

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

Extraction Date: 6-4-18
Plate lot#: 0515207

Analyst: Anne Nord
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-XXX 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: 060418 blood screen AM25-26 Worklist path: mds p1
mds 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:

Sample C2018-1020-1 and C2018-1025-1 did not inject the first time. I added methanol and re-injected both samples. 

Toxicology AM method 25 external prep information

working solution 10000 ng/ml in meoh 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
Hydrocodone	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, hydrocodone

8

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	S/N	Transition	S/N	Area	Name	Area	S/N	Area	Transition	RT	Resp.			
6-MAM	328.2 -> 165...	6/4/2018 9:58 PM	5.342	1367	6.80	6.80	328.2 -> 211...	7.35	1628	6-MAM-D6	1628	7.35	1628	334.2 -> 165...	5.260	56249			
7-aminoclonazepam	286.1 -> 121...	6/4/2018 9:58 PM	5.511	32170	122.74	122.74	286.1 -> 222...	63.70	20158	7-Aminoclonazepam-D4	20158	63.70	20158	290.1 -> 121...	5.511	169888			
Acetyl Fentanyl	323.2 -> 105...	6/4/2018 9:58 PM	6.363	29548	17.22	17.22	323.2 -> 188...	1505.82	21604	Acetyl Fentanyl-D5	21604	1505.82	21604	328.2 -> 105...	6.341	18678...			
Acetyl Norfentanyl	219.1 -> 84.2	6/4/2018 9:58 PM	4.930	8126	20.54	20.54	219.1 -> 56.3	22.78	2712	Acetyl Norfentanyl-D5	2712	22.78	2712	224.2 -> 84.2	4.930	491242			
a-hydroxylprazosolam	325.1 -> 297...	6/4/2018 9:58 PM	6.383	9199	74.64	74.64	325.1 -> 215...	164.27	4791	a-hydroxylprazosolam-D5	4791	164.27	4791	330.1 -> 302...	6.381	46299			
alpha-PVP	232.2 -> 91.0	6/4/2018 9:58 PM	5.887	142096	38647.17	38647.17	232.2 -> 77.1	57.16	47218	alpha-PVP-d8	47218	57.16	47218	240.2 -> 91.1	5.824	602983			
Alprazolam	309.1 -> 281...	6/4/2018 9:58 PM	6.488	59416	441.47	441.47	309.1 -> 205...	615.37	55234	Alprazolam-D5	55234	615.37	55234	314.1 -> 286...	6.467	260317			
Amphetamine	136.1 -> 91.1	6/4/2018 9:58 PM	4.892	84805	47.68	47.68	136.1 -> 119...	53.66	48362	Amphetamine-D11	48362	53.66	48362	147.2 -> 130...	4.852	107540			
Bupropion	240.1 -> 184...	6/4/2018 9:58 PM	6.131	134311	100.40	100.40	240.1 -> 131...	51.72	67228	Bupropion-D9	67228	51.72	67228	249.2 -> 185...	6.089	723596			
Carisoprodol	261.2 -> 176...	6/4/2018 9:58 PM	6.129	79392	264.18	264.18	261.2 -> 55.3	33.70	62822	Carisoprodol-D7	62822	33.70	62822	268.2 -> 183...	6.108	397081			
Citalopram	325.2 -> 109...	6/4/2018 9:58 PM	6.199	201478	110.57	110.57	325.2 -> 262...	455.43	55035	Citalopram-D6	55035	455.43	55035	331.2 -> 109...	6.178	929593			
Clonazepam	316.1 -> 269...	6/4/2018 9:58 PM	6.324	22581	1484.18	1484.18	316.1 -> 213...	76.24	6267	Clonazepam-D4	6267	76.24	6267	320.1 -> 217...	6.323	35347			
Codeine	300.2 -> 215...	6/4/2018 9:58 PM	5.286	9010	128.66	128.66	300.2 -> 165...	34.41	6589	Codeine-D6	6589	34.41	6589	306.2 -> 218...	5.223	48376			
Cyclobenzaprine	276.2 -> 214...	6/4/2018 9:58 PM	6.575	136328	418.74	418.74	276.2 -> 231...	85.12	42984	Cyclobenzaprine-D3	42984	85.12	42984	279.2 -> 215...	6.574	602669			
Dextromethorphan	272.2 -> 171...	6/4/2018 9:58 PM	6.291	59761	139.39	139.39	272.2 -> 147...	69.73	62110	Dextromethorphan-D3	62110	69.73	62110	275.2 -> 171...	6.270	297319			
Dextropropion	258.2 -> 157...	6/4/2018 9:58 PM	5.536	391116	858.10	858.10	258.2 -> 133...	128.84	28586	Dextropropion-D3	28586	128.84	28586	261.2 -> 157...	5.535	225319			
Diazepam	285.1 -> 193...	6/4/2018 9:58 PM	6.714	44970	129.18	129.18	285.1 -> 153...	380.64	32209	Diazepam-D5	32209	380.64	32209	290.1 -> 198...	6.693	200541			
Dihydrocodeine	302.2 -> 198...	6/4/2018 9:58 PM	5.000	24024	88.55	88.55	302.2 -> 128...	34.07	15334	Dihydrocodeine-D6	15334	34.07	15334	308.2 -> 202...	4.959	128878			
Diphenhydramine	256.2 -> 167...	6/4/2018 9:58 PM	6.191	311510	656.31	656.31	256.2 -> 152...	510.42	75743	Diphenhydramine-D3	75743	510.42	75743	259.2 -> 167...	6.190	18077...			
Doxylamine	271.2 -> 182...	6/4/2018 9:58 PM	5.801	254129	88.73	88.73	271.2 -> 167...	1025.83	1915...	Doxylamine-D5	1915...	1025.83	1915...	276.2 -> 187...	5.780	13429...			
EDDP	279.2 -> 235...	6/4/2018 9:58 PM	6.166	171088	152.77	152.77	279.2 -> 250...	6279.46	53019	EDDP-D3	53019	6279.46	53019	282.2 -> 235...	6.166	73561			
Fentanyl	337.2 -> 105...	6/4/2018 9:58 PM	6.562	35512	25.51	25.51	337.2 -> 188...	130.57	25844	Fentanyl-D5	25844	130.57	25844	342.3 -> 105...	6.562	16359...			
Fluoxetine	310.1 -> 44.3	6/4/2018 9:58 PM	6.406	291702	35779.45	35779.45	310.1 -> 148...	664.95	9933	Oxycodone-D6	9933	664.95	9933	322.2 -> 304...	5.161	300447			
Hydrocodone	300.2 -> 198...	6/4/2018 9:58 PM	5.510	31496	50.02	50.02	300.2 -> 128...	90.95	13064	Oxycodone-D6	13064	90.95	13064	306.2 -> 202...	5.447	223158			
Hydromorphone	286.2 -> 184...	6/4/2018 9:58 PM	4.802	19437	27.93	27.93	286.2 -> 157...	10034...	16587	Hydromorphone-D6	16587	10034...	16587	292.2 -> 185...	4.740	88698			
Ketamine	238.1 -> 125...	6/4/2018 9:58 PM	6.111	112546	245.22	245.22	238.1 -> 220...	11.24	40727	Ketamine-D4	40727	11.24	40727	242.1 -> 129...	6.089	467834			
Meprobamate	219.1 -> 158...	6/4/2018 9:58 PM	5.601	22739	131.01	131.01	219.1 -> 97.1	59.82	23144	Meprobamate-D7	23144	59.82	23144	226.2 -> 165...	5.601	141311			
Methadone	310.2 -> 265...	6/4/2018 9:58 PM	6.507	242342	337.66	337.66	310.2 -> 105...	286.44	2277...	Methadone-D9	2277...	286.44	2277...	319.3 -> 268...	6.506	13559...			
Methamphetamine	150.1 -> 91.1	6/4/2018 9:58 PM	5.074	186663	Infinity	Infinity	150.1 -> 119...	14.94	63133	Methamphetamine-D11	63133	14.94	63133	161.2 -> 97.1	5.033	297518			
Morphine	286.2 -> 201...	6/4/2018 9:58 PM	4.541	5167	2317.99	2317.99	286.2 -> 165...	10.90	3716	Morphine-D6	3716	10.90	3716	292.2 -> 152...	4.459	5048			
Naloxone	328.2 -> 309...	6/4/2018 9:58 PM	5.872	41855	37.63	37.63	328.2 -> 211...	845.63	12819	Naloxone-D5	12819	845.63	12819	333.2 -> 315...	5.770	259177			
Naltrexol	344.2 -> 326...	6/4/2018 9:58 PM	5.117	82582	30215.40	30215.40	344.2 -> 308...	213.92	14426	Naltrexol-D3	14426	213.92	14426	347.2 -> 329...	5.076	288724			
Naltrexone	342.2 -> 324...	6/4/2018 9:58 PM	5.401	53263	47.57	47.57	342.2 -> 55.3	38.39	34396	Naltrexone-D3	34396	38.39	34396	345.2 -> 327...	5.340	240613			
Norbuprenorphine	414.3 -> 101...	6/4/2018 9:58 PM	5.991	5637	37.17	37.17	414.3 -> 57.3	243.65	4698	Norbuprenorphine-D3	4698	243.65	4698	417.3 -> 101...	5.991	33104			
Nordiazepam	271.1 -> 140...	6/4/2018 9:58 PM	6.576	28506	4542.74	4542.74	271.1 -> 208...	71.12	19246	Nordiazepam-D5	19246	71.12	19246	276.1 -> 140...	6.555	87967			
Norfentanyl	233.2 -> 84.2	6/4/2018 9:58 PM	5.416	155948	1109.84	1109.84	233.2 -> 55.3	35.14	47460	Norfentanyl-D5	47460	35.14	47460	238.2 -> 84.2	5.395	729778			
Norhydrocodone	286.2 -> 199...	6/4/2018 9:58 PM	5.044	5753	679.59	679.59	286.2 -> 171...	Infinity	1456	Norhydrocodone-D3	1456	Infinity	1456	289.2 -> 202...	5.023	73973			
Noroxycodone	302.1 -> 284...	6/4/2018 9:58 PM	4.960	34407	29.77	29.77	302.1 -> 186...	84.15	10428	Noroxycodone-D3	10428	84.15	10428	305.2 -> 287...	4.939	147776			
O-desmethyl-tramadol	250.2 -> 58.3	6/4/2018 9:58 PM	4.988	199379	188.62	188.62	250.2 -> 42.3	563.02	9112	O-desmethyl-tramadol...	9112	563.02	9112	256.2 -> 64.3	4.968	833712			
Oxazepam	287.1 -> 240...	6/4/2018 9:58 PM	6.389	28933	53.30	53.30	287.1 -> 268...	12.74	12358	Oxazepam-D5	12358	12.74	12358	292.1 -> 246...	6.388	157967			
Oxycodone	316.2 -> 298...	6/4/2018 9:58 PM	5.222	57265	1255.82	1255.82	316.2 -> 241...	34.63	15856	Oxycodone-D6	15856	34.63	15856	322.2 -> 304...	5.161	300447			
Oxymorphone	302.1 -> 284...	6/4/2018 9:58 PM	4.476	58076	222.26	222.26	302.1 -> 227...	139.50	13256	Oxymorphone-D3	13256	139.50	13256	305.2 -> 287...	4.455	271536			
Phentermine	150.1 -> 65.2	6/4/2018 9:58 PM	5.215	24459	Infinity	Infinity	150.1 -> 133...	Infinity	593	Phentermine-D5	593	Infinity	593	155.2 -> 96.2	5.195	317732			
Promethazine	285.1 -> 86.2	6/4/2018 9:58 PM	6.694	448332	364.66	364.66	285.1 -> 71.3	92.02	96864	Promethazine-D3	96864	92.02	96864	288.2 -> 89.2	6.673	24954...			
Quetiapine	384.2 -> 253...	6/4/2018 9:58 PM	6.722	256738	4528.69	4528.69	384.2 -> 221...	683.13	1344...	Quetiapine-D8	1344...	683.13	1344...	392.2 -> 226...	6.701	337475			
Sertraline	306.1 -> 158...	6/4/2018 9:58 PM	6.753	73369	140.45	140.45	306.1 -> 275...	494.32	65440	Sertraline-D3	65440	494.32	65440	309.1 -> 275...	6.752	335762			
Sufentanil	387.2 -> 238	6/4/2018 9:58 PM	6.041	30723	656.11	656.11	387.2 -> 111	65.13	25286	Sufentanil-D5	25286	65.13	25286	392.2 -> 238	6.072	11413			

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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	Transition	Area	S/N	Area	Name	Transition	RT	Resp.	Area	S/N	Transition	RT	Resp.
Temazepam	301.1 -> 255...	6/4/2018 9:58 PM	6.530	89860	160.64	301.1 -> 283...	36022	20.66	36022	Temazepam-D5	306.1 -> 260...	6.530	448118				6.530	448118
Tramadol	264.2 -> 58.3	6/4/2018 9:58 PM	5.556	267159	245.75	264.2 -> 43.3		7.14	12694	Tramadol-13C-D3	268.2 -> 58.3	5.555	12778...				5.555	12778...
Trazodone	372.2 -> 176...	6/4/2018 9:58 PM	6.885	246171	64276.28	372.2 -> 148...		Infinity	1776...	Trazodone-D6	378.2 -> 182...	6.865	11526...				6.865	11526...
Venlafaxine	278.2 -> 58.3	6/4/2018 9:58 PM	5.922	267767	Infinity	278.2 -> 260...		38.68	51550	Venlafaxine-D6	284.2 -> 64.3	5.901	13582...				5.901	13582...
Zolpidem	308.2 -> 235...	6/4/2018 9:58 PM	6.428	250972	850.62	308.2 -> 263...		Infinity	1034...	Zolpidem-D6	314.2 -> 235...	6.426	13479...				6.426	13479...

Compound Method			p1 NEGATIVE CONTROL				Qualifier 1 M...				ISTD Method				ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.	RT	Resp.		
6-MAM	328.2 -> 165...	6/4/2018 10:18 PM				328.2 -> 211...			6-MAM-D6	334.2 -> 165...	5.280	59211	5.280	59211		
7-aminoclonazepam	286.1 -> 121...	6/4/2018 10:18 PM				286.1 -> 222...			7-Aminoclonazepam-D4	290.1 -> 121...	5.511	213892	5.511	213892		
Acetyl Fentanyl	323.2 -> 105...	6/4/2018 10:18 PM				323.2 -> 188...			Acetyl Fentanyl-D5	328.2 -> 105...	6.341	19874...	6.341	19874...		
Acetyl Norfentanyl	219.1 -> 84.2	6/4/2018 10:18 PM				219.1 -> 56.3			Acetyl Norfentanyl-D5	224.2 -> 84.2	4.930	490050	4.930	490050		
a-hydroxylprazosin	325.1 -> 297...	6/4/2018 10:18 PM				325.1 -> 215...			a-hydroxylprazosin-D5	330.1 -> 302...	6.381	49520	6.381	49520		
alpha-PVP	232.2 -> 91.0	6/4/2018 10:18 PM				232.2 -> 77.1			alpha-PVP-d8	240.2 -> 91.1	5.824	658156	5.824	658156		
Alprazolam	309.1 -> 281...	6/4/2018 10:18 PM				309.1 -> 205...			Alprazolam-D5	314.1 -> 286...	6.487	274515	6.487	274515		
Amphetamine	136.1 -> 91.1	6/4/2018 10:18 PM				136.1 -> 119...			Amphetamine-D11	147.2 -> 130...	4.852	129636	4.852	129636		
Bupropion	240.1 -> 184...	6/4/2018 10:18 PM				240.1 -> 131...			Bupropion-D9	249.2 -> 185...	6.089	747986	6.089	747986		
Carisoprodol	261.2 -> 176...	6/4/2018 10:18 PM				261.2 -> 55.3			Carisoprodol-D7	268.2 -> 183...	6.108	486699	6.108	486699		
Citalopram	325.2 -> 109...	6/4/2018 10:18 PM				325.2 -> 262...			Citalopram-D6	331.2 -> 109...	6.178	10163...	6.178	10163...		
Clonazepam	316.1 -> 269...	6/4/2018 10:18 PM				316.1 -> 213...			Clonazepam-D4	320.1 -> 217...	6.323	36589	6.323	36589		
Codeine	300.2 -> 215...	6/4/2018 10:18 PM				300.2 -> 165...			Codeine-D6	306.2 -> 218...	5.223	40413	5.223	40413		
Cyclobenzaprine	276.2 -> 214...	6/4/2018 10:18 PM				276.2 -> 231...			Cyclobenzaprine-D3	279.2 -> 215...	6.574	635348	6.574	635348		
Dextromethorphan	272.2 -> 171...	6/4/2018 10:18 PM				272.2 -> 147...			Dextromethorphan-D3	275.2 -> 171...	6.270	305662	6.270	305662		
Dextropropriphan	258.2 -> 157...	6/4/2018 10:18 PM				258.2 -> 133...			Dextropropriphan-D3	261.2 -> 157...	5.535	237009	5.535	237009		
Diazepam	285.1 -> 193...	6/4/2018 10:18 PM				285.1 -> 153...			Diazepam-D5	290.1 -> 198...	6.713	197218	6.713	197218		
Dihydrocodeine	302.2 -> 198...	6/4/2018 10:18 PM				302.2 -> 128...			Dihydrocodeine-D6	308.2 -> 202...	4.959	131926	4.959	131926		
Diphenhydramine	256.2 -> 167...	6/4/2018 10:18 PM				256.2 -> 152...			Diphenhydramine-D3	259.2 -> 167...	6.190	18152...	6.190	18152...		
Doxylamine	271.2 -> 182...	6/4/2018 10:18 PM				271.2 -> 167...			Doxylamine-D5	276.2 -> 187...	5.800	13706...	5.800	13706...		
EDDP	279.2 -> 235...	6/4/2018 10:18 PM				279.2 -> 250...			EDDP-D3	282.2 -> 235...	6.166	59233	6.166	59233		
Fentanyl	337.2 -> 105...	6/4/2018 10:18 PM				337.2 -> 188...			Fentanyl-D5	342.3 -> 105...	6.542	16795...	6.542	16795...		
Fluoxetine	310.1 -> 44.3	6/4/2018 10:18 PM				310.1 -> 148...			Fentanyl-D5	322.2 -> 304...	5.161	332125	5.161	332125		
Hydrocodone	300.2 -> 198...	6/4/2018 10:18 PM				300.2 -> 128...			Hydrocodone-D6	306.2 -> 202...	5.467	236936	5.467	236936		
Hydromorphone	286.2 -> 184...	6/4/2018 10:18 PM				286.2 -> 157...			Hydromorphone-D6	292.2 -> 185...	4.740	85930	4.740	85930		
Ketamine	238.1 -> 125...	6/4/2018 10:18 PM				238.1 -> 220...			Ketamine-D4	242.1 -> 129...	6.089	460171	6.089	460171		
Meprobamate	219.1 -> 158...	6/4/2018 10:18 PM				219.1 -> 97.1			Meprobamate-D7	226.2 -> 165...	5.601	156658	5.601	156658		
Methadone	310.2 -> 265...	6/4/2018 10:18 PM				310.2 -> 105...			Methadone-D9	319.3 -> 268...	6.506	13986...	6.506	13986...		
Methamphetamine	150.1 -> 91.1	6/4/2018 10:18 PM	5.074	137846	Infinity	150.1 -> 119...	42023		Methamphetamine-D11	161.2 -> 97.1	5.033	347327	5.033	347327		
Morphine	286.2 -> 201...	6/4/2018 10:18 PM				286.2 -> 165...			Morphine-D6	292.2 -> 152...	4.459	4353	4.459	4353		
Naloxone	328.2 -> 309...	6/4/2018 10:18 PM				328.2 -> 211...			Naloxone-D5	333.2 -> 315...	5.790	306086	5.790	306086		
Naltrexol	344.2 -> 326...	6/4/2018 10:18 PM				344.2 -> 308...			Naltrexol-D3	347.2 -> 329...	5.076	306933	5.076	306933		
Naltrexone	342.2 -> 324...	6/4/2018 10:18 PM				342.2 -> 55.3			Naltrexone-D3	345.2 -> 327...	5.340	276754	5.340	276754		
Norbuprenorphine	414.3 -> 101...	6/4/2018 10:18 PM				414.3 -> 57.3			Norbuprenorphine-D3	417.3 -> 101...	5.991	34110	5.991	34110		
Nordiazepam	271.1 -> 140...	6/4/2018 10:18 PM				271.1 -> 208...			Nordiazepam-D5	276.1 -> 140...	6.555	95093	6.555	95093		
Norfentanyl	233.2 -> 84.2	6/4/2018 10:18 PM				233.2 -> 55.3			Norfentanyl-D5	238.2 -> 84.2	5.395	725050	5.395	725050		
Norhydrocodone	286.2 -> 199...	6/4/2018 10:18 PM				286.2 -> 171...			Norhydrocodone-D3	289.2 -> 202...	5.043	83220	5.043	83220		
Noroxycodone	302.1 -> 284...	6/4/2018 10:18 PM				302.1 -> 186...			Noroxycodone-D3	305.2 -> 287...	4.939	166366	4.939	166366		
O-desmethyl-tramadol	250.2 -> 58.3	6/4/2018 10:18 PM				250.2 -> 42.3			O-desmethyl-tramadol...	256.2 -> 64.3	4.968	894676	4.968	894676		
Oxazepam	287.1 -> 240...	6/4/2018 10:18 PM				287.1 -> 268...			Oxazepam-D5	292.1 -> 246...	6.388	173894	6.388	173894		
Oxycodone	316.2 -> 298...	6/4/2018 10:18 PM				316.2 -> 241...			Oxycodone-D6	322.2 -> 304...	5.161	332125	5.161	332125		
Oxymorphone	302.1 -> 284...	6/4/2018 10:18 PM				302.1 -> 227...			Oxymorphone-D3	305.2 -> 287...	4.435	303618	4.435	303618		
Phentermine	150.1 -> 65.2	6/4/2018 10:18 PM				150.1 -> 133...			Phentermine-D5	155.2 -> 96.2	5.195	354541	5.195	354541		
Promethazine	285.1 -> 86.2	6/4/2018 10:18 PM				285.1 -> 71.3			Promethazine-D3	288.2 -> 89.2	6.673	24972...	6.673	24972...		
Quetiapine	384.2 -> 253...	6/4/2018 10:18 PM				384.2 -> 221...			Quetiapine-D3	392.2 -> 226...	6.701	382811	6.701	382811		
Sertraline	306.1 -> 158...	6/4/2018 10:18 PM				306.1 -> 275...			Sertraline-D3	309.1 -> 275...	6.752	328675	6.752	328675		
Sufentanil	387.2 -> 238	6/4/2018 10:18 PM				387.2 -> 111			Sufentanil-D5	392.2 -> 238	6.022	11427	6.022	11427		

84

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Compound Method		p1 NEGATIVE CON...			p1 NEGATIVE CONTROL...			Qualifier 1 M...			Qualifier 1 Re...			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	S/N	Area	Name	Transition	RT	Resp.	RT	Resp.		
Temazepam	301.1 -> 255...	6/4/2018 10:18 PM				301.1 -> 283...					Temazepam-D5	306.1 -> 260...	6.530	503820	6.530	503820		
Tramadol	264.2 -> 58.3	6/4/2018 10:18 PM				264.2 -> 43.3					Tramadol-13C-D3	268.2 -> 58.3	5.555	13033...	5.555	13033...		
Trazodone	372.2 -> 176...	6/4/2018 10:18 PM				372.2 -> 148...					Trazodone-D6	378.2 -> 182...	6.865	12064...	6.865	12064...		
Venlafaxine	278.2 -> 58.3	6/4/2018 10:18 PM				278.2 -> 260...					Venlafaxine-D6	284.2 -> 64.3	5.901	13824...	5.901	13824...		
Zolpidem	308.2 -> 235...	6/4/2018 10:18 PM				308.2 -> 263...					Zolpidem-D6	314.2 -> 235...	6.426	14130...	6.426	14130...		

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Compound Method				p1external control				p1external control Results				Qualifier 1 M...				Qualifier 1 Res...				ISTD Method				ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.	S/N	Area	Name	Transition	RT	Resp.	Name	Transition	RT	Resp.			
6-MAM	328.2 -> 165...	6/4/2018 10:37 PM				328.2 -> 211...			6-MAM-D6	334.2 -> 165...	5.280	51280			6-MAM-D6	334.2 -> 165...	5.280	51280							
7-aminoclonazepam	286.1 -> 121...	6/4/2018 10:37 PM				286.1 -> 222...			7-Aminoclonazepam-D4	290.1 -> 121...	5.511	184559			7-Aminoclonazepam-D4	290.1 -> 121...	5.511	184559							
Acetyl Fentanyl	323.2 -> 105...	6/4/2018 10:37 PM				323.2 -> 188...			Acetyl Fentanyl-D5	328.2 -> 105...	6.341	16818...			Acetyl Fentanyl-D5	328.2 -> 105...	6.341	16818...							
Acetyl Norfentanyl	219.1 -> 84.2	6/4/2018 10:37 PM				219.1 -> 56.3			Acetyl Norfentanyl-D5	224.2 -> 84.2	4.930	430956			Acetyl Norfentanyl-D5	224.2 -> 84.2	4.930	430956							
a-hydroxyalprazolam	325.1 -> 297...	6/4/2018 10:37 PM				325.1 -> 215...			a-hydroxyalprazolam-D5	330.1 -> 302...	6.381	47378			a-hydroxyalprazolam-D5	330.1 -> 302...	6.381	47378							
alpha-PVP	232.2 -> 91.0	6/4/2018 10:37 PM				232.2 -> 77.1			alpha-PVP-d8	240.2 -> 91.1	5.824	543696			alpha-PVP-d8	240.2 -> 91.1	5.824	543696							
Alprazolam	309.1 -> 281...	6/4/2018 10:37 PM				309.1 -> 205...			Alprazolam-D5	314.1 -> 286...	6.487	244505			Alprazolam-D5	314.1 -> 286...	6.487	244505							
Amphetamine	136.1 -> 91.1	6/4/2018 10:37 PM				136.1 -> 119...			Amphetamine-D11	147.2 -> 130...	4.852	111797			Amphetamine-D11	147.2 -> 130...	4.852	111797							
Bupropion	240.1 -> 184...	6/4/2018 10:37 PM				240.1 -> 131...			Bupropion-D9	249.2 -> 185...	6.089	593713			Bupropion-D9	249.2 -> 185...	6.089	593713							
Carisoprodol	261.2 -> 176...	6/4/2018 10:37 PM				261.2 -> 55.3			Carisoprodol-D7	268.2 -> 183...	6.108	402836			Carisoprodol-D7	268.2 -> 183...	6.108	402836							
Citalopram	325.2 -> 109...	6/4/2018 10:37 PM				325.2 -> 262...			Citalopram-D6	331.2 -> 109...	6.178	881194			Citalopram-D6	331.2 -> 109...	6.178	881194							
Clonazepam	316.1 -> 269...	6/4/2018 10:37 PM				316.1 -> 213...			Clonazepam-D4	320.1 -> 217...	6.323	37101			Clonazepam-D4	320.1 -> 217...	6.323	37101							
Codeine	300.2 -> 215...	6/4/2018 10:37 PM	5.530	10702	47.40	300.2 -> 165...		30062	Codeine-D6	306.2 -> 218...	5.223	35768			Codeine-D6	306.2 -> 218...	5.223	35768							
Cyclobenzaprine	276.2 -> 214...	6/4/2018 10:37 PM				276.2 -> 231...			Cyclobenzaprine-D3	279.2 -> 215...	6.574	542092			Cyclobenzaprine-D3	279.2 -> 215...	6.574	542092							
Dextromethorphan	272.2 -> 171...	6/4/2018 10:37 PM				272.2 -> 147...			Dextromethorphan-D3	275.2 -> 171...	6.270	261647			Dextromethorphan-D3	275.2 -> 171...	6.270	261647							
Dextropropriphan	258.2 -> 157...	6/4/2018 10:37 PM				258.2 -> 133...			Dextropropriphan-D3	261.2 -> 157...	5.535	207734			Dextropropriphan-D3	261.2 -> 157...	5.535	207734							
Diazepam	285.1 -> 193...	6/4/2018 10:37 PM				285.1 -> 153...			Diazepam-D5	290.1 -> 198...	6.693	173988			Diazepam-D5	290.1 -> 198...	6.693	173988							
Dihydrocodeine	302.2 -> 198...	6/4/2018 10:37 PM				302.2 -> 128...			Dihydrocodeine-D6	308.2 -> 202...	4.959	115699			Dihydrocodeine-D6	308.2 -> 202...	4.959	115699							
Diphenhydramine	256.2 -> 167...	6/4/2018 10:37 PM				256.2 -> 152...			Diphenhydramine-D3	259.2 -> 167...	6.190	15982...			Diphenhydramine-D3	259.2 -> 167...	6.190	15982...							
Doxylamine	271.2 -> 182...	6/4/2018 10:37 PM				271.2 -> 167...			Doxylamine-D5	276.2 -> 187...	5.800	12504...			Doxylamine-D5	276.2 -> 187...	5.800	12504...							
EDDP	279.2 -> 235...	6/4/2018 10:37 PM				279.2 -> 250...			EDDP-D3	282.2 -> 235...	6.166	61207			EDDP-D3	282.2 -> 235...	6.166	61207							
Fentanyl	337.2 -> 105...	6/4/2018 10:37 PM				337.2 -> 188...			Fentanyl-D5	342.3 -> 105...	6.562	14431...			Fentanyl-D5	342.3 -> 105...	6.562	14431...							
Fluoxetine	310.1 -> 44.3	6/4/2018 10:37 PM				310.1 -> 148...			Oxycodone-D6	322.2 -> 304...	5.161	276404			Oxycodone-D6	322.2 -> 304...	5.161	276404							
Hydrocodone	300.2 -> 198...	6/4/2018 10:37 PM	5.510	348921	Infinity	300.2 -> 128...		1470...	Hydrocodone-D6	306.2 -> 202...	5.467	202488			Hydrocodone-D6	306.2 -> 202...	5.467	202488							
Hydromorphone	286.2 -> 184...	6/4/2018 10:37 PM	4.802	208296	131.55	286.2 -> 157...		1527...	Hydromorphone-D6	292.2 -> 185...	4.740	77773			Hydromorphone-D6	292.2 -> 185...	4.740	77773							
Ketamine	238.1 -> 125...	6/4/2018 10:37 PM				238.1 -> 220...			Ketamine-D4	242.1 -> 129...	6.089	410361			Ketamine-D4	242.1 -> 129...	6.089	410361							
Meprobamate	219.1 -> 158...	6/4/2018 10:37 PM				219.1 -> 97.1			Meprobamate-D7	226.2 -> 165...	5.601	140799			Meprobamate-D7	226.2 -> 165...	5.601	140799							
Methadone	310.2 -> 265...	6/4/2018 10:37 PM				310.2 -> 105...			Methadone-D9	319.3 -> 268...	6.506	11914...			Methadone-D9	319.3 -> 268...	6.506	11914...							
Methamphetamine	150.1 -> 91.1	6/4/2018 10:37 PM	5.074	101590	32.33	150.1 -> 119...		46425	Methamphetamine-D11	161.2 -> 97.1	5.033	332518			Methamphetamine-D11	161.2 -> 97.1	5.033	332518							
Morphine	286.2 -> 201...	6/4/2018 10:37 PM				286.2 -> 165...			Morphine-D6	292.2 -> 152...	4.459	4307			Morphine-D6	292.2 -> 152...	4.459	4307							
Naloxone	328.2 -> 309...	6/4/2018 10:37 PM				328.2 -> 211...			Naloxone-D5	333.2 -> 315...	5.770	252519			Naloxone-D5	333.2 -> 315...	5.770	252519							
Naltrexol	344.2 -> 326...	6/4/2018 10:37 PM				344.2 -> 308...			Naltrexol-D3	347.2 -> 329...	5.076	269664			Naltrexol-D3	347.2 -> 329...	5.076	269664							
Naltrexone	342.2 -> 324...	6/4/2018 10:37 PM				342.2 -> 55.3			Naltrexone-D3	345.2 -> 327...	5.360	227620			Naltrexone-D3	345.2 -> 327...	5.360	227620							
Norbuprenorphine	414.3 -> 101...	6/4/2018 10:37 PM				414.3 -> 57.3			Norbuprenorphine-D3	417.3 -> 101...	5.991	29321			Norbuprenorphine-D3	417.3 -> 101...	5.991	29321							
Nordiazepam	271.1 -> 140...	6/4/2018 10:37 PM				271.1 -> 208...			Nordiazepam-D5	276.1 -> 140...	6.555	83488			Nordiazepam-D5	276.1 -> 140...	6.555	83488							
Norfentanyl	233.2 -> 84.2	6/4/2018 10:37 PM				233.2 -> 55.3			Norfentanyl-D5	238.2 -> 84.2	5.395	638377			Norfentanyl-D5	238.2 -> 84.2	5.395	638377							
Norhydrocodone	286.2 -> 199...	6/4/2018 10:37 PM				286.2 -> 171...			Norhydrocodone-D3	289.2 -> 202...	5.023	70635			Norhydrocodone-D3	289.2 -> 202...	5.023	70635							
Noroxycodone	302.1 -> 284...	6/4/2018 10:37 PM				302.1 -> 186...			Noroxycodone-D3	305.2 -> 287...	4.939	146200			Noroxycodone-D3	305.2 -> 287...	4.939	146200							
O-desmethyl-tramadol	250.2 -> 58.3	6/4/2018 10:37 PM				250.2 -> 42.3			O-desmethyl-tramadol...	256.2 -> 64.3	4.968	770508			O-desmethyl-tramadol...	256.2 -> 64.3	4.968	770508							
Oxazepam	287.1 -> 240...	6/4/2018 10:37 PM				287.1 -> 268...			Oxazepam-D5	292.1 -> 246...	6.388	164550			Oxazepam-D5	292.1 -> 246...	6.388	164550							
Oxycodone	316.2 -> 298...	6/4/2018 10:37 PM				316.2 -> 241...			Oxycodone-D6	322.2 -> 304...	5.161	276404			Oxycodone-D6	322.2 -> 304...	5.161	276404							
Oxymorphone	302.1 -> 284...	6/4/2018 10:37 PM				302.1 -> 227...			Oxymorphone-D3	305.2 -> 287...	4.455	251119			Oxymorphone-D3	305.2 -> 287...	4.455	251119							
Phentermine	150.1 -> 65.2	6/4/2018 10:37 PM				150.1 -> 133...			Phentermine-D5	155.2 -> 96.2	5.195	325800			Phentermine-D5	155.2 -> 96.2	5.195	325800							
Promethazine	285.1 -> 86.2	6/4/2018 10:37 PM				285.1 -> 71.3			Promethazine-D3	288.2 -> 89.2	6.673	22223...			Promethazine-D3	288.2 -> 89.2	6.673	22223...							
Quetiapine	384.2 -> 253...	6/4/2018 10:37 PM				384.2 -> 221...			Quetiapine-D8	392.2 -> 226...	6.701	326101			Quetiapine-D8	392.2 -> 226...	6.701	326101							
Sertraline	306.1 -> 158...	6/4/2018 10:37 PM	6.753	621058	1091.18	306.1 -> 275...		5917...	Sertraline-D3	309.1 -> 275...	6.731	268128			Sertraline-D3	309.1 -> 275...	6.731	268128							
Sufentanil	387.2 -> 238	6/4/2018 10:37 PM				387.2 -> 111			Sufentanil-D5	392.2 -> 238	6.022	979447			Sufentanil-D5	392.2 -> 238	6.022	979447							

Compound Method		p1external control		p1external control Results		Qualifier 1 M...		Qualifier 1 Res...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.	
Temazepam	301.1 -> 255...	6/4/2018 10:37 PM				301.1 -> 283...			Temazepam-D5	306.1 -> 260...	6.530	419583	
Tramadol	264.2 -> 58.3	6/4/2018 10:37 PM				264.2 -> 43.3			Tramadol-13C-D3	268.2 -> 58.3	5.555	11140...	
Trazodone	372.2 -> 176...	6/4/2018 10:37 PM				372.2 -> 148...			Trazodone-D6	378.2 -> 182...	6.865	10328...	
Venlafaxine	278.2 -> 58.3	6/4/2018 10:37 PM				278.2 -> 260...			Venlafaxine-D6	284.2 -> 64.3	5.901	11360...	
Zolpidem	308.2 -> 235...	6/4/2018 10:37 PM				308.2 -> 263...			Zolpidem-D6	314.2 -> 235...	6.426	11834...	

8

Compound Method			p2 cal 1-2b			p2 cal 1-2b Results			Qualifier 1 M...			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.				
7-aminoflunitrazepam	284.1 -> 135...	6/4/2018 10:08 PM	5.722	43808	143.40	284.1 -> 93.2	137.50	13221	7-aminoflunitrazepam-D7	291.2 -> 138...	5.699	20515				
alpha-hydroxymidazolam	342.1 -> 324...	6/4/2018 10:08 PM	6.468	65194	83.52	342.1 -> 203...	158.73	37787	alpha-hydroxymidazolam-	346.1 -> 328...	6.468	33479				
Amitriptyline	278.2 -> 91.2	6/4/2018 10:08 PM	6.701	174937	Infinity	278.2 -> 105...	Infinity	98994	Amitriptyline-D3	281.2 -> 91.2	6.700	60095				
Amoxapine	314.1 -> 271...	6/4/2018 10:08 PM	6.655	59651	Infinity	314.1 -> 193...	Infinity	31216	Amitriptyline-D3	281.2 -> 91.2	6.700	60095				
Benzoyllecgonine	290.1 -> 168...	6/4/2018 10:08 PM	5.312	23525	8493.20	290.1 -> 105...	Infinity	14105	Benzoyllecgonine-D8	298.2 -> 171...	5.289	811				
Carbamazepine	237.1 -> 193...	6/4/2018 10:08 PM	6.137	27767	4583.04	237.1 -> 194...	Infinity	2469...	Carbamazepine-13C6	243.1 -> 200...	6.137	12182				
Chlordiazepoxide	300.1 -> 227...	6/4/2018 10:08 PM	6.596	27620	101.98	300.1 -> 282...	86.62	19835	Chlordiazepoxide-D5	305.1 -> 286...	6.596	24759				
Clomipramine	315.2 -> 86.2	6/4/2018 10:08 PM	7.018	311870	830.54	315.2 -> 58.3	420.54	1705...	Clomipramine-D3	318.2 -> 89.2	6.977	16164				
Cocaine	304.2 -> 182...	6/4/2018 10:08 PM	5.821	172749	79116...	304.2 -> 105...	78.85	38399	Cocaine-D3	307.2 -> 185...	5.800	73801				
Desipramine	267.2 -> 72.3	6/4/2018 10:08 PM	6.500	299184	Infinity	267.2 -> 44.3	96.45	1412...	Desipramine-D3	270.2 -> 75.3	6.500	13893				
Doxepin	280.2 -> 107...	6/4/2018 10:08 PM	6.397	152196	210.39	280.2 -> 77.2	Infinity	45791	Doxepin-D3	283.2 -> 107...	6.376	74892				
Estazolam	295.1 -> 267...	6/4/2018 10:08 PM	6.414	68699	35792...	295.1 -> 205...	231.51	54240	Estazolam-D5	300.1 -> 272...	6.392	31536				
Flunitrazepam	314.1 -> 268...	6/4/2018 10:08 PM	6.432	53511	364.18	314.1 -> 239...	293.72	20058	Flunitrazepam-D7	321.1 -> 245...	6.431	1133				
Flurazepam	388.2 -> 315...	6/4/2018 10:08 PM	6.588	180258	37721...	388.2 -> 317...	132.11	44661	Zopiclone-D4	393.1 -> 244...	6.425	12580				
Imipramine	281.2 -> 86.2	6/4/2018 10:08 PM	6.639	455862	Infinity	281.2 -> 58.3	Infinity	2335...	Imipramine-D3	284.2 -> 61.3	6.618	11880				
Levamisole	205.1 -> 91.2	6/4/2018 10:08 PM	5.407	42521	Infinity	205.1 -> 178...	350.91	38434	Cocaine-D3	307.2 -> 185...	5.800	73801				
Maprotiline	278.2 -> 91.2	6/4/2018 10:08 PM	6.701	172046	Infinity	278.2 -> 117...	128.81	58923	Amitriptyline-D3	281.2 -> 91.2	6.700	60095				
MDA	180.1 -> 163...	6/4/2018 10:08 PM	5.044	42281	Infinity	180.1 -> 105...	5.35	30708	MDA-D5	185.1 -> 168...	5.044	22213				
MDEA	208.1 -> 163...	6/4/2018 10:08 PM	5.344	95008	572.37	208.1 -> 105...	394.08	75121	MDEA-D6	214.2 -> 166...	5.323	51490				
MDMA	194.1 -> 163...	6/4/2018 10:08 PM	5.184	74568	5482.79	194.1 -> 105...	Infinity	45419	MDMA-D6	200.2 -> 166...	5.163	4203				
Meperidine	248.2 -> 220...	6/4/2018 10:08 PM	5.871	67436	12204...	248.2 -> 174...	2024...	40536	Meperidine-D4	252.2 -> 224...	5.871	37807				
Methyphenidate	234.2 -> 84.2	6/4/2018 10:08 PM	5.709	276442	178.33	234.2 -> 56.3	293.63	56045	Meperidine-D4	252.2 -> 224...	5.871	37807				
Metoprolol	268.2 -> 116...	6/4/2018 10:08 PM	5.539	24112	716.06	268.2 -> 56.3	Infinity	21583	Meperidine-D4	252.2 -> 224...	5.871	37807				
Midazolam	326.1 -> 223...	6/4/2018 10:08 PM	6.633	23676	302.33	326.1 -> 249...	403.87	23276	Midazolam-D4	330.1 -> 295...	6.632	41871				
Mirtazapine	266.2 -> 195...	6/4/2018 10:08 PM	6.541	231249	Infinity	266.2 -> 72.3	429.86	1515...	Midazolam-D4	330.1 -> 295...	6.632	41871				
Mitragynine	399.2 -> 174...	6/4/2018 10:08 PM	6.566	66577	14986...	399.2 -> 238...	166.18	30900	Carbamazepine-13C6	243.1 -> 200...	6.137	12182				
Normeperidine	234.1 -> 42.3	6/4/2018 10:08 PM	5.709	66648	Infinity	234.1 -> 160...	763.95	57418	Normeperidine-D4	238.2 -> 164...	5.708	27205				
Norpropoxyphene	326.2 -> 44.3	6/4/2018 10:08 PM	6.348	44909	277.59	326.2 -> 252...	1373...	15790	Norpropoxyphene-D5	331.2 -> 44.3	6.347	20525				
Nortriptyline	264.2 -> 91.2	6/4/2018 10:08 PM	6.542	106465	Infinity	264.2 -> 233...	Infinity	87303	Nortriptyline-D3	267.2 -> 233...	6.540	39745				
Ondansetron	294.2 -> 184...	6/4/2018 10:08 PM	6.169	98539	465.60	294.2 -> 212...	46.31	62293	Pentazocine-13C3	289.2 -> 72.3	5.783	52207				
Pentazocine	286.2 -> 218...	6/4/2018 10:08 PM	5.783	137310	141.48	286.2 -> 41.3	339.85	1338...	Pentazocine-13C3	289.2 -> 72.3	5.783	52207				
Phenazepam	349.0 -> 206...	6/4/2018 10:08 PM	6.508	48447	11259...	349.0 -> 183...	258.02	41325	Phenazepam-D4	353.0 -> 183...	6.507	1795				
Phencyclidine	244.2 -> 86.2	6/4/2018 10:08 PM	6.055	214384	597.86	244.2 -> 91.1	Infinity	1347...	Phencyclidine-D5	249.2 -> 86.2	6.034	97093				
Phenylethylamine	253.1 -> 104...	6/4/2018 10:08 PM	6.033	3675	18.00	253.1 -> 182...	31.69	3913	Phenylethylamine-D10	263.2 -> 192...	6.033	2107				
Prazepam	325.1 -> 271...	6/4/2018 10:08 PM	6.956	202772	Infinity	325.1 -> 140...	307.64	49975	Prazepam-D5	330.1 -> 276...	6.954	89429				
Primidone	219.1 -> 91.2	6/4/2018 10:08 PM	5.405	10494	7.56	219.1 -> 162...	40.62	7646	Prazepam-D5	330.1 -> 276...	6.954	89429				
Propoxyphene	340.2 -> 58.3	6/4/2018 10:08 PM	6.530	292512	380.65	340.2 -> 266...	Infinity	64199	Propoxyphene-D11	351.3 -> 277...	6.467	31679				
Proprietyline	264.2 -> 155...	6/4/2018 10:08 PM	6.440	630367	Infinity	264.2 -> 191...	Infinity	8218...	Nortriptyline-D3	267.2 -> 233...	6.540	39745				
Pseudoephedrine	166.1 -> 148...	6/4/2018 10:08 PM	4.681	755726	354.22	166.1 -> 133...	199.66	1492...	Pseudoephedrine-D3	169.1 -> 151...	4.680	37806				
Tapentadol	222.2 -> 107...	6/4/2018 10:08 PM	5.547	152690	497.37	222.2 -> 121...	475.46	59797	Tapentadol-D3	225.2 -> 107...	5.547	78295				
Trimipramine	295.2 -> 100...	6/4/2018 10:08 PM	6.779	502336	Infinity	295.2 -> 58.3	Infinity	2754...	Trimipramine-D3	298.2 -> 103...	6.759	24161				
Verapamil	455.3 -> 165...	6/4/2018 10:08 PM	6.545	199277	855.79	455.3 -> 150...	118.87	54409	Trimipramine-D3	298.2 -> 103...	6.759	24161				
Zaleplon	306.1 -> 236...	6/4/2018 10:08 PM	6.228	70304	12780...	306.1 -> 264...	364.66	52070	Zaleplon-D4	310.2 -> 240...	6.228	29340				
Zopiclone	389.1 -> 244...	6/4/2018 10:08 PM	6.425	10956	1849.92	389.1 -> 216...	883.40	6634	Zopiclone-D4	393.1 -> 244...	6.425	12580				

Compound Method			p2 negative control			p2 negative control Results			Qualifier 1 M...			Qualifier...			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	Name	Transition	RT	Resp.	S/N	Area	Name	Transition	RT	Resp.	
7-aminoflunitrazepam	284.1 -> 135...	6/4/2018 10:27 PM				284.1 -> 93.2			7-aminoflunitrazepam-D7	291.2 -> 138...	5.699	249283							
alpha-hydroxymidazolam	342.1 -> 324...	6/4/2018 10:27 PM				342.1 -> 203...			alpha-hydroxymidazolam-...	346.1 -> 328...	6.468	390361							
Amitriptyline	278.2 -> 91.2	6/4/2018 10:27 PM				278.2 -> 105...			Amitriptyline-D3	281.2 -> 91.2	6.700	566445							
Amoxapine	314.1 -> 271...	6/4/2018 10:27 PM				314.1 -> 193...			Amitriptyline-D3	281.2 -> 91.2	6.700	566445							
Benzoyllecgonine	290.1 -> 168...	6/4/2018 10:27 PM				290.1 -> 105...			Benzoyllecgonine-D8	298.2 -> 171...	5.289	7159							
Carbamazepine	237.1 -> 193...	6/4/2018 10:27 PM				237.1 -> 194...			Carbamazepine-13C6	243.1 -> 200...	6.137	13728...							
Chlordiazepoxide	300.1 -> 227...	6/4/2018 10:27 PM				300.1 -> 282...			Chlordiazepoxide-D5	305.1 -> 286...	6.596	269027							
Clomipramine	315.2 -> 86.2	6/4/2018 10:27 PM				315.2 -> 58.3			Clomipramine-D3	318.2 -> 89.2	6.997	16629...							
Cocaine	304.2 -> 182...	6/4/2018 10:27 PM				304.2 -> 105...			Cocaine-D3	307.2 -> 185...	5.800	760781							
Desipramine	267.2 -> 72.3	6/4/2018 10:27 PM				267.2 -> 44.3			Desipramine-D3	270.2 -> 75.3	6.500	15123...							
Doxepin	280.2 -> 107...	6/4/2018 10:27 PM				280.2 -> 77.2			Doxepin-D3	283.2 -> 107...	6.376	771950							
Estazolam	295.1 -> 267...	6/4/2018 10:27 PM				295.1 -> 205...			Estazolam-D5	300.1 -> 272...	6.392	369059							
Flunitrazepam	314.1 -> 268...	6/4/2018 10:27 PM				314.1 -> 239...			Flunitrazepam-D7	321.1 -> 245...	6.431	14179							
Flurazepam	388.2 -> 315...	6/4/2018 10:27 PM				388.2 -> 317...			Zopiclone-D4	393.1 -> 244...	6.425	122923							
Imipramine	281.2 -> 86.2	6/4/2018 10:27 PM				281.2 -> 58.3			Imipramine-D3	284.2 -> 61.3	6.639	12528...							
Levamisole	205.1 -> 91.2	6/4/2018 10:27 PM				205.1 -> 178...			Cocaine-D3	307.2 -> 185...	5.800	760781							
Maprotiline	278.2 -> 91.2	6/4/2018 10:27 PM				278.2 -> 117...			Amitriptyline-D3	281.2 -> 91.2	6.700	566445							
MDA	180.1 -> 163...	6/4/2018 10:27 PM				180.1 -> 105...			MDA-D5	185.1 -> 168...	5.044	243630							
MDEA	208.1 -> 163...	6/4/2018 10:27 PM				208.1 -> 105...			MDEA-D6	214.2 -> 166...	5.323	575119							
MDMA	194.1 -> 163...	6/4/2018 10:27 PM				194.1 -> 105...			MDMA-D6	200.2 -> 166...	5.183	44519							
Meperidine	248.2 -> 220...	6/4/2018 10:27 PM				248.2 -> 174...			Meperidine-D4	252.2 -> 224...	5.871	396615							
Methylphenidate	234.2 -> 84.2	6/4/2018 10:27 PM				234.2 -> 56.3			Meperidine-D4	252.2 -> 224...	5.871	396615							
Metoprolol	268.2 -> 116...	6/4/2018 10:27 PM				268.2 -> 56.3			Meperidine-D4	252.2 -> 224...	5.871	396615							
Midazolam	326.1 -> 223...	6/4/2018 10:27 PM				326.1 -> 249...			Midazolam-D4	330.1 -> 295...	6.632	459517							
Mirtazapine	266.2 -> 195...	6/4/2018 10:27 PM				266.2 -> 72.3			Midazolam-D4	330.1 -> 295...	6.632	459517							
Mitragynine	399.2 -> 174...	6/4/2018 10:27 PM				399.2 -> 238...			Carbamazepine-13C6	243.1 -> 200...	6.137	13728...							
Normeperidine	234.1 -> 42.3	6/4/2018 10:27 PM				234.1 -> 160...			Normeperidine-D4	238.2 -> 164...	5.708	242693							
Norpropoxyphene	326.2 -> 44.3	6/4/2018 10:27 PM				326.2 -> 252...			Norpropoxyphene-D5	331.2 -> 44.3	6.347	215023							
Notriptyline	264.2 -> 91.2	6/4/2018 10:27 PM				264.2 -> 233...			Notriptyline-D3	267.2 -> 233...	6.540	437228							
Ondansetron	294.2 -> 184...	6/4/2018 10:27 PM				294.2 -> 212...			Pentazocine-13C3	289.2 -> 72.3	5.803	571564							
Pentazocine	286.2 -> 218...	6/4/2018 10:27 PM				286.2 -> 41.3			Pentazocine-13C3	289.2 -> 72.3	5.803	571564							
Phenazepam	349.0 -> 206...	6/4/2018 10:27 PM				349.0 -> 183...			Phenazepam-D4	353.0 -> 183...	6.507	21631							
Phencyclidine	244.2 -> 86.2	6/4/2018 10:27 PM				244.2 -> 91.1			Phencyclidine-D5	249.2 -> 86.2	6.034	11067...							
Phenytoloin	253.1 -> 104...	6/4/2018 10:27 PM				253.1 -> 182...			Phenytoloin-D10	263.2 -> 192...	6.013	21964							
Prazepam	325.1 -> 271...	6/4/2018 10:27 PM				325.1 -> 140...			Prazepam-D5	330.1 -> 276...	6.954	901491							
Primidone	219.1 -> 91.2	6/4/2018 10:27 PM				219.1 -> 162...			Prazepam-D5	330.1 -> 276...	6.954	901491							
Propoxyphene	340.2 -> 58.3	6/4/2018 10:27 PM				340.2 -> 266...			Propoxyphene-D11	351.3 -> 277...	6.467	353601							
Propriptyline	264.2 -> 155...	6/4/2018 10:27 PM				264.2 -> 191...			Propoxyphene-D11	351.3 -> 277...	6.467	353601							
Pseudoephedrine	166.1 -> 148...	6/4/2018 10:27 PM				166.1 -> 133...			Propoxyphene-D11	351.3 -> 277...	6.467	353601							
Tapentadol	222.2 -> 107...	6/4/2018 10:27 PM				222.2 -> 121...			Propoxyphene-D11	351.3 -> 277...	6.467	353601							
Trimipramine	295.2 -> 100...	6/4/2018 10:27 PM				295.2 -> 58.3			Propoxyphene-D11	351.3 -> 277...	6.467	353601							
Verapamil	455.3 -> 165...	6/4/2018 10:27 PM				455.3 -> 150...			Propoxyphene-D11	351.3 -> 277...	6.467	353601							
Zaleplon	306.1 -> 236...	6/4/2018 10:27 PM				306.1 -> 264...			Propoxyphene-D11	351.3 -> 277...	6.467	353601							
Zopiclone	389.1 -> 244...	6/4/2018 10:27 PM				389.1 -> 216...			Propoxyphene-D11	351.3 -> 277...	6.467	353601							

Compound Method			p2 external control			p2 external control Results			Qualifier 1 M...			Qualifier 1 Result...			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Area	S/N	Transition	Area	Name	Transition	RT	Resp.	RT	Resp.		
7-aminoflunitrazepam	284.1 -> 135...	6/4/2018 10:47 PM				284.1 -> 93.2				284.1 -> 93.2		7-aminoflunitrazepam-D7	291.2 -> 138...	5.699	2102	5.699	2102		
alpha-hydroxymidazolam	342.1 -> 324...	6/4/2018 10:47 PM				342.1 -> 203...				342.1 -> 203...		alpha-hydroxymidazolam...	346.1 -> 328...	6.468	3546	6.468	3546		
Amitriptyline	278.2 -> 91.2	6/4/2018 10:47 PM				278.2 -> 105...				278.2 -> 105...		Amitriptyline-D3	281.2 -> 91.2	6.700	4653	6.700	4653		
Amoxapine	314.1 -> 271...	6/4/2018 10:47 PM				314.1 -> 193...				314.1 -> 193...		Amitriptyline-D3	281.2 -> 91.2	6.700	4653	6.700	4653		
Benzoyllecgonine	290.1 -> 168...	6/4/2018 10:47 PM				290.1 -> 105...				290.1 -> 105...		Benzoyllecgonine-D8	298.2 -> 171...	5.289	564	5.289	564		
Carbamazepine	237.1 -> 193...	6/4/2018 10:47 PM				237.1 -> 194...				237.1 -> 194...		Carbamazepine-13C6	243.1 -> 200...	6.137	11974	6.137	11974		
Chlordiazepoxide	300.1 -> 227...	6/4/2018 10:47 PM				300.1 -> 282...				300.1 -> 282...		Chlordiazepoxide-D5	305.1 -> 286...	6.596	23924	6.596	23924		
Clomipramine	315.2 -> 86.2	6/4/2018 10:47 PM				315.2 -> 58.3				315.2 -> 58.3		Clomipramine-D3	318.2 -> 89.2	6.997	1315	6.997	1315		
Cocaine	304.2 -> 182...	6/4/2018 10:47 PM				304.2 -> 105...				304.2 -> 105...		Cocaine-D3	307.2 -> 185...	5.821	6592	5.821	6592		
Desipramine	267.2 -> 72.3	6/4/2018 10:47 PM				267.2 -> 44.3				267.2 -> 44.3		Desipramine-D3	270.2 -> 75.3	6.500	12432	6.500	12432		
Doxepin	280.2 -> 107...	6/4/2018 10:47 PM				280.2 -> 77.2				280.2 -> 77.2		Doxepin-D3	283.2 -> 107...	6.376	6706	6.376	6706		
Estazolam	295.1 -> 267...	6/4/2018 10:47 PM				295.1 -> 205...				295.1 -> 205...		Estazolam-D5	300.1 -> 272...	6.392	33352	6.392	33352		
Flunitrazepam	314.1 -> 268...	6/4/2018 10:47 PM				314.1 -> 239...				314.1 -> 239...		Flunitrazepam-D7	321.1 -> 245...	6.410	121	6.410	121		
Flurazepam	388.2 -> 315...	6/4/2018 10:47 PM				388.2 -> 317...				388.2 -> 317...		Zopiclone-D4	393.1 -> 244...	6.425	834	6.425	834		
Imipramine	281.2 -> 86.2	6/4/2018 10:47 PM				281.2 -> 58.3				281.2 -> 58.3		Imipramine-D3	284.2 -> 61.3	6.618	1100	6.618	1100		
Levamisole	205.1 -> 91.2	6/4/2018 10:47 PM				205.1 -> 178...				205.1 -> 178...		Cocaine-D3	307.2 -> 185...	5.821	6592	5.821	6592		
Maprotiline	278.2 -> 91.2	6/4/2018 10:47 PM				278.2 -> 117...				278.2 -> 117...		Amitriptyline-D3	281.2 -> 91.2	6.700	4653	6.700	4653		
MDA	180.1 -> 163...	6/4/2018 10:47 PM				180.1 -> 105...				180.1 -> 105...		MDA-D5	185.1 -> 168...	5.044	2146	5.044	2146		
MDEA	208.1 -> 163...	6/4/2018 10:47 PM				208.1 -> 105...				208.1 -> 105...		MDEA-D6	214.2 -> 166...	5.323	4804	5.323	4804		
MDMA	194.1 -> 163...	6/4/2018 10:47 PM				194.1 -> 105...				194.1 -> 105...		MDMA-D6	200.2 -> 166...	5.183	376	5.183	376		
Meperidine	248.2 -> 220...	6/4/2018 10:47 PM				248.2 -> 174...				248.2 -> 174...		Meperidine-D4	252.2 -> 224...	5.871	3349	5.871	3349		
Methylphenidate	234.2 -> 84.2	6/4/2018 10:47 PM				234.2 -> 56.3				234.2 -> 56.3		Meperidine-D4	252.2 -> 224...	5.871	3349	5.871	3349		
Metoprolol	268.2 -> 116...	6/4/2018 10:47 PM				268.2 -> 56.3				268.2 -> 56.3		Meperidine-D4	252.2 -> 224...	5.871	3349	5.871	3349		
Midazolam	326.1 -> 223...	6/4/2018 10:47 PM				326.1 -> 249...				326.1 -> 249...		Midazolam-D4	330.1 -> 295...	6.632	4042	6.632	4042		
Mirtazapine	266.2 -> 195...	6/4/2018 10:47 PM				266.2 -> 72.3				266.2 -> 72.3		Midazolam-D4	330.1 -> 295...	6.632	4042	6.632	4042		
Mirtazapine	399.2 -> 174...	6/4/2018 10:47 PM				399.2 -> 238...				399.2 -> 238...		Carbamazepine-13C6	243.1 -> 200...	6.137	11974	6.137	11974		
Mirtazapine	234.1 -> 42.3	6/4/2018 10:47 PM				234.1 -> 160...				234.1 -> 160...		Normeperidine-D4	238.2 -> 164...	5.708	2093	5.708	2093		
Normeperidine	326.2 -> 44.3	6/4/2018 10:47 PM				326.2 -> 252...				326.2 -> 252...		Normeperidine-D4	238.2 -> 164...	5.708	2093	5.708	2093		
Norpropoxyphene	264.2 -> 91.2	6/4/2018 10:47 PM	6.542	887282	1028.51	264.2 -> 233...		8359...	5255...	264.2 -> 233...		Norpropoxyphene-D5	331.2 -> 44.3	6.347	1779	6.347	1779		
Nortriptyline	294.2 -> 184...	6/4/2018 10:47 PM				294.2 -> 212...				294.2 -> 212...		Nortriptyline-D3	267.2 -> 233...	6.540	35042	6.540	35042		
Ondansetron	286.2 -> 218...	6/4/2018 10:47 PM				286.2 -> 41.3				286.2 -> 41.3		Pentazocine-13C3	289.2 -> 72.3	5.803	4638	5.803	4638		
Pentazocine	349.0 -> 206...	6/4/2018 10:47 PM				349.0 -> 183...				349.0 -> 183...		Pentazocine-13C3	289.2 -> 72.3	5.803	4638	5.803	4638		
Phenazepam	244.2 -> 86.2	6/4/2018 10:47 PM				244.2 -> 91.1				244.2 -> 91.1		Phenazepam-D4	353.0 -> 183...	6.507	1842	6.507	1842		
Phencyclidine	253.1 -> 104...	6/4/2018 10:47 PM				253.1 -> 182...				253.1 -> 182...		Phencyclidine-D5	249.2 -> 86.2	6.034	9408	6.034	9408		
Phenylethanolamine	325.1 -> 271...	6/4/2018 10:47 PM				325.1 -> 140...				325.1 -> 140...		Phenylethanolamine-D10	263.2 -> 192...	6.013	1881	6.013	1881		
Praxapam	219.1 -> 91.2	6/4/2018 10:47 PM				219.1 -> 162...				219.1 -> 162...		Prazepam-D5	330.1 -> 276...	6.954	8160	6.954	8160		
Primidone	340.2 -> 58.3	6/4/2018 10:47 PM				340.2 -> 266...				340.2 -> 266...		Prazepam-D5	330.1 -> 276...	6.954	8160	6.954	8160		
Propoxyphene	264.2 -> 155...	6/4/2018 10:47 PM				264.2 -> 191...				264.2 -> 191...		Propoxyphene-D11	351.3 -> 277...	6.467	3029	6.467	3029		
Propoxyphene	166.1 -> 148...	6/4/2018 10:47 PM				166.1 -> 133...				166.1 -> 133...		Nortriptyline-D3	267.2 -> 233...	6.540	35042	6.540	35042		
Pseudoephedrine	222.2 -> 107...	6/4/2018 10:47 PM				222.2 -> 121...				222.2 -> 121...		Pseudoephedrine-D3	169.1 -> 151...	4.680	38002	4.680	38002		
Tapentadol	295.2 -> 100...	6/4/2018 10:47 PM				295.2 -> 58.3				295.2 -> 58.3		Tapentadol-D3	225.2 -> 107...	5.547	7156	5.547	7156		
Trimipramine	455.3 -> 165...	6/4/2018 10:47 PM				455.3 -> 150...				455.3 -> 150...		Trimipramine-D3	298.2 -> 103...	6.759	2282	6.759	2282		
Verapamil	306.1 -> 236...	6/4/2018 10:47 PM				306.1 -> 264...				306.1 -> 264...		Trimipramine-D3	298.2 -> 103...	6.759	2282	6.759	2282		
Zaleplon	389.1 -> 244...	6/4/2018 10:47 PM				389.1 -> 216...				389.1 -> 216...		Zaleplon-D4	310.2 -> 240...	6.228	2739	6.228	2739		
Zopiclone												Zopiclone-D4	393.1 -> 244...	6.425	834	6.425	834		

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

Extraction Date: 6-4-18

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: 06042018 blood screen AM 25²⁶ 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:



ISP FORENSICS - Cd'A Instrument #62340

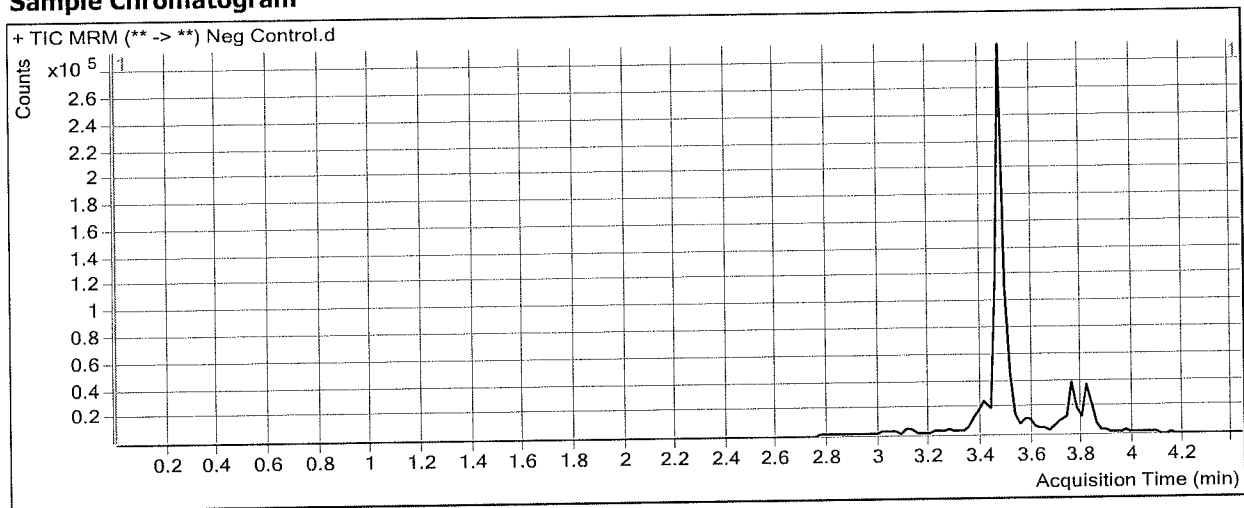
Cannabinoid Screen Report

Batch Data Path I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann screen
Analysis Time 6/5/2018 9:18 AM **Analyst Name** anord
Report Time 6/6/2018 9:35 AM **Reporter Name** ISP Tox
Last Calib Update 6/5/2018 9:18 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-04 13:26 **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 Instrument #62340

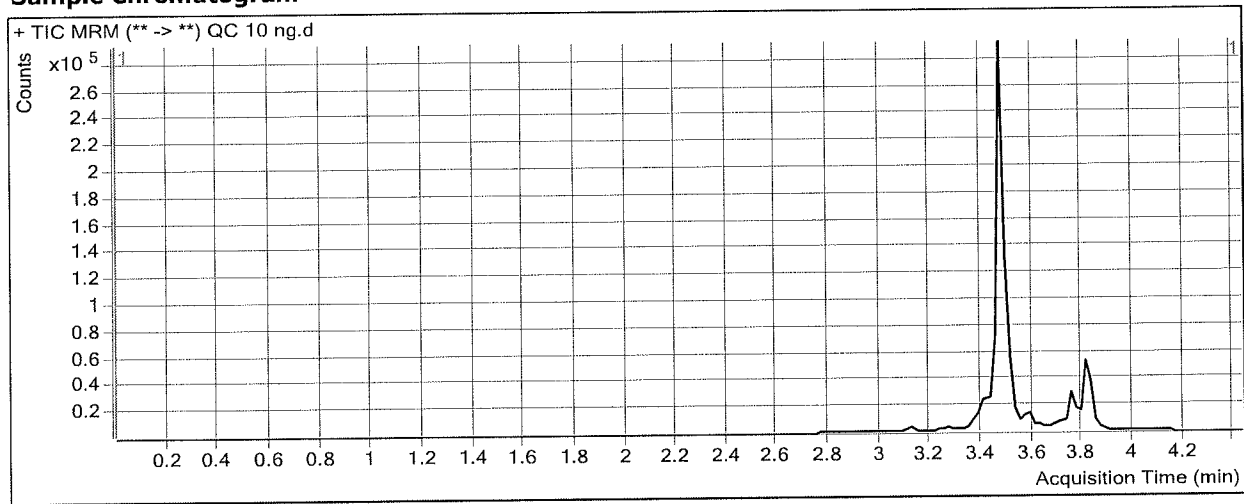
Cannabinoid Screen Report

Batch Data Path	I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann screen		
Analysis Time	6/5/2018 9:18 AM	Analyst Name	anord
Report Time	6/6/2018 9:35 AM	Reporter Name	ISP Tox
Last Calib Update	6/5/2018 9:18 AM	Batch State	Processed

Analysis Info

Acq Time	2018-06-04 13:46	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

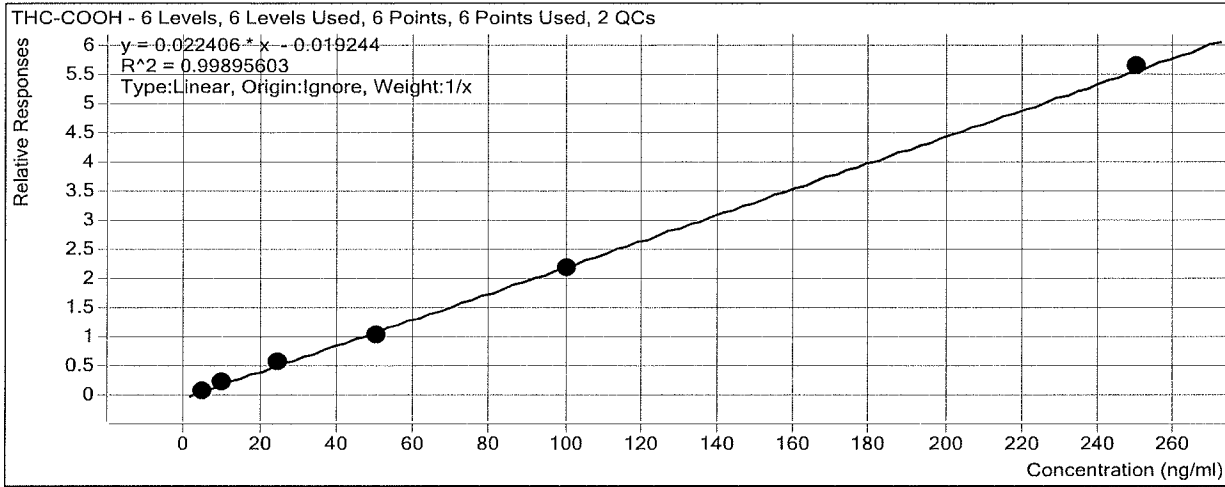
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.426	15888	65185	0.2437	11.7371
THC-OH	3.473	57577	593713	0.0970	9.8266
THC	3.820	6137	54422	0.1128	10.2713

ISP Forensics Calibration Curve Report

Batch Data Path I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann
screen.batch.bin

Last Calib Update 6/5/2018 9:18 AM **Analyst Name** ISP TOX

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



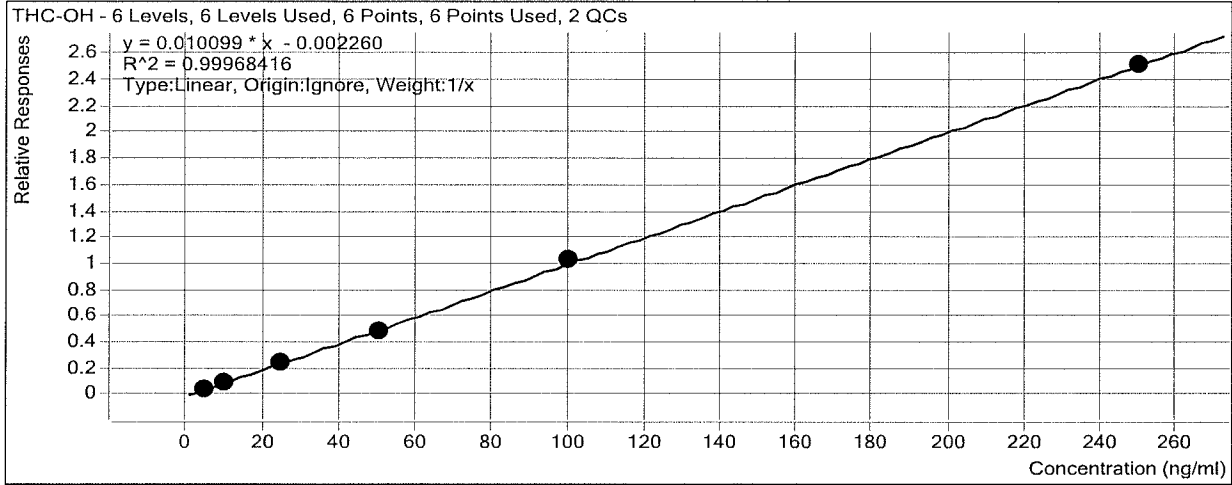
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input type="checkbox"/>	3	2.8	92.2
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	4.7	93.0
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.6	105.7
QC 10 ng	3	<input checked="" type="checkbox"/>	10	11.7	117.4
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	26.8	107.2
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	47.3	94.7
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	98.7	98.7
cal 7 - 250ng	7	<input checked="" type="checkbox"/>	250	252.0	100.8

ISP Forensics Calibration Curve Report

Batch Data Path I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann
screen.batch.bin

Last Calib Update 6/5/2018 9:18 AM **Analyst Name** ISP TOX

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



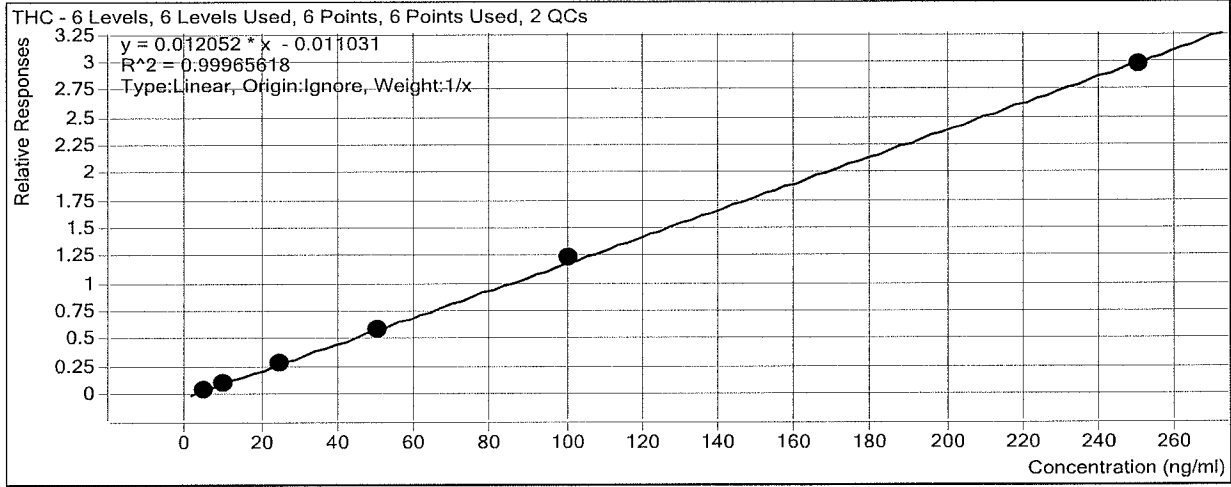
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input checked="" type="checkbox"/>	3	3.0	101.2
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.0	99.5
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.1	100.6
QC 10 ng	3	<input checked="" type="checkbox"/>	10	9.8	98.3
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	25.4	101.5
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	48.3	96.7
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	102.1	102.1
cal 7 - 250ng	7	<input checked="" type="checkbox"/>	250	249.1	99.7

ISP Forensics Calibration Curve Report

Batch Data Path I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann
screen.batch.bin

Last Calib Update 6/5/2018 9:18 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	3.4	112.7
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.0	99.8
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	9.8	98.2
QC 10 ng	3	<input checked="" type="checkbox"/>	10	10.3	102.7
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	25.1	100.3
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	49.9	99.8
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	102.9	102.9
cal 7 - 250ng	7	<input checked="" type="checkbox"/>	250	247.3	98.9

ISP FORENSICS - Cd'A Instrument #62340

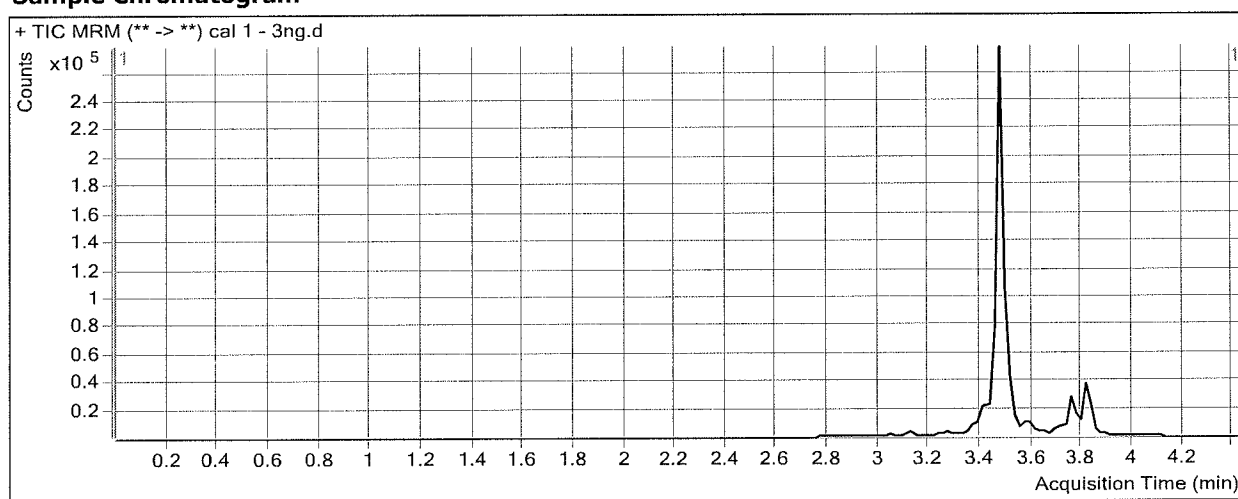
Cannabinoid Screen Report

Batch Data Path I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann screen
Analysis Time 6/5/2018 9:18 AM **Analyst Name** anord
Report Time 6/6/2018 9:35 AM **Reporter Name** ISP Tox
Last Calib Update 6/5/2018 9:18 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-04 12:39 **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	3.426	2916	68179	0.0428	2.7674
THC-OH	3.473	16579	583830	0.0284	3.0357
THC	3.820	1721	57938	0.0297	3.3804

ISP FORENSICS - Cd'A Instrument #62340

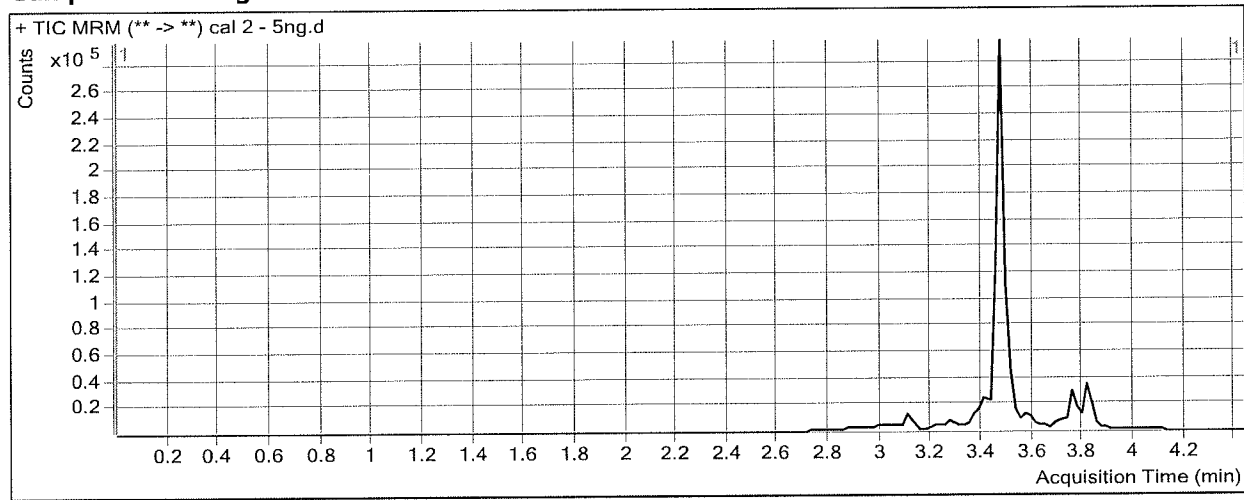
Cannabinoid Screen Report

Batch Data Path I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann screen
Analysis Time 6/5/2018 9:18 AM **Analyst Name** anord
Report Time 6/6/2018 9:35 AM **Reporter Name** ISP Tox
Last Calib Update 6/5/2018 9:18 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-04 12:46 **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	3.426	5661	66626	0.0850	4.6507
THC-OH	3.473	31599	658789	0.0480	4.9735
THC	3.820	2737	55710	0.0491	4.9921

ISP FORENSICS - Cd'A Instrument #62340

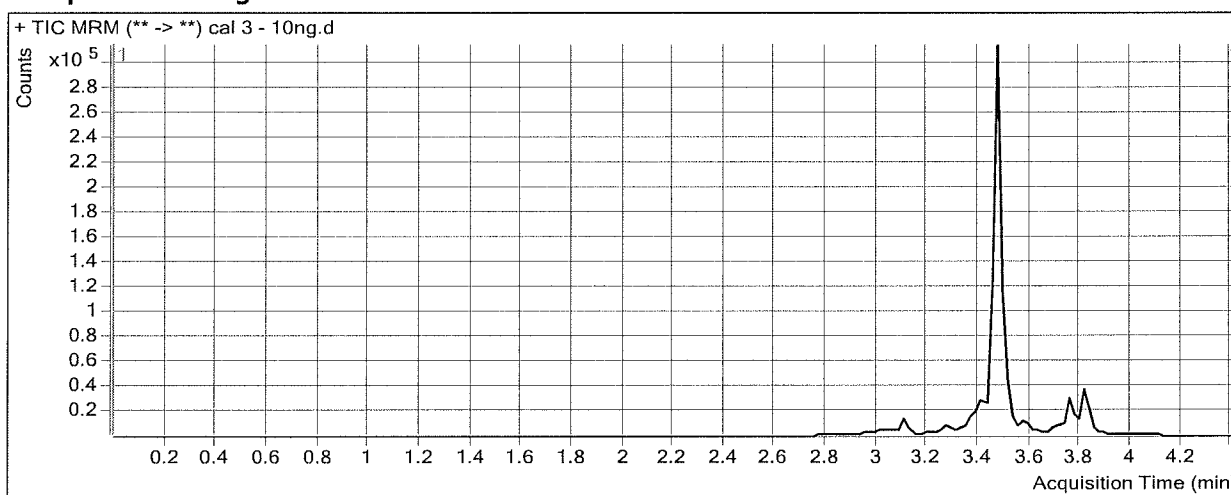
Cannabinoid Screen Report

Batch Data Path I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann screen
Analysis Time 6/5/2018 9:18 AM **Analyst Name** anord
Report Time 6/6/2018 9:35 AM **Reporter Name** ISP Tox
Last Calib Update 6/5/2018 9:18 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-04 12:53 **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	3.426	13416	61674	0.2175	10.5674
THC-OH	3.473	63278	637139	0.0993	10.0582
THC	3.820	5652	52680	0.1073	9.8169

ISP FORENSICS - Cd'A Instrument #62340

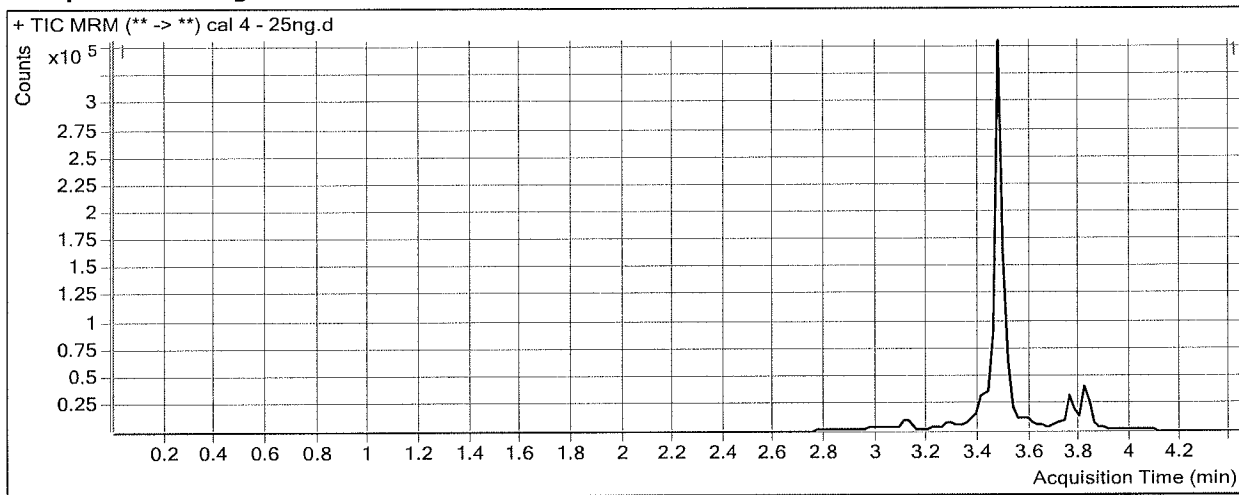
Cannabinoid Screen Report

Batch Data Path I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann scre
Analysis Time 6/5/2018 9:18 AM **Analyst Name** anord
Report Time 6/6/2018 9:35 AM **Reporter Name** ISP Tox
Last Calib Update 6/5/2018 9:18 AM **Batch State** Processed

Analysis Info

Acq Time 2018-06-04 12:59 **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	3.426	33112	56987	0.5810	26.7907
THC-OH	3.473	156475	616015	0.2540	25.3764
THC	3.820	13928	47818	0.2913	25.0828

ISP FORENSICS - Cd'A Instrument #62340

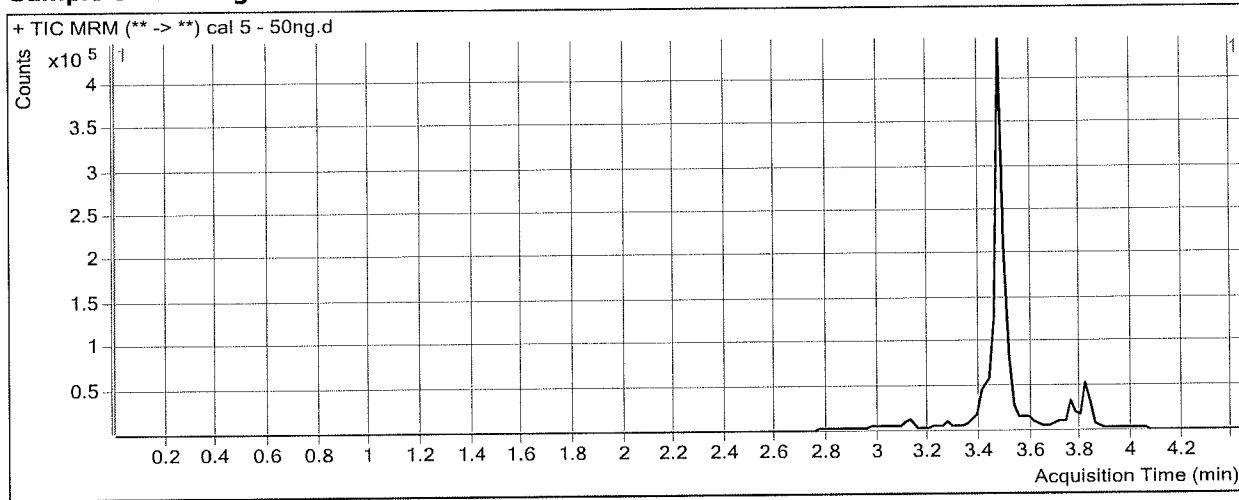
Cannabinoid Screen Report

Batch Data Path	I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann scree		
Analysis Time	6/5/2018 9:18 AM	Analyst Name	anord
Report Time	6/6/2018 9:35 AM	Reporter Name	ISP Tox
Last Calib Update	6/5/2018 9:18 AM	Batch State	Processed

Analysis Info

Acq Time	2018-06-04 13:06	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	3.426	70880	68044	1.0417	47.3493
THC-OH	3.473	312594	643320	0.4859	48.3391
THC	3.820	31328	53046	0.5906	49.9162

ISP FORENSICS - Cd'A Instrument #62340

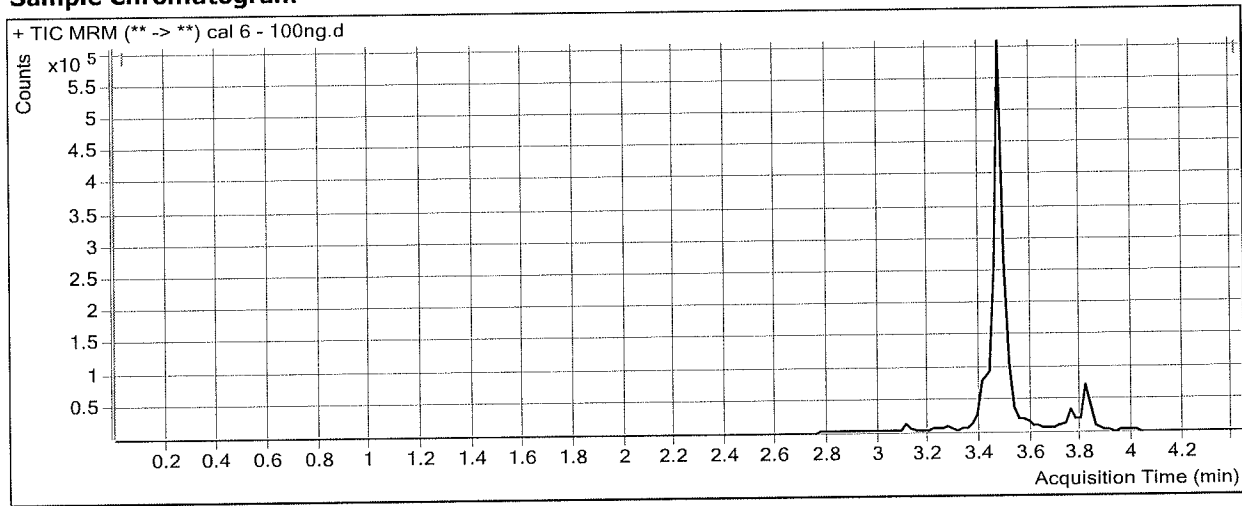
Cannabinoid Screen Report

Batch Data Path I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann scree
Analysis Time 6/5/2018 9:18 AM Analyst Name anord
Report Time 6/6/2018 9:35 AM Reporter Name ISP Tox
Last Calib Update 6/5/2018 9:18 AM Batch State Processed

Analysis Info

Acq Time 2018-06-04 13:13 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	3.426	148318	67685	2.1913	98.6558
THC-OH	3.473	691774	672347	1.0289	102.1064
THC	3.820	63012	51258	1.2293	102.9127

ISP FORENSICS - Cd'A Instrument #62340

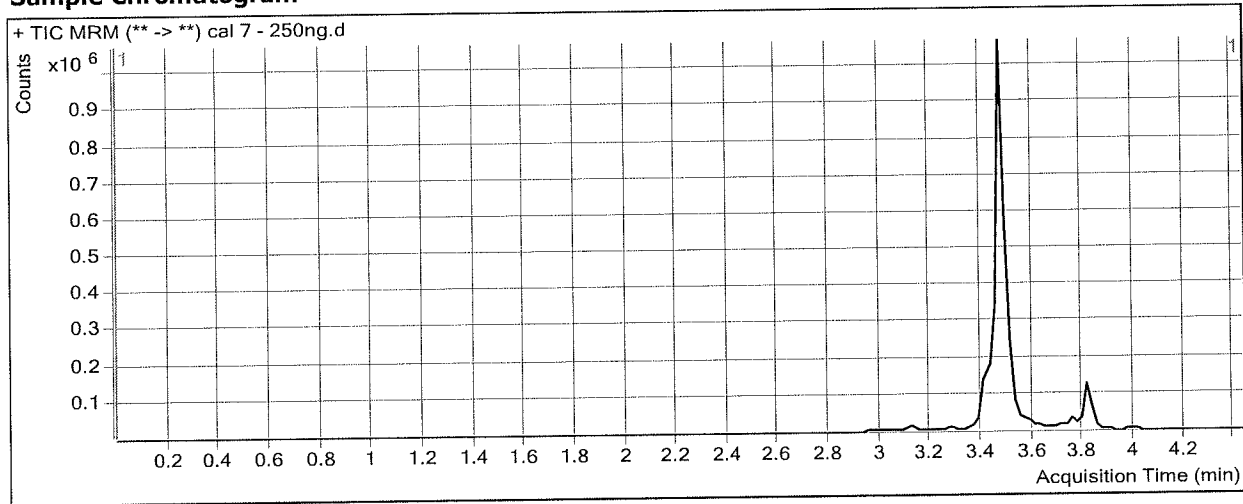
Cannabinoid Screen Report

Batch Data Path	I:\Instrument Data\CDA\Instrument 1 LCMSMS\2018 data\060418 25-26\QuantResults\cann screen		
Analysis Time	6/5/2018 9:18 AM	Analyst Name	anord
Report Time	6/6/2018 9:35 AM	Reporter Name	ISP Tox
Last Calib Update	6/5/2018 9:18 AM	Batch State	Processed

Analysis Info

Acq Time	2018-06-04 13:32	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	3.426	341205	60639	5.6269	251.9861
THC-OH	3.473	1721477	684803	2.5138	249.1465
THC	3.820	151983	51185	2.9693	247.2793