

REVIEWED

By Sarah Pickle at 1:18 pm, Dec 16, 2018

11/29/2018

Worklist: 2811

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2018-2196	1	130548	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2203	1	130619	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2204	1	130625	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2205	1	130631	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2252	1	131389	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2277	1	131444	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2290	1	131653	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2334	1	132247	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2383	1	132840	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2384	1	132843	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2018-2391	1	132994	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
M2018-5334	1	129927	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
M2018-5348	1	130055	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
M2018-5373	1	130144	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
M2018-5546	1	131222	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
M2018-5683	1	131813	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
M2018-5769	2	132504	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
P2018-3190	1	131407	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
P2018-3191	1	131413	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
P2018-3192	1	131416	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
P2018-3193	1	131419	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
P2018-3256	1	131916	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
P2018-3257	1	132025	AM 25/AM 26 Blood MultiDrug/THC Screen by L	



Worklist: 2811

<u>LAB_CASE</u>	<u>ITEM</u>	<u>TASK_ID</u>	<u>DESCRIPTION</u>
P2018-3280	1	132501	AM 25/AM 26 Blood MultiDrug/THC Screen by L



A handwritten signature in black ink, consisting of a stylized, cursive script.

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

Extraction Date: 11/28/18 Analyst: Anne Nord
Plate lot#: 0515207 Plate Expiration: 10/18/2018

Mobile phase A: 10mM Amm Form
0.5M Ammonium Hydroxide

Mobile phase B: 0.1% Formic Acid in MeOH
Ethyl Acetate LC Methanol

Blank Blood Lot: 18G207D7

Column: Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)

LCMS-QQQ ID: 62340

Pre-Analytic:

- 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
- 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 ID: 66759*
- 4. Pipette **250µL 0.5M ammonium hydroxide** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **300µL of blood+base** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).
(Load at 85-100 PSI- Selector to the right) Manifold ID: 66792
- 8. Wait 5 minutes.
- 9. Add **900uL ethyl acetate**.
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*.
- 12. Add **900uL ethyl acetate**.
- 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% LC MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

Post-Analytic

- 1. Open quantitation software and create a new quantitation batch.
Batch Name: 112818 mds p1, mds p2 112818 Worklist path: 112818 am 25-26
- 2. Make necessary changes to integration limits
- 3. Evaluate samples, S/N of primary transition >5 and S/N of secondary transition >3 or evaluation of peak symmetry and resolution. Within +/- 2% or 0.1 min RT of administrative control. > 1/2 the response of administrative control. (1/2 to 1/5 analyst discretion)
- 4. Did all QCs pass for each analyte? Y / N Click here to enter text.
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: Click here to enter text.



**Idaho State Police
Forensic Services
Toxicology Discipline**

Request for Departure from an Analytical Method

Date of Request

10/22/18

Analytical Method

AM 25 multidrug screen

Deviation

The expiration date listed for the current batch of Cayman ToxBox extraction plates (Batch # 0515207) is October 18, 2018. I am issuing a deviation to allow for the use of the remaining plates. The controls will be used to evaluate if the plate is working as intended.

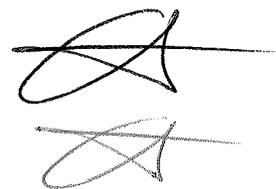
The deviation will remain in effect until December 18, 2018. The allowance of expired plates will be addressed in the next method revision.

Celena Shrum

Date: 10/22/2018

Celena Shrum

Toxicology Program Discipline Leader



Toxicology AM method 25 external prep information
working solution 10000 ng/ml in meoh Hydromorphone, Hydrocodone, Nortriptyline, Sertraline
Stock solution 1mg/ml 100 ul each in 9600ul meOH
Ppd 4/23/18 Exp: 4/23/19 lot 42318 by Amn

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

AM 25 control 100 ul working solution (42318) in 9900 ul neg blood
ppd 04/23/18 exp 4/23/19 lot 42318 neg blood lot 17J20718 by Amn

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

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.				
6-MAM	328.2 -> 165...	11/28/2018 3:25 PM	5.400	1199	7.87	328.2 -> 211...	3.20	650	6-MAM-D6	5.359	31713						
7-Aminoclonazepam	286.1 -> 121...	11/28/2018 3:25 PM	5.612	12086	49.03	286.1 -> 222...	44.86	9846	7-Aminoclonazepam-D4	5.590	68810						
Benzoylgonine	290.1 -> 168...	11/28/2018 3:25 PM	5.406	10553	75.60	290.1 -> 105...	864.92	7115	Benzoylgonine-D8	5.385	3101						
Meprobrol	268.2 -> 116...	11/28/2018 3:25 PM	5.614	14124	89.21	268.2 -> 56.3	214.40	12643	Noroxycodone-D3	5.057	78491						
a-hydroxyalprazolam	325.1 -> 297...	11/28/2018 3:25 PM	6.379	3958	26.46	325.1 -> 215...	2604	2604	a-hydroxyalprazolam-D5	6.358	21870						
alpha-PVP	232.2 -> 91.0	11/28/2018 3:25 PM	5.926	36333	183.57	232.2 -> 77.1	42.00	14313	alpha-PVP-D8	5.863	182221						
Alprazolam	309.1 -> 281...	11/28/2018 3:25 PM	6.465	30883	293.54	309.1 -> 205...	239.69	33515	Alprazolam-D5	6.464	130149						
Amphetamine	136.1 -> 91.1	11/28/2018 3:25 PM	5.012	108246	37.99	136.1 -> 119...	46.37	44817	Amphetamine-D11	4.951	92039						
Cocaine	304.2 -> 182...	11/28/2018 3:25 PM	5.874	72227	250.61	304.2 -> 105...	24.94	16751	Cocaine-D3	5.853	333934						
Bupropion	240.1 -> 184...	11/28/2018 3:25 PM	6.169	39304	164.08	240.1 -> 131...	52.92	21096	Bupropion-D9	6.128	184401						
Carisoprodol	261.2 -> 176...	11/28/2018 3:25 PM	6.127	41708	114.91	261.2 -> 55.3	67.13	47585	Carisoprodol-D7	6.126	258789						
Citalopram	325.2 -> 109...	11/28/2018 3:25 PM	6.196	126241	25682...	325.2 -> 262...	199.41	30390	Citalopram-D6	6.195	562957						
Clonazepam	316.1 -> 269...	11/28/2018 3:25 PM	6.320	13725	3609.51	316.1 -> 213...	984.70	3466	Clonazepam-D4	6.299	22720						
Codaine	300.2 -> 215...	11/28/2018 3:25 PM	5.364	6105	1644.12	300.2 -> 165...	21.84	4701	Codaine-D6	5.301	20862						
Cyclobenzaprine	276.2 -> 214...	11/28/2018 3:25 PM	6.572	62433	305.23	276.2 -> 231...	73.41	17152	Cyclobenzaprine-D3	6.551	246794						
Dextromethorphan	272.2 -> 171...	11/28/2018 3:25 PM	6.288	21722	377.20	272.2 -> 147...	24.46	18542	Dextromethorphan-D3	6.288	114575						
Dextrophan	288.2 -> 157...	11/28/2018 3:25 PM	5.616	26128	194.79	288.2 -> 133...	145.77	15627	Dextrophan-D3	5.616	154102						
Diazepam	285.1 -> 193...	11/28/2018 3:25 PM	6.671	28796	82.52	285.1 -> 153...	78.03	18803	Diazepam-D5	6.670	120772						
Dihydrocodeine	302.2 -> 198...	11/28/2018 3:25 PM	5.099	14180	62.80	302.2 -> 128...	94.56	10415	Dihydrocodeine-D6	5.056	75804						
Diphenhydramine	256.2 -> 167...	11/28/2018 3:25 PM	6.209	142869	146.18	256.2 -> 152...	69.27	36866	Diphenhydramine-D3	6.188	764213						
Doxylamine	271.2 -> 182...	11/28/2018 3:25 PM	5.859	124412	125.14	271.2 -> 167...	75.62	78346	Doxylamine-D5	5.838	581337						
EDDP	279.2 -> 235...	11/28/2018 3:25 PM	6.184	57946	404.97	279.2 -> 250...	111.82	20473	EDDP-D3	6.163	27766						
Fentanyl	337.2 -> 105...	11/28/2018 3:25 PM	6.561	14868	337.2 -> 188...	337.2 -> 188...	34.45	10423	Fentanyl-D5	6.561	726384						
Fluoxetine	310.1 -> 44.3	11/28/2018 3:25 PM	6.382	153755	29385...	310.1 -> 148...	27.85	5143	Fluoxetine-D6	6.381	774896						
Hydrocodone	300.2 -> 198...	11/28/2018 3:25 PM	5.569	19906	300.2 -> 128...	300.2 -> 128...	12.51	8237	Hydrocodone-D6	5.526	124203						
Hydromorphone	286.2 -> 184...	11/28/2018 3:25 PM	4.901	13700	29.86	286.2 -> 157...	20.36	23280	Hydromorphone-D6	4.818	45374						
Ketamine	238.1 -> 125...	11/28/2018 3:25 PM	6.129	68573	106.88	238.1 -> 220...	138.25	44849	Ketamine-D4	6.108	268993						
Mirtazapine	266.2 -> 195...	11/28/2018 3:25 PM	6.534	61740	53.72	266.2 -> 72.3	1013.29	46492	Mirtazapine-D3	5.635	662715						
Mitragynine	399.2 -> 238...	11/28/2018 3:25 PM	6.558	18910	308.65	399.2 -> 174...	25.57	17268	Mitragynine-D3	5.660	98926						
Meproamate	219.1 -> 158...	11/28/2018 3:25 PM	5.681	18385	38.95	219.1 -> 97.1	76.62	68562	Meproamate-D7	6.483	412520						
Methadone	310.2 -> 265...	11/28/2018 3:25 PM	6.484	68459	197.06	310.2 -> 105...	36691	36691	Methadone-D9	5.132	209326						
Methamphetamine	150.1 -> 91.1	11/28/2018 3:25 PM	5.173	87360	9.12	150.1 -> 119...	3.70	2434	Methamphetamine-D11	4.537	2494						
Morphine	286.2 -> 201...	11/28/2018 3:25 PM	4.618	2660	15.10	286.2 -> 165...	656.72	4696	Morphine-D6	6.029	21648						
Norbuprenorphine	414.3 -> 101...	11/28/2018 3:25 PM	6.029	3598	6.77	414.3 -> 57.3	26.15	6159	Norbuprenorphine-D3	6.512	23395						
Nordiazepam	271.1 -> 140...	11/28/2018 3:25 PM	6.533	7950	36.96	271.1 -> 208...	46.11	35290	Nordiazepam-D5	5.496	484366						
Norfentanyl	233.2 -> 84.2	11/28/2018 3:25 PM	5.496	106392	593.06	233.2 -> 55.3	22.28	6251	Norfentanyl-D5	5.143	38604						
Norhydrocodone	286.2 -> 199...	11/28/2018 3:25 PM	5.164	943	286.2 -> 171...	286.2 -> 171...	49.23	7595	Norhydrocodone-D3	5.068	586202						
Noroxycodone	302.1 -> 284...	11/28/2018 3:25 PM	5.059	10993	13.12	302.1 -> 186...	34.39	4427	Noroxycodone-D3	6.365	64957						
O-desmethyl-tramadol	250.2 -> 58.3	11/28/2018 3:25 PM	5.088	126494	455.52	250.2 -> 42.3	41.43	8925	O-desmethyl-tramadol-...	5.259	156627						
Oxazepam	287.1 -> 240...	11/28/2018 3:25 PM	6.386	13095	38.75	287.1 -> 268...	18.99	7399	Oxazepam-D5	4.512	145919						
Oxycodone	316.2 -> 298...	11/28/2018 3:25 PM	5.300	29961	23.22	316.2 -> 241...			Oxycodone-D6								
Oxymorphone	302.1 -> 284...	11/28/2018 3:25 PM	4.554	30631	27.74	302.1 -> 227...			Oxymorphone-D3								

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.				
Phentermine	150.1 -> 65.2	11/28/2018 3:25 PM	5.295	27433	∞	☑	150.1 -> 133...	☑	∞	508	Phentermine-D5	5.294	329593				
Promethazine	285.1 -> 86.2	11/28/2018 3:25 PM	6.711	209119	322.71	☑	285.1 -> 71.3	☑	134.25	43290	Promethazine-D3	6.670	11927...				
Quetiapine	384.2 -> 253...	11/28/2018 3:25 PM	6.681	170189	327.01	☑	384.2 -> 221...	☑	26346...	99487	Quetiapine-D8	6.659	255314				
Serrtraline	306.1 -> 158...	11/28/2018 3:25 PM	6.729	46875	362.66	☑	306.1 -> 275...	☑	7456.90	43918	Serrtraline-D3	6.708	221487				
Temazepam	301.1 -> 255...	11/28/2018 3:25 PM	6.507	29702	185.95	☑	301.1 -> 283...	☑	14.04	9950	Temazepam-D5	6.486	184000				
Tramadol	264.2 -> 58.3	11/28/2018 3:25 PM	5.636	137795	85.96	☑	264.2 -> 43.3	☑	6.73	7689	Tramadol-13C-D3	5.635	662715				
Trazodone	372.2 -> 176...	11/28/2018 3:25 PM	6.864	183444	2024.97	☑	372.2 -> 148...	☑	∞	1339...	Trazodone-D6	6.843	811512				
Venlafaxine	278.2 -> 58.3	11/28/2018 3:25 PM	5.960	128060	180.85	☑	278.2 -> 260...	☑	20.96	23926	Venlafaxine-D6	5.939	603715				
Zolpidem	308.2 -> 235...	11/28/2018 3:25 PM	6.404	151885	32891...	☑	308.2 -> 263...	☑	168.16	49057	Zolpidem-D6	6.402	757549				

Compound Method		p1 Negative control		p1 Negative control Results		Qualifier 1 M...		Qualifier 1 Res...		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...	11/28/2018 3:45 PM					328.2 -> 211...				6-MAM-D6	5.359	33608
7-Aminoclonazepam	286.1 -> 121...	11/28/2018 3:45 PM					286.1 -> 222...				7-Aminoclonazepam-D4	5.611	76291
Benzoylcegonine	290.1 -> 168...	11/28/2018 3:45 PM					290.1 -> 105...				Benzoylcegonine-D8	5.405	3172
Metoprolol	268.2 -> 116...	11/28/2018 3:45 PM					268.2 -> 56.3				Noroxycodone-D3	5.057	81670
a-hydroxyalprazolam	325.1 -> 297...	11/28/2018 3:45 PM					325.1 -> 215...				a-hydroxyalprazolam-D5	6.358	24400
alpha-PVP	232.2 -> 91.0	11/28/2018 3:45 PM					232.2 -> 77.1				alpha-PVP-d8	5.884	169973
Alprazolam	309.1 -> 281...	11/28/2018 3:45 PM					309.1 -> 205...				Alprazolam-D5	6.464	143559
Amphetamine	136.1 -> 91.1	11/28/2018 3:45 PM	5.032	33802			136.1 -> 119...				Amphetamine-D11	4.951	101757
Cocaine	304.2 -> 182...	11/28/2018 3:45 PM					304.2 -> 105...				Cocaine-D3	5.853	338578
Bupropion	240.1 -> 184...	11/28/2018 3:45 PM					240.1 -> 131...				Bupropion-D9	6.128	188196
Carisoprodol	261.2 -> 176...	11/28/2018 3:45 PM					261.2 -> 55.3				Carisoprodol-D7	6.126	271803
Citalopram	325.2 -> 109...	11/28/2018 3:45 PM					325.2 -> 262...				Citalopram-D6	6.195	575512
Clonazepam	316.1 -> 269...	11/28/2018 3:45 PM					316.1 -> 213...				Clonazepam-D4	6.319	23360
Codeline	300.2 -> 215...	11/28/2018 3:45 PM					300.2 -> 165...				Codeline-D6	5.301	22537
Cyclobenzaprine	276.2 -> 214...	11/28/2018 3:45 PM					276.2 -> 231...				Cyclobenzaprine-D3	6.571	212649
Dextromethorphan	272.2 -> 171...	11/28/2018 3:45 PM					272.2 -> 147...				Dextromethorphan-D3	6.288	87668
Dextrophan	258.2 -> 157...	11/28/2018 3:45 PM					258.2 -> 133...				Dextrophan-D3	5.616	153025
Diazepam	285.1 -> 193...	11/28/2018 3:45 PM					285.1 -> 153...				Diazepam-D5	6.670	122109
Dihydrocodeline	302.2 -> 198...	11/28/2018 3:45 PM					302.2 -> 128...				Dihydrocodeline-D6	5.077	69822
Diphenhydramine	256.2 -> 167...	11/28/2018 3:45 PM					256.2 -> 152...				Diphenhydramine-D3	6.209	721533
Doxylamine	271.2 -> 182...	11/28/2018 3:45 PM					271.2 -> 167...				Doxylamine-D5	5.858	469620
EDDP	279.2 -> 235...	11/28/2018 3:45 PM					279.2 -> 250...				EDDP-D3	6.184	13460
Fentanyl	337.2 -> 105...	11/28/2018 3:45 PM					337.2 -> 188...				Fentanyl-D5	6.561	665702
Fluoxetine	310.1 -> 44.3	11/28/2018 3:45 PM					310.1 -> 148...				Fluoxetine-D6	6.381	718573
Hydrocodone	300.2 -> 198...	11/28/2018 3:45 PM					300.2 -> 128...				Hydrocodone-D6	5.526	120013
Hydromorphone	286.2 -> 184...	11/28/2018 3:45 PM					286.2 -> 157...				Hydromorphone-D6	4.839	45448
Ketamine	238.1 -> 125...	11/28/2018 3:45 PM					238.1 -> 220...				Ketamine-D4	6.128	300214
Mirtazapine	266.2 -> 195...	11/28/2018 3:45 PM					266.2 -> 72.3				Tamadol-13C-D3	5.635	659383
Mirtazapine	399.2 -> 238...	11/28/2018 3:45 PM					399.2 -> 174...				Tamadol-13C-D3	5.635	659383
Meprobamate	219.1 -> 158...	11/28/2018 3:45 PM					219.1 -> 97.1				Meprobamate-D7	5.660	106853
Methadone	310.2 -> 265...	11/28/2018 3:45 PM					310.2 -> 105...				Methadone-D9	6.483	373935
Methamphetamine	150.1 -> 91.1	11/28/2018 3:45 PM	5.173	85681			150.1 -> 119...				Methamphetamine-D11	5.132	221269
Morphine	286.2 -> 201...	11/28/2018 3:45 PM					286.2 -> 165...				Morphine-D6	4.557	2191
Norbuprenorphine	414.3 -> 101...	11/28/2018 3:45 PM					414.3 -> 57.3				Norbuprenorphine-D3	6.029	22293
Nordiazepam	271.1 -> 140...	11/28/2018 3:45 PM					271.1 -> 208...				Nordiazepam-D5	6.512	20879
Nortentanyl	233.2 -> 84.2	11/28/2018 3:45 PM					233.2 -> 55.3				Nortentanyl-D5	5.496	464325
Norhydrocodone	286.2 -> 199...	11/28/2018 3:45 PM					286.2 -> 171...				Norhydrocodone-D3	5.143	39889
Noroxycodone	302.1 -> 284...	11/28/2018 3:45 PM					302.1 -> 186...				Noroxycodone-D3	5.057	81670
O-desmethyl-tramadol	250.2 -> 58.3	11/28/2018 3:45 PM					250.2 -> 42.3				O-desmethyl-tramadol...	5.088	574472
Oxazepam	287.1 -> 240...	11/28/2018 3:45 PM					287.1 -> 268...				Oxazepam-D5	6.365	70715
Oxycodone	316.2 -> 298...	11/28/2018 3:45 PM					316.2 -> 241...				Oxycodone-D6	5.259	154912
Oxymorphone	302.1 -> 284...	11/28/2018 3:45 PM					302.1 -> 227...				Oxymorphone-D3	4.532	143328

Compound Method		p1negative control		p1negative control Results		Qualifier 1 M...		Qualifier 1 Res...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.
Phentermine	150.1 -> 65.2	11/28/2018 3:45 PM					150.1 -> 133...				Phentermine-D5	5.294	352826
Promethazine	285.1 -> 86.2	11/28/2018 3:45 PM					285.1 -> 71.3				Promethazine-D3	6.670	11552...
Quetiapine	384.2 -> 253...	11/28/2018 3:45 PM					384.2 -> 221...				Quetiapine-D8	6.680	242773
Sertraline	306.1 -> 158...	11/28/2018 3:45 PM					306.1 -> 275...				Sertraline-D3	6.728	210493
Temazepam	301.1 -> 255...	11/28/2018 3:45 PM					301.1 -> 283...				Temazepam-D5	6.506	183929
Tamadol	264.2 -> 58.3	11/28/2018 3:45 PM					264.2 -> 43.3				Tamadol-13C-D3	5.635	659383
Trazodone	372.2 -> 176...	11/28/2018 3:45 PM					372.2 -> 148...				Trazodone-D6	6.843	807358
Venlafaxine	278.2 -> 58.3	11/28/2018 3:45 PM					278.2 -> 260...				Venlafaxine-D6	5.960	581482
Zolpidem	308.2 -> 235...	11/28/2018 3:45 PM					308.2 -> 263...				Zolpidem-D6	6.402	796844

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.	Name	RT	Resp.	
6-MAM	328.2 -> 165...	11/28/2018 4:04 PM					328.2 -> 211...				6-MAM-D6	5.339	32371				
7-aminoclonazepam	286.1 -> 121...	11/28/2018 4:04 PM					286.1 -> 222...				7-Aminoclonazepam-D4	5.590	68999				
Benzoyllecgonine	290.1 -> 168...	11/28/2018 4:04 PM					290.1 -> 105...				Benzoyllecgonine-D8	5.385	3876				
Meprobrol	268.2 -> 116...	11/28/2018 4:04 PM					268.2 -> 56.3				Noroxycodone-D3	5.057	77918				
a-hydroxyalprazolam	325.1 -> 297...	11/28/2018 4:04 PM					325.1 -> 215...				a-hydroxyalprazolam-D5	6.358	24382				
alpha-PVP	232.2 -> 91.0	11/28/2018 4:04 PM					232.2 -> 77.1				alpha-PVP-d8	5.863	170913				
Alprazolam	309.1 -> 281...	11/28/2018 4:04 PM					309.1 -> 205...				Alprazolam-D5	6.464	142384				
Amphetamine	136.1 -> 91.1	11/28/2018 4:04 PM	5.032	30111	34.50		136.1 -> 119...				Amphetamine-D11	4.951	123130				
Cocaine	304.2 -> 182...	11/28/2018 4:04 PM					304.2 -> 105...				Cocaine-D3	5.853	344934				
Bupropion	240.1 -> 184...	11/28/2018 4:04 PM					240.1 -> 131...				Bupropion-D9	6.128	182641				
Carisoprodol	261.2 -> 176...	11/28/2018 4:04 PM					261.2 -> 55.3				Carisoprodol-D7	6.126	237603				
Citalopram	325.2 -> 109...	11/28/2018 4:04 PM					325.2 -> 262...				Citalopram-D6	6.195	580861				
Clonazepam	316.1 -> 269...	11/28/2018 4:04 PM					316.1 -> 213...				Clonazepam-D4	6.299	22333				
Codaine	300.2 -> 215...	11/28/2018 4:04 PM	5.569	6157	47.98		300.2 -> 165...		6354...	18792	Codaine-D6	5.301	23414				
Cyclobenzaprine	276.2 -> 214...	11/28/2018 4:04 PM					276.2 -> 231...				Cyclobenzaprine-D3	6.551	215109				
Dextromethorphan	272.2 -> 171...	11/28/2018 4:04 PM					272.2 -> 147...				Dextromethorphan-D3	6.288	83745				
Dextrophan	258.2 -> 157...	11/28/2018 4:04 PM					258.2 -> 133...				Dextrophan-D3	5.616	150364				
Diazepam	285.1 -> 193...	11/28/2018 4:04 PM					285.1 -> 153...				Diazepam-D5	6.670	122638				
Dihydrocodeine	302.2 -> 198...	11/28/2018 4:04 PM					302.2 -> 128...				Dihydrocodeine-D6	5.056	71227				
Diphenhydramine	256.2 -> 167...	11/28/2018 4:04 PM					256.2 -> 152...				Diphenhydramine-D3	6.209	689503				
Doxylamine	271.2 -> 182...	11/28/2018 4:04 PM					271.2 -> 167...				Doxylamine-D5	5.838	468073				
EDDP	279.2 -> 235...	11/28/2018 4:04 PM					279.2 -> 250...				EDDP-D3	6.184	13314				
Fentanyl	337.2 -> 105...	11/28/2018 4:04 PM					337.2 -> 188...				Fentanyl-D5	6.561	677862				
Fluoxetine	310.1 -> 44.3	11/28/2018 4:04 PM					310.1 -> 148...				Fluoxetine-D6	6.381	741149				
Hydrocodone	300.2 -> 198...	11/28/2018 4:04 PM	5.569	197510	343.04		300.2 -> 128...		∞	85821	Hydrocodone-D6	5.526	115334				
Hydromorphone	286.2 -> 184...	11/28/2018 4:04 PM	4.881	128409	116.77		286.2 -> 157...		150.08	89981	Hydromorphone-D6	4.818	46165				
Ketamine	238.1 -> 125...	11/28/2018 4:04 PM					238.1 -> 220...				Ketamine-D4	6.108	287104				
Mirtazapine	266.2 -> 195...	11/28/2018 4:04 PM					266.2 -> 72.3				Tramadol-13C-D3	5.635	646638				
Miltargyline	399.2 -> 238...	11/28/2018 4:04 PM					399.2 -> 174...				Tramadol-13C-D3	5.635	646638				
Meprobamate	219.1 -> 158...	11/28/2018 4:04 PM					219.1 -> 97.1				Meprobamate-D7	5.660	103114				
Methadone	310.2 -> 265...	11/28/2018 4:04 PM					310.2 -> 105...				Methadone-D9	6.483	378023				
Methamphetamine	150.1 -> 91.1	11/28/2018 4:04 PM	5.173	54521	8.55		150.1 -> 119...		4.88	14278	Methamphetamine-D11	5.132	265506				
Morphine	286.2 -> 201...	11/28/2018 4:04 PM					286.2 -> 165...				Morphine-D6	4.537	2471				
Norbuprenorphine	414.3 -> 101...	11/28/2018 4:04 PM					414.3 -> 57.3				Norbuprenorphine-D3	6.029	23483				
Nordiazepam	271.1 -> 140...	11/28/2018 4:04 PM					271.1 -> 208...				Nordiazepam-D5	6.512	20016				
Norfentanyl	233.2 -> 84.2	11/28/2018 4:04 PM					233.2 -> 55.3				Norfentanyl-D5	5.496	449390				
Norhydrocodone	286.2 -> 199...	11/28/2018 4:04 PM					286.2 -> 171...				Norhydrocodone-D3	5.143	39061				
Noroxycodone	302.1 -> 284...	11/28/2018 4:04 PM					302.1 -> 186...				Noroxycodone-D3	5.057	77918				
O-desmethyl-tramadol	250.2 -> 58.3	11/28/2018 4:04 PM					250.2 -> 42.3				O-desmethyl-tramadol-...	5.068	563531				
Oxazepam	287.1 -> 240...	11/28/2018 4:04 PM					287.1 -> 268...				Oxazepam-D5	6.365	74942				
Oxycodone	316.2 -> 298...	11/28/2018 4:04 PM					316.2 -> 241...				Oxycodone-D6	5.238	153636				
Oxymorphone	302.1 -> 284...	11/28/2018 4:04 PM					302.1 -> 227...				Oxymorphone-D3	4.532	147580				

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.				
Phentermine	150.1 -> 65.2	11/28/2018 4:04 PM					150.1 -> 133...				Phentermine-D5	5.274	386289				
Promethazine	285.1 -> 86.2	11/28/2018 4:04 PM					285.1 -> 71.3				Promethazine-D3	6.670	11611...				
Quetiapine	384.2 -> 253...	11/28/2018 4:04 PM					384.2 -> 221...				Quetiapine-D8	6.659	253569				
Sertraline	306.1 -> 158...	11/28/2018 4:04 PM	6.729	542848	97636.58		306.1 -> 275...		∞	5209...	Sertraline-D3	6.708	203064				
Temazepam	301.1 -> 255...	11/28/2018 4:04 PM					301.1 -> 283...				Temazepam-D5	6.486	186281				
Tramadol	264.2 -> 58.3	11/28/2018 4:04 PM					264.2 -> 43.3				Tramadol-13C-D3	5.635	646638				
Trazodone	372.2 -> 176...	11/28/2018 4:04 PM					372.2 -> 148...				Trazodone-D6	6.843	805554				
Venlafaxine	278.2 -> 58.3	11/28/2018 4:04 PM					278.2 -> 260...				Venlafaxine-D6	5.939	571295				
Zolpidem	308.2 -> 235...	11/28/2018 4:04 PM					308.2 -> 263...				Zolpidem-D6	6.402	763263				

Compound Method		p1 Negative control		p1 Negative control Results		Qualifier 1 M...		Qualifier 1 Res...		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...	11/28/2018 5:22 PM				328.2 -> 211...					6-MAM-D6	5.339	24993
7-Aminoclonazepam	286.1 -> 121...	11/28/2018 5:22 PM				286.1 -> 222...					7-Aminoclonazepam-D4	5.590	56044
Benzoylcegonine	290.1 -> 168...	11/28/2018 5:22 PM				290.1 -> 105...					Benzoylcegonine-D8	5.385	3454
Metoprolol	268.2 -> 116...	11/28/2018 5:22 PM				268.2 -> 56.3					Noroxycodone-D3	5.057	61960
a-hydroxyalprazolam	325.1 -> 297...	11/28/2018 5:22 PM				325.1 -> 215...					a-hydroxyalprazolam-D5	6.379	14759
alpha-PVP	232.2 -> 91.0	11/28/2018 5:22 PM				232.2 -> 77.1					alpha-PVP-d8	5.884	1171...
Alprazolam	309.1 -> 281...	11/28/2018 5:22 PM				309.1 -> 205...					Alprazolam-D5	6.464	1086...
Amphetamine	136.1 -> 91.1	11/28/2018 5:22 PM	5.032	32969	63.52	136.1 -> 119...					Amphetamine-D11	4.951	83625
Cocaine	304.2 -> 182...	11/28/2018 5:22 PM				304.2 -> 105...					Cocaine-D3	5.853	2648...
Bupropion	240.1 -> 184...	11/28/2018 5:22 PM				240.1 -> 131...					Bupropion-D9	6.128	1430...
Carisoprodol	261.2 -> 176...	11/28/2018 5:22 PM				261.2 -> 55.3					Carisoprodol-D7	6.126	1777...
Citalopram	325.2 -> 109...	11/28/2018 5:22 PM				325.2 -> 262...					Citalopram-D6	6.195	4493...
Clonazepam	316.1 -> 269...	11/28/2018 5:22 PM				316.1 -> 213...					Clonazepam-D4	6.319	13567
Codaine	300.2 -> 215...	11/28/2018 5:22 PM				300.2 -> 165...					Codaine-D6	5.301	16342
Cyclobenzaprine	276.2 -> 214...	11/28/2018 5:22 PM				276.2 -> 231...					Cyclobenzaprine-D3	6.571	1663...
Dextromethorphan	272.2 -> 171...	11/28/2018 5:22 PM				272.2 -> 147...					Dextromethorphan-D3	6.288	67575
Dextrophan	258.2 -> 157...	11/28/2018 5:22 PM				258.2 -> 133...					Dextrophan-D3	5.616	1202...
Diazepam	285.1 -> 193...	11/28/2018 5:22 PM				285.1 -> 153...					Diazepam-D5	6.670	91388
Dihydrocodeine	302.2 -> 198...	11/28/2018 5:22 PM				302.2 -> 128...					Dihydrocodeine-D6	5.056	55494
Diphenhydramine	256.2 -> 167...	11/28/2018 5:22 PM				256.2 -> 152...					Diphenhydramine-D3	6.209	5372...
Doxylamine	271.2 -> 182...	11/28/2018 5:22 PM				271.2 -> 167...					Doxylamine-D5	5.838	3833...
EDDP	279.2 -> 235...	11/28/2018 5:22 PM				279.2 -> 250...					EDDP-D3	6.184	7957
Fentanyl	337.2 -> 105...	11/28/2018 5:22 PM				337.2 -> 188...					Fentanyl-D5	6.561	5458...
Fluoxetine	310.1 -> 44.3	11/28/2018 5:22 PM				310.1 -> 148...					Fluoxetine-D6	6.381	5519...
Hydrocodone	300.2 -> 198...	11/28/2018 5:22 PM				300.2 -> 128...					Hydrocodone-D6	5.526	94059
Hydromorphone	286.2 -> 184...	11/28/2018 5:22 PM				286.2 -> 157...					Hydromorphone-D6	4.818	34711
Ketamine	238.1 -> 125...	11/28/2018 5:22 PM				238.1 -> 220...					Ketamine-D4	6.108	2212...
Mirtazapine	266.2 -> 195...	11/28/2018 5:22 PM				266.2 -> 72.3					Tramadol-13C-D3	5.635	5047...
Mirtazapine	399.2 -> 238...	11/28/2018 5:22 PM				399.2 -> 174...					Tramadol-13C-D3	5.635	5047...
Meproamate	219.1 -> 158...	11/28/2018 5:22 PM				219.1 -> 97.1					Meproamate-D7	5.660	72834
Methadone	310.2 -> 265...	11/28/2018 5:22 PM				310.2 -> 105...					Methadone-D9	6.483	2897...
Methamphetamine	150.1 -> 91.1	11/28/2018 5:22 PM	5.173	66545		150.1 -> 119...	2.02	21864			Methamphetamine-D11	5.132	1831...
Morphine	286.2 -> 201...	11/28/2018 5:22 PM				286.2 -> 165...					Morphine-D6	4.537	1813
Norbuprenorphine	414.3 -> 101...	11/28/2018 5:22 PM				414.3 -> 57.3					Norbuprenorphine-D3	6.029	16780
Nordiazepam	271.1 -> 140...	11/28/2018 5:22 PM				271.1 -> 208...					Nordiazepam-D5	6.532	16460
Norfentanyl	233.2 -> 84.2	11/28/2018 5:22 PM				233.2 -> 55.3					Norfentanyl-D5	5.496	3605...
Norhydrocodone	286.2 -> 199...	11/28/2018 5:22 PM				286.2 -> 171...					Norhydrocodone-D3	5.143	28527
Noroxycodone	302.1 -> 284...	11/28/2018 5:22 PM				302.1 -> 186...					Noroxycodone-D3	5.057	61960
O-desmethyl-tramadol	250.2 -> 58.3	11/28/2018 5:22 PM				250.2 -> 42.3					O-desmethyl-tramadol...	5.088	4656...
Oxazepam	287.1 -> 240...	11/28/2018 5:22 PM				287.1 -> 268...					Oxazepam-D5	6.365	44456
Oxycodone	316.2 -> 298...	11/28/2018 5:22 PM				316.2 -> 241...					Oxycodone-D6	5.238	1226...
Oxymorphone	302.1 -> 284...	11/28/2018 5:22 PM				302.1 -> 227...					Oxymorphone-D3	4.512	1213...

re-injection of negative control

Compound Method		p1negative control		p1negative control Results				Qualifier 1 M...			Qualifier 1 Res...			ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	MI	S/N	Area	Name	RT	Resp.				
Phentermine	150.1 -> 65.2	11/28/2018 5:22 PM					150.1 -> 133...				Phentermine-D5	5.274	2796...				
Promethazine	285.1 -> 86.2	11/28/2018 5:22 PM					285.1 -> 71.3				Promethazine-D3	6.670	8770...				
Quetiapine	384.2 -> 253...	11/28/2018 5:22 PM					384.2 -> 221...				Quetiapine-D8	6.680	1925...				
Sertraline	306.1 -> 158...	11/28/2018 5:22 PM					306.1 -> 275...				Sertraline-D3	6.728	1475...				
Temazepam	301.1 -> 255...	11/28/2018 5:22 PM					301.1 -> 283...				Temazepam-D5	6.506	1354...				
Tramadol	264.2 -> 58.3	11/28/2018 5:22 PM					264.2 -> 43.3				Tramadol-13C-D3	5.635	5047...				
Trazodone	372.2 -> 176...	11/28/2018 5:22 PM					372.2 -> 148...				Trazodone-D6	6.843	6177...				
Venlafaxine	278.2 -> 58.3	11/28/2018 5:22 PM					278.2 -> 260...				Venlafaxine-D6	5.960	4587...				
Zolpidem	308.2 -> 235...	11/28/2018 5:22 PM					308.2 -> 263...				Zolpidem-D6	6.402	5993...				

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.
Acetylfentanyl	333.2 -> 188...	11/28/2018 3:35 PM	6.367	10996	65.39	333.2 -> 105...	50.43	17781	24546	Acetylfentanyl-D5	6.367	10546	
alpha-hydroxymidazolam	342.1 -> 324...	11/28/2018 3:35 PM	6.446	42692	178.81	342.1 -> 203...	329.61	24546	alpha-hydroxymidazolam-...	6.446	210555		
Amiripryline	278.2 -> 91.2	11/28/2018 3:35 PM	6.699	74556	43.49	278.2 -> 105...	∞	39173	Amiripryline-D3	6.677	236276		
Acetyl/norfentanyl	219.1 -> 84.2	11/28/2018 3:35 PM	5.060	6944	4143.22	219.1 -> 56.3	106.06	2304	Acetyl/norfentanyl-D5	5.038	367051		
Carbamazepine	237.1 -> 193...	11/28/2018 3:35 PM	6.157	18927	88.34	237.1 -> 194...	273.33	1882...	Carbamazepine-13C6	6.156	942339		
Chlordiazepoxide	300.1 -> 227...	11/28/2018 3:35 PM	6.573	17459	128.55	300.1 -> 282...	35.32	11695	Chlordiazepoxide-D5	6.573	142452		
Zopiclone	389.1 -> 244...	11/28/2018 3:35 PM	6.423	12943	121.86	389.1 -> 216...	25.77	6724	Zopiclone-D4	6.403	170797		
Sufentanil	387.2 -> 238...	11/28/2018 3:35 PM	6.948	18111	208.06	387.2 -> 111...	41.12	15185	Sufentanil-D5	6.927	702131		
Desipramine	267.2 -> 72.3	11/28/2018 3:35 PM	6.479	163845	231.41	267.2 -> 44.3	139.22	86759	Desipramine-D3	6.479	781974		
Doxepin	280.2 -> 107...	11/28/2018 3:35 PM	6.395	63551	270.45	280.2 -> 77.2	16.97	24880	Doxepin-D3	6.373	348716		
Estazolam	295.1 -> 267...	11/28/2018 3:35 PM	6.392	37534	160.16	295.1 -> 205...	2229...	31179	Estazolam-D5	6.391	184644		
Flunitrazepam	314.1 -> 268...	11/28/2018 3:35 PM	6.429	31763	148.59	314.1 -> 239...	29.80	11460	Flunitrazepam-D7	6.409	6721		
Flurazepam	388.2 -> 315...	11/28/2018 3:35 PM	6.586	101624	582.19	388.2 -> 317...	247.31	22049	Flurazepam-D4	6.403	170797		
Imipramine	281.2 -> 86.2	11/28/2018 3:35 PM	6.637	198572	587.96	281.2 -> 58.3	244.34	1115	Imipramine-D3	6.616	586523		
Levamisole	205.1 -> 91.2	11/28/2018 3:35 PM	5.469	35149	20.84	205.1 -> 178...	69.68	31283	Sufentanil-D5	6.927	702131		
Maprotiline	278.2 -> 91.2	11/28/2018 3:35 PM	6.497	33149	101.79	278.2 -> 117...	518.37	22358	Amiripryline-D3	6.677	236276		
MDA	180.1 -> 163...	11/28/2018 3:35 PM	5.146	48058	51.23	180.1 -> 105...	31.33	33125	MDA-D5	5.145	271508		
MDEA	208.1 -> 163...	11/28/2018 3:35 PM	5.427	86138	82.96	208.1 -> 105...	95.59	65152	MDEA-D6	5.426	374520		
MDMA	194.1 -> 163...	11/28/2018 3:35 PM	5.266	93333	79.11	194.1 -> 105...	35.72	58183	MDMA-D6	5.265	51400		
Meperidine	248.2 -> 220...	11/28/2018 3:35 PM	5.932	22979	47.81	248.2 -> 174...	27.81	14899	Meperidine-D4	5.911	125367		
Methylphenidate	234.2 -> 84.2	11/28/2018 3:35 PM	5.771	195655	411.93	234.2 -> 56.3	68.62	38997	Meperidine-D4	5.911	125367		
Midazolam	326.1 -> 223...	11/28/2018 3:35 PM	6.610	14585	248.19	326.1 -> 249...	1476...	12633	Midazolam-D4	6.609	248618		
Normeperidine	234.1 -> 42.3	11/28/2018 3:35 PM	5.772	50287	126.96	234.1 -> 160...	45.69	36544	Normeperidine-D4	5.771	174394		
7-Aminoflunitrazepam	284.1 -> 135...	11/28/2018 3:35 PM	5.783	23119	75.93	284.1 -> 93.2	2836...	7642	7-aminoflunitrazepam-D7	5.762	112022		
Nortriptyline	264.2 -> 91.2	11/28/2018 3:35 PM	6.500	23226	∞	264.2 -> 233...	∞	19602	Nortriptyline-D3	6.499	113412		
Phenazepam	349.0 -> 206...	11/28/2018 3:35 PM	6.486	27158	319.88	349.0 -> 183...	439.43	19196	Phenazepam-D4	6.486	10089		
Phencyclidine	244.2 -> 86.2	11/28/2018 3:35 PM	6.074	37248	71.40	244.2 -> 91.1	20.87	29547	Phencyclidine-D5	6.074	192679		
Phenylethylamine	253.1 -> 104...	11/28/2018 3:35 PM	6.073	3111	1043.28	253.1 -> 182...	15.07	2280	Phenylethylamine-D10	6.052	15074		
Pseudoephedrine	166.1 -> 148...	11/28/2018 3:35 PM	4.784	649189	318.24	166.1 -> 133...	70.86	1275...	Pseudoephedrine-D3	4.784	332487		
Tapentadol	222.2 -> 107...	11/28/2018 3:35 PM	5.629	110252	163.59	222.2 -> 121...	140.18	38897	Tapentadol-D3	5.629	573321		
Zaleplon	306.1 -> 236...	11/28/2018 3:35 PM	6.248	42619	385.24	306.1 -> 264...	111.26	28585	Zaleplon-D4	6.227	172056		

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.
Acetylfentanyl	323.2 -> 188...	11/28/2018 3:54 PM					323.2 -> 105...				Acetylfentanyl-D5	6.367	10338...
alpha-hydroxymidazolam	342.1 -> 324...	11/28/2018 3:54 PM					342.1 -> 203...				alpha-hydroxymidazolam-...	6.446	212728
Amtripyline	278.2 -> 91.2	11/28/2018 3:54 PM					278.2 -> 105...				Amtripyline-D3	6.677	189980
Acetylhorfentanyl	219.1 -> 84.2	11/28/2018 3:54 PM					219.1 -> 56.3				Acetylhorfentanyl-D5	5.038	361803
Carbamazepine	237.1 -> 193...	11/28/2018 3:54 PM					237.1 -> 194...				Carbamazepine-13C6	6.156	937418
Chlordiazepoxide	300.1 -> 227...	11/28/2018 3:54 PM					300.1 -> 282...				Chlordiazepoxide-D5	6.573	132990
Zopiclone	389.1 -> 244...	11/28/2018 3:54 PM					389.1 -> 216...				Zopiclone-D4	6.403	177531
Sufentanil	387.2 -> 238...	11/28/2018 3:54 PM					387.2 -> 111...				Sufentanil-D5	6.927	726759
Desipramine	267.2 -> 72.3	11/28/2018 3:54 PM					267.2 -> 44.3				Desipramine-D3	6.479	741203
Doxepin	280.2 -> 107...	11/28/2018 3:54 PM					280.2 -> 77.2				Doxepin-D3	6.373	317746
Estazolam	295.1 -> 267...	11/28/2018 3:54 PM					295.1 -> 205...				Estazolam-D5	6.391	192398
Flunitrazepam	314.1 -> 268...	11/28/2018 3:54 PM					314.1 -> 239...				Flunitrazepam-D7	6.409	6883
Flurazepam	388.2 -> 315...	11/28/2018 3:54 PM					388.2 -> 317...				Zopiclone-D4	6.403	177531
Imipramine	281.2 -> 86.2	11/28/2018 3:54 PM					281.2 -> 58.3				Imipramine-D3	6.616	498146
Levamisole	205.1 -> 91.2	11/28/2018 3:54 PM					205.1 -> 178...				Sufentanil-D5	6.927	726759
Maprotiline	278.2 -> 91.2	11/28/2018 3:54 PM					278.2 -> 117...				Amtripyline-D3	6.677	189980
MDA	180.1 -> 163...	11/28/2018 3:54 PM					180.1 -> 105...				MDA-D5	5.145	262960
MDEA	208.1 -> 163...	11/28/2018 3:54 PM					208.1 -> 105...				MDEA-D6	5.426	352886
MDMA	194.1 -> 163...	11/28/2018 3:54 PM					194.1 -> 105...				MDMA-D6	5.265	50629
Meperidine	248.2 -> 220...	11/28/2018 3:54 PM					248.2 -> 174...				Meperidine-D4	5.911	99385
Methylphenidate	234.2 -> 84.2	11/28/2018 3:54 PM					234.2 -> 56.3				Meperidine-D4	5.911	99385
Midazolam	326.1 -> 223...	11/28/2018 3:54 PM					326.1 -> 249...				Midazolam-D4	6.609	251862
Normeperidine	234.1 -> 42.3	11/28/2018 3:54 PM					234.1 -> 160...				Normeperidine-D4	5.771	152225
7-Aminoflunitrazepam	284.1 -> 135...	11/28/2018 3:54 PM					284.1 -> 93.2				7-aminoflunitrazepam-D7	5.762	107446
Nortriptyline	264.2 -> 91.2	11/28/2018 3:54 PM					264.2 -> 233...				Nortriptyline-D3	6.499	93686
Phenazepam	349.0 -> 206...	11/28/2018 3:54 PM					349.0 -> 183...				Phenazepam-D4	6.486	10867
Phencyclidine	244.2 -> 86.2	11/28/2018 3:54 PM					244.2 -> 91.1				Phencyclidine-D5	6.074	138653
Phenytol	253.1 -> 104...	11/28/2018 3:54 PM					253.1 -> 182...				Phenytol-D10	6.052	12302
Pseudoephedrine	166.1 -> 148...	11/28/2018 3:54 PM					166.1 -> 133...				Pseudoephedrine-D3	4.784	297540
Tapentadol	222.2 -> 107...	11/28/2018 3:54 PM					222.2 -> 121...				Tapentadol-D3	5.609	536811
Zaleplon	306.1 -> 236...	11/28/2018 3:54 PM					306.1 -> 264...				Zaleplon-D4	6.227	160715

Compound Method		p2 external control			p2 external 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.				
Acetyl/fentanyl	323.2 -> 188...	11/28/2018 4:14 PM					323.2 -> 105...				Acetyl/fentanyl-D5	6.367	10398...				
alpha-hydroxymidazolam	342.1 -> 324...	11/28/2018 4:14 PM					342.1 -> 203...				alpha-hydroxymidazolam-...	6.446	226761				
Amitriptyline	278.2 -> 91.2	11/28/2018 4:14 PM					278.2 -> 105...				Amitriptyline-D3	6.677	197301				
Acetyl/norfentanyl	219.1 -> 84.2	11/28/2018 4:14 PM					219.1 -> 56.3				Acetyl/norfentanyl-D5	5.038	346942				
Carbamazepine	237.1 -> 193...	11/28/2018 4:14 PM					237.1 -> 194...				Carbamazepine-13C6	6.156	914123				
Chlordiazepoxide	300.1 -> 227...	11/28/2018 4:14 PM					300.1 -> 282...				Chlordiazepoxide-D5	6.573	132425				
Zopiclone	389.1 -> 244...	11/28/2018 4:14 PM					389.1 -> 216...				Zopiclone-D4	6.403	134574				
Sufentanil	387.2 -> 238...	11/28/2018 4:14 PM					387.2 -> 111...				Sufentanil-D5	6.927	740221				
Desipramine	267.2 -> 72.3	11/28/2018 4:14 PM					267.2 -> 44.3				Desipramine-D3	6.479	754495				
Doxepin	280.2 -> 107...	11/28/2018 4:14 PM					280.2 -> 77.2				Doxepin-D3	6.373	309539				
Estazolam	295.1 -> 267...	11/28/2018 4:14 PM					295.1 -> 205...				Estazolam-D5	6.391	197815				
Flunitrazepam	314.1 -> 268...	11/28/2018 4:14 PM					314.1 -> 239...				Flunitrazepam-D7	6.409	6886				
Flurazepam	388.2 -> 315...	11/28/2018 4:14 PM					388.2 -> 317...				Zopiclone-D4	6.403	134574				
Imipramine	281.2 -> 86.2	11/28/2018 4:14 PM					281.2 -> 58.3				Imipramine-D3	6.616	506242				
Levamisole	205.1 -> 91.2	11/28/2018 4:14 PM					205.1 -> 178...				Sufentanil-D5	6.927	740221				
Maprotiline	278.2 -> 91.2	11/28/2018 4:14 PM					278.2 -> 117...				Amitriptyline-D3	6.677	197301				
MDA	180.1 -> 163...	11/28/2018 4:14 PM					180.1 -> 105...				MDA-D5	5.145	270553				
MDEA	208.1 -> 163...	11/28/2018 4:14 PM					208.1 -> 105...				MDEA-D6	5.426	369790				
MDMA	194.1 -> 163...	11/28/2018 4:14 PM					194.1 -> 105...				MDEA-D6	5.265	48594				
Meperidine	248.2 -> 220...	11/28/2018 4:14 PM					248.2 -> 174...				MDMA-D6	5.265	48594				
Methylphenidate	234.2 -> 84.2	11/28/2018 4:14 PM					234.2 -> 56.3				Meperidine-D4	5.911	110405				
Midazolam	326.1 -> 223...	11/28/2018 4:14 PM					326.1 -> 249...				Meperidine-D4	5.911	110405				
Normeperidine	234.1 -> 42.3	11/28/2018 4:14 PM					234.1 -> 160...				Midazolam-D4	6.609	253806				
7-Aminoflunitrazepam	284.1 -> 135...	11/28/2018 4:14 PM					284.1 -> 93.2				Normeperidine-D4	5.771	161692				
Nortriptyline	264.2 -> 91.2	11/28/2018 4:14 PM	6.520	261343			264.2 -> 233...				7-aminoflunitrazepam-D7	5.762	109850				
Phenazepam	349.0 -> 206...	11/28/2018 4:14 PM					349.0 -> 183...				Nortriptyline-D3	6.519	87227				
Phencyclidine	244.2 -> 86.2	11/28/2018 4:14 PM					244.2 -> 91.1				Phenazepam-D4	6.486	10654				
Phenylethanolamine	253.1 -> 104...	11/28/2018 4:14 PM					253.1 -> 182...				Phencyclidine-D5	6.074	144444				
Pseudoephedrine	166.1 -> 148...	11/28/2018 4:14 PM					166.1 -> 133...				Phenylethanolamine-D10	6.052	12665				
Tapentadol	222.2 -> 107...	11/28/2018 4:14 PM					222.2 -> 121...				Pseudoephedrine-D3	4.784	345086				
Zaleplon	306.1 -> 236...	11/28/2018 4:14 PM					306.1 -> 264...				Tapentadol-D3	5.629	540556				
											Zaleplon-D4	6.227	157063				

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

Extraction Date: 11/28/18

Analyst: Anne Nord

Plate lot#: 0539904

Plate Expiration: 09/10/2019

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

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

Blank Blood Lot: 18G20707

Column: Phenomenex Phenyl Hexyl (4.6x50mm: 2.6 um)

LCMS-QQQ ID: 62340

Pre-Analytic:

- 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- 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: k52558** 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: 112818 am 25-26 Batch Name: cann screen
- 2. Calculated sample concentration of 3 ng/mL or greater for THC and THC-OH, a calculated sample concentration of 10 ng/mL or greater for Carboxy-THC.
- 3. Retention time within +/- 2% or +/- .100 min whichever is greater of the average retention time of the calibrators.
- 4. Did all QCs pass for each analyte? Y / N
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: *THC-COOH curve 5-100*



ISP FORENSICS - Cd'A

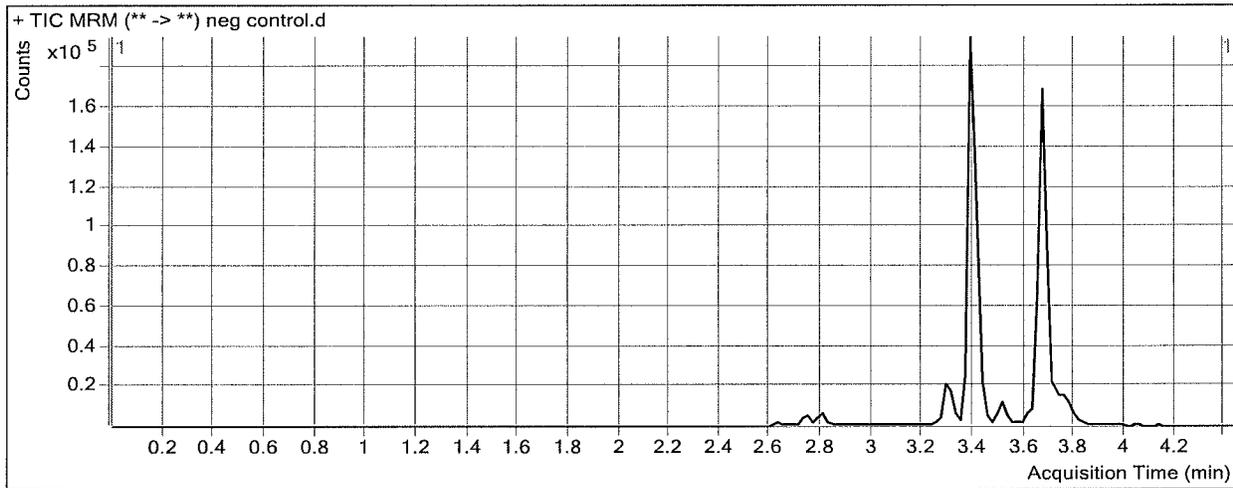
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 12/3/2018 10:00 AM **Analyst Name** ISP Tox
Report Time 12/3/2018 10:06 AM **Reporter Name** ISP Tox
Last Calib Update 12/3/2018 10:00 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-29 01:43 **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

Sample Chromatogram



ISP FORENSICS - Cd'A

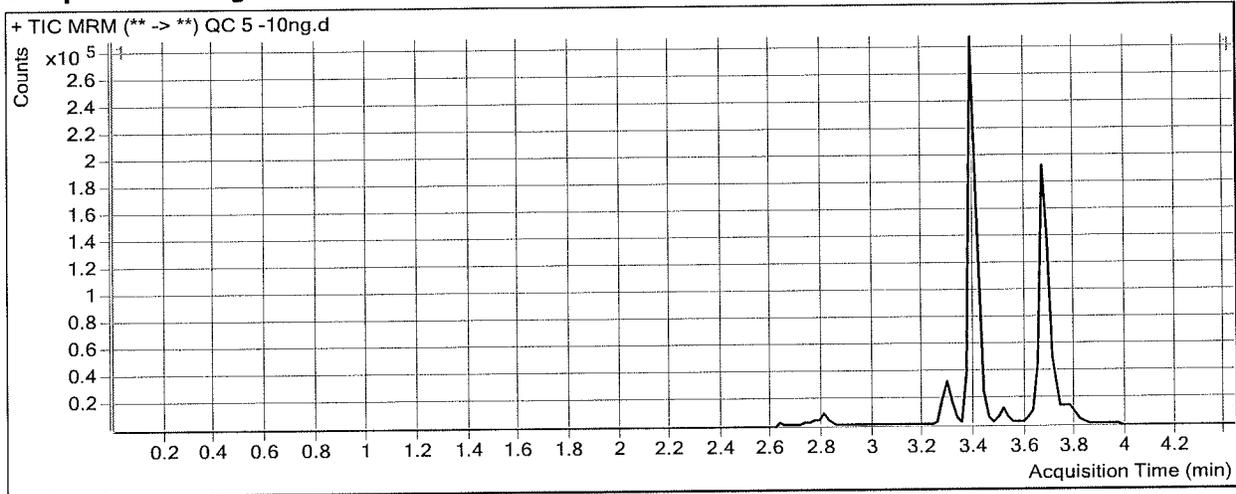
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 12/3/2018 10:00 AM **Analyst Name** ISP Tox
Report Time 12/3/2018 10:06 AM **Reporter Name** ISP Tox
Last Calib Update 12/3/2018 10:00 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-29 01:30 **Data File** QC 5 -10ng.d
Sample Type QC **Sample Name** QC 5 -10ng
Dilution 1 **Acq Method** Screen THC 8-2017.m
Position P1-H1 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen 5 ng THC, THC-OH, 10 ng C-TH

Sample Chromatogram



Results

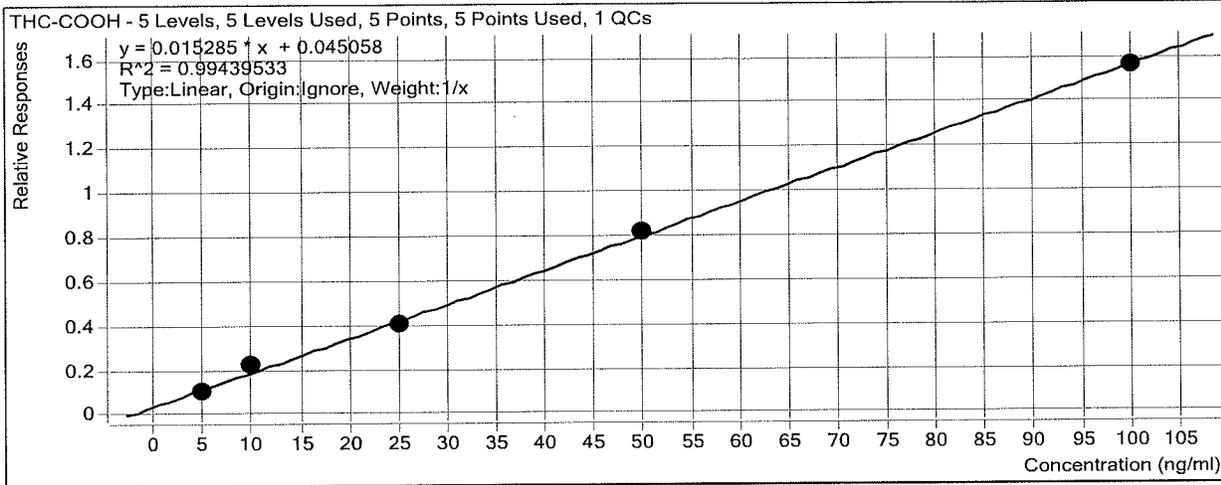
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.286	17957	74969	0.2395	12.7232
THC-OH	3.392	24799	599549	0.0414	5.3697
THC	3.760	622	13067	0.0476	4.9792

ISP Forensics Calibration Curve Report

Batch Data Path
Last Calib Update

D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
12/3/2018 11:34 AM **Analyst Name** ISP TOX

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



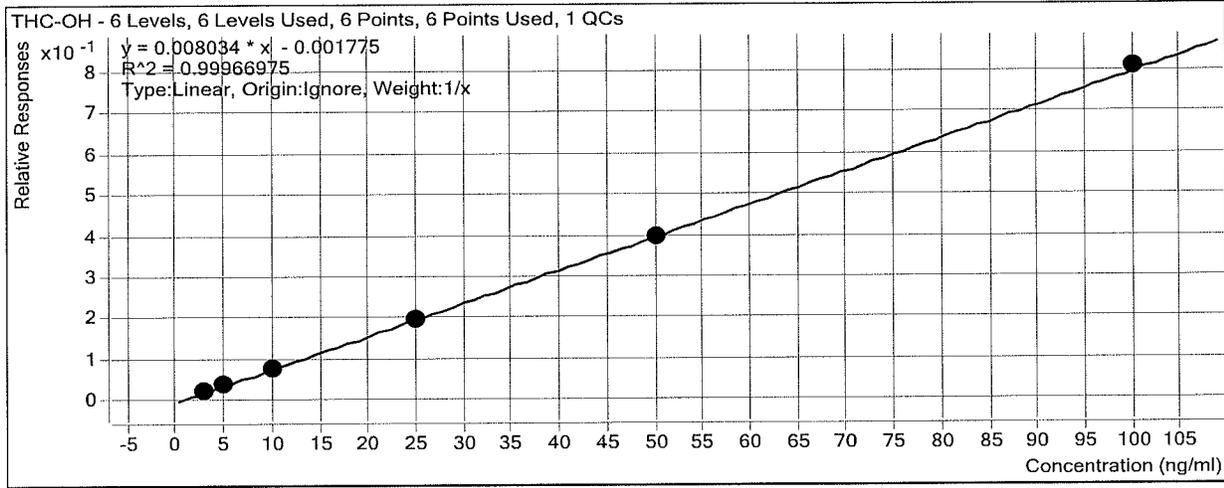
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input type="checkbox"/>	3	0.0	0.0
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	4.2	83.9
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	12.1	121.0
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	23.5	93.9
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	51.0	102.0
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	99.2	99.2
QC 5 - 10ng	7	<input type="checkbox"/>	10	12.7	127.2

ISP Forensics Calibration Curve Report

Batch Data Path
Last Calib Update

D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
12/3/2018 10:00 AM **Analyst Name** ISP TOX

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



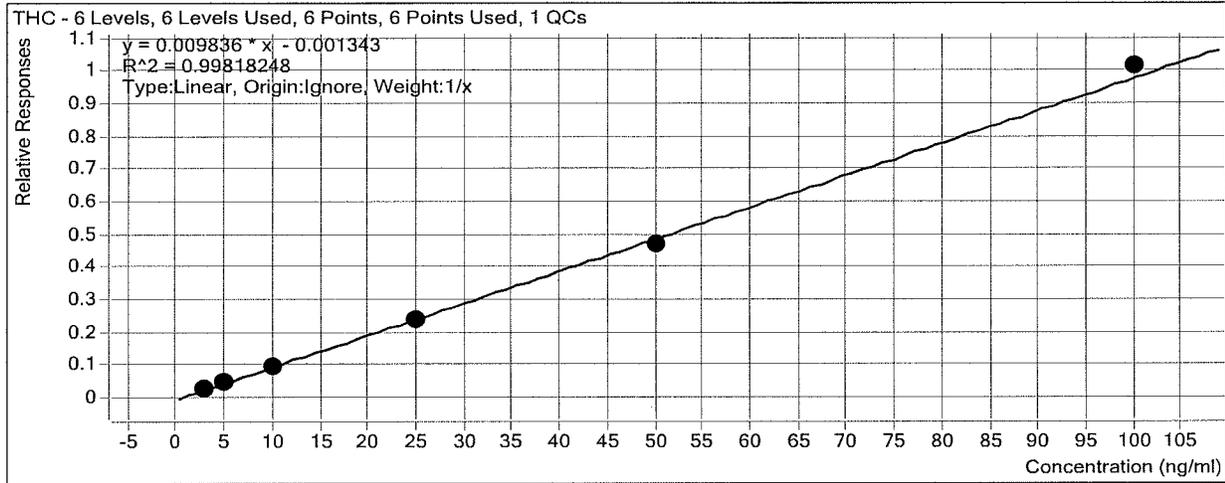
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input checked="" type="checkbox"/>	3	3.2	106.8
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	4.9	97.6
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	9.7	97.3
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	24.4	97.6
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	49.9	99.8
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	100.9	100.9
QC 5 - 10ng	7	<input type="checkbox"/>	5	5.4	107.4

ISP Forensics Calibration Curve Report

Batch Data Path
Last Calib Update

D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
12/3/2018 10:00 AM **Analyst Name** ISP TOX

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



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input checked="" type="checkbox"/>	3	3.1	103.3
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.2	104.2
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	9.7	97.5
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	24.1	96.5
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	47.7	95.3
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	103.2	103.2
QC 5 - 10ng	7	<input type="checkbox"/>	5	5.0	99.6

ISP FORENSICS - Cd'A

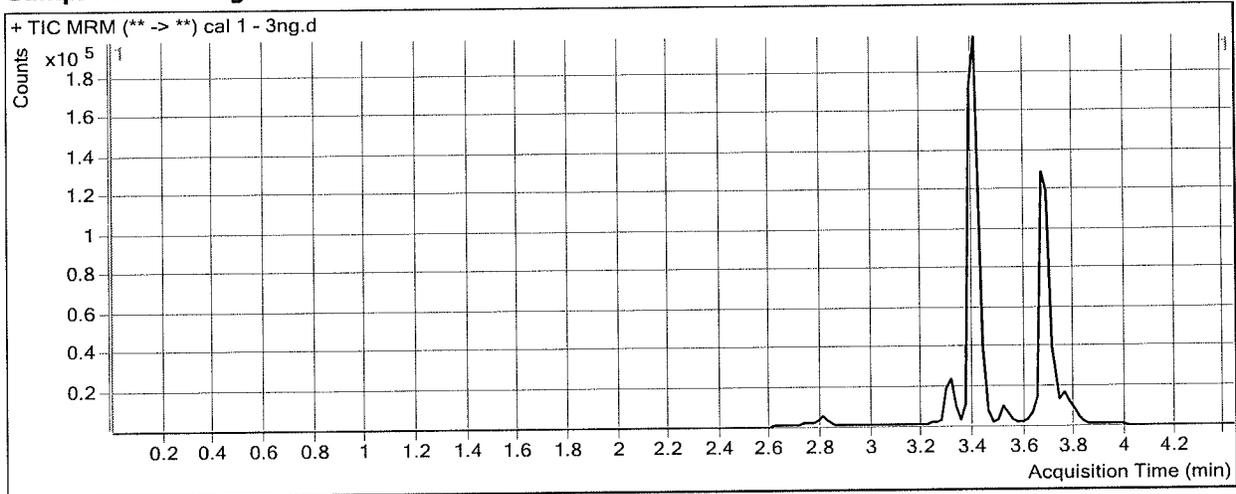
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 12/3/2018 10:00 AM **Analyst Name** ISP Tox
Report Time 12/3/2018 10:06 AM **Reporter Name** ISP Tox
Last Calib Update 12/3/2018 10:00 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-29 00:43 **Data File** cal 1 - 3ng.d
Sample Type Calibration **Sample Name** cal 1 - 3ng
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	3.412	11822	493096	0.0240	3.2054
THC	3.760	563	19313	0.0292	3.1002

ISP FORENSICS - Cd'A

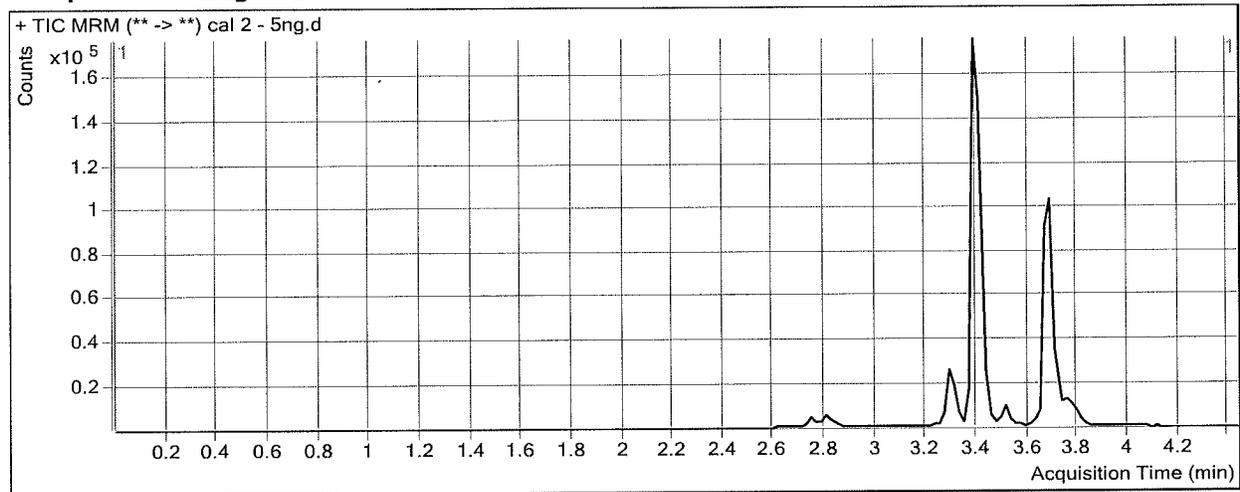
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 12/3/2018 10:00 AM **Analyst Name** ISP Tox
Report Time 12/3/2018 10:06 AM **Reporter Name** ISP Tox
Last Calib Update 12/3/2018 10:00 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-29 00:50 **Data File** cal 2 - 5ng.d
Sample Type Calibration **Sample Name** cal 2 - 5ng
Dilution 1 **Acq Method** Screen THC 8-2017.m
Position P1-C1 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	7144	65450	0.1091	4.1929
THC-OH	3.392	15869	423964	0.0374	4.8801
THC	3.760	696	13944	0.0499	5.2099

ISP FORENSICS - Cd'A

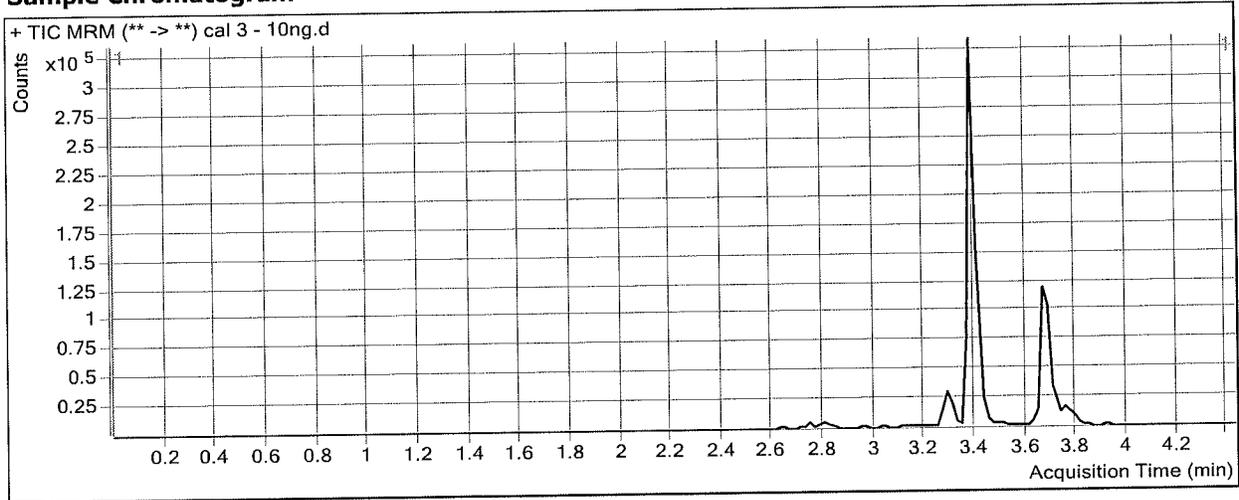
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 12/3/2018 10:00 AM **Analyst Name** ISP Tox
Report Time 12/3/2018 10:06 AM **Reporter Name** ISP Tox
Last Calib Update 12/3/2018 10:00 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-29 00:57 **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-d1 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	17016	73986	0.2300	12.0991
THC-OH	3.392	49613	649734	0.0764	9.7260
THC	3.760	1871	19796	0.0945	9.7457

ISP FORENSICS - Cd'A

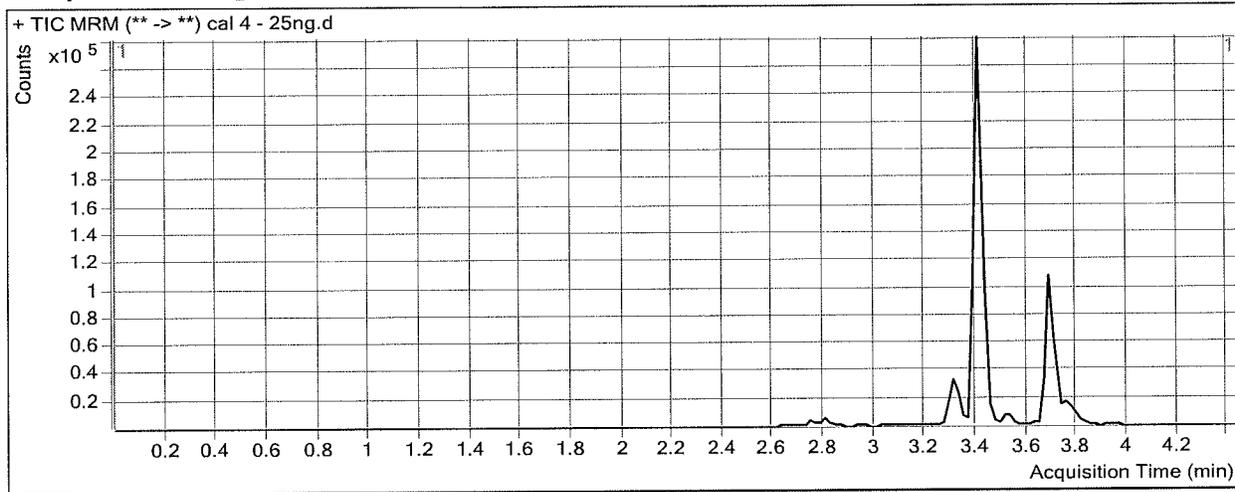
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 12/3/2018 10:00 AM **Analyst Name** ISP Tox
Report Time 12/3/2018 10:06 AM **Reporter Name** ISP Tox
Last Calib Update 12/3/2018 10:00 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-29 01:03 **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-E1 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.326	28098	69564	0.4039	23.4778
THC-OH	3.412	92853	477872	0.1943	24.4078
THC	3.760	4207	17822	0.2361	24.1358

ISP FORENSICS - Cd'A

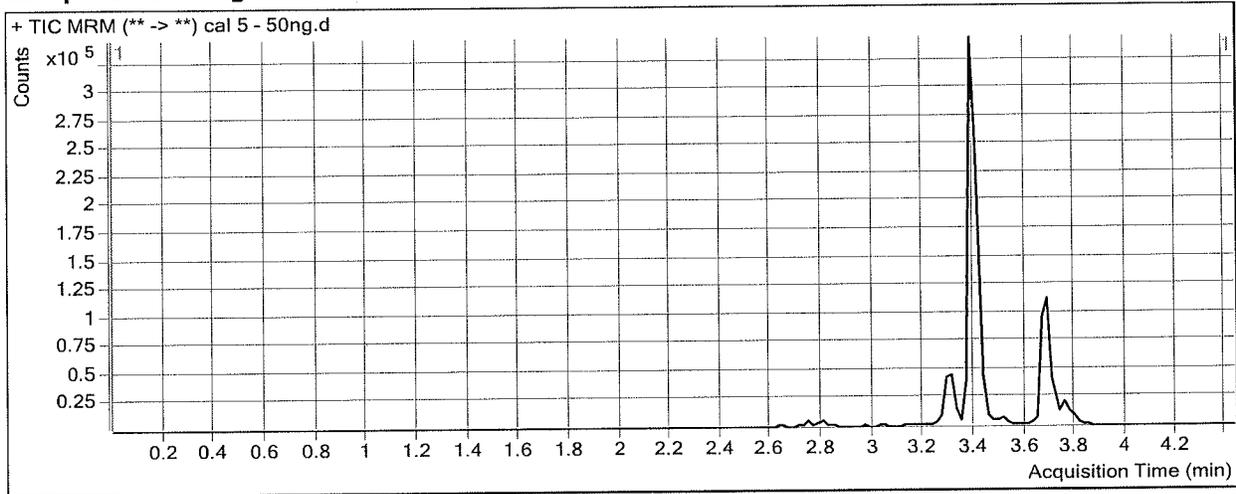
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 12/3/2018 10:00 AM **Analyst Name** ISP Tox
Report Time 12/3/2018 10:06 AM **Reporter Name** ISP Tox
Last Calib Update 12/3/2018 10:00 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-29 01:10 **Data File** cal 5 - 50ng.d
Sample Type Calibration **Sample Name** cal 5 - 50ng
Dilution 1 **Acq Method** Screen THC 8-2017.m
Position p1-f1 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	57999	70324	0.8247	51.0097
THC-OH	3.392	218764	548357	0.3989	49.8808
THC	3.760	8732	18682	0.4674	47.6531

ISP FORENSICS - Cd'A

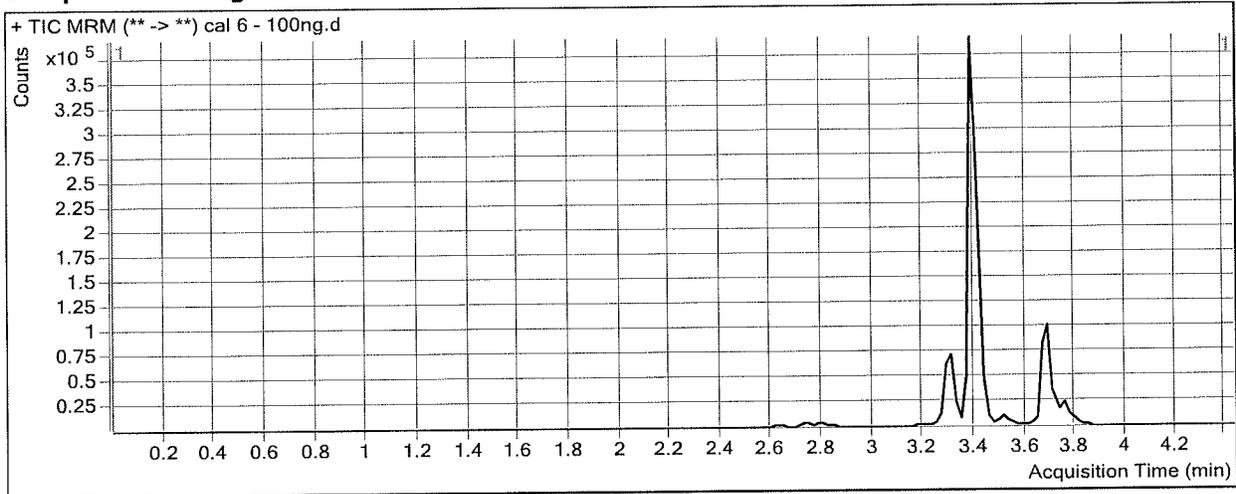
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\112818 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 12/3/2018 10:00 AM **Analyst Name** ISP Tox
Report Time 12/3/2018 10:06 AM **Reporter Name** ISP Tox
Last Calib Update 12/3/2018 10:00 AM **Batch State** Processed

Analysis Info

Acq Time 2018-11-29 01:16 **Data File** cal 6 - 100ng.d
Sample Type Calibration **Sample Name** cal 6 - 100ng
Dilution 1 **Acq Method** Screen THC 8-2017.m
Position P1-G1 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	109233	69948	1.5616	99.2205
THC-OH	3.392	379749	469517	0.8088	100.8999
THC	3.760	16677	16457	1.0133	103.1553