 PM	4.935	35318	Infinity	316.2 -> 241...	Infinity	Oxycodone-D6	4.915	177730			
Oxycodone	302.1 -> 284...	1/2/2018 4:49 PM	4.273	31919	Infinity	302.1 -> 227...	Infinity	Oxycodone-D6	4.252	153788			
Phentemine	150.1 -> 66.2	1/2/2018 4:49 PM	5.132	29693	13.66	150.1 -> 133...	26.55	Phentemine-D5	5.112	380970			
Promethazine	285.1 -> 86.2	1/2/2018 4:49 PM	6.346	284816	505.80	285.1 -> 71.3...	81.01	Promethazine-D5	6.325	16984...			
Quetiapine	384.2 -> 253...	1/2/2018 4:49 PM	6.416	197748	1313.61	384.2 -> 221...	109.11	Quetiapine-D8	6.374	276812			
Serrraline	306.1 -> 158...	1/2/2018 4:49 PM	6.547	76041	305.30	306.1 -> 275...	18938...	Serrraline-D3	6.545	370399			
Sufentanil	387.2 -> 238...	1/2/2018 4:49 PM	6.375	17888	90.80	387.2 -> 111...	1190.23	Sufentanil-D5	6.374	676012			

Compound Method		p1 cal 1-1a		p1 cal 1-1a Results		Qualifier 1 M...		Qualifier 1 Results		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.
Temazepam	301.1 -> 255..	1/2/2018 4:49 PM	6.527	73396	Infinity		301.1 -> 283...		16.51	27398	Temazepam-D5	6.526	364960
Tramadol	264.2 -> 58.3	1/2/2018 4:49 PM	5.451	200131	85.32		264.2 -> 43.3		22.19	10257	Tramadol-13C-D3	5.430	987588
Trazodone	372.2 -> 176..	1/2/2018 4:49 PM	6.518	202527	1095.41		372.2 -> 148...		562.13	1418..	Trazodone-D6	6.477	861310
Venlafaxine	278.2 -> 58.3	1/2/2018 4:49 PM	5.797	197594	Infinity		278.2 -> 260...		37.10	38578	Venlafaxine-D6	5.796	936222
Zolpidem	308.2 -> 235..	1/2/2018 4:49 PM	6.221	184516	964.86		308.2 -> 263...		269.23	64467	Zolpidem-D6	6.199	969651

Compound Method		p1 negative		p1 negative Results		Qualifier 1 M...		Qualifier 1 R...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.
6-MAM	328.2 -> 165...	1/2/2018 5:09 PM				328.2 -> 211...					6-MAM-D6	4.953	37845
7-aminoclonazepam	286.1 -> 121...	1/2/2018 5:09 PM				286.1 -> 222...					7-Aminoclonazepam-D4	5.508	89387
Acetyl Fentanyl	323.2 -> 105...	1/2/2018 5:09 PM				323.2 -> 188...					Acetyl Fentanyl-D5	5.829	975018
Acetyl Norfentanyl	219.1 -> 84.2	1/2/2018 5:09 PM				219.1 -> 56.3					Acetyl Norfentanyl-D5	4.848	356115
a-hydroxyalprazolam	325.1 -> 297...	1/2/2018 5:09 PM				325.1 -> 215...					a-hydroxyalprazolam-D5	6.378	26633
alpha-PVP	232.2 -> 91.0	1/2/2018 5:09 PM				232.2 -> 77.1					alpha-PVP-d8	5.556	431974
Alprazolam	309.1 -> 281...	1/2/2018 5:09 PM				309.1 -> 205...					Alprazolam-D5	6.463	190843
Amphetamine	136.1 -> 91.1	1/2/2018 5:09 PM	4.931	20440		136.1 -> 119...					Amphetamine-D11	4.789	108755
Bupropion	240.1 -> 184...	1/2/2018 5:09 PM				240.1 -> 131...					Bupropion-D9	5.760	404737
Carisoprodol	261.2 -> 176...	1/2/2018 5:09 PM				261.2 -> 55.3					Carisoprodol-D7	6.105	343096
Citalopram	325.2 -> 109...	1/2/2018 5:09 PM				325.2 -> 262...					Citalopram-D6	6.052	730233
Clonazepam	316.1 -> 269...	1/2/2018 5:09 PM				316.1 -> 213...					Clonazepam-D4	6.320	30801
Codeine	300.2 -> 215...	1/2/2018 5:09 PM				300.2 -> 165...					Codeine-D6	4.835	25538
Cyclobenzaprine	276.2 -> 214...	1/2/2018 5:09 PM				276.2 -> 231...					Cyclobenzaprine-D3	6.347	472919
Dextromethorphan	272.2 -> 171...	1/2/2018 5:09 PM				272.2 -> 147...					Dextromethorphan-D3	6.104	198743
Dextrophan	258.2 -> 157...	1/2/2018 5:09 PM				258.2 -> 133...					Dextrophan-D3	5.410	195828
Diazepam	285.1 -> 193...	1/2/2018 5:09 PM				285.1 -> 153...					Diazepam-D5	6.690	174320
Dihydrocodeine	302.2 -> 198...	1/2/2018 5:09 PM				302.2 -> 128...					Dihydrocodeine-D6	4.754	92131
Diphenhydramine	256.2 -> 167...	1/2/2018 5:09 PM				256.2 -> 152...					Diphenhydramine-D3	6.024	12165...
Doxylamine	271.2 -> 182...	1/2/2018 5:09 PM	5.757	1378	0.63	271.2 -> 167...					Doxylamine-D5	5.695	10344...
EDDP	279.2 -> 235...	1/2/2018 5:09 PM				279.2 -> 250...					EDDP-D3	6.081	38801
Fentanyl	337.2 -> 105...	1/2/2018 5:09 PM	6.397	1386	1.93	337.2 -> 188...					Fentanyl-D5	6.051	958318
Fluoxetine	310.1 -> 44.3	1/2/2018 5:09 PM				310.1 -> 148...					Fluoxetine-D6	6.280	11359...
Hydrocodone	300.2 -> 198...	1/2/2018 5:09 PM				300.2 -> 128...					Hydrocodone-D6	5.058	150090
Hydromorphone	286.2 -> 184...	1/2/2018 5:09 PM				286.2 -> 157...					Hydromorphone-D6	4.478	46472
Ketamine	238.1 -> 125...	1/2/2018 5:09 PM				238.1 -> 220...					Ketamine-D4	5.514	251406
Meprobamate	219.1 -> 158...	1/2/2018 5:09 PM	5.783	556	1.58	219.1 -> 97.1					Meprobamate-D7	5.598	92839
Methadone	310.2 -> 285...	1/2/2018 5:09 PM				310.2 -> 105...					Methadone-D9	6.361	950462
Methamphetamine	150.1 -> 91.1	1/2/2018 5:09 PM	5.011	48620	6.26	150.1 -> 119...					Methamphetamine-D11	4.950	239540
Morphine	286.2 -> 201...	1/2/2018 5:09 PM				286.2 -> 165...					Morphine-D6	4.197	2535
Naloxone	328.2 -> 309...	1/2/2018 5:09 PM				328.2 -> 211...					Naloxone-D5	4.974	134787
Naltrexol	344.2 -> 326...	1/2/2018 5:09 PM				344.2 -> 308...					Naltrexol-D3	4.891	209780
Naltrexone	342.2 -> 324...	1/2/2018 5:09 PM				342.2 -> 55.3					Naltrexone-D3	4.912	142577
Norbuprenorphine	414.3 -> 101...	1/2/2018 5:09 PM				414.3 -> 57.3					Norbuprenorphine-D3	5.825	25291
Nordiazepam	271.1 -> 140...	1/2/2018 5:09 PM				271.1 -> 208...					Nordiazepam-D5	6.552	77346
Norfentanyl	233.2 -> 84.2	1/2/2018 5:09 PM				233.2 -> 55.3					Norfentanyl-D5	5.332	539876
Norhydrocodone	286.2 -> 199...	1/2/2018 5:09 PM				286.2 -> 171...					Norhydrocodone-D3	4.920	43644
Noroxycodone	302.1 -> 284...	1/2/2018 5:09 PM				302.1 -> 186...					Noroxycodone-D3	4.856	87462
O-desmethyl-tramadol	250.2 -> 58.3	1/2/2018 5:09 PM				250.2 -> 42.3					O-desmethyl-tramadol-...	4.905	649735
Oxazepam	287.1 -> 240...	1/2/2018 5:09 PM				287.1 -> 268...					Oxazepam-D5	6.385	114086
Oxycodone	316.2 -> 298...	1/2/2018 5:09 PM				316.2 -> 241...					Oxycodone-D6	4.915	173381
Oxymorphone	302.1 -> 284...	1/2/2018 5:09 PM				302.1 -> 227...					Oxymorphone-D3	4.252	146814
Phentermine	150.1 -> 65.2	1/2/2018 5:09 PM				150.1 -> 133...					Phentermine-D5	5.112	341249
Promethazine	285.1 -> 86.2	1/2/2018 5:09 PM	6.366	525	26.84	285.1 -> 71.3					Promethazine-D3	6.325	15632...
Quetiapine	384.2 -> 253...	1/2/2018 5:09 PM				384.2 -> 221...					Quetiapine-D8	6.374	252106
Sepraline	306.1 -> 158...	1/2/2018 5:09 PM				306.1 -> 275...					Sepraline-D3	6.545	340298

Compound Method	p1 negative	p1 negative Results				Qualifier 1 M...	Qualifier 1 R...	ISTD Method	ISTD Results				
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.
Temazepam	301.1 -> 255...	1/2/2018 5:09 PM					301.1 -> 283...				Temazepam-D5	6.526	363217
Tramadol	264.2 -> 58.3	1/2/2018 5:09 PM					264.2 -> 43.3				Tramadol-13C-D3	5.430	897392
Trazodone	372.2 -> 176...	1/2/2018 5:09 PM					372.2 -> 148...				Trazodone-D6	6.477	804145
Venlafaxine	278.2 -> 58.3	1/2/2018 5:09 PM					278.2 -> 260...				Venlafaxine-D6	5.796	860510
Zolpidem	308.2 -> 235...	1/2/2018 5:09 PM					308.2 -> 263...				Zolpidem-D6	6.199	874140

Compound Method		p1 external control		p1 external control Results		Qualifier 1 M...		Qualifier 1 Results		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.
6-MAM	328.2 -> 165...	1/2/2018 5:28 PM					328.2 -> 211...				6-MAM-D6	4.953	37161
7-Aminoclonazepam	286.1 -> 121...	1/2/2018 5:28 PM					286.1 -> 222...				7-Aminoclonazepam-D4	5.508	87780
Acetyl Fentanyl	323.2 -> 105...	1/2/2018 5:28 PM					323.2 -> 188...				Acetyl Fentanyl-D5	5.849	981645
Acetyl Norfentanyl	219.1 -> 84.2	1/2/2018 5:28 PM					219.1 -> 56.3				Acetyl Norfentanyl-D5	4.868	322152
a-hydroxyalprazolam	325.1 -> 297...	1/2/2018 5:28 PM					325.1 -> 215...				a-hydroxyalprazolam-D5	6.378	26186
alpha-PVP	232.2 -> 91.0	1/2/2018 5:28 PM					232.2 -> 77.1				alpha-PVP-d8	5.556	411651
Alprazolam	309.1 -> 281...	1/2/2018 5:28 PM					309.1 -> 205...				Alprazolam-D5	6.463	181467
Amphetamine	136.1 -> 91.1	1/2/2018 5:28 PM	4.931	22266	15.47		136.1 -> 119...				Amphetamine-D11	4.789	104605
Bupropion	240.1 -> 184...	1/2/2018 5:28 PM					240.1 -> 131...				Bupropion-D9	5.760	378206
Carisoprodol	261.2 -> 176...	1/2/2018 5:28 PM					261.2 -> 55.3				Carisoprodol-D7	6.125	339496
Citalopram	325.2 -> 109...	1/2/2018 5:28 PM					325.2 -> 262...				Citalopram-D6	6.052	685195
Clonazepam	316.1 -> 269...	1/2/2018 5:28 PM					316.1 -> 213...				Clonazepam-D4	6.320	32727
Codeine	300.2 -> 215...	1/2/2018 5:28 PM	4.858	54768	23958.98		300.2 -> 165...		19827...	48199	Codeine-D6	4.835	24533
Cyclobenzaprine	276.2 -> 171...	1/2/2018 5:28 PM					276.2 -> 231...				Cyclobenzaprine-D3	6.347	439883
Dextromethorphan	272.2 -> 171...	1/2/2018 5:28 PM					272.2 -> 147...				Dextromethorphan-D3	6.104	196012
Dextrophan	258.2 -> 157...	1/2/2018 5:28 PM					258.2 -> 133...				Dextrophan-D3	5.410	191051
Diazepam	285.1 -> 193...	1/2/2018 5:28 PM					285.1 -> 153...				Diazepam-D5	6.690	179075
Dihydrocodeine	302.2 -> 198...	1/2/2018 5:28 PM					302.2 -> 128...				Dihydrocodeine-D6	4.754	89633
Diphenhydramine	256.2 -> 167...	1/2/2018 5:28 PM	6.025	23365...	920.96		256.2 -> 152...		1547.52	5900...	Diphenhydramine-D3	6.024	11406...
Doxylamine	271.2 -> 182...	1/2/2018 5:28 PM					271.2 -> 167...				Doxylamine-D5	5.695	994125
EDDP	279.2 -> 235...	1/2/2018 5:28 PM					279.2 -> 250...				EDDP-D3	6.061	44838
Fentanyl	337.2 -> 105...	1/2/2018 5:28 PM					337.2 -> 188...				Fentanyl-D5	6.051	901747
Fluoxetine	310.1 -> 44.3	1/2/2018 5:28 PM					310.1 -> 148...				Fluoxetine-D6	6.280	10346...
Hydrocodone	300.2 -> 198...	1/2/2018 5:28 PM	4.858	27845	15.38		300.2 -> 128...		Infinity	38127	Hydrocodone-D6	5.058	139388
Hydromorphone	286.2 -> 184...	1/2/2018 5:28 PM					286.2 -> 157...				Hydromorphone-D6	4.478	45030
Ketamine	238.1 -> 125...	1/2/2018 5:28 PM					238.1 -> 220...				Ketamine-D4	5.535	229956
Meprobamate	219.1 -> 158...	1/2/2018 5:28 PM					219.1 -> 97.1				Meprobamate-D7	5.598	88451
Methadone	310.2 -> 265...	1/2/2018 5:28 PM					310.2 -> 105...				Methadone-D9	6.361	890082
Methamphetamine	150.1 -> 91.1	1/2/2018 5:28 PM	4.991	59647	9.52		150.1 -> 119...				Methamphetamine-D11	4.950	234916
Morphine	286.2 -> 201...	1/2/2018 5:28 PM	4.258	52836	3913.94		286.2 -> 165...		32.86	39740	Morphine-D6	4.197	2750
Naloxone	328.2 -> 309...	1/2/2018 5:28 PM					328.2 -> 211...				Naloxone-D5	4.974	135105
Naltrexol	344.2 -> 326...	1/2/2018 5:28 PM					344.2 -> 308...				Naltrexol-D3	4.891	196382
Naltrexone	342.2 -> 324...	1/2/2018 5:28 PM					342.2 -> 55.3				Naltrexone-D3	4.912	132888
Norbuprenorphine	414.3 -> 101...	1/2/2018 5:28 PM					414.3 -> 57.3				Norbuprenorphine-D3	5.825	23340
Nordiazepam	271.1 -> 140...	1/2/2018 5:28 PM					271.1 -> 208...				Nordiazepam-D5	6.552	77543
Norfentanyl	233.2 -> 84.2	1/2/2018 5:28 PM					233.2 -> 55.3				Norfentanyl-D5	5.332	490386
Norhydrocodone	286.2 -> 199...	1/2/2018 5:28 PM					286.2 -> 171...				Norhydrocodone-D3	4.940	42491
Noroxycodone	302.1 -> 284...	1/2/2018 5:28 PM					302.1 -> 186...				Noroxycodone-D3	4.856	78781
O-desmethyl-tramadol	250.2 -> 58.3	1/2/2018 5:28 PM					250.2 -> 42.3				O-desmethyl-tramadol-...	4.905	645125
Oxazepam	287.1 -> 240...	1/2/2018 5:28 PM					287.1 -> 268...				Oxazepam-D5	6.385	120561
Oxycodone	316.2 -> 298...	1/2/2018 5:28 PM					316.2 -> 241...				Oxycodone-D6	4.915	168036
Oxymorphone	302.1 -> 284...	1/2/2018 5:28 PM					302.1 -> 227...				Oxymorphone-D3	4.272	129263
Phentermine	150.1 -> 65.2	1/2/2018 5:28 PM	5.661	794	0.57		150.1 -> 133...				Phentermine-D5	5.112	328028
Promethazine	285.1 -> 86.2	1/2/2018 5:28 PM					285.1 -> 71.3				Promethazine-D3	6.345	15614...
Quetiapine	384.2 -> 253...	1/2/2018 5:28 PM					384.2 -> 221...				Quetiapine-D8	6.374	24558
Setraline	306.1 -> 158...	1/2/2018 5:28 PM					306.1 -> 275...				Setraline-D3	6.545	314632



Compound Method	p1 external control	p1 external control Results				Qualifier 1 M...	Qualifier 1 Results			ISTD Method	ISTD Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.
Temazepam	301.1 -> 255..	1/2/2018 5:28 PM					301.1 -> 283...				Temazepam-D5	6.526	346724
Tramadol	264.2 -> 58.3	1/2/2018 5:28 PM					264.2 -> 43.3				Tramadol-13C-D3	5.430	893423
Trazodone	372.2 -> 176..	1/2/2018 5:28 PM					372.2 -> 148...				Trazodone-D6	6.477	759190
Venlafaxine	278.2 -> 58.3	1/2/2018 5:28 PM					278.2 -> 260...				Venlafaxine-D6	5.796	849204
Zolpidem	308.2 -> 235..	1/2/2018 5:28 PM					308.2 -> 263...				Zolpidem-D6	6.199	883200

Compound Method		p2 cal 1-1b		p2 cal 1-1b Results			Qualifier 1 M...			Qualifier 1 Results			ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.			
7-aminoflunitrazepam	284.1 -> 135...	1/2/2018 4:59 PM	5.701	34175	69.45	284.1 -> 93.2	260.06	11743	7-aminoflunitrazepam-D7	5.699	172419					
alpha-hydroxymidazolam	342.1 -> 324...	1/2/2018 4:59 PM	6.468	50679	567.82	342.1 -> 203...	135.34	33641	alpha-hydroxymidazolam-...	6.448	297120					
Amiripryline	278.2 -> 91.2	1/2/2018 4:59 PM	6.438	202900	144.51	278.2 -> 105...	36.33	76605	Amiripryline-D3	6.437	425339					
Amoxapine	314.1 -> 271...	1/2/2018 4:59 PM	6.391	49491	148.14	314.1 -> 193...	Infinity	30520	Amiripryline-D3	6.437	425339					
Benzoylcegonine	290.1 -> 168...	1/2/2018 4:59 PM	5.312	13215	49.52	290.1 -> 105...	64.43	8412	Benzoylcegonine-D8	5.289	4854					
Carbamazepine	237.1 -> 193...	1/2/2018 4:59 PM	6.117	23695	53.99	237.1 -> 194...	285.09	2070...	Carbamazepine-13C6	6.137	10837...					
Chlordiazepoxide	300.1 -> 227...	1/2/2018 4:59 PM	6.596	28621	162.59	300.1 -> 282...	Infinity	16040	Chlordiazepoxide-D5	6.596	219592					
Clozapine	315.2 -> 86.2	1/2/2018 4:59 PM	6.634	303789	163.50	315.2 -> 58.3	1028.14	1795...	Clozapine-D3	6.634	16237...					
Cocaine	304.2 -> 182...	1/2/2018 4:59 PM	5.596	132469	Infinity	304.2 -> 105...	41.76	30507	Cocaine-D3	5.596	587384					
Desipramine	267.2 -> 72.3	1/2/2018 4:59 PM	6.357	214881	47016.38	267.2 -> 44.3	16780...	1139...	Desipramine-D3	6.357	11196...					
Doxepin	280.2 -> 107...	1/2/2018 4:59 PM	6.152	107832	349.83	280.2 -> 77.2	Infinity	34922	Doxepin-D3	6.151	524725					
Estazolam	295.1 -> 267...	1/2/2018 4:59 PM	6.394	43128	563.85	295.1 -> 205...	7544.70	38663	Estazolam-D5	6.392	211004					
Flunitrazepam	314.1 -> 268...	1/2/2018 4:59 PM	6.432	39351	86.06	314.1 -> 239...	Infinity	15235	Flunitrazepam-D7	6.410	8569					
Flurazepam	388.2 -> 315...	1/2/2018 4:59 PM	6.161	127021	264.37	388.2 -> 317...	5591.60	30556	Zopiclone-D4	6.120	213277					
Imipramine	281.2 -> 86.2	1/2/2018 4:59 PM	6.396	327059	Infinity	281.2 -> 58.3	Infinity	1750...	Imipramine-D3	6.395	969860					
Levamisole	205.1 -> 91.2	1/2/2018 4:59 PM	5.001	37691	Infinity	205.1 -> 178...	61.29	30317	Cocaine-D3	5.596	587384					
Maprotiline	278.2 -> 91.2	1/2/2018 4:59 PM	6.438	144381	Infinity	278.2 -> 117...	167.58	87766	Meperidine-D4	5.625	273103					
MDA	180.1 -> 163...	1/2/2018 4:59 PM	4.983	44475	95.06	180.1 -> 105...	Infinity	28954	MDA-D5	4.963	228272					
MDEA	208.1 -> 163...	1/2/2018 4:59 PM	5.242	84901	Infinity	208.1 -> 105...	72.66	68378	MDEA-D6	5.242	473171					
MDMA	194.1 -> 163...	1/2/2018 4:59 PM	5.083	86703	Infinity	194.1 -> 105...	94.82	53398	MDMA-D6	5.082	53978					
Meperidine	248.2 -> 220...	1/2/2018 4:59 PM	5.646	50332	113.65	248.2 -> 174...	102.24	29778	Meperidine-D4	5.625	273103					
Methylphenidate	234.2 -> 84.2	1/2/2018 4:59 PM	5.526	234069	Infinity	234.2 -> 56.3	107.18	53715	Meperidine-D4	5.625	273103					
Metoprolol	268.2 -> 116...	1/2/2018 4:59 PM	5.439	23291	Infinity	268.2 -> 56.3	110.68	22609	Meperidine-D4	5.625	273103					
Midazolam	326.1 -> 223...	1/2/2018 4:59 PM	6.612	24126	208.97	326.1 -> 249...	124.63	21557	Midazolam-D4	6.611	408116					
Miltazapine	266.2 -> 195...	1/2/2018 4:59 PM	5.950	145721	81.52	266.2 -> 72.3	52.54	85705	Midazolam-D4	6.611	408116					
Miltazapine	399.2 -> 174...	1/2/2018 4:59 PM	6.160	48996	196.91	399.2 -> 238...	4471.43	22747	Carbamazepine-13C6	6.137	10837...					
Normeperidine	234.1 -> 42.3	1/2/2018 4:59 PM	5.608	58290	241.78	234.1 -> 160...	319.62	44592	Normeperidine-D4	5.607	226805					
Norpropoxyphene	326.2 -> 44.3	1/2/2018 4:59 PM	6.246	36750	301.30	326.2 -> 252...	3604.18	13264	Norpropoxyphene-D5	6.225	162215					
Nortriptyline	264.2 -> 91.2	1/2/2018 4:59 PM	6.298	347769	71.34	264.2 -> 233...	425.03	3535...	Nortriptyline-D3	6.398	404464					
Ondansetron	294.2 -> 184...	1/2/2018 4:59 PM	5.823	77580	413.54	294.2 -> 212...	212.88	33291	Pentazocine-13C3	5.680	400128					
Pentazocine	286.2 -> 218...	1/2/2018 4:59 PM	5.680	102215	1321.07	286.2 -> 41.3	452.80	1171...	Pentazocine-13C3	5.680	400128					
Phenazepam	349.0 -> 206...	1/2/2018 4:59 PM	6.508	49648	3838.40	349.0 -> 183...	347.45	34872	Phenazepam-D4	6.507	17910					
Phencyclidine	244.2 -> 86.2	1/2/2018 4:59 PM	5.912	174490	Infinity	244.2 -> 91.1	176.93	1221...	Phencyclidine-D5	5.912	908429					
Phenylethylamine	253.1 -> 104...	1/2/2018 4:59 PM	6.054	2252	5.25	253.1 -> 182...	6.29	2330	Phenylethylamine-D10	6.033	12022					
Praxepam	325.1 -> 271...	1/2/2018 4:59 PM	6.956	197302	259.30	325.1 -> 140...	137.36	50959	Praxepam-D5	6.934	898231					
Primidone	219.1 -> 91.2	1/2/2018 4:59 PM	5.385	8425	15.62	219.1 -> 162...	26.52	5378	Praxepam-D5	6.934	898231					
Propoxyphene	340.2 -> 58.3	1/2/2018 4:59 PM	6.265	221782	1182.44	340.2 -> 266...	200.11	46952	Propoxyphene-D11	6.243	262851					
Proprylolone	264.2 -> 155...	1/2/2018 4:59 PM	6.318	515569	80420.83	264.2 -> 161...	Infinity	6	Nortriptyline-D3	6.398	404464					
Pseudoephedrine	166.1 -> 148...	1/2/2018 4:59 PM	4.640	828021	577.08	166.1 -> 133...	93.48	1682...	Pseudoephedrine-D3	4.619	426937					
Tapentadol	222.2 -> 107...	1/2/2018 4:59 PM	5.465	132937	1146.62	222.2 -> 121...	Infinity	45134	Tapentadol-D3	5.445	658517					
Trimipramine	295.2 -> 100...	1/2/2018 4:59 PM	6.475	369814	150.27	295.2 -> 58.3	Infinity	2097...	Trimipramine-D3	6.475	17969...					
Verapamil	455.3 -> 165...	1/2/2018 4:59 PM	6.201	166928	2177.33	455.3 -> 150...	9773.66	47840	Trimipramine-D3	6.475	17969...					
Zaleplon	306.1 -> 236...	1/2/2018 4:59 PM	6.228	47204	196.72	306.1 -> 264...	7302.44	33600	Zaleplon-D4	6.207	185774					
Zopiclone	389.1 -> 244...	1/2/2018 4:59 PM	6.120	16527	58.41	389.1 -> 216...	87.73	8025	Zopiclone-D4	6.120	213277					

Compound Method		p2 negative			p2 negative Results			Qualifier 1 M...			Qualifier 1 R...			ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.				
7-aminoflunitrazepam	284.1 -> 135...	1/2/2018 5:19 PM				284.1 -> 93.2					7-aminoflunitrazepam-D7	5.679	143292				
alpha-hydroxymidazolam	342.1 -> 324...	1/2/2018 5:19 PM				342.1 -> 203...					alpha-hydroxymidazolam-...	6.448	260137				
Amitriptyline	278.2 -> 91.2	1/2/2018 5:19 PM				278.2 -> 105...					Amitriptyline-D3	6.437	385290				
Amoxapine	314.1 -> 271...	1/2/2018 5:19 PM				314.1 -> 193...					Amitriptyline-D3	6.437	385290				
Benzoyllecgonine	290.1 -> 168...	1/2/2018 5:19 PM				290.1 -> 105...					Benzoyllecgonine-D8	5.289	4345				
Carbamazepine	237.1 -> 193...	1/2/2018 5:19 PM				237.1 -> 194...					Carbamazepine-13C6	6.137	10200...				
Chlordiazepoxide	300.1 -> 227...	1/2/2018 5:19 PM				300.1 -> 282...					Chlordiazepoxide-D5	6.596	202327				
Clomipramine	315.2 -> 86.2	1/2/2018 5:19 PM				315.2 -> 58.3					Clomipramine-D3	6.634	14149...				
Cocaine	304.2 -> 182...	1/2/2018 5:19 PM				304.2 -> 105...					Cocaine-D3	5.596	536459				
Desipramine	267.2 -> 72.3	1/2/2018 5:19 PM				267.2 -> 44.3					Desipramine-D3	6.357	10498...				
Doxepin	280.2 -> 107...	1/2/2018 5:19 PM				280.2 -> 77.2					Doxepin-D3	6.151	485215				
Estazolam	295.1 -> 267...	1/2/2018 5:19 PM				295.1 -> 205...					Estazolam-D5	6.392	199270				
Flunitrazepam	314.1 -> 268...	1/2/2018 5:19 PM				314.1 -> 239...					Flunitrazepam-D7	6.410	6785				
Flurazepam	388.2 -> 315...	1/2/2018 5:19 PM				388.2 -> 317...					Zopiclone-D4	6.120	198307				
Imipramine	281.2 -> 86.2	1/2/2018 5:19 PM				281.2 -> 58.3					Imipramine-D3	6.395	871088				
Levamisole	205.1 -> 91.2	1/2/2018 5:19 PM				205.1 -> 178...					Cocaine-D3	5.596	536459				
Maprotiline	278.2 -> 91.2	1/2/2018 5:19 PM				278.2 -> 117...					Meperidine-D4	5.625	242044				
MDA	180.1 -> 163...	1/2/2018 5:19 PM				180.1 -> 105...					MDA-D5	4.963	212812				
MDEA	208.1 -> 163...	1/2/2018 5:19 PM				208.1 -> 105...					MDEA-D6	5.242	418247				
MDMA	194.1 -> 163...	1/2/2018 5:19 PM				194.1 -> 105...					MDEA-D6	5.082	45384				
Meperidine	248.2 -> 220...	1/2/2018 5:19 PM				248.2 -> 174...					Meperidine-D4	5.625	242044				
Methyphenidate	234.2 -> 84.2	1/2/2018 5:19 PM				234.2 -> 56.3					Meperidine-D4	5.625	242044				
Metoprolol	268.2 -> 116...	1/2/2018 5:19 PM				268.2 -> 56.3					Meperidine-D4	5.625	242044				
Midazolam	326.1 -> 223...	1/2/2018 5:19 PM				326.1 -> 249...					Midazolam-D4	6.611	365066				
Miltazapine	266.2 -> 195...	1/2/2018 5:19 PM				266.2 -> 72.3					Midazolam-D4	6.611	365066				
Mirtazapine	399.2 -> 174...	1/2/2018 5:19 PM				399.2 -> 238...					Carbamazepine-13C6	6.137	10200...				
Mirtazapine	399.2 -> 174...	1/2/2018 5:19 PM				399.2 -> 238...					Carbamazepine-13C6	6.137	10200...				
Normeperidine	234.1 -> 42.3	1/2/2018 5:19 PM				234.1 -> 160...					Normeperidine-D4	5.607	213407				
Normeperidine	234.1 -> 42.3	1/2/2018 5:19 PM				234.1 -> 160...					Normeperidine-D4	5.607	213407				
Norpropoxyphene	326.2 -> 44.3	1/2/2018 5:19 PM				326.2 -> 252...					Norpropoxyphene-D5	6.225	143388				
Nortriptyline	264.2 -> 91.2	1/2/2018 5:19 PM				264.2 -> 233...					Nortriptyline-D3	6.398	292505				
Ondansetron	294.2 -> 184...	1/2/2018 5:19 PM				294.2 -> 212...					Pentazocine-13C3	5.680	370566				
Pentazocine	286.2 -> 218...	1/2/2018 5:19 PM				286.2 -> 41.3					Pentazocine-13C3	5.680	370566				
Phenazepam	349.0 -> 206...	1/2/2018 5:19 PM				349.0 -> 183...					Phenazepam-D4	6.507	18324				
Phenazepam	349.0 -> 206...	1/2/2018 5:19 PM				349.0 -> 183...					Phenazepam-D4	6.507	18324				
Phencyclidine	244.2 -> 86.2	1/2/2018 5:19 PM				244.2 -> 91.1					Phencyclidine-D5	5.912	771580				
Phenylethylamine	253.1 -> 104...	1/2/2018 5:19 PM				253.1 -> 182...					Phenylethylamine-D5	6.013	11296				
Phenylethylamine	253.1 -> 104...	1/2/2018 5:19 PM				253.1 -> 182...					Phenylethylamine-D5	6.013	11296				
Praxepam	325.1 -> 271...	1/2/2018 5:19 PM				325.1 -> 140...					Praxepam-D5	6.934	793853				
Praxepam	325.1 -> 271...	1/2/2018 5:19 PM				325.1 -> 140...					Praxepam-D5	6.934	793853				
Primidone	219.1 -> 91.2	1/2/2018 5:19 PM				219.1 -> 162...					Praxepam-D5	6.934	793853				
Propoxyphene	340.2 -> 58.3	1/2/2018 5:19 PM				340.2 -> 266...					Propoxyphene-D11	6.243	229467				
Propoxyphene	340.2 -> 58.3	1/2/2018 5:19 PM				340.2 -> 266...					Propoxyphene-D11	6.243	229467				
Protriptyline	264.2 -> 155...	1/2/2018 5:19 PM				264.2 -> 161...					Nortriptyline-D3	6.398	292505				
Pseudoephedrine	166.1 -> 148...	1/2/2018 5:19 PM				166.1 -> 133...					Pseudoephedrine-D3	4.639	346310				
Tapentadol	222.2 -> 107...	1/2/2018 5:19 PM				222.2 -> 121...					Tapentadol-D3	5.445	619705				
Tapentadol	222.2 -> 107...	1/2/2018 5:19 PM				222.2 -> 121...					Tapentadol-D3	5.445	619705				
Trimipramine	295.2 -> 100...	1/2/2018 5:19 PM				295.2 -> 58.3					Trimipramine-D3	6.475	16329...				
Trimipramine	295.2 -> 100...	1/2/2018 5:19 PM				295.2 -> 58.3					Trimipramine-D3	6.475	16329...				
Verapamil	455.3 -> 165...	1/2/2018 5:19 PM				455.3 -> 150...					Trimipramine-D3	6.475	16329...				
Zaleplon	306.1 -> 236...	1/2/2018 5:19 PM				306.1 -> 264...					Zaleplon-D4	6.228	174444				
Zopiclone	389.1 -> 244...	1/2/2018 5:19 PM				389.1 -> 216...					Zopiclone-D4	6.120	198307				

Compound	Method	p2 external control	p2 external control	Results	Qualifier 1 M...	Qualifier 1 Results	ISTD Method	ISTD Results					
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.
7-aminoflunitrazepam	284.1 -> 135...	1/2/2018 5:38 PM					284.1 -> 93.2				7-aminoflunitrazepam-D7	5.679	131310
alpha-hydroxymidazolam	342.1 -> 324...	1/2/2018 5:38 PM					342.1 -> 203...				alpha-hydroxymidazolam-...	6.448	245354
Amiripryline	278.2 -> 91.2	1/2/2018 5:38 PM	6.438	12537...	Infinity		278.2 -> 105...		133.74	6299...	Amiripryline-D3	6.437	363718
Amoxapine	314.1 -> 271...	1/2/2018 5:38 PM					314.1 -> 193...				Amiripryline-D3	6.437	363718
Benzoylcegonine	290.1 -> 168...	1/2/2018 5:38 PM					290.1 -> 105...				Benzoylcegonine-D8	5.289	4034
Carbamazepine	237.1 -> 193...	1/2/2018 5:38 PM					237.1 -> 194...				Carbamazepine-13C6	6.137	962582
Chlordiazepoxide	300.1 -> 227...	1/2/2018 5:38 PM					300.1 -> 282...				Chlordiazepoxide-D5	6.596	192331
Clomipramine	315.2 -> 86.2	1/2/2018 5:38 PM					315.2 -> 58.3				Clomipramine-D3	6.634	13845...
Cocaine	304.2 -> 182...	1/2/2018 5:38 PM					304.2 -> 105...				Cocaine-D3	5.596	526294
Desipramine	267.2 -> 72.3	1/2/2018 5:38 PM					267.2 -> 44.3				Desipramine-D3	6.357	983895
Doxepin	280.2 -> 107...	1/2/2018 5:38 PM					280.2 -> 77.2				Doxepin-D3	6.151	472537
Estazolam	295.1 -> 267...	1/2/2018 5:38 PM					295.1 -> 205...				Estazolam-D5	6.392	199319
Flunitrazepam	314.1 -> 268...	1/2/2018 5:38 PM					314.1 -> 239...				Flunitrazepam-D7	6.431	8544
Flurazepam	388.2 -> 315...	1/2/2018 5:38 PM					388.2 -> 317...				Zopiclone-D4	6.120	157239
Imipramine	281.2 -> 86.2	1/2/2018 5:38 PM					281.2 -> 58.3				Imipramine-D3	6.395	825733
Levamisole	205.1 -> 91.2	1/2/2018 5:38 PM					205.1 -> 178...				Cocaine-D3	5.596	526294
Maprotiline	278.2 -> 91.2	1/2/2018 5:38 PM	6.438	897330	Infinity		278.2 -> 117...		1169...	4193...	Meperidine-D4	5.625	218030
MDA	180.1 -> 163...	1/2/2018 5:38 PM					180.1 -> 105...				MDA-D5	4.963	195967
MDEA	208.1 -> 163...	1/2/2018 5:38 PM					208.1 -> 105...				MDEA-D6	5.242	381976
MDMA	194.1 -> 163...	1/2/2018 5:38 PM					194.1 -> 105...				MDMA-D6	5.082	43351
Meperidine	248.2 -> 220...	1/2/2018 5:38 PM					248.2 -> 174...				Meperidine-D4	5.625	218030
Methylphenidate	234.2 -> 84.2	1/2/2018 5:38 PM					234.2 -> 56.3				Meperidine-D4	5.625	218030
Metoprolol	268.2 -> 116...	1/2/2018 5:38 PM					268.2 -> 56.3				Meperidine-D4	5.625	218030
Midazolam	326.1 -> 223...	1/2/2018 5:38 PM					326.1 -> 249...				Midazolam-D4	6.611	349468
Mirtazapine	266.2 -> 195...	1/2/2018 5:38 PM	5.950	11643...	259.12		266.2 -> 72.3		304.07	7442...	Midazolam-D4	6.611	349468
Mitragynine	399.2 -> 174...	1/2/2018 5:38 PM					399.2 -> 238...				Carbamazepine-13C6	6.137	962582
Normeperidine	234.1 -> 42.3	1/2/2018 5:38 PM					234.1 -> 160...				Normeperidine-D4	5.607	196622
Norpropoxyphene	326.2 -> 44.3	1/2/2018 5:38 PM					326.2 -> 252...				Normeperidine-D4	5.607	196622
Nortriptyline	264.2 -> 91.2	1/2/2018 5:38 PM					264.2 -> 233...				Nortriptyline-D3	6.225	141807
Ondansetron	294.2 -> 184...	1/2/2018 5:38 PM					294.2 -> 212...				Nortriptyline-D3	6.398	339908
Pentazocine	286.2 -> 218...	1/2/2018 5:38 PM					286.2 -> 41.3				Pentazocine-13C3	5.680	364496
Phenazepam	349.0 -> 206...	1/2/2018 5:38 PM					349.0 -> 183...				Phenazepam-D4	6.507	18679
Phencyclidine	244.2 -> 86.2	1/2/2018 5:38 PM					244.2 -> 91.1				Phencyclidine-D5	5.912	729844
Phenylethanolamine	253.1 -> 104...	1/2/2018 5:38 PM					253.1 -> 182...				Phenylethanolamine-D10	6.033	9426
Prazeepam	325.1 -> 271...	1/2/2018 5:38 PM					325.1 -> 140...				Prazeepam-D5	6.934	748177
Primidone	219.1 -> 91.2	1/2/2018 5:38 PM					219.1 -> 162...				Prazeepam-D5	6.934	748177
Propoxyphene	340.2 -> 58.3	1/2/2018 5:38 PM					340.2 -> 266...				Propoxyphene-D11	6.243	217612
Protriptyline	264.2 -> 155...	1/2/2018 5:38 PM					264.2 -> 161...				Nortriptyline-D3	6.398	339908
Pseudoephedrine	166.1 -> 148...	1/2/2018 5:38 PM					166.1 -> 133...				Pseudoephedrine-D3	4.639	318059
Tapentadol	222.2 -> 107...	1/2/2018 5:38 PM					222.2 -> 121...				Tapentadol-D3	5.445	578576
Trimipramine	295.2 -> 100...	1/2/2018 5:38 PM					295.2 -> 58.3				Trimipramine-D3	6.475	15352...
Verapamil	455.3 -> 165...	1/2/2018 5:38 PM					455.3 -> 150...				Trimipramine-D3	6.475	15352...
Zaleplon	306.1 -> 236...	1/2/2018 5:38 PM					306.1 -> 264...				Zaleplon-D4	6.207	172036
Zopiclone	389.1 -> 244...	1/2/2018 5:38 PM					389.1 -> 216...				Zopiclone-D4	6.120	157239

Can not find  
Amiripryline  
OK

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

Extraction Date: 1-2-18

Analyst: Anne Nord

Plate lot#: 0515037

Plate Expiration: 9/28/2018

**Mobile phase A:** 10mM Ammonium Formate  
0.1% Formic Acid in Water

MTBE

**Mobile phase B:** 0.1% Formic acid in MeOH  
Hexane

**Blank Blood Lot:** 17J20718

**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.
- 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 **1000 µL blood (calibrated pipette) Pipette ID: 2609543** in wells of analytical (standards) plate.
  - 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*
- 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.
- 6. Transfer **800 µL 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: 66792*
- 8. Wait 5 minutes.
- 9. Add **2.25 mL MTBE** (add in 3 increments of 750uL).
- 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).*
- 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.  
*SPE Dry ID: 66819*
- 16. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

## Post-Analytic

- 1. Create batch and process data.  
Worklist path: 01022018 blood screen AM 25-26 Batch Name: 01022018 cann screen
- 2. For unknown samples, calculated concentration > 3ng THC, THC-OH and > 5ng Carboxy-THC and +/- 2% or +/- 0.100 min (whichever is greater) retention time of calibrators?
- 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: \_

Toxicology AMI method 27 external prep information

working solution 1 ug/ml in meoh C-THC, THC-OH, THC

Stock solution 1mg/ml 10 ul each THC, THC-OH 100 ug/ml 100 ul C-THC in 9880 ul meOH lot (Fisher 168427)

Ppd 8/17/17 Exp: 2/17/18 lot 21718 by AMN

Drug	lot (cerilliant)	expiration
C-THC	FE03121501	3/1/2020
THC-OH	FE01141502	1/1/2020
THC	FE04231406	4/1/2019

AM 27 control 100 ul working solution lot (21717) in 9900 ul blood lot (321632)

ppd 8/17/17 Exp 2/17/18 lot 81717 Concentration 10 ng/ml each by AMN

ppd 1/3/18 Exp 2/17/18 lot 1318 neg blood lot 17120718 by AMN

# ISP FORENSICS - Cd'A Instrument #62340

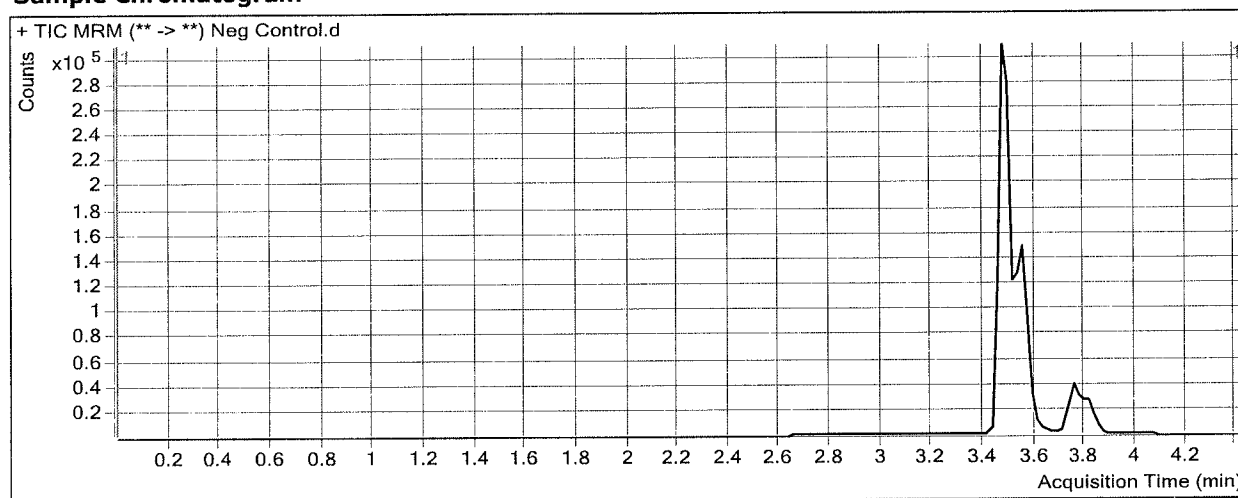
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin  
**Analysis Time** 1/2/2018 3:57 PM **Analyst Name** ISP Tox  
**Report Time** 1/3/2018 8:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2018 3:57 PM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-02 13:07 **Data File** Neg Control.d  
**Sample Type** Sample **Sample Name** Neg Control  
**Dilution** 1 **Acq Method** Screen THC 8-2017.m  
**Position** P1-a2 **Sample Info**  
**Inj Vol** -1 **Comment** AM 26 Cannabinoid screen negative blood lot 17J20718

### Sample Chromatogram



### Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.546	18783	442810	0.0424	2.1075 < 5 *

# ISP FORENSICS - Cd'A Instrument #62340

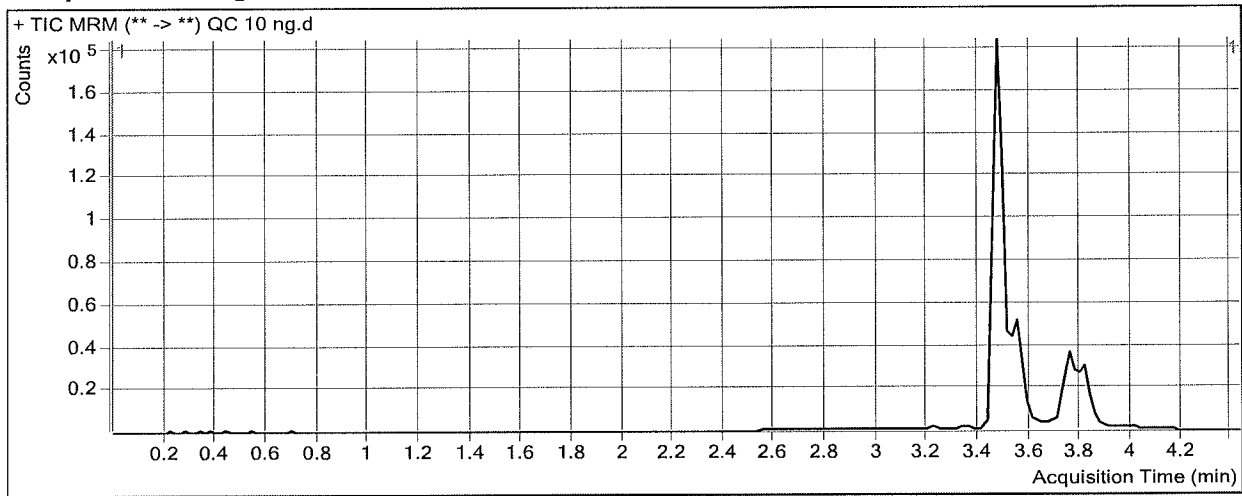
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin  
**Analysis Time** 1/2/2018 3:57 PM **Analyst Name** ISP Tox  
**Report Time** 1/3/2018 8:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2018 3:57 PM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-02 13:27 **Data File** QC 10 ng.d  
**Sample Type** QC **Sample Name** QC 10 ng  
**Dilution** 1 **Acq Method** Screen THC 8-2017.m  
**Position** P1-H1 **Sample Info**  
**Inj Vol** -1 **Comment** AM 26 Cannabinoid screen

### Sample Chromatogram



### Results

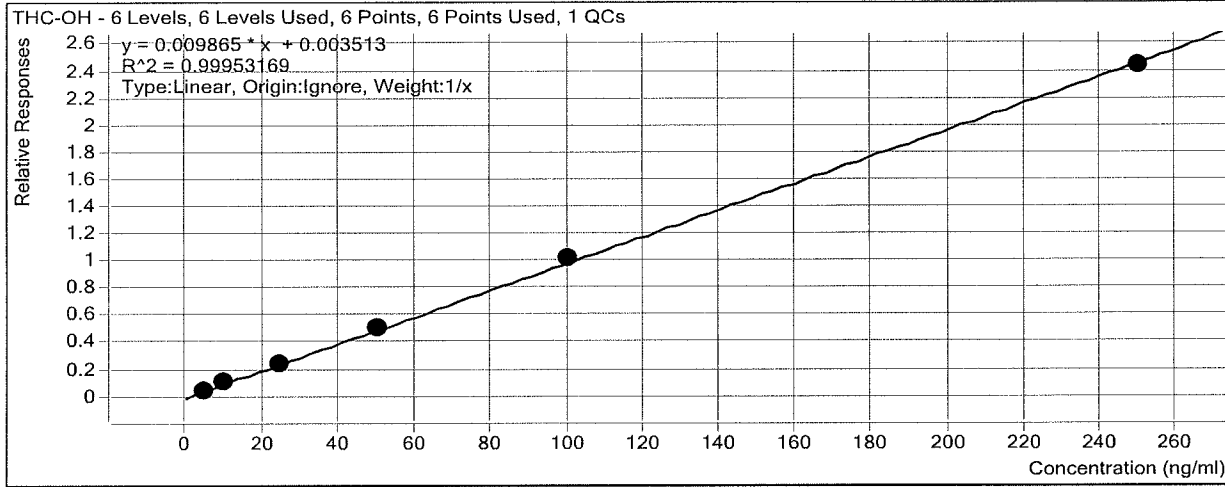
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	49585	500407	0.0991	9.6881
THC-COOH	3.546	25782	124556	0.2070	10.6815
THC	3.820	3809	37667	0.1011	9.8916



# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin  
**Last Calib Update** 1/2/2018 3:57 PM **Analyst Name** ISP TOX

**Target Compound** *THC-OH*  
**Internal Standard** *THC-OH-d3*

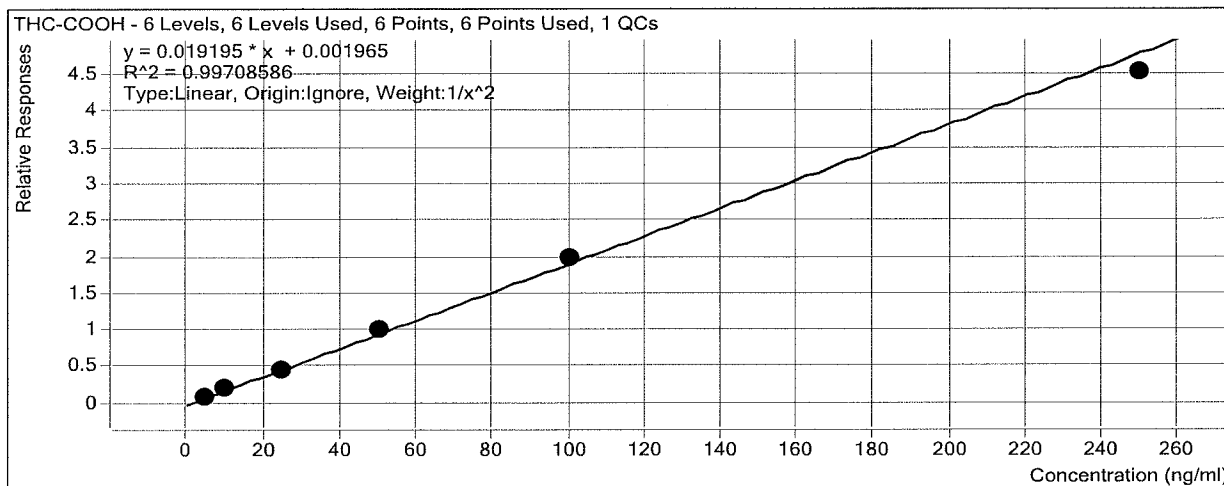


Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	4.8	95.7
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.2	101.7
QC 10 ng	3	<input checked="" type="checkbox"/>	10	9.7	96.9
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	24.7	99.0
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	51.2	102.4
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	102.6	102.6
cal 7 - 250ng	7	<input checked="" type="checkbox"/>	250	246.5	98.6

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann  
screen.batch.bin  
**Last Calib Update** 1/2/2018 3:57 PM  
**Analyst Name** ISP TOX

**Target Compound** *THC-COOH*  
**Internal Standard** *THC-COOH-d9*

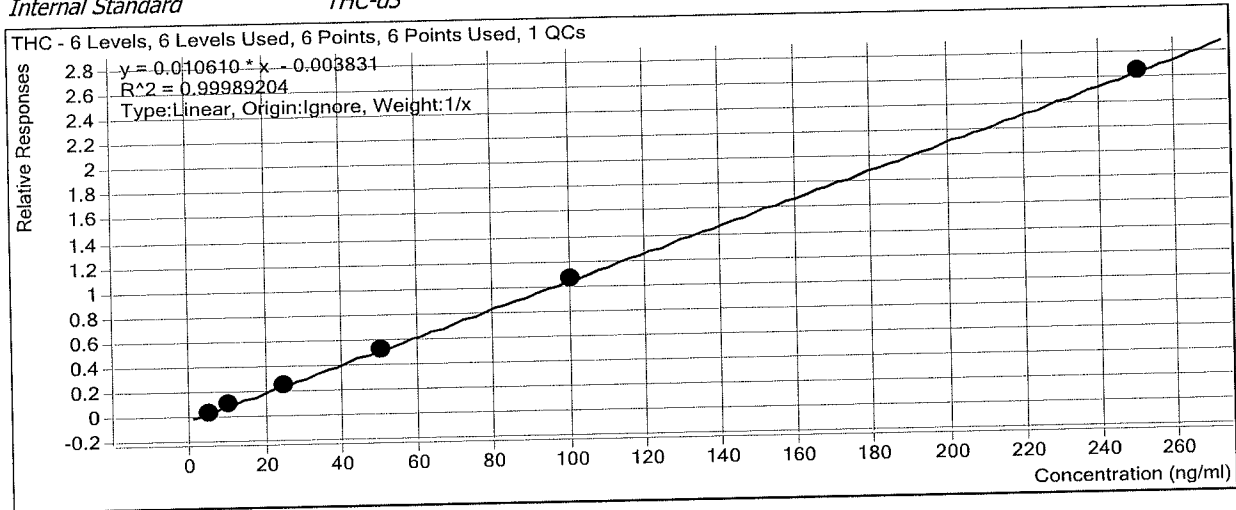


Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	4.9	99.0
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.3	102.6
QC 10 ng	3	<input checked="" type="checkbox"/>	10	10.7	106.8
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	23.9	95.8
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	52.3	104.7
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	103.8	103.8
cal 7 - 250ng	7	<input checked="" type="checkbox"/>	250	235.3	94.1

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin  
**Last Calib Update** 1/2/2018 3:57 PM **Analyst Name** ISP TOX

**Target Compound** THC  
**Internal Standard** THC-d3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.0	99.8
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.3	102.7
QC 10 ng	3	<input checked="" type="checkbox"/>	10	9.9	98.9
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	24.3	97.0
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	49.9	99.8
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	100.8	100.8
cal 7 - 250ng	7	<input checked="" type="checkbox"/>	250	249.7	99.9

# ISP FORENSICS - Cd'A Instrument #62340

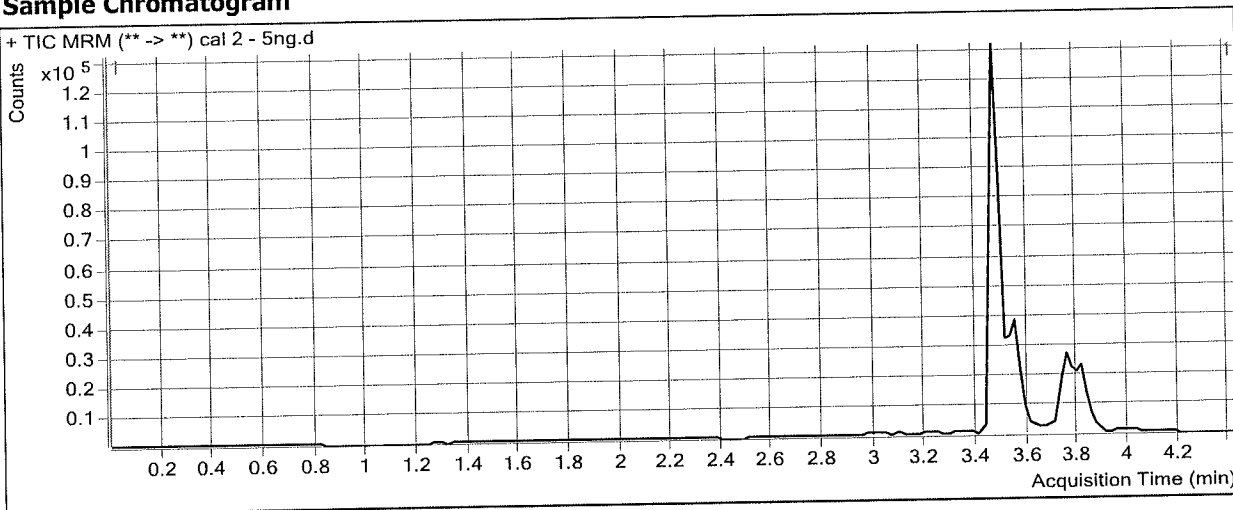
## Cannabinoid Screen Report

<b>Batch Data Path</b>	D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin		
<b>Analysis Time</b>	1/2/2018 3:57 PM	<b>Analyst Name</b>	ISP Tox
<b>Report Time</b>	1/3/2018 8:37 AM	<b>Reporter Name</b>	ISP Tox
<b>Last Calib Update</b>	1/2/2018 3:57 PM	<b>Batch State</b>	Processed

### Analysis Info

<b>Acq Time</b>	2018-01-02 12:34	<b>Data File</b>	cal 2 - 5ng.d
<b>Sample Type</b>	Calibration	<b>Sample Name</b>	cal 2 - 5ng
<b>Dilution</b>	1	<b>Acq Method</b>	Screen THC 8-2017.m
<b>Position</b>	P1-B1	<b>Sample Info</b>	
<b>Inj Vol</b>	-1	<b>Comment</b>	AM 26 Cannabinoid screen

### Sample Chromatogram



### Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	18859	371878	0.0507	4.7843
THC-COOH	3.546	10018	103313	0.0970	4.9495
THC	3.820	1453	29603	0.0491	4.9879

# ISP FORENSICS - Cd'A Instrument #62340

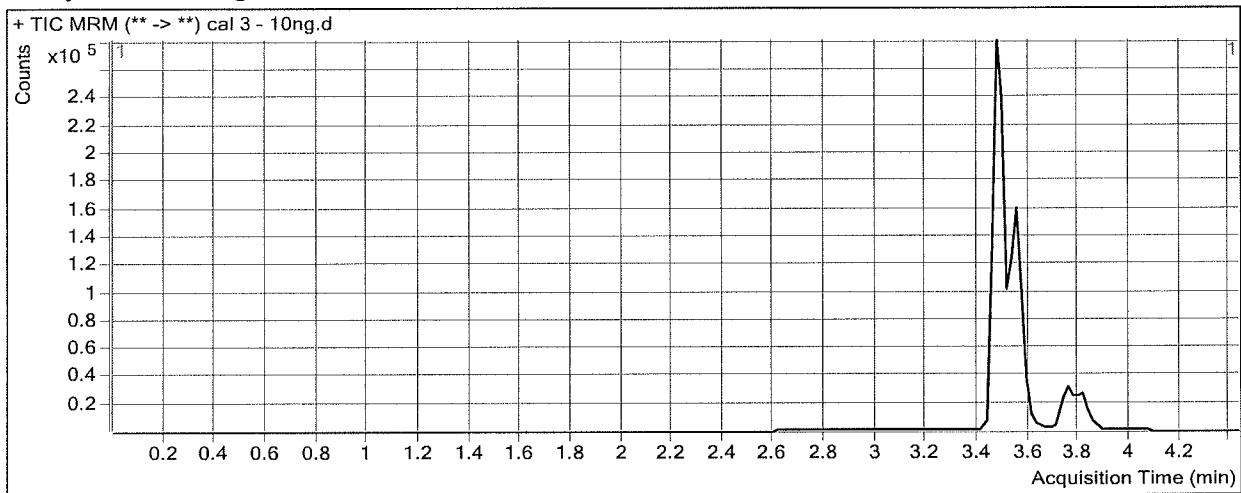
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin  
**Analysis Time** 1/2/2018 3:57 PM **Analyst Name** ISP Tox  
**Report Time** 1/3/2018 8:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2018 3:57 PM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-02 12:40 **Data File** cal 3 - 10ng.d  
**Sample Type** Calibration **Sample Name** cal 3 - 10ng  
**Dilution** 1 **Acq Method** Screen THC 8-2017.m  
**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-OH	3.473	86417	831888	0.1039	10.1738
THC-COOH	3.546	76359	383774	0.1990	10.2635
THC	3.820	3376	32113	0.1051	10.2685

# ISP FORENSICS - Cd'A Instrument #62340

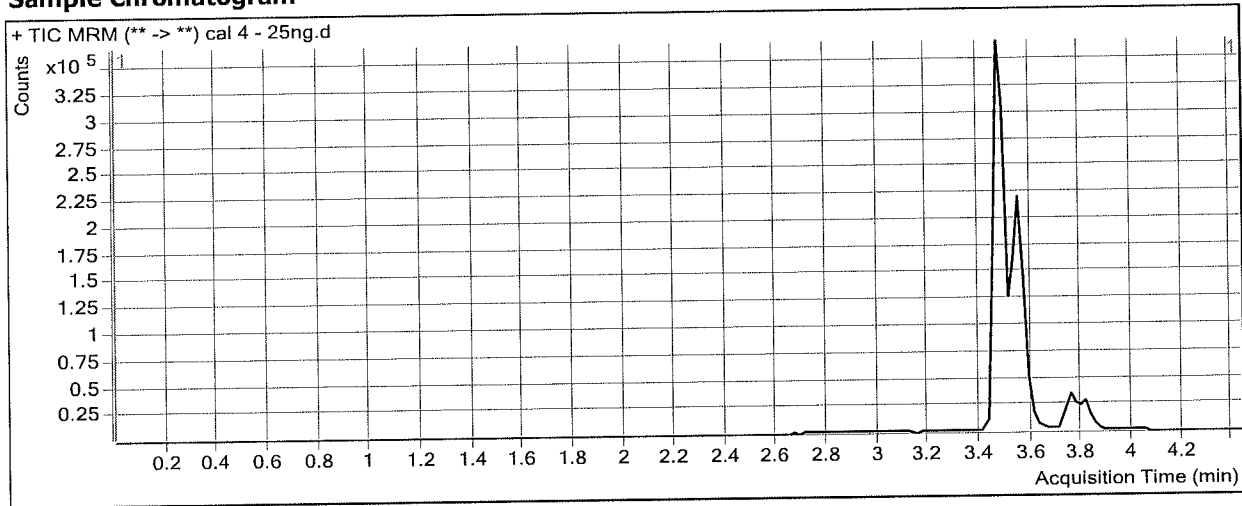
## Cannabinoid Screen Report

<b>Batch Data Path</b>	D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin		
<b>Analysis Time</b>	1/2/2018 3:57 PM	<b>Analyst Name</b>	ISP Tox
<b>Report Time</b>	1/3/2018 8:37 AM	<b>Reporter Name</b>	ISP Tox
<b>Last Calib Update</b>	1/2/2018 3:57 PM	<b>Batch State</b>	Processed

### Analysis Info

<b>Acq Time</b>	2018-01-02 12:47	<b>Data File</b>	cal 4 - 25ng.d
<b>Sample Type</b>	Calibration	<b>Sample Name</b>	cal 4 - 25ng
<b>Dilution</b>	1	<b>Acq Method</b>	Screen THC 8-2017.m
<b>Position</b>	P1-D1	<b>Sample Info</b>	
<b>Inj Vol</b>	-1	<b>Comment</b>	AM 26 Cannabinoid screen

### Sample Chromatogram



### Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	233022	941191	0.2476	24.7402
THC-COOH	3.546	188054	407521	0.4615	23.9387
THC	3.820	8083	31886	0.2535	24.2542

# ISP FORENSICS - Cd'A Instrument #62340

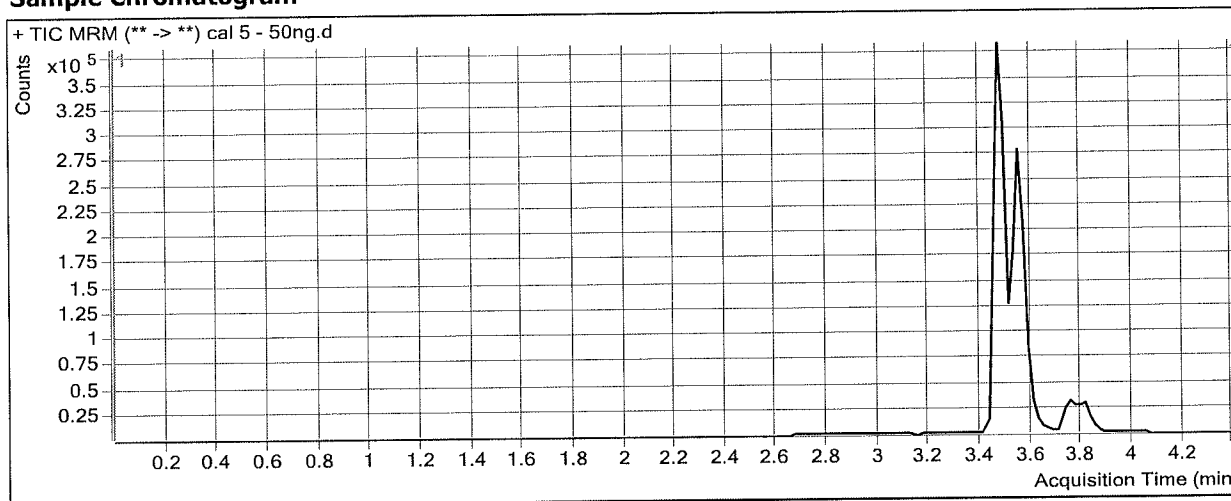
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin  
**Analysis Time** 1/2/2018 3:57 PM **Analyst Name** ISP Tox  
**Report Time** 1/3/2018 8:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2018 3:57 PM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-02 12:53 **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-E1 **Sample Info**  
**Inj Vol** -1 **Comment** AM 26 Cannabinoid screen

### Sample Chromatogram



### Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	409354	804696	0.5087	51.2092
THC-COOH	3.546	366862	364498	1.0065	52.3335
THC	3.820	16019	30478	0.5256	49.8979

# ISP FORENSICS - Cd'A Instrument #62340

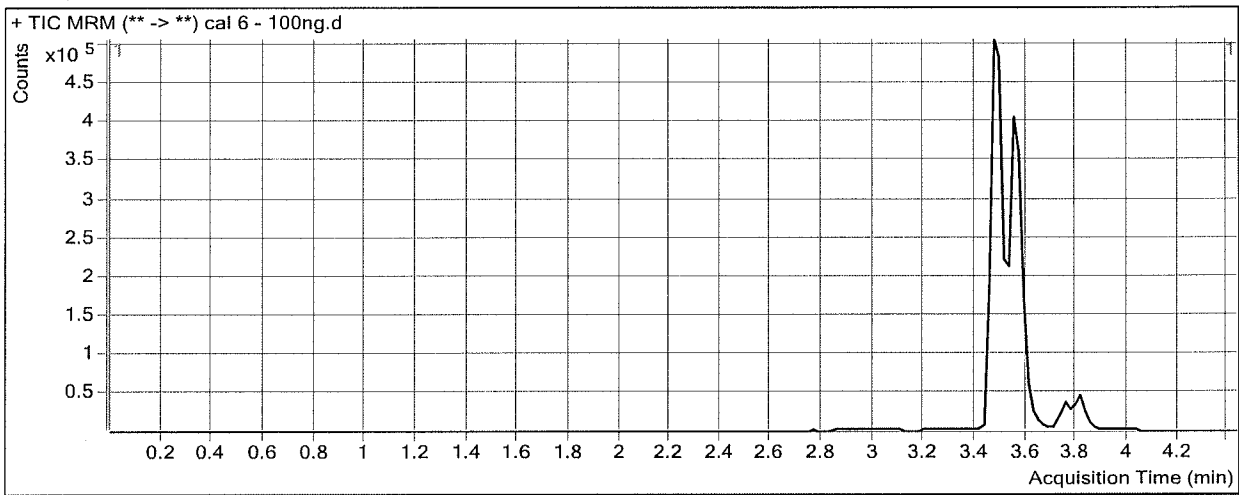
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin  
**Analysis Time** 1/2/2018 3:57 PM **Analyst Name** ISP Tox  
**Report Time** 1/3/2018 8:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2018 3:57 PM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-02 13:00 **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-F1 **Sample Info**  
**Inj Vol** -1 **Comment** AM 26 Cannabinoid screen

### Sample Chromatogram



### Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	830095	817274	1.0157	102.5997
THC-COOH	3.566	691971	346875	1.9949	103.8264
THC	3.820	36511	34246	1.0661	100.8460



# ISP FORENSICS - Cd'A Instrument #62340

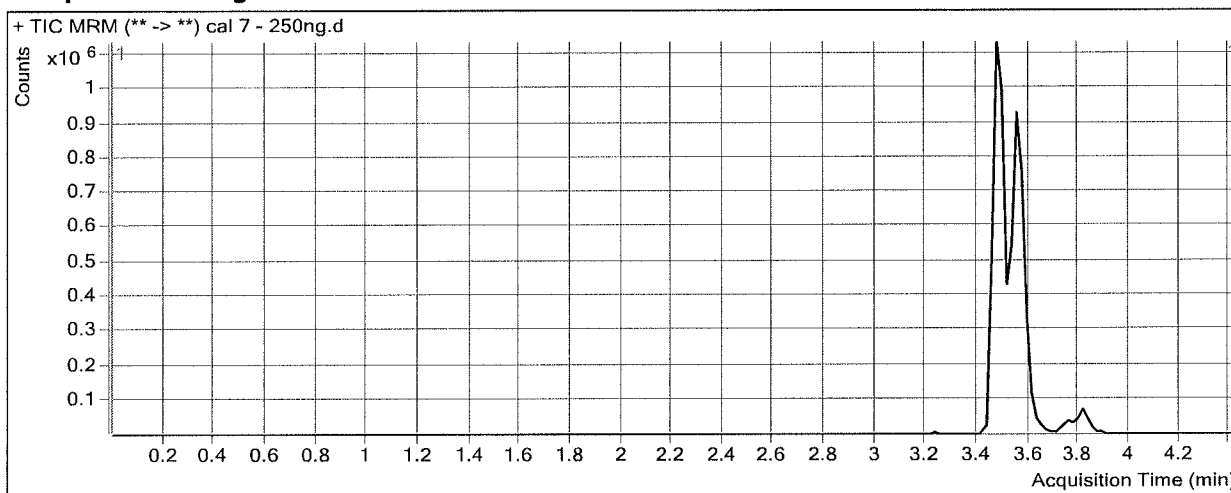
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01022018 blood screen AM 25-26\QuantResults\01022018 cann screen.batch.bin  
**Analysis Time** 1/2/2018 3:57 PM **Analyst Name** ISP Tox  
**Report Time** 1/3/2018 8:37 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2018 3:57 PM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-02 13:13 **Data File** cal 7 - 250ng.d  
**Sample Type** Calibration **Sample Name** cal 7 - 250ng  
**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-OH	3.473	2490902	1022860	2.4352	246.4929
THC-COOH	3.546	1812345	401075	4.5187	235.3137
THC	3.820	88164	33320	2.6459	249.7455