

B. Wylee

Worklist: 2516

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2018-1045	1	117236	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1046	1	117238	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1047	1	117242	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1062	1	117463	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1077	1	117643	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1081	1	117650	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1125	1	118106	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1136	1	118268	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1137	1	118270	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1181	1	118916	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1186	1	118999	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1197	2	119040	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
C2018-1206	1	119158	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
M2018-2765	2	117240	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
M2018-2862	3	118488	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
P2018-1667	1	118487	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	
P2018-1743	1	119584	AM 25/AM 26 Blood MultiDrug/THC Screen by LC	

[Handwritten signature]

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

Extraction Date: 6-25-18 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: 17J20718 **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 00.5M 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: 062518 AM 25-26 Worklist path: Mdq P1
Mdq P2
- 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. > 1/3 the response of administrative control.
- 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:



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 1-1a	p1 cal 1-1a Results	Qualifier 1 M...	Qualifier 1 Results	ISTD Method	ISTD Results						
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.
6-MAM	328.2 -> 165...	6/25/2018 11:17 AM	5.543	1559	5.26	328.2 -> 211...	6.31	1366	6-MAM-D6	334.2 -> 165...	5.502	50062
7-Aminoclonazepam	286.1 -> 121...	6/25/2018 11:17 AM	5.529	38978	100.71	286.1 -> 222...	243.97	23438	7-Aminoclonazepam-D4	290.1 -> 121...	5.507	177198
Benzoylcegonine	290.1 -> 168...	6/25/2018 11:17 AM	5.325	18593	84.22	290.1 -> 105...	39.33	11367	Benzoylcegonine-D8	298.2 -> 171...	5.304	6643
Metoprolol	268.2 -> 116...	6/25/2018 11:17 AM	5.573	29537	5915.39	268.2 -> 56.3	80.61	29018	Noroxycodone-D3	305.2 -> 287...	5.017	152837
a-hydroxyalprazolam	325.1 -> 297...	6/25/2018 11:17 AM	6.400	9579	39.25	325.1 -> 215...	41.49	5150	a-hydroxyalprazolam-D5	330.1 -> 302...	6.379	54704
Alprazolam	232.2 -> 91.0	6/25/2018 11:17 AM	6.068	144523	Infinity	232.2 -> 77.1	98.58	55800	Alprazolam-D8	240.2 -> 91.1	5.986	733293
Amphetamine	309.1 -> 281...	6/25/2018 11:17 AM	6.505	51846	7571.90	309.1 -> 205...	194.29	53070	Alprazolam-D5	314.1 -> 286...	6.484	225012
Cocaine	136.1 -> 91.1	6/25/2018 11:17 AM	4.972	104098	167.31	136.1 -> 119...	Infinity	60800	Amphetamine-D11	147.2 -> 130...	4.911	110141
Bupropion	304.2 -> 182...	6/25/2018 11:17 AM	5.976	159025	79.37	304.2 -> 105...	75.47	39825	Cocaine-D3	307.2 -> 185...	5.955	834807
Carisoprodol	240.1 -> 184...	6/25/2018 11:17 AM	6.291	155129	585.80	240.1 -> 131...	87.32	81064	Bupropion-D9	249.2 -> 185...	6.250	691650
Citalopram	261.2 -> 176...	6/25/2018 11:17 AM	6.127	73186	709.32	261.2 -> 55.3	71.96	66431	Carisoprodol-D7	268.2 -> 183...	6.126	448677
Clonazepam	325.2 -> 109...	6/25/2018 11:17 AM	6.277	201609	105.43	325.2 -> 262...	401.77	48451	Citalopram-D6	331.2 -> 109...	6.256	1004868
Codeine	316.1 -> 269...	6/25/2018 11:17 AM	6.340	23965	605.63	316.1 -> 213...	22.17	6427	Clonazepam-D4	320.1 -> 217...	6.319	38857
Cyclobenzaprine	300.2 -> 215...	6/25/2018 11:17 AM	5.548	10307	1885.95	300.2 -> 165...	78.50	8736	Codeine-D6	306.2 -> 218...	5.485	43508
Dextromethorphan	276.2 -> 214...	6/25/2018 11:17 AM	6.693	122879	212.05	276.2 -> 231...	70.73	38208	Cyclobenzaprine-D3	279.2 -> 215...	6.672	646375
Dextrophan	272.2 -> 171...	6/25/2018 11:17 AM	6.389	60580	53.10	272.2 -> 147...	626.92	58824	Dextromethorphan-D3	275.2 -> 171...	6.369	314136
Diazepam	258.2 -> 157...	6/25/2018 11:17 AM	5.616	46910	330.88	258.2 -> 133...	2716.84	28570	Dextrophan-D3	261.2 -> 157...	5.616	249465
Dihydrocodeine	285.1 -> 193...	6/25/2018 11:17 AM	6.711	44295	180.61	285.1 -> 153...	91.36	28773	Diazepam-D5	290.1 -> 198...	6.710	202141
Diphenhydramine	302.2 -> 198...	6/25/2018 11:17 AM	5.241	23512	22.57	302.2 -> 128...	33.74	15668	Dihydrocodeine-D6	308.2 -> 202...	5.178	137704
Doxylamine	256.2 -> 167...	6/25/2018 11:17 AM	6.290	309304	329.21	256.2 -> 152...	390.40	76886	Diphenhydramine-D3	259.2 -> 167...	6.270	1798470
EDDP	271.2 -> 182...	6/25/2018 11:17 AM	5.880	270128	156.65	271.2 -> 167...	Infinity	1844...	Doxylamine-D5	276.2 -> 187...	5.858	1524088
Fentanyl	279.2 -> 235...	6/25/2018 11:17 AM	6.205	239851	140.72	279.2 -> 250...	12824...	74541	EDDP-D3	282.2 -> 235...	6.205	107617
Fluoxetine	337.2 -> 105...	6/25/2018 11:17 AM	6.702	35435	33.10	337.2 -> 188...	282.85	23755	Fentanyl-D5	342.3 -> 105...	6.682	1745364
Hydrocodone	310.1 -> 44.3	6/25/2018 11:17 AM	6.444	289686	Infinity	310.1 -> 148...	121.85	9183	Fluoxetine-D6	316.2 -> 44.3	6.442	1477770
Hydromorphone	300.2 -> 198...	6/25/2018 11:17 AM	5.773	38264	Infinity	300.2 -> 128...	Infinity	20808	Hydrocodone-D6	306.2 -> 202...	5.710	225750
Ketamine	286.2 -> 184...	6/25/2018 11:17 AM	5.123	22104	124.50	286.2 -> 157...	Infinity	14720	Hydromorphone-D6	292.2 -> 185...	5.060	87339
Mirtazapine	238.1 -> 125...	6/25/2018 11:17 AM	6.231	112951	Infinity	238.1 -> 220...	15.81	37971	Ketamine-D4	242.1 -> 129...	6.230	505181
Meprobamate	266.2 -> 195...	6/25/2018 11:17 AM	6.615	230522	1161.86	266.2 -> 72.3	314.54	1640...	Tamadol-13C-D3	268.2 -> 58.3	5.635	1400073
Methadone	399.2 -> 238...	6/25/2018 11:17 AM	6.699	29121	280.43	399.2 -> 174...	215.40	66406	Tamadol-13C-D3	268.2 -> 58.3	5.635	1400073
Methamphetamine	219.1 -> 158...	6/25/2018 11:17 AM	5.620	23089	63.35	219.1 -> 97.1	107.64	22074	Meprobamate-D7	226.2 -> 165...	5.599	148625
Morphine	310.2 -> 265...	6/25/2018 11:17 AM	6.565	236055	265.72	310.2 -> 105...	125.56	2205...	Methadone-D9	319.3 -> 268...	6.544	1330636
Norbuprenorphine	150.1 -> 91.1	6/25/2018 11:17 AM	5.153	175126	Infinity	150.1 -> 119...	Infinity	63748	Methamphetamine-D11	161.2 -> 97.1	5.112	272059
Nordiazepam	286.2 -> 201...	6/25/2018 11:17 AM	4.901	5341	114.90	286.2 -> 165...	226.32	4084	Morphine-D6	292.2 -> 152...	4.818	3857
Norfentanyl	414.3 -> 101...	6/25/2018 11:17 AM	6.070	6227	30.06	414.3 -> 57.3	26.23	5865	Norbuprenorphine-D3	417.3 -> 101...	6.070	30584
Noroxycodone	271.1 -> 140...	6/25/2018 11:17 AM	6.573	26537	3973.42	271.1 -> 208...	110.57	15806	Nordiazepam-D5	276.1 -> 140...	6.572	85452
O-desmethyl-tramadol	233.2 -> 84.2	6/25/2018 11:17 AM	5.476	132390	1047.32	233.2 -> 55.3	38.83	51539	Norfentanyl-D5	238.2 -> 84.2	5.455	710507
Oxazepam	286.2 -> 199...	6/25/2018 11:17 AM	5.123	2851	319.13	286.2 -> 171...	Infinity	997	Noroxycodone-D3	289.2 -> 202...	5.123	64743
Oxycodone	302.1 -> 284...	6/25/2018 11:17 AM	5.018	24747	10.50	302.1 -> 186...	20.94	10815	O-desmethyl-tramadol...	305.2 -> 287...	5.017	152837
Oxymorphone	287.1 -> 240...	6/25/2018 11:17 AM	6.406	25247	53.66	287.1 -> 268...	10.38	13033	Oxazepam-D5	292.1 -> 246...	6.385	142649
Phentermine	316.2 -> 298...	6/25/2018 11:17 AM	5.463	58980	Infinity	316.2 -> 241...	3223.32	17663	Oxycodone-D6	322.2 -> 304...	5.401	332329
Promethazine	302.1 -> 284...	6/25/2018 11:17 AM	4.775	65789	464.87	302.1 -> 227...	4460.92	15706	Oxymorphone-D3	305.2 -> 287...	4.713	338232
Quetiapine	150.1 -> 65.2	6/25/2018 11:17 AM	5.274	29231	11.35	150.1 -> 133...	Infinity	601	Phentermine-D5	155.2 -> 96.2	5.254	327356
	285.1 -> 86.2	6/25/2018 11:17 AM	6.834	459407	1775.13	285.1 -> 71.3	171.45	1073...	Promethazine-D3	288.2 -> 89.2	6.813	2752252
	384.2 -> 253...	6/25/2018 11:17 AM	6.741	260830	24232...	384.2 -> 221...	48939...	1456...	Quetiapine-D8	392.2 -> 226...	6.740	367945

Compound Method	p1 cal 1-1a			p1 cal 1-1a Results			ISTD Method			ISTD Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.
Setraline	306.1 -> 158...	6/25/2018 11:17 AM	6.831	74310	117.25	306.1 -> 275...	18702...	74350	Setraline-D3	309.1 -> 275...	6.810	418363
Temazepam	301.1 -> 255...	6/25/2018 11:17 AM	6.548	92397	578.47	301.1 -> 283...	21.77	34543	Temazepam-D5	306.1 -> 260...	6.527	515166
Tramadol	264.2 -> 58.3	6/25/2018 11:17 AM	5.656	277352	144.07	264.2 -> 43.3	11.69	10464	Tramadol-13C-D3	268.2 -> 58.3	5.635	1400073
Trazodone	372.2 -> 176...	6/25/2018 11:17 AM	6.904	238047	855.20	372.2 -> 148...	297.85	1707...	Trazodone-D6	378.2 -> 182...	6.884	1106525
Venlafaxine	278.2 -> 58.3	6/25/2018 11:17 AM	5.981	283728	190.78	278.2 -> 260...	28.56	48276	Venlafaxine-D6	284.2 -> 64.3	5.960	1326473
Zolpidem	308.2 -> 235...	6/25/2018 11:17 AM	6.445	244260	Infinity	308.2 -> 263...	22954...	92374	Zolpidem-D6	314.2 -> 235...	6.443	1401123

Compound Method			p1 negative			p1 negative Results			ISTD Method			ISTD Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Qualifier 1 M...	S/N	Area	Name	Transition	RT	Resp.		
6-MAM	328.2 -> 165...	6/25/2018 11:36 AM				328.2 -> 211...			6-MAM-D6	334.2 -> 165...	5.502	56915		
7-aminoclonazepam	286.1 -> 121...	6/25/2018 11:36 AM				286.1 -> 222...			7-Aminoclonazepam-D4	290.1 -> 121...	5.507	190899		
Benzylecgonine	290.1 -> 168...	6/25/2018 11:36 AM				290.1 -> 105...			Benzylecgonine-D8	298.2 -> 171...	5.304	7395		
Metoprolol	268.2 -> 116...	6/25/2018 11:36 AM				268.2 -> 56.3			Noroxycodone-D3	305.2 -> 287...	5.017	179899		
a-hydroxyalprazolam	325.1 -> 297...	6/25/2018 11:36 AM				325.1 -> 215...			a-hydroxyalprazolam-D5	330.1 -> 302...	6.379	62221		
alpha-PVP	232.2 -> 91.0	6/25/2018 11:36 AM				232.2 -> 77.1			alpha-PVP-d8	240.2 -> 91.1	5.986	741898		
Alprazolam	309.1 -> 281...	6/25/2018 11:36 AM				309.1 -> 205...			Alprazolam-D5	314.1 -> 286...	6.484	264888		
Amphetamine	136.1 -> 91.1	6/25/2018 11:36 AM	4.931	15432	5.53	136.1 -> 119...			Amphetamine-D11	147.2 -> 130...	4.911	121330		
Cocaine	304.2 -> 182...	6/25/2018 11:36 AM				304.2 -> 105...			Cocaine-D3	307.2 -> 185...	5.955	828914		
Bupropion	240.1 -> 184...	6/25/2018 11:36 AM				240.1 -> 131...			Bupropion-D9	249.2 -> 185...	6.250	814893		
Carisoprodol	261.2 -> 176...	6/25/2018 11:36 AM				261.2 -> 55.3			Carisoprodol-D7	268.2 -> 183...	6.126	462024		
Citalopram	325.2 -> 109...	6/25/2018 11:36 AM				325.2 -> 262...			Citalopram-D6	331.2 -> 109...	6.256	11332...		
Clonazepam	316.1 -> 269...	6/25/2018 11:36 AM				316.1 -> 213...			Clonazepam-D4	320.1 -> 217...	6.319	44188		
Codeine	300.2 -> 215...	6/25/2018 11:36 AM				300.2 -> 165...			Codeine-D6	306.2 -> 218...	5.485	45770		
Cyclobenzaprine	276.2 -> 214...	6/25/2018 11:36 AM				276.2 -> 231...			Cyclobenzaprine-D3	279.2 -> 215...	6.672	682675		
Dextromethorphan	272.2 -> 171...	6/25/2018 11:36 AM				272.2 -> 147...			Dextromethorphan-D3	275.2 -> 171...	6.369	330564		
Dextropropofol	258.2 -> 157...	6/25/2018 11:36 AM				258.2 -> 133...			Dextropropofol-D3	261.2 -> 157...	5.616	263166		
Diazepam	285.1 -> 193...	6/25/2018 11:36 AM				285.1 -> 153...			Diazepam-D5	290.1 -> 198...	6.710	214238		
Dihydrocodeine	302.2 -> 198...	6/25/2018 11:36 AM				302.2 -> 128...			Dihydrocodeine-D6	308.2 -> 202...	5.178	143422		
Diphenhydramine	256.2 -> 167...	6/25/2018 11:36 AM				256.2 -> 152...			Diphenhydramine-D3	259.2 -> 167...	6.270	19768...		
Doxylamine	271.2 -> 182...	6/25/2018 11:36 AM				271.2 -> 167...			Doxylamine-D5	276.2 -> 187...	5.858	15086...		
EDDP	279.2 -> 235...	6/25/2018 11:36 AM				279.2 -> 250...			EDDP-D3	282.2 -> 235...	6.205	118985		
Fentanyl	337.2 -> 105...	6/25/2018 11:36 AM				337.2 -> 188...			Fentanyl-D5	342.3 -> 105...	6.682	18038...		
Fluoxetine	310.1 -> 44.3	6/25/2018 11:36 AM				310.1 -> 148...			Fluoxetine-D6	316.2 -> 44.3	6.442	15892...		
Hydrocodone	300.2 -> 198...	6/25/2018 11:36 AM				300.2 -> 128...			Hydrocodone-D6	306.2 -> 202...	5.710	243852		
Hydromorphone	286.2 -> 184...	6/25/2018 11:36 AM				286.2 -> 157...			Hydromorphone-D6	292.2 -> 185...	5.060	93988		
Ketamine	238.1 -> 125...	6/25/2018 11:36 AM				238.1 -> 220...			Ketamine-D4	242.1 -> 129...	6.230	534120		
Miltazapine	266.2 -> 195...	6/25/2018 11:36 AM				266.2 -> 72.3			Tramadol-13C-D3	268.2 -> 58.3	5.635	14106...		
Miltazapine	399.2 -> 238...	6/25/2018 11:36 AM				399.2 -> 174...			Tramadol-13C-D3	268.2 -> 58.3	5.635	14106...		
Miltazapine	219.1 -> 158...	6/25/2018 11:36 AM				219.1 -> 97.1			Meproamate-D7	226.2 -> 165...	5.599	151777		
Meproamate	310.2 -> 265...	6/25/2018 11:36 AM				310.2 -> 105...			Methadone-D9	319.3 -> 268...	6.544	13757...		
Methadone	150.1 -> 91.1	6/25/2018 11:36 AM	5.173	123821	Infinity	150.1 -> 119...	Infinity...	46647	Methamphetamine-D11	161.2 -> 97.1	5.112	286944		
Methamphetamine	286.2 -> 201...	6/25/2018 11:36 AM				286.2 -> 165...			Morphine-D6	292.2 -> 152...	4.818	5420		
Morphine	414.3 -> 101...	6/25/2018 11:36 AM				414.3 -> 57.3			Norbuprenorphine-D3	417.3 -> 101...	6.090	32298		
Norbuprenorphine	271.1 -> 140...	6/25/2018 11:36 AM				271.1 -> 208...			Nordiazepam-D5	276.1 -> 140...	6.552	91096		
Nordiazepam	233.2 -> 84.2	6/25/2018 11:36 AM				233.2 -> 55.3			Norfentanyl-D5	238.2 -> 84.2	5.455	760937		
Norfentanyl	286.2 -> 199...	6/25/2018 11:36 AM				286.2 -> 171...			Northydrocodone-D3	289.2 -> 202...	5.123	64737		
Northydrocodone	302.1 -> 284...	6/25/2018 11:36 AM				302.1 -> 186...			Noroxycodone-D3	305.2 -> 287...	5.017	179899		
Noroxycodone	250.2 -> 58.3	6/25/2018 11:36 AM				250.2 -> 42.3			O-desmethyl-tramadol-...	256.2 -> 64.3	5.047	995588		
O-desmethyl-tramadol	287.1 -> 240...	6/25/2018 11:36 AM				287.1 -> 268...			Oxazepam-D5	292.1 -> 246...	6.385	169395		
Oxazepam	316.2 -> 298...	6/25/2018 11:36 AM				316.2 -> 241...			Oxycodone-D6	322.2 -> 304...	5.381	344507		
Oxycodone	302.1 -> 284...	6/25/2018 11:36 AM				302.1 -> 227...			Oxymorphone-D3	305.2 -> 287...	4.713	363643		
Oxymorphone	150.1 -> 65.2	6/25/2018 11:36 AM				150.1 -> 133...			Phentermine-D5	155.2 -> 96.2	5.254	334860		
Phentermine	285.1 -> 86.2	6/25/2018 11:36 AM				285.1 -> 71.3			Promethazine-D3	288.2 -> 89.2	6.813	28786...		
Promethazine	384.2 -> 253...	6/25/2018 11:36 AM				384.2 -> 221...			Quetiapine-D8	392.2 -> 226...	6.740	384691		

Compound Method		p1 negative		p1 negative Results			Qualifier 1 M...			Qualifier 1 Re..			ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.	Name	Transition	RT	Resp.
Sertraline	306.1 -> 158...	6/25/2018 11:36 AM				306.1 -> 275...			Sertraline-D3	309.1 -> 275...	6.810	428645				
Temazepam	301.1 -> 255...	6/25/2018 11:36 AM				301.1 -> 283...			Temazepam-D5	306.1 -> 260...	6.527	573436				
Tramadol	264.2 -> 58.3	6/25/2018 11:36 AM				264.2 -> 43.3			Tramadol-13C-D3	268.2 -> 58.3	5.635	14106...				
Trazodone	372.2 -> 176...	6/25/2018 11:36 AM				372.2 -> 148...			Trazodone-D6	378.2 -> 182...	6.884	11848...				
Venlafaxine	278.2 -> 58.3	6/25/2018 11:36 AM				278.2 -> 260...			Venlafaxine-D6	284.2 -> 64.3	5.960	13153...				
Zolpidem	308.2 -> 235...	6/25/2018 11:36 AM				308.2 -> 263...			Zolpidem-D6	314.2 -> 235...	6.443	14030...				

Compound Method			p1 external control			p1 external control Results			Qualifier 1 M...			Qualifier 1 Resul...			ISTD Method			ISTD Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.								
6-MAM	328.2 -> 165...	6/25/2018 11:55 AM				328.2 -> 211...			6-MAM-D6	334.2 -> 165...	5.502	57338								
7-Aminoclonazepam	286.1 -> 121...	6/25/2018 11:55 AM				286.1 -> 222...			7-Aminoclonazepam-D4	290.1 -> 121...	5.507	152829								
Benzoylcegonine	290.1 -> 168...	6/25/2018 11:55 AM				290.1 -> 105...			Benzoylcegonine-D8	298.2 -> 171...	5.304	5666								
Metoprolol	268.2 -> 116...	6/25/2018 11:55 AM				268.2 -> 56.3			Noroxycodone-D3	305.2 -> 287...	5.017	174427								
a-hydroxyalprazolam	325.1 -> 297...	6/25/2018 11:55 AM				325.1 -> 215...			a-hydroxyalprazolam-D5	330.1 -> 302...	6.379	55283								
alpha-PVP	232.2 -> 91.0	6/25/2018 11:55 AM				232.2 -> 77.1			alpha-PVP-d8	240.2 -> 91.1	5.986	766530								
Alprazolam	309.1 -> 281...	6/25/2018 11:55 AM				309.1 -> 205...			Alprazolam-D5	314.1 -> 286...	6.484	261651								
Amphetamine	136.1 -> 91.1	6/25/2018 11:55 AM	4.931	24962	4.97	136.1 -> 119...			Amphetamine-D11	147.2 -> 130...	4.931	111849								
Cocaine	304.2 -> 182...	6/25/2018 11:55 AM				304.2 -> 105...			Cocaine-D3	307.2 -> 185...	5.955	833252								
Bupropion	240.1 -> 184...	6/25/2018 11:55 AM				240.1 -> 131...			Bupropion-D9	249.2 -> 185...	6.250	755300								
Carisoprodol	261.2 -> 176...	6/25/2018 11:55 AM				261.2 -> 55.3			Carisoprodol-D7	268.2 -> 183...	6.126	459691								
Citalopram	325.2 -> 109...	6/25/2018 11:55 AM				325.2 -> 262...			Citalopram-D6	331.2 -> 109...	6.256	10434...								
Clonazepam	316.1 -> 269...	6/25/2018 11:55 AM				316.1 -> 213...			Clonazepam-D4	320.1 -> 217...	6.319	41663								
Codeine	300.2 -> 215...	6/25/2018 11:55 AM	5.752	12561	169.19	300.2 -> 165...	3862...	35128	Codeine-D6	306.2 -> 218...	5.505	43970								
Cyclobenzaprine	276.2 -> 214...	6/25/2018 11:55 AM				276.2 -> 231...			Cyclobenzaprine-D3	279.2 -> 215...	6.672	666422								
Dextromethorphan	272.2 -> 171...	6/25/2018 11:55 AM				272.2 -> 147...			Dextromethorphan-D3	275.2 -> 171...	6.369	316570								
Dextropropriphan	258.2 -> 157...	6/25/2018 11:55 AM				258.2 -> 133...			Dextropropriphan-D3	261.2 -> 157...	5.616	271915								
Diazepam	285.1 -> 193...	6/25/2018 11:55 AM				285.1 -> 153...			Diazepam-D5	290.1 -> 198...	6.710	210305								
Dihydrocodeine	302.2 -> 198...	6/25/2018 11:55 AM				302.2 -> 128...			Dihydrocodeine-D6	308.2 -> 202...	5.199	138827								
Diphenhydramine	256.2 -> 167...	6/25/2018 11:55 AM				256.2 -> 152...			Diphenhydramine-D3	259.2 -> 167...	6.270	18438...								
Doxylamine	271.2 -> 182...	6/25/2018 11:55 AM				271.2 -> 167...			Doxylamine-D5	276.2 -> 187...	5.858	16435...								
EDDP	279.2 -> 235...	6/25/2018 11:55 AM				279.2 -> 250...			EDDP-D3	282.2 -> 235...	6.205	120248								
Fentanyl	337.2 -> 105...	6/25/2018 11:55 AM				337.2 -> 188...			Fentanyl-D5	342.3 -> 105...	6.682	17991...								
Fluoxetine	310.1 -> 44.3	6/25/2018 11:55 AM				310.1 -> 148...			Fluoxetine-D6	316.2 -> 44.3	6.442	15722...								
Hydrocodone	300.2 -> 198...	6/25/2018 11:55 AM	5.752	422424	Infinity	300.2 -> 128...	Infinity	1783...	Hydrocodone-D6	306.2 -> 202...	5.710	238949								
Hydromorphone	286.2 -> 184...	6/25/2018 11:55 AM	5.123	219157	669.19	286.2 -> 157...	741.00	1520...	Hydromorphone-D6	292.2 -> 185...	5.060	80484								
Ketamine	238.1 -> 125...	6/25/2018 11:55 AM				238.1 -> 220...			Ketamine-D4	242.1 -> 129...	6.230	528126								
Miltazapine	266.2 -> 195...	6/25/2018 11:55 AM				266.2 -> 72.3			Tramadol-13C-D3	268.2 -> 58.3	5.635	14970...								
Miltazapine	399.2 -> 238...	6/25/2018 11:55 AM				399.2 -> 174...			Tramadol-13C-D3	268.2 -> 58.3	5.635	14970...								
Miltazapine	219.1 -> 158...	6/25/2018 11:55 AM				219.1 -> 97.1			Meprobamate-D7	226.2 -> 165...	5.599	152857								
Meprobamate	310.2 -> 265...	6/25/2018 11:55 AM				310.2 -> 105...			Methadone-D9	319.3 -> 268...	6.544	13324...								
Methadone	150.1 -> 91.1	6/25/2018 11:55 AM	5.173	130532	Infinity	150.1 -> 119...	202.66	48192	Methamphetamine-D11	161.2 -> 97.1	5.112	366182								
Methamphetamine	286.2 -> 201...	6/25/2018 11:55 AM				286.2 -> 165...			Morphine-D6	292.2 -> 152...	4.798	3437								
Morphine	414.3 -> 101...	6/25/2018 11:55 AM				414.3 -> 57.3			Norbuprenorphine-D3	417.3 -> 101...	6.070	31970								
Norbuprenorphine	271.1 -> 140...	6/25/2018 11:55 AM				271.1 -> 208...			Nordiazepam-D5	276.1 -> 140...	6.552	89141								
Nordiazepam	233.2 -> 84.2	6/25/2018 11:55 AM				233.2 -> 55.3			Norfentanyl-D5	238.2 -> 84.2	5.455	692132								
Norfentanyl	286.2 -> 199...	6/25/2018 11:55 AM	5.123	8824	8.44	286.2 -> 171...	15.04	6044	Norhydrocodone-D3	289.2 -> 202...	5.123	61539								
Norhydrocodone	302.1 -> 284...	6/25/2018 11:55 AM				302.1 -> 186...			Noroxycodone-D3	305.2 -> 287...	5.017	174427								
Noroxycodone	250.2 -> 58.3	6/25/2018 11:55 AM				250.2 -> 42.3			O-desmethyl-tramadol...	256.2 -> 64.3	5.047	982275								
O-desmethyl-tramadol	287.1 -> 240...	6/25/2018 11:55 AM				287.1 -> 268...			Oxazepam-D5	292.1 -> 246...	6.385	163839								
Oxazepam	316.2 -> 298...	6/25/2018 11:55 AM				316.2 -> 241...			Oxycodone-D6	322.2 -> 304...	5.401	323607								
Oxycodone	302.1 -> 284...	6/25/2018 11:55 AM				302.1 -> 227...			Oxymorphone-D3	305.2 -> 287...	4.713	332372								
Oxymorphone	150.1 -> 65.2	6/25/2018 11:55 AM				150.1 -> 133...			Phentermine-D5	155.2 -> 96.2	5.254	387083								
Phentermine	285.1 -> 86.2	6/25/2018 11:55 AM				285.1 -> 71.3			Promethazine-D3	288.2 -> 89.2	6.813	28388...								
Promethazine	384.2 -> 253...	6/25/2018 11:55 AM				384.2 -> 221...			Quetiapine-D8	392.2 -> 226...	6.740	359395								

Norhydrocodone coming out at same time as hydromorphone - reaction from hydromorphone.



Compound Method		p1 external control		p1 external control Results		Qualifier 1 M...		Qualifier 1 Resul...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.	
Sertraline	306.1 -> 158...	6/25/2018 11:55 AM	6.831	779233	2526.53	306.1 -> 275...	2205...	7649...	Sertraline-D3	309.1 -> 275...	6.810	410761	
Temazepam	301.1 -> 255...	6/25/2018 11:55 AM				301.1 -> 283...			Temazepam-D5	306.1 -> 260...	6.527	549509	
Tramadol	264.2 -> 58.3	6/25/2018 11:55 AM				264.2 -> 43.3			Tramadol-13C-D3	268.2 -> 58.3	5.635	14970...	
Trazodone	372.2 -> 176...	6/25/2018 11:55 AM				372.2 -> 148...			Trazodone-D6	378.2 -> 182...	6.884	11450...	
Venlafaxine	278.2 -> 58.3	6/25/2018 11:55 AM				278.2 -> 260...			Venlafaxine-D6	284.2 -> 64.3	5.960	13750...	
Zolpidem	308.2 -> 235...	6/25/2018 11:55 AM				308.2 -> 263...			Zolpidem-D6	314.2 -> 235...	6.443	13568...	

Compound Method			p2 negative			p2 negative Results			ISTD Method			ISTD Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Qualifier 1 M...	Qualifier..	Name	Transition	RT	Resp.			
Acetyl/fentanyl	323.2 -> 188...	6/25/2018 11:46 AM				323.2 -> 105...		Acetyl/fentanyl-D5	328.2 -> 105...	6.508	21636...			
alpha-hydroxymidazolam	342.1 -> 324...	6/25/2018 11:46 AM				342.1 -> 203...		alpha-hydroxymidazolam...	346.1 -> 328...	6.466	426773			
Amiripryline	278.2 -> 91.2	6/25/2018 11:46 AM				278.2 -> 105...		Amiripryline-D3	281.2 -> 91.2	6.798	668767			
Acetylnorfentanyl	219.1 -> 84.2	6/25/2018 11:46 AM				219.1 -> 56.3		Acetylnorfentanyl-D5	224.2 -> 84.2	4.977	524562			
Carbamazepine	237.1 -> 193...	6/25/2018 11:46 AM				237.1 -> 194...		Carbamazepine-13C6	243.1 -> 200...	6.136	13875...			
Chlordiazepoxide	300.1 -> 227...	6/25/2018 11:46 AM				300.1 -> 282...		Chlordiazepoxide-D5	305.1 -> 286...	6.593	372195			
Sufentanil	387.2 -> 238...	6/25/2018 11:46 AM				387.2 -> 111...		Sufentanil-D5	392.2 -> 238...	7.008	12088...			
Desipramine	267.2 -> 72.3	6/25/2018 11:46 AM				267.2 -> 44.3		Desipramine-D3	270.2 -> 75.3	6.539	16015...			
Doxepin	280.2 -> 107...	6/25/2018 11:46 AM				280.2 -> 77.2		Doxepin-D3	283.2 -> 107...	6.495	800630			
Estazolam	295.1 -> 267...	6/25/2018 11:46 AM				295.1 -> 205...		Estazolam-D5	300.1 -> 272...	6.391	405675			
Flunitrazepam	314.1 -> 268...	6/25/2018 11:46 AM				314.1 -> 239...		Flunitrazepam-D7	321.1 -> 245...	6.429	15257			
Flurazepam	388.2 -> 315...	6/25/2018 11:46 AM				388.2 -> 317...		Zopiclone-D4	393.1 -> 244...	6.443	207918			
Imipramine	281.2 -> 86.2	6/25/2018 11:46 AM				281.2 -> 58.3		Imipramine-D3	284.2 -> 61.3	6.737	14035...			
Levamisole	205.1 -> 91.2	6/25/2018 11:46 AM				205.1 -> 178...		Sufentanil-D5	392.2 -> 238...	7.008	12088...			
Maprotiline	278.2 -> 91.2	6/25/2018 11:46 AM				278.2 -> 117...		Amiripryline-D3	281.2 -> 91.2	6.798	668767			
MIDA	180.1 -> 163...	6/25/2018 11:46 AM				180.1 -> 105...		MDA-D5	185.1 -> 168...	5.105	228234			
MDEA	208.1 -> 163...	6/25/2018 11:46 AM				208.1 -> 105...		MDEA-D6	214.2 -> 166...	5.386	487616			
MDMA	194.1 -> 163...	6/25/2018 11:46 AM				194.1 -> 105...		MDMA-D6	200.2 -> 166...	5.245	40227			
Meperidine	248.2 -> 220...	6/25/2018 11:46 AM				248.2 -> 174...		Meperidine-D4	252.2 -> 224...	6.013	400333			
Methylphenidate	234.2 -> 84.2	6/25/2018 11:46 AM				234.2 -> 56.3		Meperidine-D4	252.2 -> 224...	6.013	400333			
Midazolam	326.1 -> 223...	6/25/2018 11:46 AM				326.1 -> 249...		Midazolam-D4	330.1 -> 295...	6.630	437584			
Normeperidine	234.1 -> 42.3	6/25/2018 11:46 AM				234.1 -> 160...		Normeperidine-D4	238.2 -> 164...	5.750	292441			
7-Aminoflunitrazepam	284.1 -> 135...	6/25/2018 11:46 AM				284.1 -> 93.2		7-aminoflunitrazepam-D7	291.2 -> 138...	5.700	264117			
Nortriptyline	264.2 -> 91.2	6/25/2018 11:46 AM				264.2 -> 233...		Nortriptyline-D3	267.2 -> 233...	6.600	429688			
Phenazepam	349.0 -> 206...	6/25/2018 11:46 AM				349.0 -> 183...		Phenazepam-D4	353.0 -> 183...	6.506	23162			
Phencyclidine	244.2 -> 86.2	6/25/2018 11:46 AM				244.2 -> 91.1		Phencyclidine-D5	249.2 -> 86.2	6.094	10997...			
Phenylethanolamine	253.1 -> 104...	6/25/2018 11:46 AM	6.012	3729	Infinity	253.1 -> 182...		Phenylethanolamine-D10	263.2 -> 192...	6.012	23248			
Pseudoephedrine	166.1 -> 148...	6/25/2018 11:46 AM				166.1 -> 133...		Pseudoephedrine-D3	169.1 -> 151...	4.743	383231			
Tapentadol	222.2 -> 107...	6/25/2018 11:46 AM				222.2 -> 121...		Tapentadol-D3	225.2 -> 107...	5.609	827902			
Zaleplon	306.1 -> 236...	6/25/2018 11:46 AM				306.1 -> 264...		Zaleplon-D4	310.2 -> 240...	6.227	279227			
Zopiclone	389.1 -> 244...	6/25/2018 11:46 AM				389.1 -> 216...		Zopiclone-D4	393.1 -> 244...	6.443	207918			

Compound Method	Transition	Acq. Date-Time	RT	Resp.	S/N	Qualifier 1 M...	Qualifier 1 Res...	Area	ISTD Method	Transition	RT	Resp.
Acetylfentanyl	323.2 -> 188...	6/25/2018 12:05 PM				323.2 -> 105...			Acetylfentanyl-D5	328.2 -> 105...	6.508	21444...
alpha-hydroxymidazolam	342.1 -> 324...	6/25/2018 12:05 PM				342.1 -> 203...			alpha-hydroxymidazolam-...	346.1 -> 328...	6.466	427697
Amtripyline	278.2 -> 91.2	6/25/2018 12:05 PM				278.2 -> 105...			Amtripyline-D3	281.2 -> 91.2	6.798	672120
Acetylornofentanyl	219.1 -> 84.2	6/25/2018 12:05 PM				219.1 -> 56.3			Acetylornofentanyl-D5	224.2 -> 84.2	4.997	534208
Carbamazepine	237.1 -> 193...	6/25/2018 12:05 PM				237.1 -> 194...			Carbamazepine-13C6	243.1 -> 200...	6.136	14303...
Chlordiazepoxide	300.1 -> 227...	6/25/2018 12:05 PM				300.1 -> 282...			Chlordiazepoxide-D5	305.1 -> 286...	6.593	360230
Sufentanil	387.2 -> 238...	6/25/2018 12:05 PM				387.2 -> 111...			Sufentanil-D5	392.2 -> 238...	7.008	12101...
Desipramine	267.2 -> 72.3	6/25/2018 12:05 PM				267.2 -> 44.3			Desipramine-D3	270.2 -> 75.3	6.559	16021...
Doxepin	280.2 -> 107...	6/25/2018 12:05 PM				280.2 -> 77.2			Doxepin-D3	283.2 -> 107...	6.495	813801
Estazolam	295.1 -> 267...	6/25/2018 12:05 PM				295.1 -> 205...			Estazolam-D5	300.1 -> 272...	6.411	414790
Flunitrazepam	314.1 -> 268...	6/25/2018 12:05 PM				314.1 -> 239...			Flunitrazepam-D7	321.1 -> 245...	6.429	14212
Flurazepam	388.2 -> 315...	6/25/2018 12:05 PM				388.2 -> 317...			Zopiclone-D4	393.1 -> 244...	6.443	134567
Imipramine	281.2 -> 86.2	6/25/2018 12:05 PM				281.2 -> 58.3			Imipramine-D3	284.2 -> 61.3	6.737	14354...
Levamisole	205.1 -> 91.2	6/25/2018 12:05 PM				205.1 -> 178...			Sufentanil-D5	392.2 -> 238...	7.008	12101...
Maprotiline	278.2 -> 91.2	6/25/2018 12:05 PM				278.2 -> 117...			Amtripyline-D3	281.2 -> 91.2	6.798	672120
MDA	180.1 -> 163...	6/25/2018 12:05 PM				180.1 -> 105...			MDA-D5	185.1 -> 168...	5.105	230744
MDEA	208.1 -> 163...	6/25/2018 12:05 PM				208.1 -> 105...			MDEA-D6	214.2 -> 166...	5.386	527580
MDMA	194.1 -> 163...	6/25/2018 12:05 PM				194.1 -> 105...			MDMA-D6	200.2 -> 166...	5.245	43868
Meperidine	248.2 -> 220...	6/25/2018 12:05 PM				248.2 -> 174...			Meperidine-D4	252.2 -> 224...	6.013	409957
Methylphenidate	234.2 -> 84.2	6/25/2018 12:05 PM				234.2 -> 56.3			Meperidine-D4	252.2 -> 224...	6.013	409957
Midazolam	326.1 -> 223...	6/25/2018 12:05 PM				326.1 -> 249...			Midazolam-D4	330.1 -> 295...	6.630	471815
Normeperidine	234.1 -> 42.3	6/25/2018 12:05 PM				234.1 -> 160...			Normeperidine-D4	238.2 -> 164...	5.750	301566
7-Aminoflunitrazepam	284.1 -> 135...	6/25/2018 12:05 PM				284.1 -> 93.2			7-aminoflunitrazepam-D7	291.2 -> 138...	5.700	219782
Nortriptyline	264.2 -> 91.2	6/25/2018 12:05 PM	6.601	916849	662.17	264.2 -> 233...	Infini...	8231...	Nortriptyline-D3	267.2 -> 233...	6.600	422861
Phenazepam	349.0 -> 206...	6/25/2018 12:05 PM				349.0 -> 183...			Phenazepam-D4	353.0 -> 183...	6.506	22508
Phencyclidine	244.2 -> 86.2	6/25/2018 12:05 PM				244.2 -> 91.1			Phencyclidine-D5	249.2 -> 86.2	6.094	11425...
Phenyltoin	253.1 -> 104...	6/25/2018 12:05 PM	6.012	2994	1349.25	253.1 -> 182...			Phenyltoin-D10	263.2 -> 192...	6.032	22813
Pseudoephedrine	166.1 -> 148...	6/25/2018 12:05 PM				166.1 -> 133...			Pseudoephedrine-D3	169.1 -> 151...	4.764	335388
Tapentadol	222.2 -> 107...	6/25/2018 12:05 PM				222.2 -> 121...			Tapentadol-D3	225.2 -> 107...	5.609	858477
Zaleplon	306.1 -> 236...	6/25/2018 12:05 PM				306.1 -> 264...			Zaleplon-D4	310.2 -> 240...	6.227	269827
Zopiclone	389.1 -> 244...	6/25/2018 12:05 PM				389.1 -> 216...			Zopiclone-D4	393.1 -> 244...	6.443	134567

Compound Method	p2 cal 1-1b	p2 cal 1-1b Results	Qualifier 1 M...	Qualifier 1 Results	ISTD Method	ISTD Results						
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.
Acetylfentanyl	323.2 -> 188...	6/25/2018 11:26 AM	6.509	22301	108.30	323.2 -> 105...	14.27	33524	Acetylfentanyl-D5	328.2 -> 105...	6.508	2190486
alpha-hydroxymidazolam	342.1 -> 324...	6/25/2018 11:26 AM	6.467	74049	46.08	342.1 -> 203...	334.13	46634	alpha-hydroxymidazola...	346.1 -> 328...	6.466	429640
Amtripyline	278.2 -> 91.2	6/25/2018 11:26 AM	6.800	111508	Infinity	278.2 -> 105...	120.18	22418	Amtripyline-D3	281.2 -> 91.2	6.798	690090
Acetylornfantanyl	219.1 -> 84.2	6/25/2018 11:26 AM	4.998	9575	243.17	219.1 -> 56.3	23.45	2406	Acetylornfantanyl-D5	224.2 -> 84.2	4.977	520048
Carbamazepine	237.1 -> 193...	6/25/2018 11:26 AM	6.137	29139	145.31	237.1 -> 194...	199.18	2415...	Carbamazepine-13C6	243.1 -> 200...	6.136	1425069
Chlordiazepoxide	300.1 -> 227...	6/25/2018 11:26 AM	6.613	38573	114.40	300.1 -> 282...	41.19	22181	Chlordiazepoxide-D5	305.1 -> 286...	6.593	394142
Sufentanil	387.2 -> 238...	6/25/2018 11:26 AM	7.008	29687	418.74	387.2 -> 111...	165.39	26668	Sufentanil-D5	392.2 -> 238...	7.008	1254128
Desipramine	267.2 -> 72.3	6/25/2018 11:26 AM	6.560	321265	Infinity	267.2 -> 44.3	316.69	1615...	Desipramine-D3	270.2 -> 75.3	6.559	1592865
Doxepin	280.2 -> 107...	6/25/2018 11:26 AM	6.517	142428	56.45	280.2 -> 77.2	Infinity	52638	Doxepin-D3	283.2 -> 107...	6.495	793842
Estazolam	295.1 -> 267...	6/25/2018 11:26 AM	6.413	78124	390.84	295.1 -> 205...	201.61	66152	Estazolam-D5	300.1 -> 272...	6.411	408539
Flunitrazepam	314.1 -> 268...	6/25/2018 11:26 AM	6.450	59977	Infinity	314.1 -> 239...	38.39	20672	Flunitrazepam-D7	321.1 -> 245...	6.429	12841
Flurazepam	388.2 -> 315...	6/25/2018 11:26 AM	6.687	184603	634.27	388.2 -> 317...	14976...	40753	Zopiclone-D4	393.1 -> 244...	6.443	187997
Imipramine	281.2 -> 86.2	6/25/2018 11:26 AM	6.758	462752	Infinity	281.2 -> 58.3	Infinity	2610...	Imipramine-D3	284.2 -> 61.3	6.737	1441382
Levamisole	205.1 -> 91.2	6/25/2018 11:26 AM	5.672	57115	Infinity	205.1 -> 178...	35504...	47765	Sufentanil-D5	392.2 -> 238...	7.008	1254128
Maprotiline	278.2 -> 91.2	6/25/2018 11:26 AM	6.800	111508	Infinity	278.2 -> 117...	Infinity	69389	Amtripyline-D3	281.2 -> 91.2	6.798	690090
MDA	180.1 -> 163...	6/25/2018 11:26 AM	5.126	37835	Infinity	180.1 -> 105...	Infinity	32030	MDA-D5	185.1 -> 168...	5.105	235401
MDEA	208.1 -> 163...	6/25/2018 11:26 AM	5.406	91121	Infinity	208.1 -> 105...	28.97	77761	MDEA-D6	214.2 -> 166...	5.386	545048
MDMA	194.1 -> 163...	6/25/2018 11:26 AM	5.266	62503	287.95	194.1 -> 105...	80.18	45716	MDMA-D6	200.2 -> 166...	5.245	39791
Meperidine	248.2 -> 220...	6/25/2018 11:26 AM	6.034	73795	Infinity	248.2 -> 174...	32.67	40575	Meperidine-D4	252.2 -> 224...	6.013	424252
Methylphenidate	234.2 -> 84.2	6/25/2018 11:26 AM	5.812	331051	Infinity	234.2 -> 56.3	Infinity	73517	Meperidine-D4	252.2 -> 224...	6.013	424252
Midazolam	326.1 -> 223...	6/25/2018 11:26 AM	6.651	27287	290.95	326.1 -> 249...	123.65	24313	Midazolam-D4	330.1 -> 295...	6.630	468764
Normeperidine	234.1 -> 42.3	6/25/2018 11:26 AM	5.772	79545	220.85	234.1 -> 160...	154.85	55088	Normeperidine-D4	238.2 -> 164...	5.750	291584
7-Aminoflunitrazepam	284.1 -> 135...	6/25/2018 11:26 AM	5.721	48683	234.19	284.1 -> 93.2	60.17	16574	7-Aminoflunitrazepam-...	291.2 -> 138...	5.700	270422
Nortriptyline	264.2 -> 91.2	6/25/2018 11:26 AM	6.480	420695	290.68	264.2 -> 233...	2328.59	4549...	Nortriptyline-D3	267.2 -> 233...	6.600	443999
Phenazepam	349.0 -> 206...	6/25/2018 11:26 AM	6.526	52876	215.79	349.0 -> 183...	567.49	39934	Phenazepam-D4	353.0 -> 183...	6.506	20301
Phencyclidine	244.2 -> 86.2	6/25/2018 11:26 AM	6.115	212460	795.68	244.2 -> 91.1	71.92	1531...	Phencyclidine-D5	249.2 -> 86.2	6.094	1164868
Phenylethanolamine	253.1 -> 104...	6/25/2018 11:26 AM	6.053	7852	1763.75	253.1 -> 182...	17.37	3854	Phenylethanolamine-D10	263.2 -> 192...	6.032	20508
Pseudoephedrine	166.1 -> 148...	6/25/2018 11:26 AM	4.764	713719	90.68	166.1 -> 133...	100.87	1436...	Pseudoephedrine-D3	169.1 -> 151...	4.743	403751
Tapentadol	222.2 -> 107...	6/25/2018 11:26 AM	5.629	146810	Infinity	222.2 -> 121...	942.31	55901	Tapentadol-D3	225.2 -> 107...	5.609	843730
Zaleplon	306.1 -> 236...	6/25/2018 11:26 AM	6.248	68656	166.95	306.1 -> 264...	13691...	52525	Zaleplon-D4	310.2 -> 240...	6.227	293654
Zopiclone	389.1 -> 244...	6/25/2018 11:26 AM	6.444	13178	173.76	389.1 -> 216...	28.27	7505	Zopiclone-D4	393.1 -> 244...	6.443	187997

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

Extraction Date: 6-25-18

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
MTBE 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: 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: 062518 AM25-26 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:

**Idaho State Police
Forensic Services
Toxicology Discipline**

Request for Departure from an Analytical Method

Date of Request

06/28/18

Forensic Scientist

Anne Nord

Analytical Method

Method 26

Type of Deviation

Minor

Major

Departure

Allow the response from 5ng/ml for Carboxy-THC to be evaluated as positive at the analyst's discretion.

4.3 Evaluation of Results

4.3.1 Minimum Criteria:

4.3.1.1

Analyte Administrative Threshold

THC 3 ng/mL

Carboxy-THC 10 ng/mL

THC-OH 3 ng/mL

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.

Allow for the positive control to be prepared in house.

Rationale for Departure

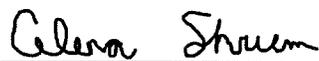
AM 26 is a screening method for cannabinoids, the function of the method is to indicate if cannabinoids are present. There is a potential for a positive sample to give a response in this range in the screen.

Discipline Leader Review

Departure approved- this deviation will remain in effect until the next method revision at which time the change will be made in the analytical method.

Departure Not Approved

Comments:



Celena Shrum

Toxicology Program Discipline Leader

Date: 06/28/18



ISP FORENSICS - Cd'A

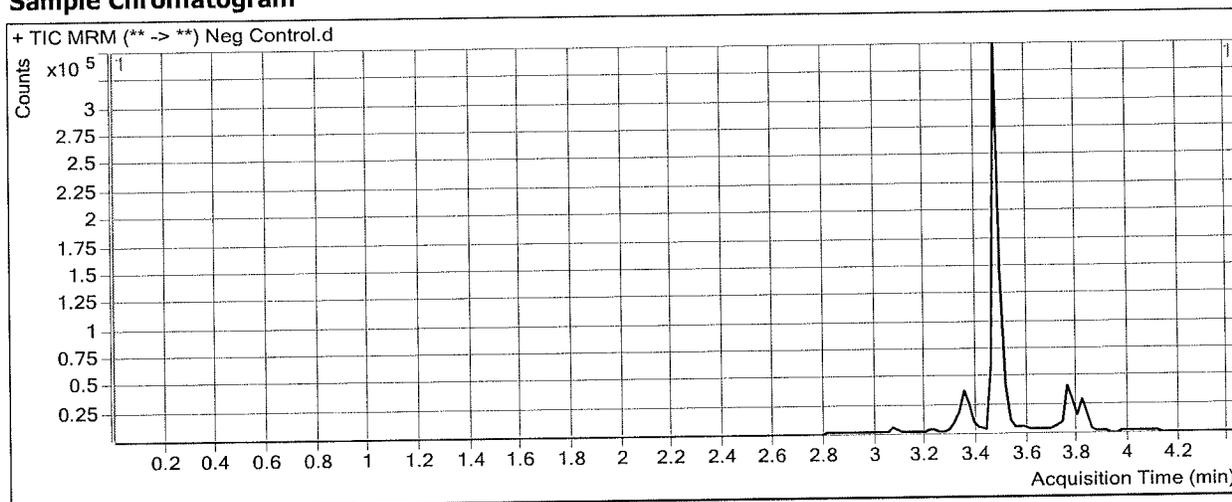
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 6/27/2018 11:34 AM **Analyst Name** ISP Tox
Report Time 6/27/2018 11:34 AM **Reporter Name** ISP Tox
Last Calib Update 6/27/2018 11:34 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-25 19:04 **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



ISP FORENSICS - Cd'A

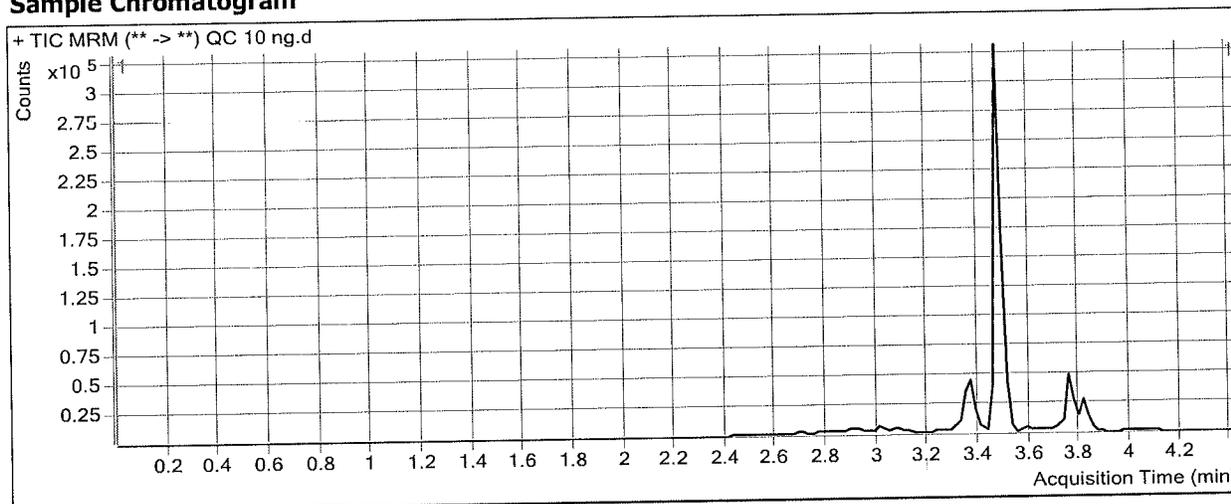
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 6/27/2018 11:34 AM **Analyst Name** ISP Tox
Report Time 6/27/2018 11:34 AM **Reporter Name** ISP Tox
Last Calib Update 6/27/2018 11:34 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-25 19:24 **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

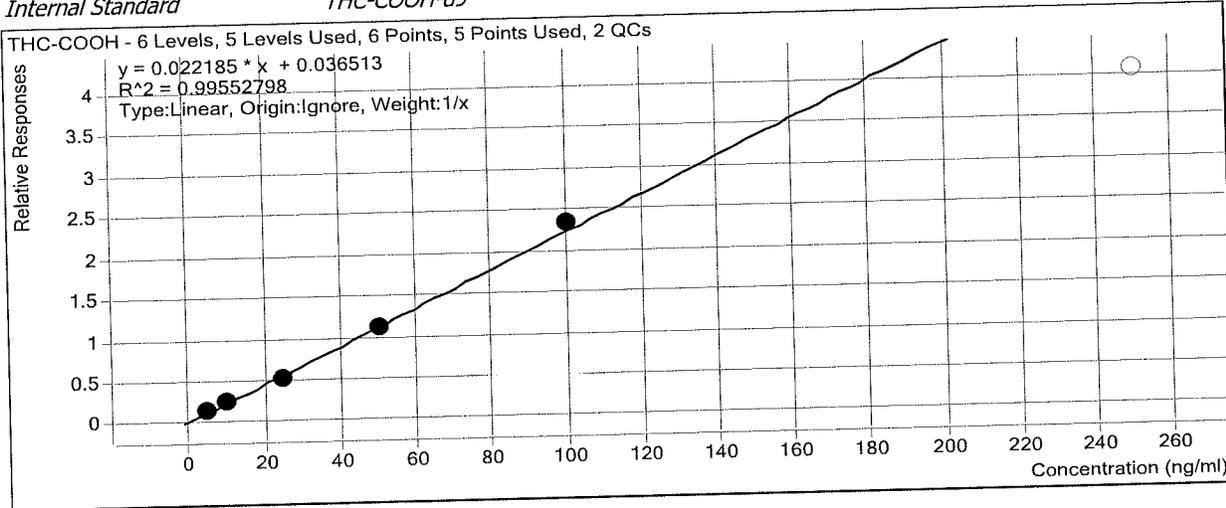
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.366	26912	82723	0.3253	13.0181
THC-OH	3.473	70364	601005	0.1171	9.2053
THC	3.820	6211	40277	0.1542	10.9267

ISP Forensics Calibration Curve Report

Batch Data Path
Last Calib Update

D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
6/27/2018 11:34 AM **Analyst Name** ISP TOX

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



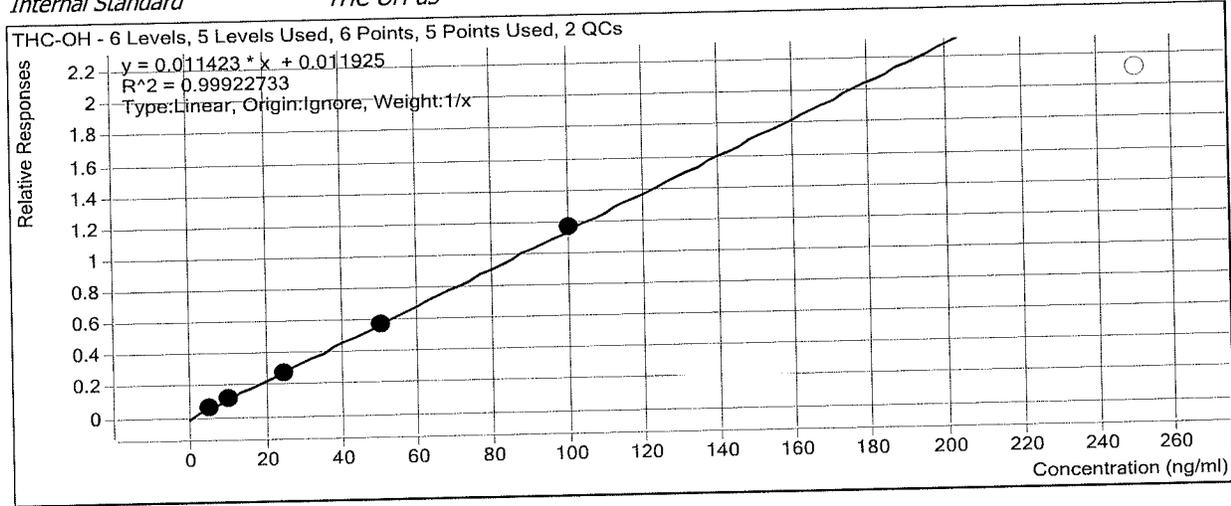
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input type="checkbox"/>	3	1.9	64.8
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.5	110.4
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.0	100.1
QC 10 ng	3	<input checked="" type="checkbox"/>	10	13.0	130.2
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	22.1	88.5
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	48.7	97.4
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	103.6	103.6
cal 7 - 250ng	7	<input type="checkbox"/>	250	181.8	72.7

ISP Forensics Calibration Curve Report

Batch Data Path
Last Calib Update

D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
6/27/2018 11:34 AM **Analyst Name** ISP TOX

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



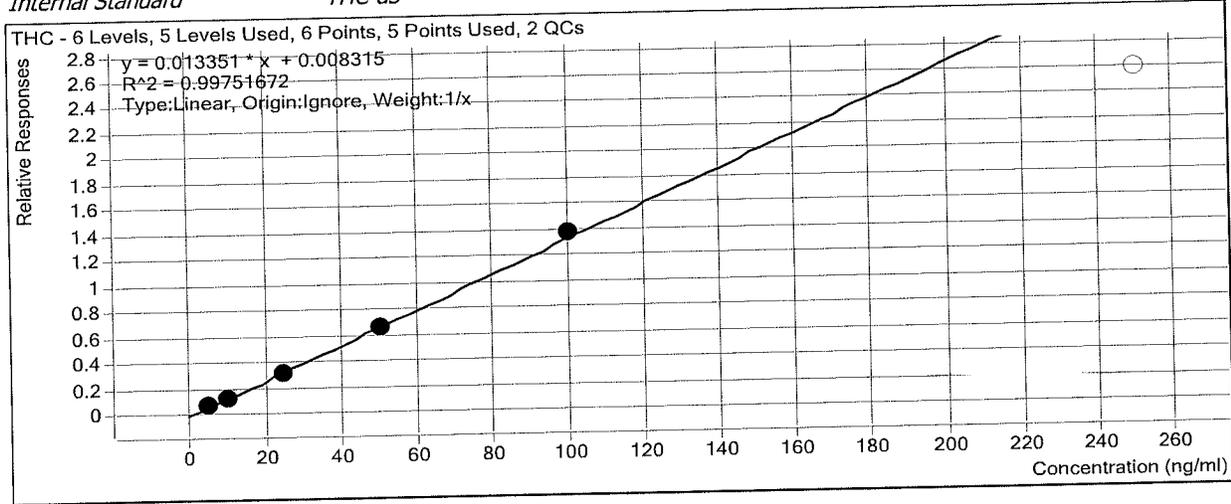
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input checked="" type="checkbox"/>	3	1.9	65.0
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.2	103.6
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.1	100.9
QC 10 ng	3	<input checked="" type="checkbox"/>	10	9.2	92.1
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	23.8	95.0
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	49.5	99.0
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	101.5	101.5
cal 7 - 250ng	7	<input type="checkbox"/>	250	183.8	73.5

ISP Forensics Calibration Curve Report

Batch Data Path
Last Calib Update

D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
6/27/2018 11:34 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	2.2	73.3
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.6	111.1
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	9.5	95.5
QC 10 ng	3	<input checked="" type="checkbox"/>	10	10.9	109.3
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	23.0	92.1
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	49.4	98.9
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	102.4	102.4
cal 7 - 250ng	7	<input type="checkbox"/>	250	193.6	77.4

ISP FORENSICS - Cd'A

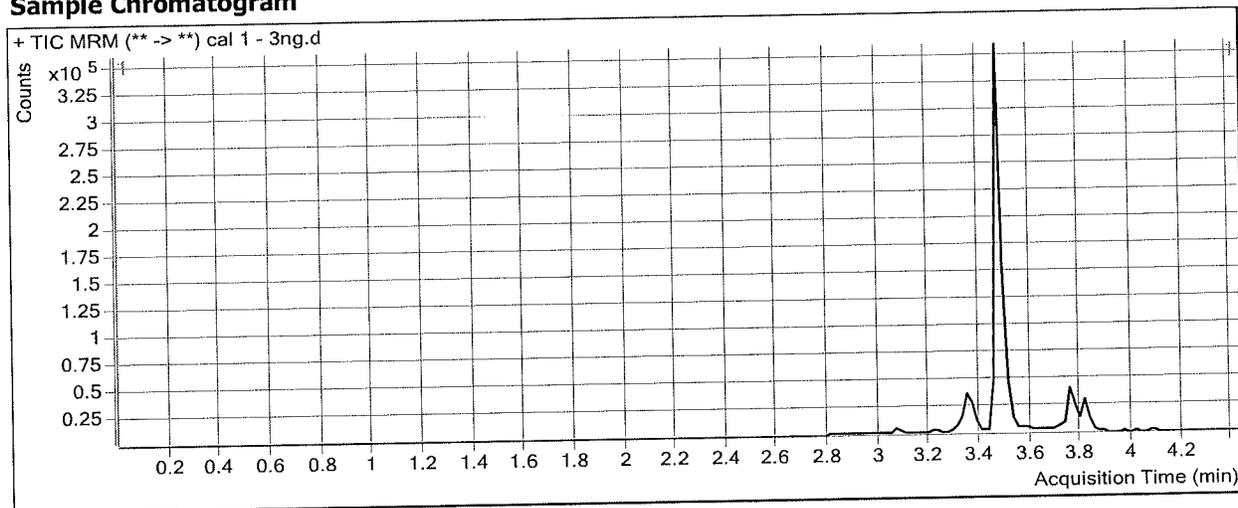
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 6/27/2018 11:34 AM **Analyst Name** ISP Tox
Report Time 6/27/2018 11:34 AM **Reporter Name** ISP Tox
Last Calib Update 6/27/2018 11:34 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-25 18:18 **Data File** cal 1 - 3ng.d
Sample Type QC **Sample Name** cal 1 - 3ng
Dilution 1 **Acq Method** Screen THC 8-2017.m
Position P1-a1 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.366	7025	88186	0.0797	1.9446
THC-OH	3.473	23481	686731	0.0342	1.9493
THC	3.820	1927	51131	0.0377	2.1995

ISP FORENSICS - Cd'A

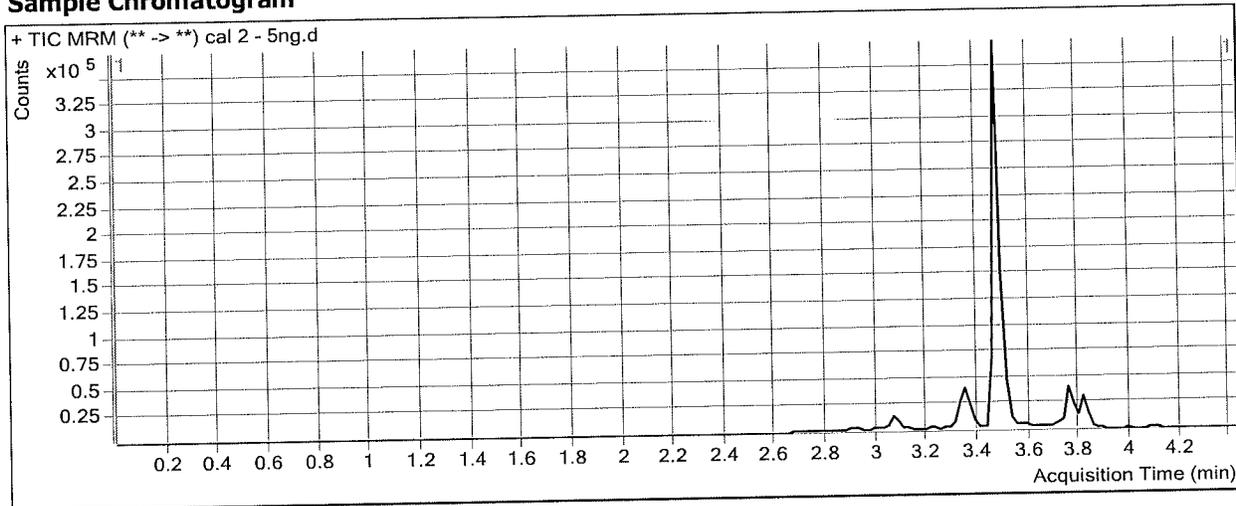
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 6/27/2018 11:34 AM **Analyst Name** ISP Tox
Report Time 6/27/2018 11:34 AM **Reporter Name** ISP Tox
Last Calib Update 6/27/2018 11:34 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-25 18:25 **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-COOH	3.366	14488	91159	0.1589	5.5179
THC-OH	3.473	50755	713868	0.0711	5.1802
THC	3.820	4002	48510	0.0825	5.5560

ISP FORENSICS - Cd'A

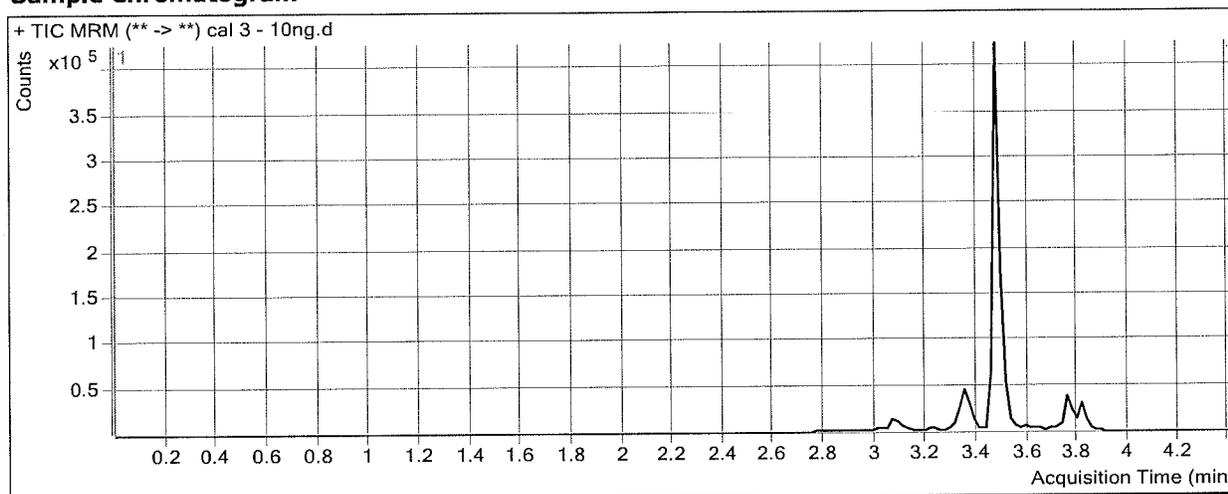
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 6/27/2018 11:34 AM **Analyst Name** ISP Tox
Report Time 6/27/2018 11:34 AM **Reporter Name** ISP Tox
Last Calib Update 6/27/2018 11:34 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-25 18:31 **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-COOH	3.366	25044	96863	0.2585	10.0082
THC-OH	3.473	93895	738483	0.1271	10.0867
THC	3.820	6086	44817	0.1358	9.5488

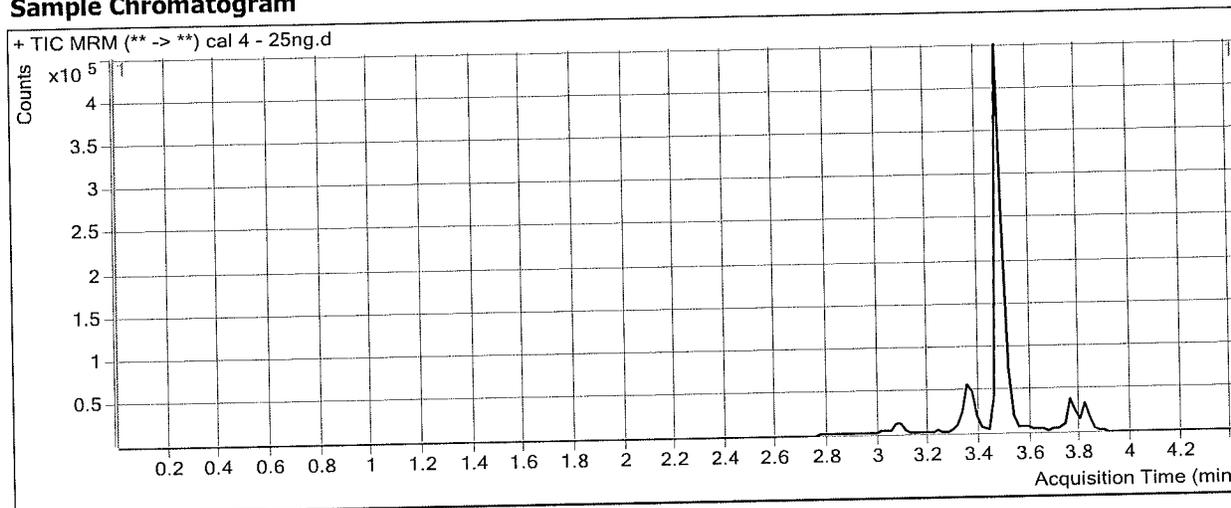
ISP FORENSICS - Cd'A Cannabinoid Screen Report

Batch Data Path D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 6/27/2018 11:34 AM **Analyst Name** ISP Tox
Report Time 6/27/2018 11:34 AM **Reporter Name** ISP Tox
Last Calib Update 6/27/2018 11:34 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-25 18:38 **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-COOH	3.366	51270	97204	0.5274	22.1287
THC-OH	3.473	209443	739270	0.2833	23.7577
THC	3.820	13694	43388	0.3156	23.0166

ISP FORENSICS - Cd'A

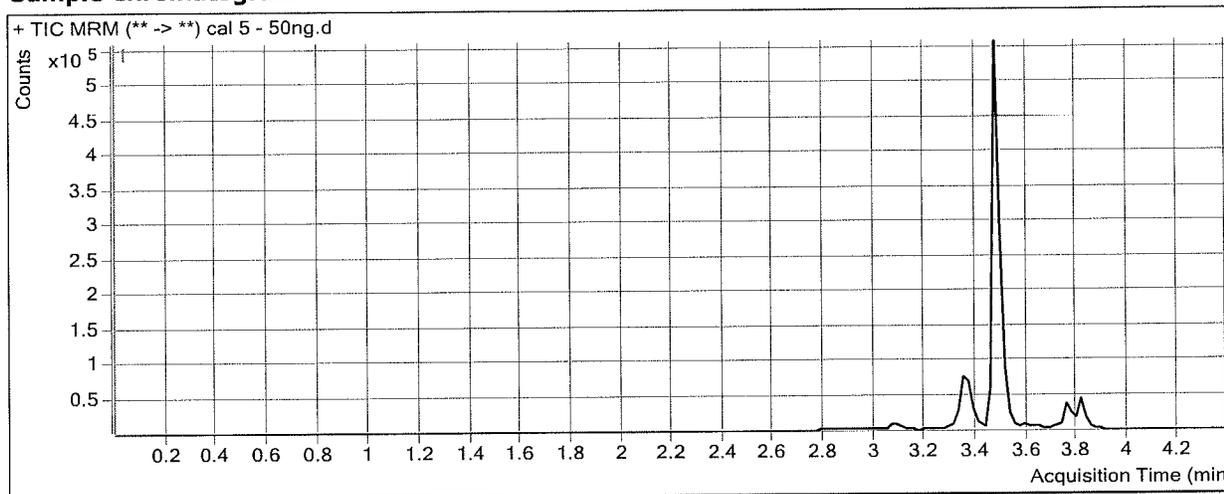
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 6/27/2018 11:34 AM **Analyst Name** ISP Tox
Report Time 6/27/2018 11:34 AM **Reporter Name** ISP Tox
Last Calib Update 6/27/2018 11:34 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-25 18:44 **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-COOH	3.366	105651	94588	1.1170	48.7010
THC-OH	3.473	413353	715620	0.5776	49.5219
THC	3.820	28294	42326	0.6685	49.4467

ISP FORENSICS - Cd'A

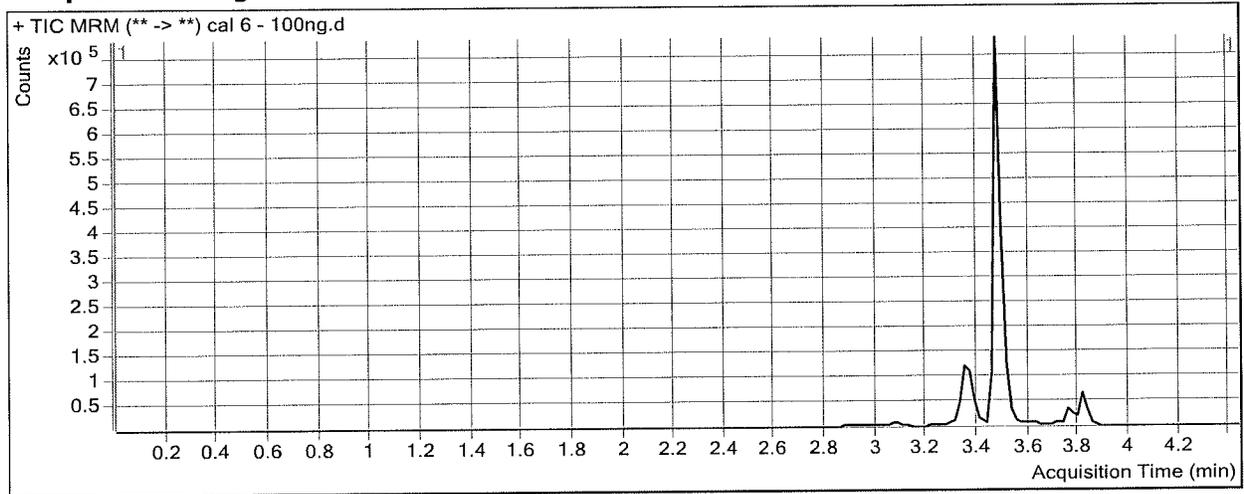
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 6/27/2018 11:34 AM **Analyst Name** ISP Tox
Report Time 6/27/2018 11:34 AM **Reporter Name** ISP Tox
Last Calib Update 6/27/2018 11:34 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-25 18:51 **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-COOH	3.366	219252	93861	2.3359	103.6443
THC-OH	3.473	841205	718468	1.1708	101.4534
THC	3.820	65620	47693	1.3759	102.4318

ISP FORENSICS - Cd'A

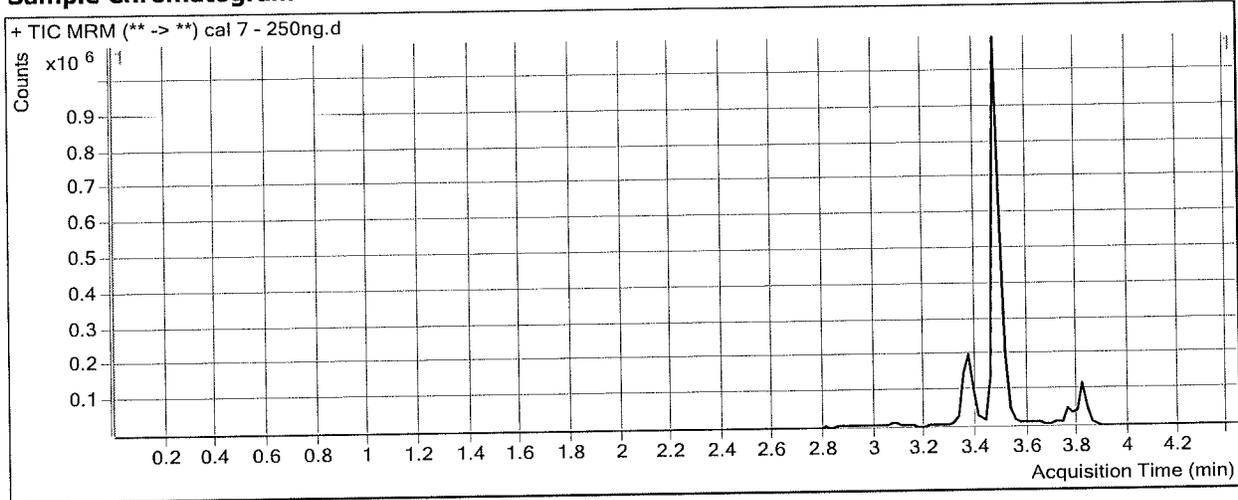
Cannabinoid Screen Report

Batch Data Path D:\2018 Data\062518 AM 25-26\QuantResults\cann screen.batch.bin
Analysis Time 6/27/2018 11:34 AM **Analyst Name** ISP Tox
Report Time 6/27/2018 11:34 AM **Reporter Name** ISP Tox
Last Calib Update 6/27/2018 11:34 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-25 19:11 **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-COOH	3.366	355939	87457	4.0699	181.8019
THC-OH	3.473	1515791	718033	2.1110	183.7608
THC	3.820	144918	55895	2.5927	193.5676