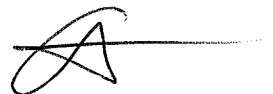


**Worklist: 2157**

*Bylee*

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2017-2496	1	102186	AM 25/AM 26 Blood MultiDrug/	
C2017-2547	1	105910	AM 25/AM 26 Blood MultiDrug/	
C2018-0013	1	103921	AM 25/AM 26 Blood MultiDrug/	
C2018-0028	1	104209	AM 25/AM 26 Blood MultiDrug/	
C2018-0044	1	104464	AM 25/AM 26 Blood MultiDrug/	
C2018-0065	1	104791	AM 25/AM 26 Blood MultiDrug/	
C2018-0077	1	104995	AM 25/AM 26 Blood MultiDrug/	
C2018-0088	2	106344	AM 25/AM 26 Blood MultiDrug/	
C2018-0101	1	105323	AM 25/AM 26 Blood MultiDrug/	
C2018-0109	1	105366	AM 25/AM 26 Blood MultiDrug/	
C2018-0119	1	105439	AM 25/AM 26 Blood MultiDrug/	
C2018-0148	1	105804	AM 25/AM 26 Blood MultiDrug/	
C2018-0183	1	106341	AM 25/AM 26 Blood MultiDrug/	
C2018-0188	1	106358	AM 25/AM 26 Blood MultiDrug/	
M2018-0141	1	104508	AM 25/AM 26 Blood MultiDrug/	



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

Extraction Date: 1-31-18

Analyst: Amc 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: <sup>390993 amn</sup> 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: 01312018 am 25-26 Batch Name: 01312018 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

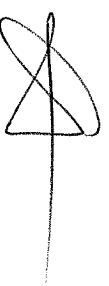
Ppd 6-26-17 Exp 9-26-17 lot 92617 (may be listed as 92117)

ppd 9-22-17 Exp 12-22-17 Lot 12-22-17

ppd 12/29/17 Exp 3/29/18 Lot 32918

neg blood lot 321632-1 by Amn  
neg blood lot 321632-1 by Amn  
neg blood lot 17120718 by Amn  
neg blood lot 17120718 by Amn

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



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...	1/31/2018 3:16 PM					328.2 -> 211...				6-MAM-D6	5.116	51004				
7-Aminoclonazepam	286.1 -> 121...	1/31/2018 3:16 PM					286.1 -> 222...				7-Aminoclonazepam-D4	5.488	175555				
Acetyl Fentanyl	323.2 -> 105...	1/31/2018 3:16 PM					323.2 -> 188...				Acetyl Fentanyl-D5	6.155	15497...				
Acetyl Norfentanyl	219.1 -> 84.2	1/31/2018 3:16 PM					219.1 -> 56.3				Acetyl Norfentanyl-D5	4.888	507365				
a-hydroxyalprazolam	325.1 -> 297...	1/31/2018 3:16 PM					325.1 -> 215...				a-hydroxyalprazolam-D5	6.378	38232				
alpha-PVP	232.2 -> 91.0	1/31/2018 3:16 PM					232.2 -> 77.1				alpha-PVP-d8	5.699	589687				
Alprazolam	309.1 -> 281...	1/31/2018 3:16 PM	6.302	5107	24.00		309.1 -> 205...				Alprazolam-D5	6.463	232527				
Amphetamine	136.1 -> 91.1	1/31/2018 3:16 PM	4.911	32767	17.01		136.1 -> 119...				Amphetamine-D11	4.810	157790				
Bupropion	240.1 -> 184...	1/31/2018 3:16 PM					240.1 -> 131...				Bupropion-D9	5.944	634632				
Carisoprodol	261.2 -> 176...	1/31/2018 3:16 PM					261.2 -> 55.3				Carisoprodol-D7	6.105	404341				
Citalopram	325.2 -> 109...	1/31/2018 3:16 PM					325.2 -> 262...				Citalopram-D6	6.134	889764				
Clonazepam	316.1 -> 269...	1/31/2018 3:16 PM					316.1 -> 213...				Clonazepam-D4	6.320	41465				
Codeine	300.2 -> 215...	1/31/2018 3:16 PM	5.081	79182	32616.38		300.2 -> 165...		20366...	74939	Codeine-D6	5.038	35114				
Cyclobenzaprine	276.2 -> 214...	1/31/2018 3:16 PM					276.2 -> 231...				Cyclobenzaprine-D3	6.469	597251				
Dextromethorphan	272.2 -> 171...	1/31/2018 3:16 PM					272.2 -> 147...				Dextromethorphan-D3	6.206	263072				
Dextrophan	258.2 -> 157...	1/31/2018 3:16 PM					258.2 -> 133...				Dextrophan-D3	5.471	241810				
Diazepam	285.1 -> 193...	1/31/2018 3:16 PM					285.1 -> 153...				Diazepam-D5	6.690	217196				
Dihydrocodeine	302.2 -> 198...	1/31/2018 3:16 PM					302.2 -> 128...				Dihydrocodeine-D6	4.855	120805				
Diphenhydramine	266.2 -> 167...	1/31/2018 3:16 PM	6.127	31151...	493.27		266.2 -> 152...		1737.86	8102...	Diphenhydramine-D3	6.106	16455...				
Doxylamine	271.2 -> 182...	1/31/2018 3:16 PM					271.2 -> 167...				Doxylamine-D5	5.756	13602...				
EDDP	279.2 -> 235...	1/31/2018 3:16 PM					279.2 -> 250...				EDDP-D3	6.122	26593				
Fentanyl	337.2 -> 105...	1/31/2018 3:16 PM					337.2 -> 188...				Fentanyl-D5	6.357	14520...				
Fluoxetine	310.1 -> 44.3	1/31/2018 3:16 PM					310.1 -> 148...				Fluoxetine-D6	6.341	13792...				
Hydrocodone	300.2 -> 198...	1/31/2018 3:16 PM					300.2 -> 128...				Hydrocodone-D6	5.282	192098				
Hydromorphone	286.2 -> 184...	1/31/2018 3:16 PM					286.2 -> 157...				Hydromorphone-D6	4.579	66000				
Ketamine	238.1 -> 125...	1/31/2018 3:16 PM					238.1 -> 220...				Ketamine-D4	5.924	418613				
Meperbamate	219.1 -> 158...	1/31/2018 3:16 PM					219.1 -> 97.1				Meperbamate-D7	5.598	132671				
Methadone	310.2 -> 265...	1/31/2018 3:16 PM					310.2 -> 105...				Methadone-D9	6.442	11595...				
Methamphetamine	150.1 -> 91.1	1/31/2018 3:16 PM	5.051	81597	9.63		150.1 -> 119...				Methamphetamine-D11	4.990	478365				
Morphine	286.2 -> 201...	1/31/2018 3:16 PM	4.338	81130	123.52		286.2 -> 165...		879.06	59189	Morphine-D6	4.277	2776				
Naloxone	328.2 -> 309...	1/31/2018 3:16 PM					328.2 -> 211...				Naloxone-D5	5.462	215468				
Naltrexol	344.2 -> 326...	1/31/2018 3:16 PM	5.155	5641	Infinity		344.2 -> 308...				Naltrexol-D3	4.992	281723				
Naltrexone	342.2 -> 324...	1/31/2018 3:16 PM					342.2 -> 55.3				Naltrexone-D3	5.135	225402				
Norbuprenorphine	414.3 -> 101...	1/31/2018 3:16 PM					414.3 -> 57.3				Norbuprenorphine-D3	5.927	33237				
Nordiazepam	271.1 -> 140...	1/31/2018 3:16 PM					271.1 -> 208...				Nordiazepam-D5	6.552	98620				
Norfentanyl	233.2 -> 84.2	1/31/2018 3:16 PM					233.2 -> 55.3				Norfentanyl-D5	5.373	716775				
Norhydrocodone	286.2 -> 199...	1/31/2018 3:16 PM					286.2 -> 171...				Norhydrocodone-D3	4.980	60165				
Noroxycodone	302.1 -> 284...	1/31/2018 3:16 PM					302.1 -> 186...				Noroxycodone-D3	4.896	133163				
O-desmethyl-tramadol	250.2 -> 58.3	1/31/2018 3:16 PM					250.2 -> 42.3				O-desmethyl-tramadol-...	4.925	920857				
Oxazepam	287.1 -> 240...	1/31/2018 3:16 PM					287.1 -> 268...				Oxazepam-D5	6.385	172134				
Oxycodone	316.2 -> 298...	1/31/2018 3:16 PM					316.2 -> 241...				Oxycodone-D6	5.037	255286				
Oxymorphone	302.1 -> 284...	1/31/2018 3:16 PM					302.1 -> 227...				Oxymorphone-D3	4.312	196809				
Phentermine	150.1 -> 65.2	1/31/2018 3:16 PM					150.1 -> 133...				Phentermine-D5	5.152	473813				
Promethazine	285.1 -> 86.2	1/31/2018 3:16 PM					285.1 -> 71.3				Promethazine-D3	6.528	22457...				
Quetiapine	384.2 -> 253...	1/31/2018 3:16 PM	6.659	240	3.88		384.2 -> 221...				Quetiapine-D8	6.638	374885				
Sertraline	306.1 -> 158...	1/31/2018 3:16 PM					306.1 -> 275...				Sertraline-D3	6.647	373382				

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...	1/31/2018 3:16 PM					301.1 -> 283...				Temazepam-D5	6.526	447667
Tramadol	264.2 -> 58.3	1/31/2018 3:16 PM	5.512	8652	Infinity		264.2 -> 43.3				Tramadol-13C-D3	5.491	12620...
Trazodone	372.2 -> 176...	1/31/2018 3:16 PM					372.2 -> 148...				Trazodone-D6	6.801	11744...
Venlafaxine	278.2 -> 58.3	1/31/2018 3:16 PM					278.2 -> 260...				Venlafaxine-D6	5.857	11812...
Zolpidem	308.2 -> 235...	1/31/2018 3:16 PM	6.587	1966	6.13		308.2 -> 263...		6.79	732	Zolpidem-D6	6.382	12773...

Compound Method		p1 cal 1-2a			p1 cal 1-2a Results			Qualifier 1 M...			Qualifier 1 Results			ISTD Method	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.		
6-MAM	328.2 -> 165...	1/31/2018 2:37 PM	5.157	1499	14.86	328.2 -> 211...	17.07	2098	6-MAM-D6	5.096	49977				
7-Aminoclonazepam	286.1 -> 121...	1/31/2018 2:37 PM	5.509	24782	108.09	286.1 -> 222...	71.11	16657	7-Aminoclonazepam-D4	5.508	119854				
Acetyl Fentanyl	323.2 -> 105...	1/31/2018 2:37 PM	6.156	24335	17.49	323.2 -> 188...	1266.29	15666	Acetyl Fentanyl-D5	6.134	14660...				
Acetyl Norfentanyl	219.1 -> 84.2	1/31/2018 2:37 PM	4.908	8689	3695.82	219.1 -> 56.3	20.31	1852	Acetyl Norfentanyl-D5	4.888	441605				
a-hydroxyvalproazolam	325.1 -> 297...	1/31/2018 2:37 PM	6.399	5819	536.66	325.1 -> 215...	34.47	4569	a-hydroxyvalproazolam-D5	6.378	35435				
alpha-PVP	232.2 -> 91.0	1/31/2018 2:37 PM	5.741	128805	63.79	232.2 -> 77.1	25.94	45286	alpha-PVP-d8	5.699	577785				
Alprazolam	309.1 -> 281...	1/31/2018 2:37 PM	6.485	55124	413.66	309.1 -> 205...	10840...	54840	Alprazolam-D5	6.463	218503				
Amphetamine	136.1 -> 91.1	1/31/2018 2:37 PM	4.850	148914	39.36	136.1 -> 119...	18.32	61701	Amphetamine-D11	4.810	130622				
Bupropion	240.1 -> 184...	1/31/2018 2:37 PM	6.005	121549	83.41	240.1 -> 131...	59.13	56828	Bupropion-D9	5.944	523223				
Carisoprodol	261.2 -> 176...	1/31/2018 2:37 PM	6.105	61112	408.37	261.2 -> 55.3	32.85	71941	Carisoprodol-D7	6.105	394795				
Citalopram	325.2 -> 109...	1/31/2018 2:37 PM	6.135	187629	455.84	325.2 -> 262...	143.28	45010	Citalopram-D6	6.134	913327				
Clonazepam	316.1 -> 269...	1/31/2018 2:37 PM	6.321	28437	124.49	316.1 -> 213...	1544.61	7408	Clonazepam-D4	6.320	38310				
Codeine	300.2 -> 215...	1/31/2018 2:37 PM	5.081	7156	1956.36	300.2 -> 165...	21.54	7422	Codeine-D6	5.017	29921				
Cyclobenzaprine	276.2 -> 214...	1/31/2018 2:37 PM	6.491	119164	50838.82	276.2 -> 231...	65.04	32030	Cyclobenzaprine-D3	6.469	586567				
Dextromethorphan	272.2 -> 171...	1/31/2018 2:37 PM	6.206	50528	325.50	272.2 -> 147...	169.49	51597	Dextromethorphan-D3	6.206	284886				
Dextropropfan	258.2 -> 157...	1/31/2018 2:37 PM	5.472	41683	216.08	258.2 -> 133...	156.67	24517	Dextropropfan-D3	5.471	231385				
Diazepam	285.1 -> 193...	1/31/2018 2:37 PM	6.711	52424	67.36	285.1 -> 153...	69.27	32262	Diazepam-D5	6.690	215542				
Dihydrocodeine	302.2 -> 198...	1/31/2018 2:37 PM	4.897	19497	47.50	302.2 -> 128...	6234.58	14219	Dihydrocodeine-D6	4.885	108739				
Diphenhydramine	256.2 -> 167...	1/31/2018 2:37 PM	6.127	282498	196.12	256.2 -> 152...	167.79	64558	Diphenhydramine-D3	6.126	15778...				
Doxylamine	271.2 -> 182...	1/31/2018 2:37 PM	5.757	258104	57.78	271.2 -> 167...	110.01	1877...	Doxylamine-D5	5.756	12750...				
EDDP	279.2 -> 235...	1/31/2018 2:37 PM	6.122	109104	687.30	279.2 -> 250...	48.50	33286	EDDP-D3	6.122	49465				
Fentanyl	337.2 -> 105...	1/31/2018 2:37 PM	6.357	29232	24.03	337.2 -> 188...	102.83	18497	Fentanyl-D5	6.357	14133...				
Fluoxetine	310.1 -> 44.3	1/31/2018 2:37 PM	6.363	271419	217.02	310.1 -> 148...	Infinity	7747	Fluoxetine-D6	6.341	13360...				
Hydrocodone	300.2 -> 198...	1/31/2018 2:37 PM	5.324	27558	Infinity	300.2 -> 128...	Infinity	13467	Hydrocodone-D6	5.282	183091				
Hydromorphone	286.2 -> 184...	1/31/2018 2:37 PM	4.620	16313	Infinity	286.2 -> 157...	21.70	10454	Hydromorphone-D6	4.579	56151				
Ketamine	238.1 -> 125...	1/31/2018 2:37 PM	5.945	96988	Infinity	238.1 -> 220...	Infinity	36407	Ketamine-D4	5.924	382383				
Meprobramate	219.1 -> 158...	1/31/2018 2:37 PM	5.599	21637	25.12	219.1 -> 97.1	11.87	18610	Meprobramate-D7	5.598	124033				
Methadone	310.2 -> 265...	1/31/2018 2:37 PM	6.443	207636	79.62	310.2 -> 105...	Infinity	2101...	Methadone-D9	6.442	11724...				
Methamphetamine	150.1 -> 91.1	1/31/2018 2:37 PM	5.031	135710	21.54	150.1 -> 119...	9.19	44730	Methamphetamine-D11	4.990	278320				
Morphine	286.2 -> 201...	1/31/2018 2:37 PM	4.318	3663	7.90	286.2 -> 165...	671.04	2766	Morphine-D6	4.297	2426				
Naloxone	328.2 -> 309...	1/31/2018 2:37 PM	5.564	28084	97.67	328.2 -> 211...	1132.16	9201	Naloxone-D5	5.462	199755				
Naltrexol	344.2 -> 326...	1/31/2018 2:37 PM	5.013	67169	645.56	344.2 -> 308...	44.04	13829	Naltrexol-D3	4.992	266484				
Naltrexone	342.2 -> 324...	1/31/2018 2:37 PM	5.176	40893	55.58	342.2 -> 55.3	87.08	40182	Naltrexone-D3	5.135	206272				
Norbuprenorphine	414.3 -> 101...	1/31/2018 2:37 PM	5.927	7789	19.18	414.3 -> 57.3	55.84	6855	Norbuprenorphine-D3	5.927	30565				
Nordiazepam	271.1 -> 140...	1/31/2018 2:37 PM	6.553	29779	50.43	271.1 -> 208...	22.98	16733	Nordiazepam-D5	6.552	95192				
Norfentanyl	233.2 -> 84.2	1/31/2018 2:37 PM	5.373	146520	37368.02	233.2 -> 55.3	Infinity	52637	Norfentanyl-D5	5.373	651523				
Norhydrocodone	286.2 -> 199...	1/31/2018 2:37 PM	5.002	2332	6.06	286.2 -> 171...	4.27	890	Norhydrocodone-D3	4.980	53797				
Noroxycodone	302.1 -> 284...	1/31/2018 2:37 PM	4.917	26904	Infinity	302.1 -> 186...	20.15	9602	Noroxycodone-D3	4.896	117681				
O-desmethyl-tramadol	250.2 -> 58.3	1/31/2018 2:37 PM	4.945	183953	Infinity	250.2 -> 42.3	58.99	10277	O-desmethyl-tramadol-...	4.925	839403				
Oxazepam	287.1 -> 240...	1/31/2018 2:37 PM	6.386	28551	292.03	287.1 -> 268...	10.30	12340	Oxazepam-D5	6.385	143191				
Oxycodone	316.2 -> 298...	1/31/2018 2:37 PM	5.078	48617	Infinity	316.2 -> 241...	19.36	13298	Oxycodone-D6	5.037	231248				
Oxymorphone	302.1 -> 284...	1/31/2018 2:37 PM	4.334	41820	Infinity	302.1 -> 227...	37.61	9727	Oxymorphone-D3	4.312	203780				
Phentermine	150.1 -> 65.2	1/31/2018 2:37 PM	5.173	34400	Infinity	150.1 -> 133...	Infinity	989	Phentermine-D5	5.152	364174				
Promethazine	285.1 -> 86.2	1/31/2018 2:37 PM	6.549	392932	548.34	285.1 -> 71.3	132.47	92629	Promethazine-D3	6.528	22704...				
Quetiapine	384.2 -> 253...	1/31/2018 2:37 PM	6.659	266527	11099.67	384.2 -> 221...	4278.43	1404...	Quetiapine-D8	6.638	368923				
Setraline	306.1 -> 158...	1/31/2018 2:37 PM	6.648	78069	9130.34	306.1 -> 275...	590.08	72633	Setraline-D3	6.647	393719				

Compound Method	p1 cal 1-2a		p1 cal 1-2a 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...	1/31/2018 2:37 PM	6.527	80216	Infinity	301.1 -> 283..	24.82	30940	Temazepam-D5	6.526	406368		
Tramadol	264.2 -> 58.3	1/31/2018 2:37 PM	5.512	235924	Infinity	264.2 -> 43.3	11.24	10721	Tramadol-13C-D3	5.491	11232...		
Trazodone	372.2 -> 176...	1/31/2018 2:37 PM	6.822	257916	505.78	372.2 -> 148..	794.85	1858..	Trazodone-D6	6.801	11714...		
Venlafaxine	278.2 -> 58.3	1/31/2018 2:37 PM	5.878	245792	Infinity	278.2 -> 260..	332.05	46124	Venlafaxine-D6	5.857	11250...		
Zolpidem	308.2 -> 235...	1/31/2018 2:37 PM	6.384	226106	873.41	308.2 -> 263..	511.05	81322	Zolpidem-D6	6.382	11988...		

Compound Method		p1 negative control		p1 negative control Results		Qualifier 1 M...		Qualifier 1 Resu...		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...	1/31/2018 2:57 PM					328.2 -> 211...				6-MAM-D6	5.116	51467
7-Aminoclonazepam	286.1 -> 121...	1/31/2018 2:57 PM					286.1 -> 222...				7-Aminoclonazepam-D4	5.488	170047
Acetyl Fentanyl	323.2 -> 105...	1/31/2018 2:57 PM					323.2 -> 188...				Acetyl Fentanyl-D5	6.155	15792...
Acetyl Norfentanyl	219.1 -> 84.2	1/31/2018 2:57 PM					219.1 -> 56.3				Acetyl Norfentanyl-D5	4.888	494742
a-hydroxylalprazolam	325.1 -> 297...	1/31/2018 2:57 PM					325.1 -> 215...				a-hydroxylalprazolam-D5	6.378	38925
alpha-PVP	232.2 -> 91.0	1/31/2018 2:57 PM					232.2 -> 77.1				alpha-PVP-d8	5.699	599957
Alprazolam	309.1 -> 281...	1/31/2018 2:57 PM	6.302	4926	17.50		309.1 -> 205...				Alprazolam-D5	6.463	245011
Amphetamine	136.1 -> 91.1	1/31/2018 2:57 PM	4.931	33882	22.09		136.1 -> 119...				Amphetamine-D11	4.810	162887
Bupropion	240.1 -> 184...	1/31/2018 2:57 PM					240.1 -> 131...				Bupropion-D9	5.964	674882
Carisoprodol	261.2 -> 176...	1/31/2018 2:57 PM					261.2 -> 55.3				Carisoprodol-D7	6.105	440310
Citalopram	325.2 -> 109...	1/31/2018 2:57 PM					325.2 -> 262...				Citalopram-D6	6.113	925721
Clonazepam	316.1 -> 269...	1/31/2018 2:57 PM					316.1 -> 213...				Clonazepam-D4	6.320	40623
Codeine	300.2 -> 215...	1/31/2018 2:57 PM					300.2 -> 165...				Codeine-D6	5.038	36115
Cyclobenzaprine	276.2 -> 214...	1/31/2018 2:57 PM	6.511	337	3.35		276.2 -> 231...				Cyclobenzaprine-D3	6.469	598852
Dextromethorphan	272.2 -> 171...	1/31/2018 2:57 PM					272.2 -> 147...				Dextromethorphan-D3	6.206	279816
Dextrophan	258.2 -> 157...	1/31/2018 2:57 PM					258.2 -> 133...				Dextrophan-D3	5.471	253148
Diazepam	285.1 -> 193...	1/31/2018 2:57 PM					285.1 -> 153...				Diazepam-D5	6.690	218466
Dihydrocodeine	302.2 -> 198...	1/31/2018 2:57 PM					302.2 -> 128...				Dihydrocodeine-D6	4.855	122184
Diphenhydramine	256.2 -> 167...	1/31/2018 2:57 PM	6.432	310	0.62		256.2 -> 152...				Diphenhydramine-D3	6.126	15836...
Doxylamine	271.2 -> 182...	1/31/2018 2:57 PM	5.675	1337	1.05		271.2 -> 167...				Doxylamine-D5	5.736	13723...
EDDP	279.2 -> 235...	1/31/2018 2:57 PM					279.2 -> 250...				EDDP-D3	6.122	31048
Fentanyl	337.2 -> 105...	1/31/2018 2:57 PM	6.539	799	110.00		337.2 -> 188...				Fentanyl-D5	6.357	14978...
Fluoxetine	310.1 -> 44.3	1/31/2018 2:57 PM					310.1 -> 148...				Fluoxetine-D6	6.341	13894...
Hydrocodone	300.2 -> 198...	1/31/2018 2:57 PM					300.2 -> 128...				Hydrocodone-D6	5.282	211950
Hydromorphone	286.2 -> 184...	1/31/2018 2:57 PM					286.2 -> 157...				Hydromorphone-D6	4.579	67559
Ketamine	238.1 -> 125...	1/31/2018 2:57 PM					238.1 -> 220...				Ketamine-D4	5.924	421709
Meprbamate	219.1 -> 158...	1/31/2018 2:57 PM	5.476	732	1.33		219.1 -> 97.1		0.86	864	Meprbamate-D7	5.598	133244
Methadone	310.2 -> 265...	1/31/2018 2:57 PM					310.2 -> 105...				Methadone-D9	6.442	11960...
Methamphetamine	150.1 -> 91.1	1/31/2018 2:57 PM	5.031	83775	10.82		150.1 -> 119...				Methamphetamine-D11	4.990	406728
Morphine	286.2 -> 201...	1/31/2018 2:57 PM					286.2 -> 165...				Morphine-D6	4.277	2856
Naloxone	328.2 -> 309...	1/31/2018 2:57 PM					328.2 -> 211...				Naloxone-D5	5.462	218474
Naltrexol	344.2 -> 326...	1/31/2018 2:57 PM	5.135	5770	36.80		344.2 -> 308...				Naltrexol-D3	4.992	275058
Naltrexone	342.2 -> 324...	1/31/2018 2:57 PM					342.2 -> 55.3				Naltrexone-D3	5.135	221512
Norbuprenorphine	414.3 -> 101...	1/31/2018 2:57 PM					414.3 -> 57.3				Norbuprenorphine-D3	5.927	34594
Nordiazepam	271.1 -> 140...	1/31/2018 2:57 PM					271.1 -> 208...				Nordiazepam-D5	6.552	102939
Norfentanyl	233.2 -> 84.2	1/31/2018 2:57 PM					233.2 -> 55.3				Norfentanyl-D5	5.373	730348
Norhydrocodone	286.2 -> 199...	1/31/2018 2:57 PM					286.2 -> 171...				Norhydrocodone-D3	4.980	59429
Noroxycodone	302.1 -> 284...	1/31/2018 2:57 PM					302.1 -> 186...				Noroxycodone-D3	4.896	133850
O-desmethyl-tramadol	250.2 -> 58.3	1/31/2018 2:57 PM					250.2 -> 42.3				O-desmethyl-tramadol...	4.925	902959
Oxazepam	287.1 -> 240...	1/31/2018 2:57 PM					287.1 -> 268...				Oxazepam-D5	6.385	174105
Oxycodone	316.2 -> 298...	1/31/2018 2:57 PM					316.2 -> 241...				Oxycodone-D6	5.037	260215
Oxymorphone	302.1 -> 284...	1/31/2018 2:57 PM					302.1 -> 227...				Oxymorphone-D3	4.312	219959
Phentermine	150.1 -> 65.2	1/31/2018 2:57 PM	5.335	274	0.37		150.1 -> 133...				Phentermine-D5	5.152	458169
Promethazine	285.1 -> 86.2	1/31/2018 2:57 PM	6.468	1138	1.12		285.1 -> 71.3		0.43	414	Promethazine-D3	6.528	23265...
Quetiapine	384.2 -> 253...	1/31/2018 2:57 PM	6.679	358	0.56		384.2 -> 221...				Quetiapine-D8	6.638	395354
Sevraline	306.1 -> 158...	1/31/2018 2:57 PM					306.1 -> 275...				Sevraline-D3	6.647	399254



Compound Method	p1 negative control			p1 negative control Results			Qualifier 1 M...	Qualifier 1 Resu..	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...	1/31/2018 2:57 PM					301.1 -> 283...				Temazepam-D5	6.526	459196
Tramadol	264.2 -> 58.3	1/31/2018 2:57 PM	5.512	8159	2.31		264.2 -> 43.3				Tramadol-13C-D3	5.491	12422...
Trazodone	372.2 -> 176...	1/31/2018 2:57 PM					372.2 -> 148...				Trazodone-D6	6.801	11787...
Venlafaxine	278.2 -> 58.3	1/31/2018 2:57 PM					278.2 -> 260...				Venlafaxine-D6	5.857	12248...
Zolpidem	308.2 -> 235...	1/31/2018 2:57 PM	6.587	1466	310.32		308.2 -> 263...		Infini..	436	Zolpidem-D6	6.382	12939...

Compound Method		p2 cal 1-2b		p2 cal 1-2b 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...	1/31/2018 2:47 PM	5.701	36019	85/6.43	284.1 -> 93.2	4026...	11026	7-aminoflunitrazepam-D7	5.679	197537		
alpha-hydroxymidazolam	342.1 -> 324...	1/31/2018 2:47 PM	6.468	62334	854.58	342.1 -> 203...	379.41	38995	alpha-hydroxymidazolam-...	6.448	341246		
Amtripyline	278.2 -> 91.2	1/31/2018 2:47 PM	6.580	197809	426.25	278.2 -> 105...	Infinity	91847	Amtripyline-D3	6.579	544712		
Amoxapine	314.1 -> 271...	1/31/2018 2:47 PM	6.533	54594	154.88	314.1 -> 193...	72.80	36438	Amtripyline-D3	6.579	544712		
Benzoylcegonine	290.1 -> 168...	1/31/2018 2:47 PM	5.312	13842	67.37	290.1 -> 105...	7.71	8092	Benzoylcegonine-D8	5.269	5053		
Carbamazepine	237.1 -> 193...	1/31/2018 2:47 PM	6.117	26645	47.21	237.1 -> 194...	142.16	2278...	Carbamazepine-13C6	6.137	12603...		
Chlordiazepoxide	300.1 -> 227...	1/31/2018 2:47 PM	6.596	29022	55.01	300.1 -> 282...	Infinity	15338	Chlordiazepoxide-D5	6.596	244885		
Clomipramine	315.2 -> 86.2	1/31/2018 2:47 PM	6.837	373637	Infinity	315.2 -> 58.3	62.70	2228...	Clomipramine-D3	6.816	19115...		
Cocaine	304.2 -> 182...	1/31/2018 2:47 PM	5.718	153912	64.26	304.2 -> 105...	5912...	37831	Cocaine-D3	5.718	693773		
Desipramine	267.2 -> 72.3	1/31/2018 2:47 PM	6.439	248004	Infinity	267.2 -> 44.3	Infinity	1375...	Desipramine-D3	6.439	13767...		
Doxepin	290.2 -> 107...	1/31/2018 2:47 PM	6.295	127592	17576.41	280.2 -> 77.2	Infinity	49137	Doxepin-D3	6.274	675509		
Estazolam	295.1 -> 267...	1/31/2018 2:47 PM	6.394	57567	352.28	295.1 -> 205...	322.82	47608	Estazolam-D5	6.392	254211		
Flunitrazepam	314.1 -> 268...	1/31/2018 2:47 PM	6.432	47748	Infinity	314.1 -> 239...	71.27	18833	Flunitrazepam-D7	6.410	11837		
Flurazepam	388.2 -> 315...	1/31/2018 2:47 PM	6.426	158833	14767.98	388.2 -> 317...	42.69	35401	Zopiclone-D4	6.364	224474		
Imipramine	281.2 -> 86.2	1/31/2018 2:47 PM	6.538	400766	93.32	281.2 -> 58.3	Infinity	2399...	Imipramine-D3	6.517	12220...		
Levamisole	205.1 -> 91.2	1/31/2018 2:47 PM	5.223	50125	Infinity	205.1 -> 178...	Infinity	41938	Cocaine-D3	5.718	693773		
Maprotiline	278.2 -> 91.2	1/31/2018 2:47 PM	6.458	62247	Infinity	278.2 -> 117...	Infinity	41637	Meperidine-D4	5.769	318200		
MDA	180.1 -> 163...	1/31/2018 2:47 PM	5.004	42154	Infinity	180.1 -> 105...	Infinity	31862	MDA-D5	5.003	252136		
MDEA	208.1 -> 163...	1/31/2018 2:47 PM	5.283	93947	6672.17	208.1 -> 105...	Infinity	73257	MDEA-D6	5.282	507129		
MDMA	194.1 -> 163...	1/31/2018 2:47 PM	5.144	85279	Infinity	194.1 -> 105...	Infinity	54531	MDEA-D6	5.123	54027		
Meperidine	248.2 -> 220...	1/31/2018 2:47 PM	5.769	54834	183.36	248.2 -> 174...	39.06	35663	Meperidine-D4	5.769	318200		
Methylphenidate	234.2 -> 84.2	1/31/2018 2:47 PM	5.628	299386	Infinity	234.2 -> 56.3	149.79	66505	Meperidine-D4	5.769	318200		
Metoprolol	268.2 -> 116...	1/31/2018 2:47 PM	5.479	24651	8461.81	268.2 -> 56.3	120.58	23203	Meperidine-D4	5.769	318200		
Midazolam	326.1 -> 223...	1/31/2018 2:47 PM	6.633	26340	82.35	326.1 -> 249...	49.91	26410	Midazolam-D4	6.611	429623		
Mirtazapine	266.2 -> 195...	1/31/2018 2:47 PM	6.379	199386	77.79	266.2 -> 72.3	3419...	1283...	Midazolam-D4	6.611	429623		
Mirtazapine	399.2 -> 174...	1/31/2018 2:47 PM	6.404	68606	7072.39	399.2 -> 238...	137.24	28678	Carbamazepine-13C6	6.137	12603...		
Normeperidine	234.1 -> 42.3	1/31/2018 2:47 PM	5.669	65167	Infinity	234.1 -> 160...	1458...	46360	Normeperidine-D4	5.668	244844		
Norpropoxyphene	326.2 -> 44.3	1/31/2018 2:47 PM	6.307	42402	210.22	326.2 -> 252...	45.12	14519	Norpropoxyphene-D5	6.286	193476		
Nortriptyline	264.2 -> 91.2	1/31/2018 2:47 PM	6.481	120651	Infinity	264.2 -> 233...	Infinity	89789	Nortriptyline-D3	6.480	351035		
Ondansetron	294.2 -> 184...	1/31/2018 2:47 PM	6.047	97210	520.70	294.2 -> 212...	7883...	47144	Pentazocine-13C3	5.742	502854		
Pentazocine	286.2 -> 218...	1/31/2018 2:47 PM	5.742	115444	55802.09	286.2 -> 41.3	51.77	1394...	Pentazocine-13C3	5.742	502854		
Phenazepam	349.0 -> 206...	1/31/2018 2:47 PM	6.508	59088	11738.57	349.0 -> 183...	6555...	43405	Phenazepam-D4	6.507	20526		
Phencyclidine	244.2 -> 86.2	1/31/2018 2:47 PM	5.993	206826	384.42	244.2 -> 91.1	Infinity	1473...	Phencyclidine-D5	5.973	10046...		
Phenytoin	253.1 -> 104...	1/31/2018 2:47 PM	6.033	2875	Infinity	253.1 -> 182...	718.76	3316	Phenytoin-D10	6.013	15201		
Prazepam	325.1 -> 271...	1/31/2018 2:47 PM	6.956	208356	406.10	325.1 -> 140...	431.81	53334	Prazepam-D5	6.934	963913		
Primidone	219.1 -> 91.2	1/31/2018 2:47 PM	5.385	10045	10.07	219.1 -> 162...	83.54	5973	Prazepam-D5	6.934	963913		
Propoxyphene	340.2 -> 58.3	1/31/2018 2:47 PM	6.408	265813	173.06	340.2 -> 266...	161.61	53799	Propoxyphene-D11	6.365	286068		
Propoxyphene	264.2 -> 155...	1/31/2018 2:47 PM	6.379	545564	1067.80	264.2 -> 161...	Infinity	108	Nortriptyline-D3	6.480	351035		
Pseudoephedrine	166.1 -> 148...	1/31/2018 2:47 PM	4.640	831552	133.46	166.1 -> 133...	118.81	1608...	Pseudoephedrine-D3	4.639	420116		
Tapentadol	222.2 -> 107...	1/31/2018 2:47 PM	5.506	144159	Infinity	222.2 -> 121...	1086...	51383	Tapentadol-D3	5.506	756672		
Trimipramine	295.2 -> 100...	1/31/2018 2:47 PM	6.638	449599	Infinity	295.2 -> 58.3	Infinity	2748...	Trimipramine-D3	6.617	22173...		
Verapamil	455.3 -> 165...	1/31/2018 2:47 PM	6.383	200964	1899.33	455.3 -> 150...	6024...	56002	Trimipramine-D3	6.617	22173...		
Zaleplon	306.1 -> 236...	1/31/2018 2:47 PM	6.228	57381	308.76	306.1 -> 264...	6139...	38909	Zaleplon-D4	6.207	230123		
Zopiclone	389.1 -> 244...	1/31/2018 2:47 PM	6.364	16853	51.30	389.1 -> 216...	53.31	11614	Zopiclone-D4	6.364	224474		

Compound Method	p2 negative control	p2 negative control 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...	1/31/2018 3:06 PM					284.1 -> 93.2				7-aminoflunitrazepam-D7	5.679	245883
alpha-hydroxymidazolam	342.1 -> 324...	1/31/2018 3:06 PM					342.1 -> 203...				alpha-hydroxymidazolam...	6.448	388427
Amtriptyline	278.2 -> 91.2	1/31/2018 3:06 PM					278.2 -> 105...				Amtriptyline-D3	6.579	551428
Amoxapine	314.1 -> 271...	1/31/2018 3:06 PM					314.1 -> 193...				Amtriptyline-D3	6.579	551428
Benzoyllecgonine	290.1 -> 168...	1/31/2018 3:06 PM					290.1 -> 105...				Benzoyllecgonine-D8	5.289	6455
Carbamazepine	237.1 -> 193...	1/31/2018 3:06 PM					237.1 -> 194...				Carbamazepine-13C6	6.137	13281...
Chlordiazepoxide	300.1 -> 227...	1/31/2018 3:06 PM					300.1 -> 282...				Chlordiazepoxide-D5	6.596	263297
Cloimipramine	315.2 -> 86.2	1/31/2018 3:06 PM					315.2 -> 58.3				Cloimipramine-D3	6.816	17683...
Cocaine	304.2 -> 182...	1/31/2018 3:06 PM					304.2 -> 105...				Cocaine-D3	5.718	684737
Desipramine	267.2 -> 72.3	1/31/2018 3:06 PM					267.2 -> 44.3				Desipramine-D3	6.439	14695...
Doxepin	280.2 -> 107...	1/31/2018 3:06 PM					280.2 -> 77.2				Doxepin-D3	6.274	706534
Estazolam	295.1 -> 267...	1/31/2018 3:06 PM					295.1 -> 295...				Estazolam-D5	6.392	292899
Flunitrazepam	314.1 -> 268...	1/31/2018 3:06 PM					314.1 -> 239...				Flunitrazepam-D7	6.410	12379
Flurazepam	388.2 -> 315...	1/31/2018 3:06 PM					388.2 -> 317...				Zopiclone-D4	6.364	262753
Imipramine	281.2 -> 86.2	1/31/2018 3:06 PM					281.2 -> 58.3				Imipramine-D3	6.517	12558...
Levamisole	205.1 -> 91.2	1/31/2018 3:06 PM					205.1 -> 178...				Cocaine-D3	5.718	684737
Maprotiline	278.2 -> 91.2	1/31/2018 3:06 PM					278.2 -> 117...				Meperidine-D4	5.769	330436
MDA	180.1 -> 163...	1/31/2018 3:06 PM					180.1 -> 105...				MDA-D5	5.003	275123
MDEA	208.1 -> 163...	1/31/2018 3:06 PM					208.1 -> 105...				MDEA-D6	5.282	534070
MDMA	194.1 -> 163...	1/31/2018 3:06 PM					194.1 -> 105...				MDEA-D6	5.123	54274
Meperidine	248.2 -> 220...	1/31/2018 3:06 PM					248.2 -> 174...				Meperidine-D4	5.769	330436
Methylphenidate	234.2 -> 84.2	1/31/2018 3:06 PM					234.2 -> 56.3				Meperidine-D4	5.769	330436
Metoprolol	268.2 -> 116...	1/31/2018 3:06 PM					268.2 -> 56.3				Meperidine-D4	5.769	330436
Midazolam	326.1 -> 223...	1/31/2018 3:06 PM					326.1 -> 249...				Midazolam-D4	6.611	452897
Mirtazapine	266.2 -> 195...	1/31/2018 3:06 PM					266.2 -> 72.3				Midazolam-D4	6.611	452897
Mitragynine	399.2 -> 174...	1/31/2018 3:06 PM					399.2 -> 238...				Carbamazepine-13C6	6.137	13281...
Normeperidine	234.1 -> 42.3	1/31/2018 3:06 PM					234.1 -> 160...				Normeperidine-D4	5.668	205328
Norpropoxyphene	326.2 -> 44.3	1/31/2018 3:06 PM					326.2 -> 252...				Normeperidine-D4	6.286	219320
Nortriptyline	264.2 -> 91.2	1/31/2018 3:06 PM					264.2 -> 233...				Nortriptyline-D3	6.480	376217
Ondansetron	294.2 -> 184...	1/31/2018 3:06 PM					294.2 -> 212...				Pentazocine-13C3	5.742	507457
Pentazocine	286.2 -> 218...	1/31/2018 3:06 PM					286.2 -> 41.3				Pentazocine-13C3	5.742	507457
Phenazepam	349.0 -> 206...	1/31/2018 3:06 PM					349.0 -> 183...				Phenazepam-D4	6.487	26379
Phencyclidine	244.2 -> 86.2	1/31/2018 3:06 PM					244.2 -> 91.1				Phencyclidine-D5	5.973	10520...
Phenylethanolamine	253.1 -> 104...	1/31/2018 3:06 PM					253.1 -> 182...				Phenylethanolamine-D10	6.033	17544
Prazepam	325.1 -> 271...	1/31/2018 3:06 PM					325.1 -> 140...				Prazepam-D5	6.934	981119
Primidone	219.1 -> 91.2	1/31/2018 3:06 PM					219.1 -> 162...				Prazepam-D5	6.934	981119
Propoxyphene	340.2 -> 58.3	1/31/2018 3:06 PM					340.2 -> 266...				Propoxyphene-D11	6.365	295534
Protriptyline	264.2 -> 155...	1/31/2018 3:06 PM					264.2 -> 161...				Nortriptyline-D3	6.480	376217
Pseudoephedrine	166.1 -> 148...	1/31/2018 3:06 PM					166.1 -> 133...				Pseudoephedrine-D3	4.639	538249
Tapentadol	222.2 -> 107...	1/31/2018 3:06 PM					222.2 -> 121...				Tapentadol-D3	5.506	799003
Trimipramine	295.2 -> 100...	1/31/2018 3:06 PM					295.2 -> 58.3				Trimipramine-D3	6.617	22067...
Verapamil	455.3 -> 165...	1/31/2018 3:06 PM					455.3 -> 150...				Trimipramine-D3	6.617	22067...
Zaleplon	306.1 -> 236...	1/31/2018 3:06 PM					306.1 -> 264...				Zaleplon-D4	6.207	243839
Zopiclone	389.1 -> 244...	1/31/2018 3:06 PM					389.1 -> 216...				Zopiclone-D4	6.364	262753

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...	1/31/2018 3:26 PM					284.1 -> 93.2				7-aminoflunitrazepam-D7	5.679	236490		
alpha-hydroxymidazolam	342.1 -> 324...	1/31/2018 3:26 PM					342.1 -> 203...				alpha-hydroxymidazolam-...	6.448	384414		
Amiripryline	278.2 -> 91.2	1/31/2018 3:26 PM	6.580	18478...	Infinity		278.2 -> 105...	Infinity	939212		Amiripryline-D3	6.579	554423		
Amoxapine	314.1 -> 271...	1/31/2018 3:26 PM					314.1 -> 193...				Amiripryline-D3	6.579	554423		
Benzoyllecgonine	290.1 -> 168...	1/31/2018 3:26 PM					290.1 -> 105...				Benzoyllecgonine-D8	5.269	6275		
Carbamazepine	237.1 -> 193...	1/31/2018 3:26 PM					237.1 -> 194...				Carbamazepine-13C6	6.137	1234212		
Chlordiazepoxide	300.1 -> 227...	1/31/2018 3:26 PM					300.1 -> 282...				Chlordiazepoxide-D5	6.596	261182		
Clomipramine	315.2 -> 86.2	1/31/2018 3:26 PM					315.2 -> 58.3				Clomipramine-D3	6.836	1819231		
Cocaine	304.2 -> 182...	1/31/2018 3:26 PM					304.2 -> 105...				Cocaine-D3	5.718	663290		
Desipramine	267.2 -> 72.3	1/31/2018 3:26 PM					267.2 -> 44.3				Desipramine-D3	6.439	1414116		
Doxepin	280.2 -> 107...	1/31/2018 3:26 PM					280.2 -> 77.2				Doxepin-D3	6.274	673013		
Estazolam	295.1 -> 267...	1/31/2018 3:26 PM					295.1 -> 205...				Estazolam-D5	6.392	282504		
Flunitrazepam	314.1 -> 268...	1/31/2018 3:26 PM					314.1 -> 239...				Flunitrazepam-D7	6.410	11127		
Flurazepam	388.2 -> 315...	1/31/2018 3:26 PM					388.2 -> 317...				Zopiclone-D4	6.364	207238		
Imipramine	281.2 -> 86.2	1/31/2018 3:26 PM					281.2 -> 58.3				Imipramine-D3	6.517	1212998		
Levamisole	205.1 -> 91.2	1/31/2018 3:26 PM					205.1 -> 178...				Cocaine-D3	5.718	663290		
Maprotiline	278.2 -> 91.2	1/31/2018 3:26 PM					278.2 -> 117...				Mepredine-D4	5.769	314495		
MDA	180.1 -> 163...	1/31/2018 3:26 PM					180.1 -> 105...				MDA-D5	5.003	255184		
MDEA	208.1 -> 163...	1/31/2018 3:26 PM					208.1 -> 105...				MDEA-D6	5.282	523376		
MDMA	194.1 -> 163...	1/31/2018 3:26 PM					194.1 -> 105...				MDMA-D6	5.123	52192		
Mepertidine	248.2 -> 220...	1/31/2018 3:26 PM					248.2 -> 174...				Mepertidine-D4	5.769	314495		
Methylphenidate	234.2 -> 84.2	1/31/2018 3:26 PM					234.2 -> 56.3				Mepertidine-D4	5.769	314495		
Metoprolol	268.2 -> 116...	1/31/2018 3:26 PM					268.2 -> 56.3				Mepertidine-D4	5.769	314495		
Midazolam	326.1 -> 223...	1/31/2018 3:26 PM					326.1 -> 249...				Midazolam-D4	6.611	436065		
Mirtazapine	266.2 -> 195...	1/31/2018 3:26 PM	6.379	20763...	299.23		266.2 -> 72.3		233.44	14004...	Midazolam-D4	6.611	436065		
Mitragynine	399.2 -> 174...	1/31/2018 3:26 PM					399.2 -> 238...				Carbamazepine-13C6	6.137	1234212		
Normeperidine	234.1 -> 42.3	1/31/2018 3:26 PM					234.1 -> 160...				Normeperidine-D4	5.668	213960		
Norpropoxyphene	326.2 -> 44.3	1/31/2018 3:26 PM					326.2 -> 252...				Normeperidine-D4	5.668	213960		
Nortriptyline	264.2 -> 91.2	1/31/2018 3:26 PM					264.2 -> 233...				Norpropoxyphene-D5	6.286	200919		
Ondansetron	294.2 -> 184...	1/31/2018 3:26 PM					294.2 -> 212...				Nortriptyline-D3	6.480	463312		
Pentazocine	286.2 -> 218...	1/31/2018 3:26 PM					286.2 -> 41.3				Pentazocine-13C3	5.742	490960		
Phenazepam	349.0 -> 206...	1/31/2018 3:26 PM					349.0 -> 183...				Pentazocine-13C3	5.742	490960		
Phencyclidine	244.2 -> 86.2	1/31/2018 3:26 PM					244.2 -> 91.1				Phenazepam-D4	6.507	24995		
Phenylethanolamine	253.1 -> 104...	1/31/2018 3:26 PM					253.1 -> 182...				Phencyclidine-D5	5.973	1075195		
Prazepam	325.1 -> 271...	1/31/2018 3:26 PM					325.1 -> 140...				Phenylethanolamine-D10	6.033	17881		
Primidone	219.1 -> 91.2	1/31/2018 3:26 PM					219.1 -> 162...				Prazepam-D5	6.934	957007		
Propoxyphene	340.2 -> 58.3	1/31/2018 3:26 PM					340.2 -> 266...				Prazepam-D5	6.934	957007		
Protriptyline	264.2 -> 155...	1/31/2018 3:26 PM					264.2 -> 161...				Propoxyphene-D11	6.365	281205		
Pseudoephedrine	166.1 -> 148...	1/31/2018 3:26 PM					166.1 -> 133...				Nortriptyline-D3	6.480	463312		
Tapentadol	222.2 -> 107...	1/31/2018 3:26 PM					222.2 -> 121...				Pseudoephedrine-D3	4.639	542479		
Trimipramine	295.2 -> 100...	1/31/2018 3:26 PM					295.2 -> 58.3				Tapentadol-D3	5.506	761959		
Verapamil	455.3 -> 165...	1/31/2018 3:26 PM					455.3 -> 150...				Trimipramine-D3	6.617	2169111		
Zaleplon	306.1 -> 236...	1/31/2018 3:26 PM					306.1 -> 264...				Trimipramine-D3	6.617	2169111		
Zopiclone	389.1 -> 244...	1/31/2018 3:26 PM					389.1 -> 216...				Zaleplon-D4	6.207	239847		
											Zopiclone-D4	6.364	207238		

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

Extraction Date: 1-31-18

Analyst: Anne Nord

Plate lot#: 0515037

Plate Expiration: 9/28/2018

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

**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: 01312018 am 25-26 Batch Name: 01312018 can 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: \_



# ISP FORENSICS - Cd'A

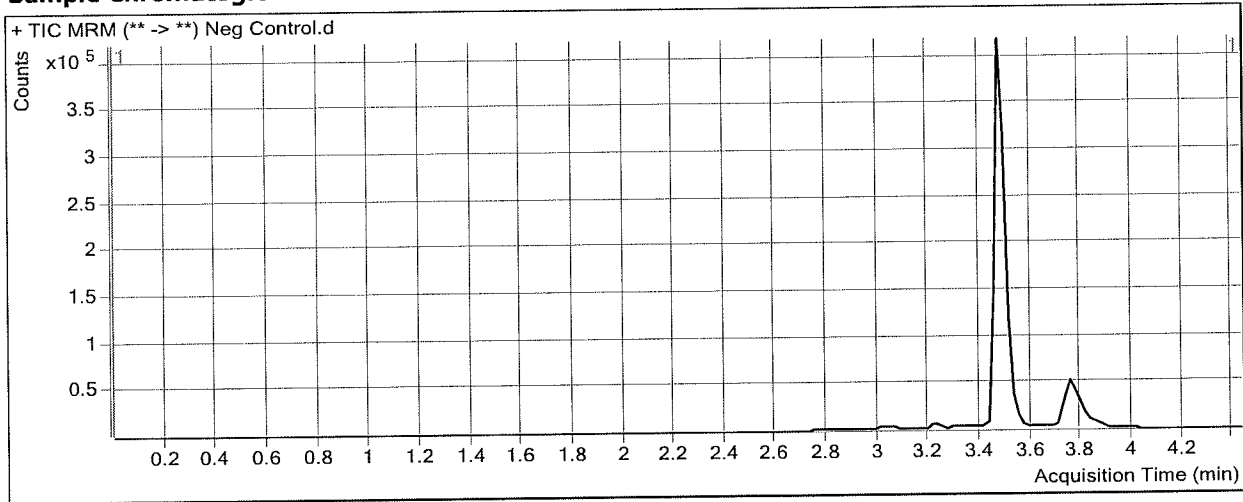
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Analysis Time** 2/1/2018 11:09 AM **Analyst Name** ISP Tox  
**Report Time** 2/1/2018 11:09 AM **Reporter Name** ISP Tox  
**Last Calib Update** 2/1/2018 11:09 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-31 11:53 **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-OH	3.433	6155	1011769	0.0061	1.2345
THC-COOH	3.466	13356	208643	0.0640	4.6101

# ISP FORENSICS - Cd'A

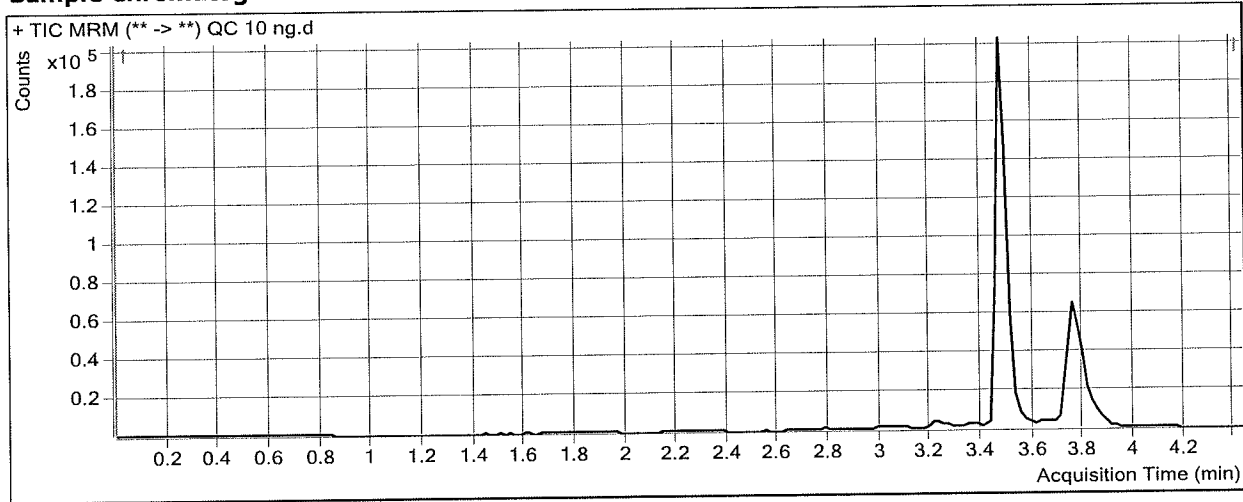
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Analysis Time** 2/1/2018 8:12 AM **Analyst Name** ISP Tox  
**Report Time** 2/1/2018 8:14 AM **Reporter Name** ISP Tox  
**Last Calib Update** 2/1/2018 8:12 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-31 12:13 **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



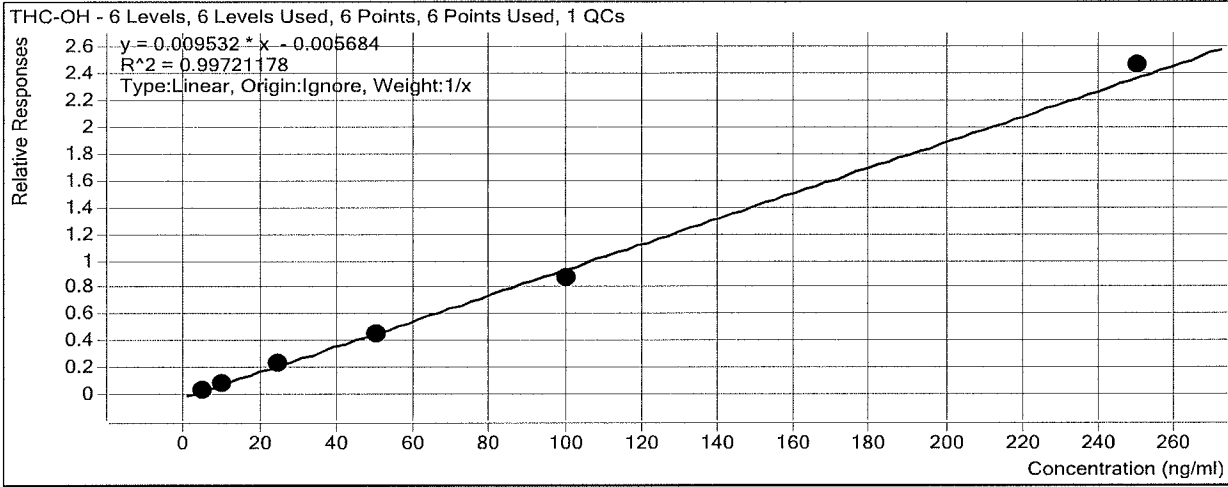
### Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	39532	456516	0.0866	9.6813
THC-COOH	3.486	15180	73629	0.2062	12.3155
THC	3.840	1729	19272	0.0897	8.9006

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Last Calib Update** 2/1/2018 8:12 AM **Analyst Name** ISP TOX

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



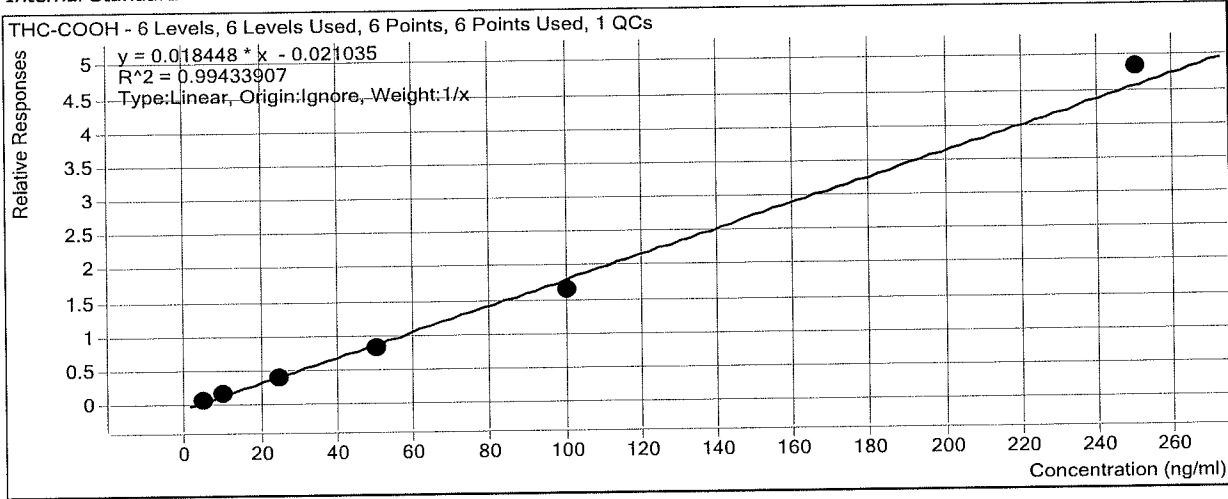
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.3	105.4
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.1	100.7
QC 10 ng	3	<input checked="" type="checkbox"/>	10	9.7	96.8
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	25.2	100.7
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	48.8	97.7
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	92.1	92.1
cal 7 - 250ng	7	<input checked="" type="checkbox"/>	250	258.6	103.4



# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Last Calib Update** 2/1/2018 8:12 AM **Analyst Name** ISP TOX

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

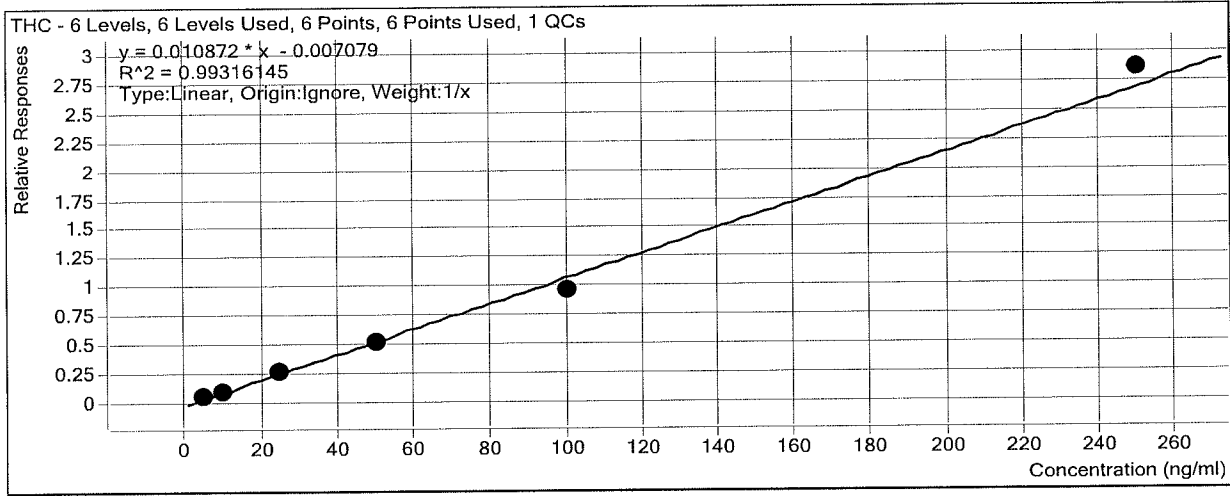


Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.7	114.0
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.2	102.1
QC 10 ng	3	<input checked="" type="checkbox"/>	10	12.3	123.2
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	23.6	94.6
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	46.7	93.5
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	90.6	90.6
cal 7 - 250ng	7	<input checked="" type="checkbox"/>	250	263.1	105.2

# ISP Forensics Calibration Curve Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann  
 screen.batch.bin  
**Last Calib Update** 2/1/2018 8:12 AM **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	6.1	122.3
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	9.0	89.7
QC 10 ng	3	<input checked="" type="checkbox"/>	10	8.9	89.0
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	24.6	98.4
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	47.5	94.9
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	89.3	89.3
cal 7 - 250ng	7	<input checked="" type="checkbox"/>	250	263.6	105.4

# ISP FORENSICS - Cd'A

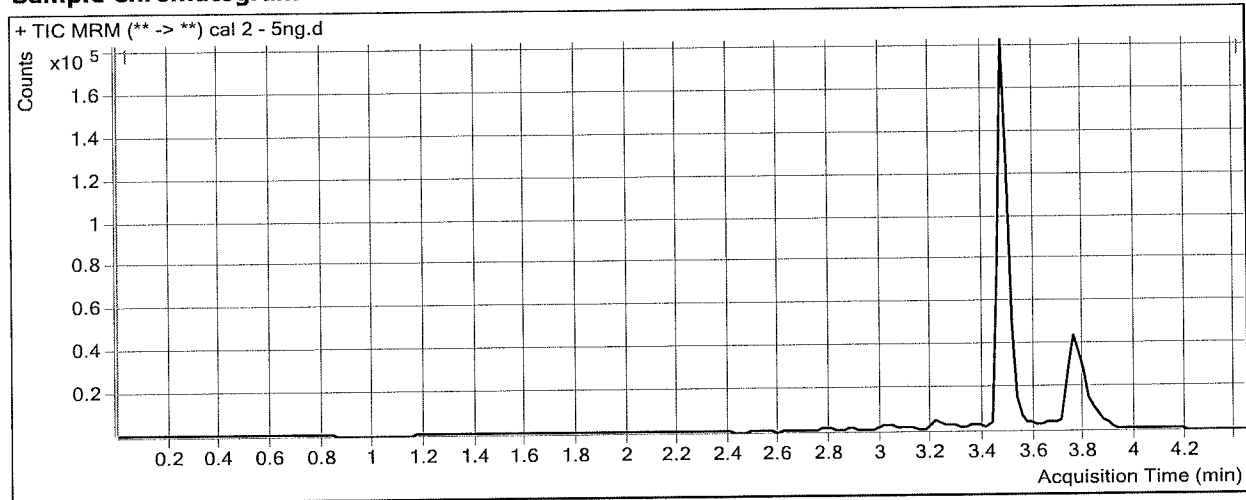
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Analysis Time** 2/1/2018 8:12 AM **Analyst Name** ISP Tox  
**Report Time** 2/1/2018 8:14 AM **Reporter Name** ISP Tox  
**Last Calib Update** 2/1/2018 8:12 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-31 11:20 **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-B1 **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	18908	424389	0.0446	5.2706
THC-COOH	3.486	7242	86085	0.0841	5.7002
THC	3.820	889	14966	0.0594	6.1140

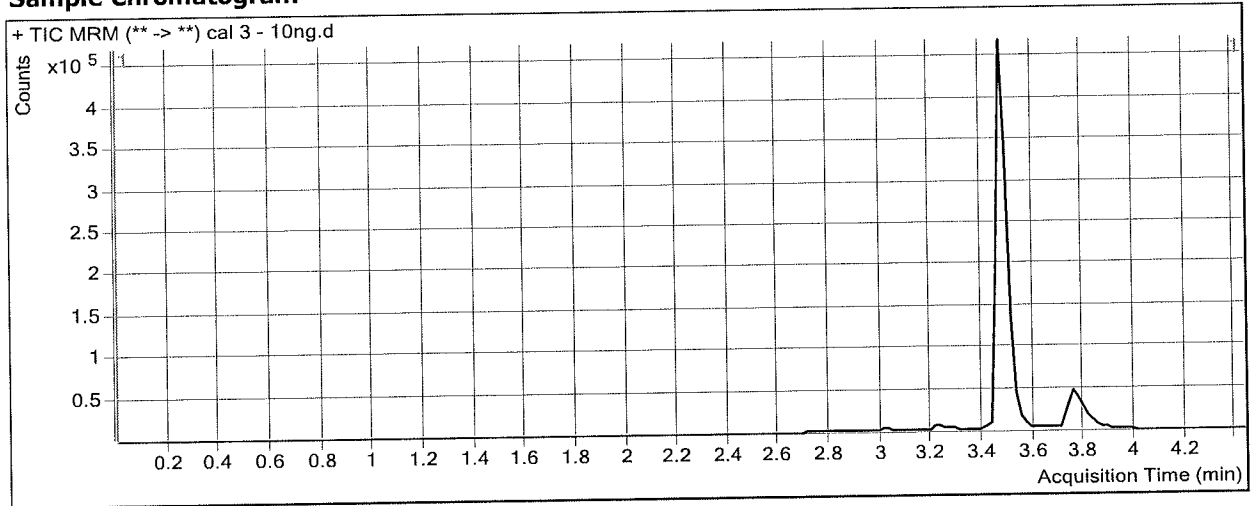
# ISP FORENSICS - Cd'A Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Analysis Time** 2/1/2018 8:12 AM **Analyst Name** ISP Tox  
**Report Time** 2/1/2018 8:14 AM **Reporter Name** ISP Tox  
**Last Calib Update** 2/1/2018 8:12 AM **Batch State** Processed

## Analysis Info

**Acq Time** 2018-01-31 11:27 **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	92448	1023649	0.0903	10.0713
THC-COOH	3.486	41011	245065	0.1673	10.2113
THC	3.820	1455	16094	0.0904	8.9692

# ISP FORENSICS - Cd'A

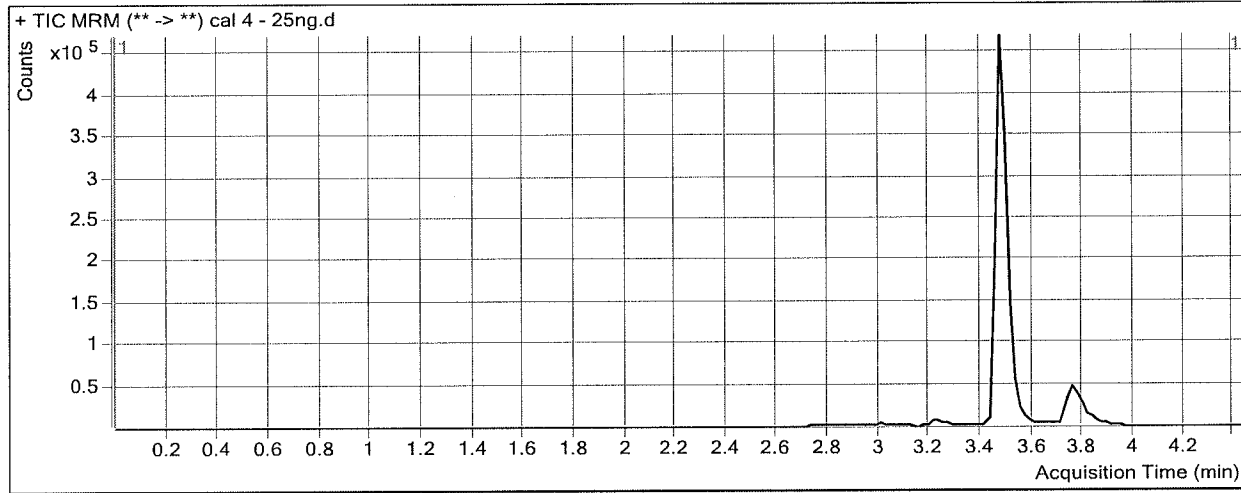
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Analysis Time** 2/1/2018 8:12 AM **Analyst Name** ISP Tox  
**Report Time** 2/1/2018 8:14 AM **Reporter Name** ISP Tox  
**Last Calib Update** 2/1/2018 8:12 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-31 11:33 **Data File** cal 4 - 25ng.d  
**Sample Type** Calibration **Sample Name** cal 4 - 25ng  
**Dilution** 1 **Acq Method** Screen 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-OH	3.473	215549	920066	0.2343	25.1750
THC-COOH	3.486	87928	211839	0.4151	23.6391
THC	3.820	4072	15645	0.2603	24.5921

# ISP FORENSICS - Cd'A

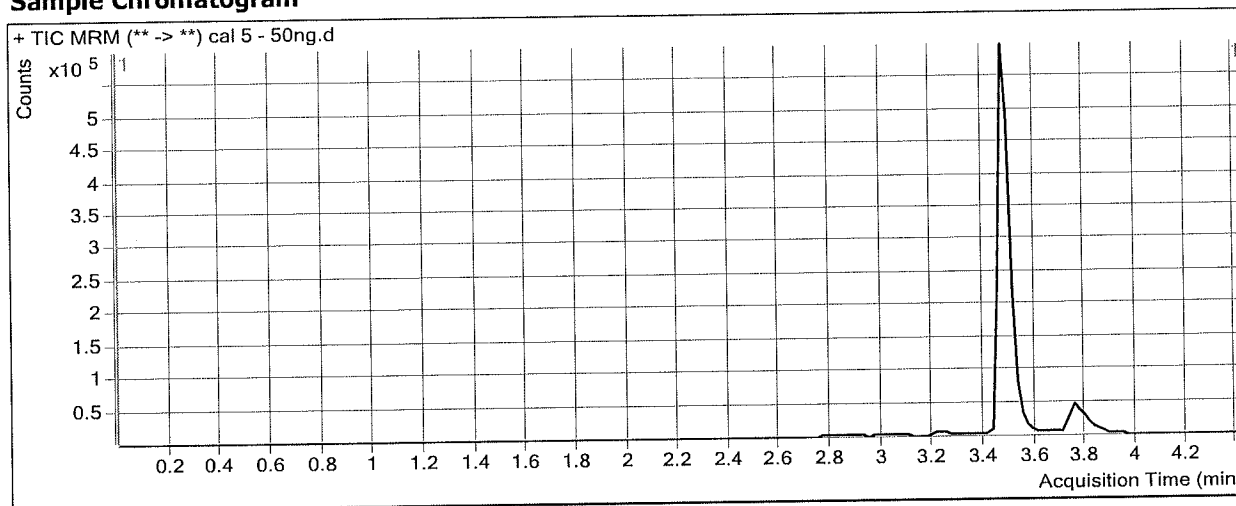
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Analysis Time** 2/1/2018 8:12 AM **Analyst Name** ISP Tox  
**Report Time** 2/1/2018 8:14 AM **Reporter Name** ISP Tox  
**Last Calib Update** 2/1/2018 8:12 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-31 11:40 **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	446639	971551	0.4597	48.8270
THC-COOH	3.486	191243	227349	0.8412	46.7371
THC	3.820	8384	16473	0.5090	47.4646

# ISP FORENSICS - Cd'A

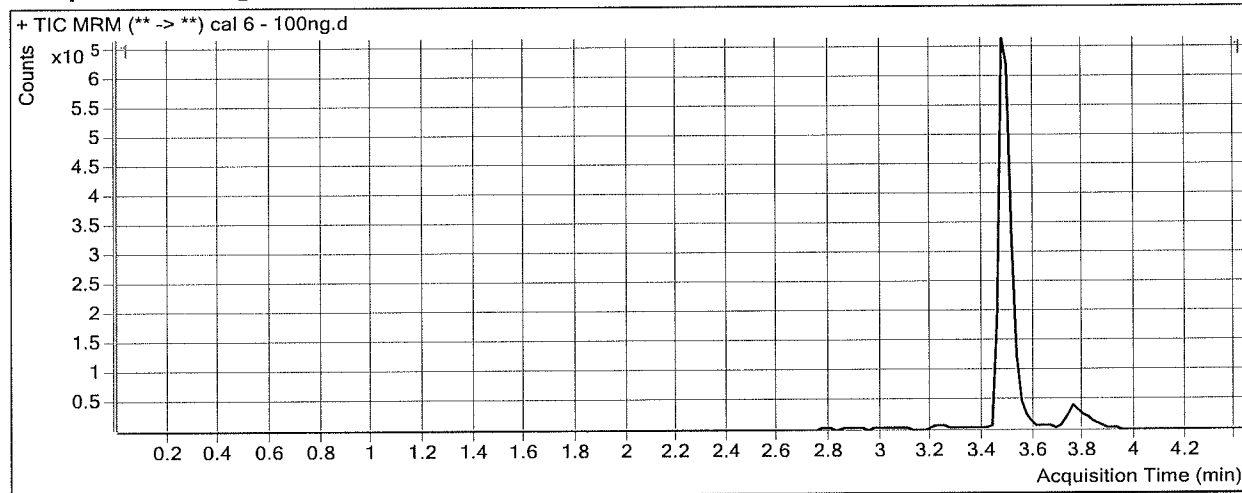
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Analysis Time** 2/1/2018 8:12 AM **Analyst Name** ISP Tox  
**Report Time** 2/1/2018 8:14 AM **Reporter Name** ISP Tox  
**Last Calib Update** 2/1/2018 8:12 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-31 11:47 **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	760302	871738	0.8722	92.0987
THC-COOH	3.486	312595	189379	1.6506	90.6132
THC	3.820	16317	16928	0.9639	89.3099

# ISP FORENSICS - Cd'A

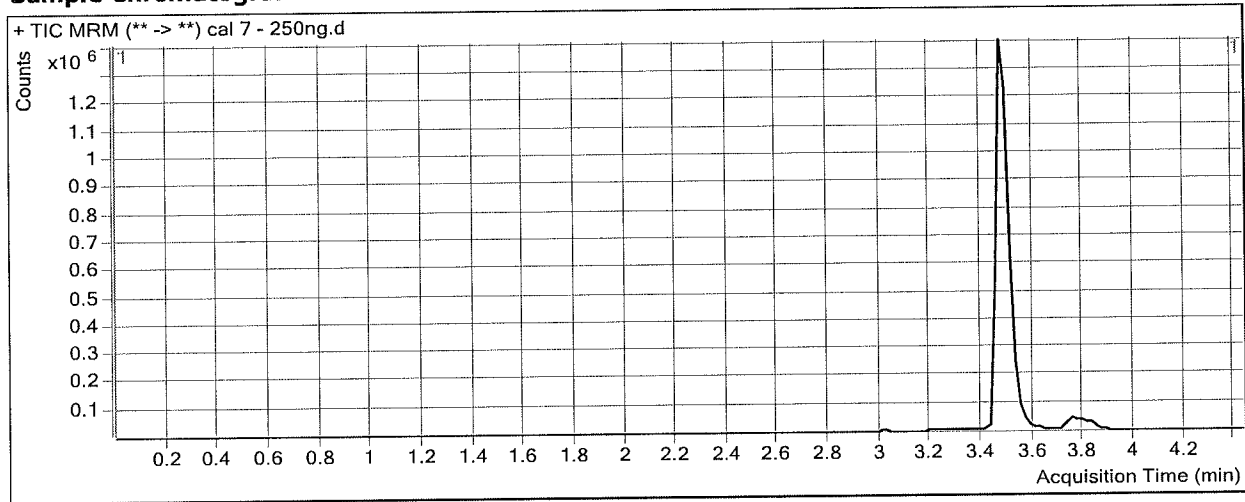
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\01312018 blood screen AM 25-26\QuantResults\01312018 cann screen.batch.bin  
**Analysis Time** 2/1/2018 8:12 AM **Analyst Name** ISP Tox  
**Report Time** 2/1/2018 8:14 AM **Reporter Name** ISP Tox  
**Last Calib Update** 2/1/2018 8:12 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-01-31 12:00 **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	2272734	924330	2.4588	258.5574
THC-COOH	3.486	894966	185189	4.8327	263.0991
THC	3.820	47008	16446	2.8583	263.5501