

Worklist: 2929

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2019-0109	1	137174	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0130	1	137274	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0131	1	137276	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0159	1	137602	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0169	1	138918	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0181	1	137956	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0182	1	137958	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0192	1	138155	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0209	1	138297	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0210	1	138301	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0216	1	138319	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0218	1	138414	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0236	1	138920	AM 25/AM 26 Blood MultiDrug/THC Screen by L	
C2019-0238	1	138711	AM 25/AM 26 Blood MultiDrug/THC Screen by L	



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

Extraction Date: 2/5/19

Analyst: Anne Nord

Plate lot#: 0543908

Plate Expiration: November 28 2019

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: amn12518

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

LCMS-QQQ ID: 69679

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: Data Path Name: D:\masshunter\Data\am 25 020519

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: am 25 020519
- 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.~~ *★* calculated concentration 5 or greater, discretionary range 2-5 *★*
- 4. Did all QCs pass for each analyte? Y / N yes
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:



Toxicology AMI 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		negative			negative			ISTD Method		ISTD Results		
Name	Transition	Acq. Date-Time	RT	Resp.	MI	Calc. Conc.	S/N	Transition	Qualifier 1 Re...	Name	RT	Resp.
6-MAM	328.2 -> 165..	2/5/2019 1:23 PM						328.2 -> 211..		6-MAM-D6	3.207	2293548
7-aminoclonazepam	286.1 -> 121..	2/5/2019 1:23 PM						286.1 -> 222..		7-Aminoclonazepam-D4	3.501	4663369
7-aminoflunitrazepam	284.1 -> 135..	2/5/2019 1:23 PM						284.1 -> 93.2		7-aminoflunitrazepam-D7	3.698	14536456
Acetyl Fentanyl	323.2 -> 105..	2/5/2019 1:23 PM						323.2 -> 188..		Acetyl Fentanyl-D5	4.385	35502564
Acetyl Norfentanyl	219.1 -> 84.2	2/5/2019 1:23 PM						219.1 -> 56.3		Acetyl Norfentanyl-D5	2.882	22553529
a-hydroxyalprazolam	325.1 -> 297..	2/5/2019 1:23 PM						325.1 -> 215..		a-hydroxyalprazolam-D5	4.415	1035497
alpha-hydroxymidazolam	342.1 -> 324..	2/5/2019 1:23 PM						342.1 -> 203..		alpha-hydroxymidazolam-...	4.507	13407953
alpha-PVP	232.2 -> 91.0	2/5/2019 1:23 PM						232.2 -> 77.1		alpha-PVP-D8	3.766	23437392
Alprazolam	309.1 -> 281..	2/5/2019 1:23 PM						309.1 -> 205..		Alprazolam-D5	4.510	6228377
Amiripryline	278.2 -> 91.2	2/5/2019 1:23 PM						278.2 -> 105..		Amiripryline-D3	4.654	8676089
Amphetamine	136.1 -> 119..	2/5/2019 1:23 PM						136.1 -> 91.1		Amphetamine-D11	2.902	11507435
Benzoyllecgonine	290.1 -> 168..	2/5/2019 1:23 PM						290.1 -> 105..		Benzoyllecgonine-D8	3.287	6454726
Bupropion	240.1 -> 184..	2/5/2019 1:23 PM						240.1 -> 131..		Bupropion-D9	4.089	15793008
Carbamazepine	237.1 -> 193..	2/5/2019 1:23 PM						237.1 -> 194..		Carbamazepine-13C6	4.151	34685116
Carisoprodol	261.2 -> 176..	2/5/2019 1:23 PM						261.2 -> 55.3		Carisoprodol-D7	4.133	8775577
Chlordiazepoxide	300.1 -> 282..	2/5/2019 1:23 PM						300.1 -> 227..		Chlordiazepoxide-D5	4.651	12263591
Chlorpheniramine	275.2 -> 167..	2/5/2019 1:23 PM						275.2 -> 230..		Diphenhydramine-D3	4.134	53049054
Citalopram	325.2 -> 109..	2/5/2019 1:23 PM						325.2 -> 262..		Citalopram-D6	4.169	17569266
Clonazepam	316.1 -> 269..	2/5/2019 1:23 PM						316.1 -> 213..		Clonazepam-D4	4.371	733956
Cocaine	304.2 -> 182..	2/5/2019 1:23 PM						304.2 -> 105..		Cocaine-D3	3.742	39027257
Cocaine	300.2 -> 215..	2/5/2019 1:23 PM						300.2 -> 165..		Cocaine-D6	3.132	3338481
Cyclobenzaprine	276.2 -> 214..	2/5/2019 1:23 PM						276.2 -> 231..		Cyclobenzaprine-D3	4.546	16661575
Desipramine	267.2 -> 72.3	2/5/2019 1:23 PM						267.2 -> 44.3		Desipramine-D3	4.486	32418102
Dextromethorphan	272.2 -> 171..	2/5/2019 1:23 PM						272.2 -> 147..		Dextromethorphan-D3	4.193	16188124
Dextropropphan	258.2 -> 157..	2/5/2019 1:23 PM						258.2 -> 133..		Dextropropphan-D3	3.473	20203381
Diazepam	285.1 -> 193..	2/5/2019 1:23 PM						285.1 -> 153..		Diazepam-D5	4.760	4140543
Diethylcocaine	302.2 -> 198..	2/5/2019 1:23 PM						302.2 -> 128..		Diethylcocaine-D6	2.889	10134141
Diphenhydramine	256.2 -> 167..	2/5/2019 1:23 PM						256.2 -> 152..		Diphenhydramine-D3	4.134	53049054
Doxepin	280.2 -> 107..	2/5/2019 1:23 PM						280.2 -> 77.2		Doxepin-D3	4.375	14528767
Doxylamine	271.2 -> 167..	2/5/2019 1:23 PM						271.2 -> 182..		Doxylamine-D5	3.684	50357481
EDDP	279.2 -> 235..	2/5/2019 1:23 PM						279.2 -> 250..		EDDP-D3	4.083	34581815
Estazolam	295.1 -> 267..	2/5/2019 1:23 PM						295.1 -> 205..		Estazolam-D5	4.436	9261184
Etizolam	343.3 -> 259..	2/5/2019 1:23 PM						343.3 -> 314..		Etizolam-D5	4.436	9261184
Fentanyl	337.2 -> 105..	2/5/2019 1:23 PM						337.2 -> 188..		Fentanyl-D5	4.599	22865076
Flunitrazepam	314.1 -> 268..	2/5/2019 1:23 PM						314.1 -> 239..		Flunitrazepam-D7	4.478	679903
Fluoxetine	310.1 -> 44.3	2/5/2019 1:23 PM						310.1 -> 148..		Fluoxetine-D6	4.371	16702730
Flurazepam	388.2 -> 315..	2/5/2019 1:23 PM						388.2 -> 317..		Flurazepam-D7	4.478	679903
Hydrocodone	286.2 -> 198..	2/5/2019 1:23 PM						286.2 -> 128..		Hydrocodone-D6	3.361	11183064
Hydroxycodone	286.2 -> 184..	2/5/2019 1:23 PM						286.2 -> 157..		Hydroxycodone-D6	2.742	3649010
Imipramine	281.2 -> 86.2	2/5/2019 1:23 PM						281.2 -> 58.3		Imipramine-D3	4.592	24318695
Ketamine	238.1 -> 125..	2/5/2019 1:23 PM						238.1 -> 220..		Ketamine-D4	4.104	17263416
Lamotrigine	256.0 -> 211..	2/5/2019 1:23 PM						256.0 -> 108..		Meperidine-D4	3.795	19711274
Levamisole	205.1 -> 178..	2/5/2019 1:23 PM						205.1 -> 91.2		Cocaine-d3	3.742	39027257
Maprotiline	278.2 -> 91.2	2/5/2019 1:23 PM						278.2 -> 117..		Amiripryline-D3	4.654	8676089

Compound Method	negative	negative					ISTD Method		ISTD Results			
Name	Transition	Acq Date-Time	RT	Resp.	MI	Calc. Conc.	S/N	Qualifier 1 M...	Qualifier 1 Re...	Name	RT	Resp.
MDA	180.1 -> 163..	2/5/2019 1:23 PM						180.1 -> 105..		MDA-D5	3.067	17479651
MDEA	208.1 -> 163..	2/5/2019 1:23 PM						208.1 -> 105..		MDEA-D6	3.295	34419015
MDMA	194.1 -> 163..	2/5/2019 1:23 PM						194.1 -> 105..		MDMA-D6	3.158	4299354
Meperidine	248.2 -> 220..	2/5/2019 1:23 PM						248.2 -> 174..		Meperidine-D4	3.795	19711274
Meperbarmate	219.1 -> 158..	2/5/2019 1:23 PM						219.1 -> 97.1		Meperbarmate-D7	3.585	3006673
Methadone	310.2 -> 265..	2/5/2019 1:23 PM						310.2 -> 105..		Methadone-D9	4.417	32671625
Methamphetamine	150.1 -> 91.1	2/5/2019 1:23 PM						150.1 -> 119..		Methamphetamine-D11	3.008	30059124
Methocarbamol	242.0 -> 163..	2/5/2019 1:23 PM						242.0 -> 199..		Meperidine-D4	3.795	19711274
Methylphenidate	234.2 -> 84.2	2/5/2019 1:23 PM						234.2 -> 56.3		Methylphenidate-D4	3.614	46610908
Metoprolol	268.2 -> 56.3	2/5/2019 1:23 PM						268.2 -> 116..		Meperidine-D4	3.795	19711274
Midazolam	326.1 -> 223..	2/5/2019 1:23 PM						326.1 -> 249..		Midazolam-D4	4.677	12475691
Miltazapine	266.2 -> 72.3	2/5/2019 1:23 PM						266.2 -> 195..		Meperidine-D4	3.795	19711274
Mirtazapine	399.2 -> 238..	2/5/2019 1:23 PM						399.2 -> 174..		Doxepin-D3	4.375	14528767
Morphine	286.2 -> 165..	2/5/2019 1:23 PM						286.2 -> 201..		Morphine-D6	2.501	675928
Norbuprenorphine	414.3 -> 57.3	2/5/2019 1:23 PM						414.3 -> 101..		Norbuprenorphine-D3	3.999	342093
Nordiazepam	271.1 -> 140..	2/5/2019 1:23 PM						271.1 -> 208..		Nordiazepam-D5	4.608	1319956
Norfentanyl	233.2 -> 84.2	2/5/2019 1:23 PM						233.2 -> 55.3		Norfentanyl-D5	3.323	31767607
Norhydrocodone	286.2 -> 199..	2/5/2019 1:23 PM						286.2 -> 171..		Norhydrocodone-D3	3.030	2514442
Normeperidine	234.1 -> 160..	2/5/2019 1:23 PM						234.1 -> 42.3		Normeperidine-D4	3.644	14484261
Noroxycodone	302.1 -> 284..	2/5/2019 1:23 PM						302.1 -> 186..		Noroxycodone-D3	2.951	7109909
Nortriptyline	264.2 -> 233..	2/5/2019 1:23 PM						264.2 -> 91.2		Nortriptyline-D3	4.533	6399234
O-desmethyl-tramadol	250.2 -> 58.3	2/5/2019 1:23 PM						250.2 -> 42.3		O-desmethyl-tramadol-D6	2.927	50261739
Oxazepam	313.2 -> 250..	2/5/2019 1:23 PM						313.2 -> 84.1		Phenytoin-D10	4.899	134195
Oxazepam	287.1 -> 240..	2/5/2019 1:23 PM						287.1 -> 268..		Oxazepam-D5	4.421	1631270
Oxycodone	316.2 -> 298..	2/5/2019 1:23 PM						316.2 -> 241..		Oxycodone-D6	3.116	16446994
Oxymorphone	302.1 -> 284..	2/5/2019 1:23 PM						302.1 -> 227..		Oxymorphone-D3	2.497	7547871
Paroxetine	330.4 -> 70.2	2/5/2019 1:23 PM						330.4 -> 192..		Sepraline-D3	4.727	7971406
Phenazepam	349.0 -> 206..	2/5/2019 1:23 PM						349.0 -> 183..		Phenazepam-D4	4.553	2709709
Phencyclidine	244.2 -> 86.2	2/5/2019 1:23 PM						244.2 -> 91.1		Phencyclidine-D5	3.964	26985237
Phentermine	150.1 -> 65.2	2/5/2019 1:23 PM						150.1 -> 133..		Phentermine-D5	3.160	13326483
Phenyltolin	253.1 -> 182..	2/5/2019 1:23 PM						253.1 -> 104..		Phenyltolin-D10	4.039	131195
Promethazine	285.1 -> 86.2	2/5/2019 1:23 PM						285.1 -> 71.3		Promethazine-D3	4.699	38266685
Pseudoephedrine	166.1 -> 148..	2/5/2019 1:23 PM						166.1 -> 133..		Pseudoephedrine-D3	2.704	1641488..
Quetiapine	384.2 -> 253..	2/5/2019 1:23 PM						384.2 -> 221..		Quetiapine-D8	4.750	9159189
Sepraline	306.1 -> 275..	2/5/2019 1:23 PM						306.1 -> 158..		Sepraline-D3	4.727	7971406
Sufentanil	387.2 -> 238..	2/5/2019 1:23 PM						387.2 -> 111..		Sufentanil-D5	4.964	23375618
Tapentadol	222.2 -> 107..	2/5/2019 1:23 PM						222.2 -> 121..		Tapentadol-D3	3.478	29057645
Temazepam	301.1 -> 255..	2/5/2019 1:23 PM						301.1 -> 283..		Temazepam-D5	4.573	8869182
Tramadol	264.2 -> 58.3	2/5/2019 1:23 PM						264.2 -> 43.3		Tramadol-13C-D3	3.472	44078136
Tramazone	372.2 -> 176..	2/5/2019 1:23 PM						372.2 -> 148..		Tramazone-D6	4.935	26472610
Venlafaxine	278.2 -> 58.3	2/5/2019 1:23 PM						278.2 -> 260..		Venlafaxine-D6	3.836	38512634
Zaleplon	306.1 -> 236..	2/5/2019 1:23 PM						306.1 -> 264..		Zaleplon-D4	4.264	6240831
Zolpidem	308.2 -> 235..	2/5/2019 1:23 PM						308.2 -> 263..		Zolpidem-D6	4.448	42856895
Zopiclone	389.1 -> 244..	2/5/2019 1:23 PM						389.1 -> 216..		Zopiclone-D4	4.459	3425601

Compound Method		external control am...			external control am 25			Qualifier 1 M...		Qualifier 1 Re...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	MI	Calc. Conc.	S/N	Transition	S/N	MI	Name	RT	Resp.		
6-MAM	328.2 -> 165...	2/5/2019 1:34 PM						328.2 -> 211...			6-MAM-D6	3.207	1070389		
7-aminoclonazepam	286.1 -> 121...	2/5/2019 1:34 PM						286.1 -> 222...			7-Aminoclonazepam-D4	3.515	2577861		
7-aminoflunitrazepam	284.1 -> 135...	2/5/2019 1:34 PM						284.1 -> 93.2			7-aminoflunitrazepam-D7	3.698	5064229		
Acetyl Fentanyl	323.2 -> 105...	2/5/2019 1:34 PM						323.2 -> 188...			Acetyl Fentanyl-D5	4.385	17143169		
Acetyl Norfentanyl	219.1 -> 84.2	2/5/2019 1:34 PM						219.1 -> 56.3			Acetyl Norfentanyl-D5	2.897	9260869		
a-hydroxypiprazolam	325.1 -> 297...	2/5/2019 1:34 PM						325.1 -> 215...			a-hydroxypiprazolam-D5	4.415	564623		
alpha-hydroxymidazolam	342.1 -> 324...	2/5/2019 1:34 PM						342.1 -> 203...			alpha-hydroxymidazolam-...	4.507	7226888		
alpha-PVP	232.2 -> 91.0	2/5/2019 1:34 PM						232.2 -> 77.1			alpha-PVP-d8	3.766	10173147		
Alprazolam	309.1 -> 281...	2/5/2019 1:34 PM						309.1 -> 205...			Alprazolam-D5	4.510	3013898		
Amphetamine	278.2 -> 91.2	2/5/2019 1:34 PM						278.2 -> 105...			Amphetamine-D3	4.654	4927791		
Amtripyline	136.1 -> 119...	2/5/2019 1:34 PM						136.1 -> 91.1			Amtripyline-D11	2.902	5116996		
Benzoylcegonine	290.1 -> 168...	2/5/2019 1:34 PM						290.1 -> 105...			Benzoylcegonine-D8	3.302	2079102		
Bupropion	240.1 -> 184...	2/5/2019 1:34 PM						240.1 -> 131...			Bupropion-D9	4.089	7593481		
Carbamazepine	237.1 -> 193...	2/5/2019 1:34 PM						237.1 -> 194...			Carbamazepine-13C6	4.166	22857298		
Carisoprodol	261.2 -> 176...	2/5/2019 1:34 PM						261.2 -> 55.3			Carisoprodol-D7	4.133	4233566		
Chlordiazepoxide	300.1 -> 282...	2/5/2019 1:34 PM						300.1 -> 227...			Chlordiazepoxide-D5	4.651	6308824		
Chlorpheniramine	275.2 -> 167...	2/5/2019 1:34 PM						275.2 -> 230...			Diphenhydramine-D3	4.134	35654851		
Citalopram	325.2 -> 109...	2/5/2019 1:34 PM						325.2 -> 262...			Citalopram-D6	4.169	9403518		
Clonazepam	316.1 -> 269...	2/5/2019 1:34 PM						316.1 -> 213...			Clonazepam-D4	4.371	433047		
Cocaine	304.2 -> 182...	2/5/2019 1:34 PM						304.2 -> 105...			Cocaine-d3	3.742	17713387		
Codeine	300.2 -> 215...	2/5/2019 1:34 PM						300.2 -> 165...			Codeine-D6	3.132	1560074		
Cyclobenzaprine	276.2 -> 214...	2/5/2019 1:34 PM						276.2 -> 231...			Cyclobenzaprine-D3	4.546	9452082		
Desipramine	267.2 -> 72.3	2/5/2019 1:34 PM						267.2 -> 44.3			Desipramine-D3	4.486	18665893		
Dextromethorphan	272.2 -> 171...	2/5/2019 1:34 PM						272.2 -> 147...			Dextromethorphan-D3	4.193	7993610		
Dextroproprian	258.2 -> 157...	2/5/2019 1:34 PM						258.2 -> 133...			Dextroproprian-D3	3.488	9318743		
Diazepam	285.1 -> 193...	2/5/2019 1:34 PM						285.1 -> 153...			Diazepam-D5	4.760	2633099		
Dihydrocodeine	302.2 -> 198...	2/5/2019 1:34 PM						302.2 -> 128...			Dihydrocodeine-D6	2.904	4174875		
Diphenhydramine	256.2 -> 167...	2/5/2019 1:34 PM						256.2 -> 152...			Diphenhydramine-D3	4.134	35654851		
Doxepin	280.2 -> 107...	2/5/2019 1:34 PM						280.2 -> 77.2			Doxepin-D3	4.375	7647758		
Doxylamine	271.2 -> 167...	2/5/2019 1:34 PM						271.2 -> 182...			Doxylamine-D5	3.684	24682196		
EDDP	279.2 -> 235...	2/5/2019 1:34 PM						279.2 -> 250...			EDDP-D3	4.083	25878980		
Estazolam	295.1 -> 267...	2/5/2019 1:34 PM						295.1 -> 205...			Estazolam-D5	4.436	5027564		
Etizolam	343.3 -> 259...	2/5/2019 1:34 PM						343.3 -> 314...			Etizolam-D5	4.436	5027564		
Fentanyl	337.2 -> 105...	2/5/2019 1:34 PM						337.2 -> 188...			Fentanyl-D5	4.599	11217897		
Flunitrazepam	314.1 -> 268...	2/5/2019 1:34 PM						314.1 -> 239...			Flunitrazepam-D7	4.478	382460		
Fluoxetine	310.1 -> 44.3	2/5/2019 1:34 PM						310.1 -> 148...			Fluoxetine-D6	4.386	10884298		
Flurazepam	388.2 -> 315...	2/5/2019 1:34 PM						388.2 -> 317...			Flurazepam-D7	4.478	382460		
Hydrocodone	300.2 -> 198...	2/5/2019 1:34 PM						300.2 -> 128...			Hydrocodone-D6	3.376	5010233		
Hydromorphone	286.2 -> 184...	2/5/2019 1:34 PM						286.2 -> 157...			Hydromorphone-D6	2.712	2007436		
Imipramine	281.2 -> 86.2	2/5/2019 1:34 PM						281.2 -> 58.3			Imipramine-D3	4.592	13622969		
Ketamine	238.1 -> 125...	2/5/2019 1:34 PM						238.1 -> 220...			Ketamine-D4	4.104	8124187		
Lamotrigine	256.0 -> 211...	2/5/2019 1:34 PM						256.0 -> 108...			Meperidine-D4	3.795	8669332		
Lorazepam	205.1 -> 178...	2/5/2019 1:34 PM						205.1 -> 91.2			Cocaine-d3	3.742	17713387		
Maprotiline	278.2 -> 91.2	2/5/2019 1:34 PM						278.2 -> 117...			Amtripyline-D3	4.654	4927791		

Compound Method	Name	Transition	Acq. Date-Time	RT	external control am 25				Qualifier 1 M...	Qualifier 1 Re...	ISTD Method	ISTD Results	
					Resp	MI	Calc. Conc.	S/N				Transition	S/N
MDA		180.1 -> 163...	2/5/2019 1:34 PM										
MDEA		208.1 -> 163...	2/5/2019 1:34 PM										
MDMA		194.1 -> 163...	2/5/2019 1:34 PM										
Meperidine		248.2 -> 220...	2/5/2019 1:34 PM										
Meproramate		219.1 -> 158...	2/5/2019 1:34 PM										
Methadone		310.2 -> 265...	2/5/2019 1:34 PM										
Methamphetamine		150.1 -> 91.1	2/5/2019 1:34 PM	3.023	9053458		9.3131	97.75	150.1 -> 119...	*			
Methocarbamol		242.0 -> 163...	2/5/2019 1:34 PM						242.0 -> 199...				
Methyphenidate		234.2 -> 84.2	2/5/2019 1:34 PM						234.2 -> 56.3				
Metoprolol		268.2 -> 56.3	2/5/2019 1:34 PM						268.2 -> 116...				
Midazolam		326.1 -> 223...	2/5/2019 1:34 PM						326.1 -> 249...				
Mirtazapine		266.2 -> 72.3	2/5/2019 1:34 PM						266.2 -> 195...				
Morphine		399.2 -> 238...	2/5/2019 1:34 PM						399.2 -> 174...				
Morphine		286.2 -> 165...	2/5/2019 1:34 PM						286.2 -> 201...				
Norbuprenorphine		414.3 -> 57.3	2/5/2019 1:34 PM						414.3 -> 101...				
Nordiazepam		271.1 -> 140...	2/5/2019 1:34 PM						271.1 -> 208...				
Norfentanyl		233.2 -> 84.2	2/5/2019 1:34 PM						233.2 -> 55.3				
Norhydrocodone		286.2 -> 199...	2/5/2019 1:34 PM						286.2 -> 171...				
Normeperidine		234.1 -> 160...	2/5/2019 1:34 PM						234.1 -> 42.3				
Noroxycodone		302.1 -> 284...	2/5/2019 1:34 PM						302.1 -> 186...				
Nortriptyline		264.2 -> 233...	2/5/2019 1:34 PM	4.533	13317535		87.1974	11183.72	264.2 -> 91.2	*			
O-desmethyl-tramadol		250.2 -> 58.3	2/5/2019 1:34 PM						250.2 -> 42.3				
Oxazepam		287.1 -> 240...	2/5/2019 1:34 PM						287.1 -> 268...				
Oxycodone		316.2 -> 298...	2/5/2019 1:34 PM						316.2 -> 241...				
Oxycodone		302.1 -> 284...	2/5/2019 1:34 PM						302.1 -> 227...				
Oxycodone		330.4 -> 70.2	2/5/2019 1:34 PM						330.4 -> 192...				
Paroxetine		349.0 -> 206...	2/5/2019 1:34 PM						349.0 -> 183...				
Phenazepam		244.2 -> 86.2	2/5/2019 1:34 PM						244.2 -> 91.1				
Phencyclidine		150.1 -> 65.2	2/5/2019 1:34 PM						150.1 -> 133...				
Phentermine		253.1 -> 182...	2/5/2019 1:34 PM						253.1 -> 104...				
Promethazine		285.1 -> 86.2	2/5/2019 1:34 PM						285.1 -> 71.3				
Pseudoephedrine		166.1 -> 148...	2/5/2019 1:34 PM						166.1 -> 133...				
Quetiapine		384.2 -> 253...	2/5/2019 1:34 PM						384.2 -> 221...				
Sertraline		306.1 -> 275...	2/5/2019 1:34 PM	4.743	9577570		98.9024	*	306.1 -> 158...	5868.07			
Sufentanil		387.2 -> 238...	2/5/2019 1:34 PM						387.2 -> 111...				
Tamadol		222.2 -> 107...	2/5/2019 1:34 PM						222.2 -> 121...				
Tamazepam		301.1 -> 255...	2/5/2019 1:34 PM						301.1 -> 283...				
Tramadol		264.2 -> 58.3	2/5/2019 1:34 PM						264.2 -> 43.3				
Tramazepam		372.2 -> 176...	2/5/2019 1:34 PM						372.2 -> 148...				
Trazodone		278.2 -> 58.3	2/5/2019 1:34 PM						278.2 -> 260...				
Venlafaxine		306.1 -> 236...	2/5/2019 1:34 PM						306.1 -> 264...				
Zaleplon		308.2 -> 235...	2/5/2019 1:34 PM						308.2 -> 263...				
Zolpidem		389.1 -> 244...	2/5/2019 1:34 PM						389.1 -> 216...				
Zopiclone													

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

Extraction Date: 2/5/19

Analyst: Anne Nord

Plate lot#: 0539904

Plate Expiration: 09/10/2019

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

MTBE

Mobile phase B: 0.1% Formic acid in MeOH
Hexane

Blank Blood Lot: 18G207D7

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: k52558g** 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.
Data path: D:\2019 data\26\020519 AM 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: *C-THC curve 5-100, THC dropped 25ng calibrator internal std peak cut off.*



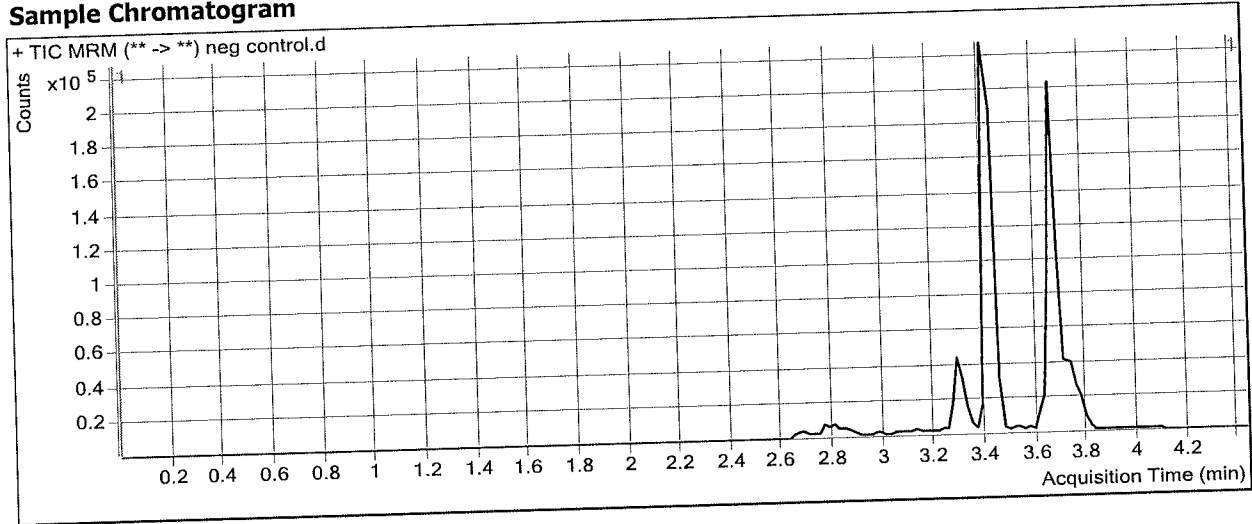
ISP FORENSICS - Cd'A Cannabinoid Screen Report

Batch Data Path D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin
Analysis Time 2/7/2019 8:06 AM **Analyst Name** ISP Tox
Report Time 2/7/2019 8:07 AM **Reporter Name** ISP Tox
Last Calib Update 2/7/2019 8:06 AM **Batch State** Processed

Analysis Info

Acq Time 2019-02-06 10:42 **Data File** neg control.d
Sample Type Sample **Sample Name** neg control
Dilution 1 **Acq Method** Screen THC 8-2017.m
Position P1-A2 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.286	0	131448	0.0000	0.0000

ISP FORENSICS - Cd'A

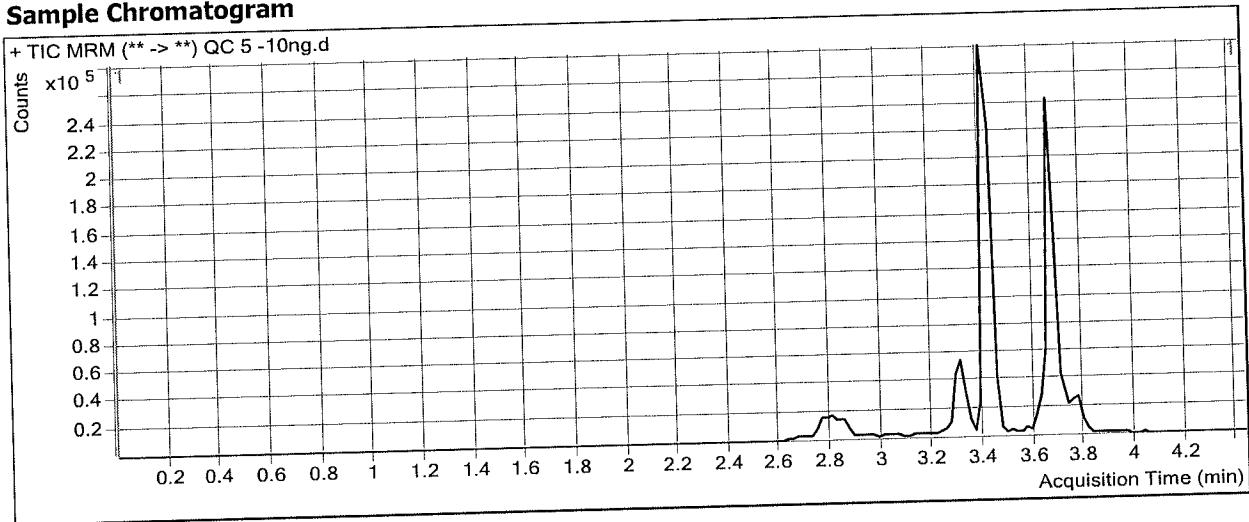
Cannabinoid Screen Report

Batch Data Path D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin
Analysis Time 2/7/2019 8:06 AM **Analyst Name** ISP Tox
Report Time 2/7/2019 8:07 AM **Reporter Name** ISP Tox
Last Calib Update 2/7/2019 8:06 AM **Batch State** Processed

Analysis Info

Acq Time 2019-02-06 10:28 **Data File** QC 5 -10ng.d
Sample Type QC **Sample Name** QC 5 -10ng
Dilution 1 **Acq Method** Screen THC 8-2017.m
Position P1-H1 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen 5 ng THC, THC-OH, 10 ng C-TH

Sample Chromatogram



Results

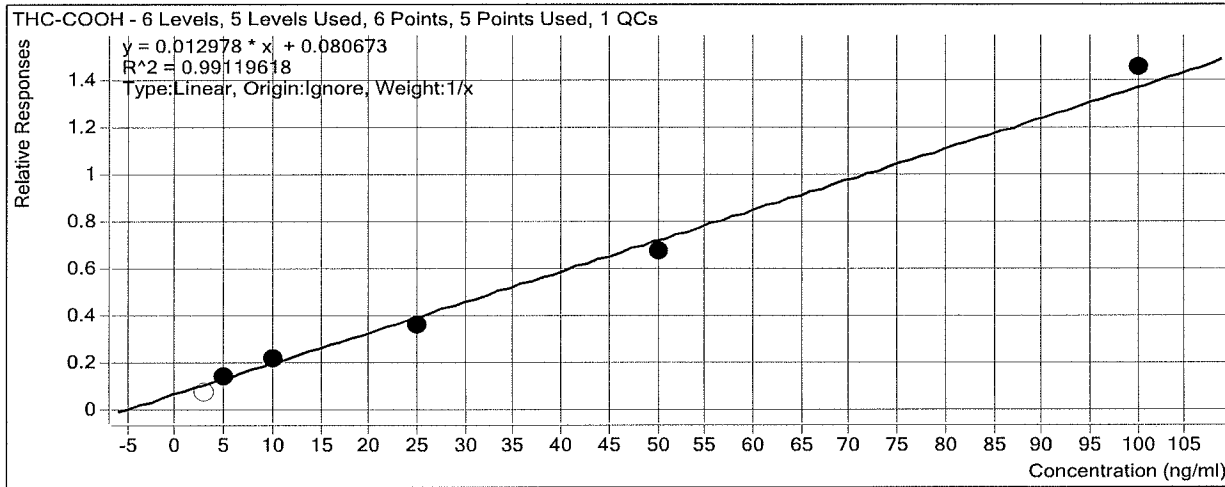
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	29373	143422	0.2048	9.5644
THC-OH	3.412	27222	649600	0.0419	4.4442
THC	3.780	727	15820	0.0460	5.0506

ISP Forensics Calibration Curve Report

Batch Data Path D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin

Last Calib Update 2/7/2019 8:06 AM **Analyst Name** ISP TOX

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



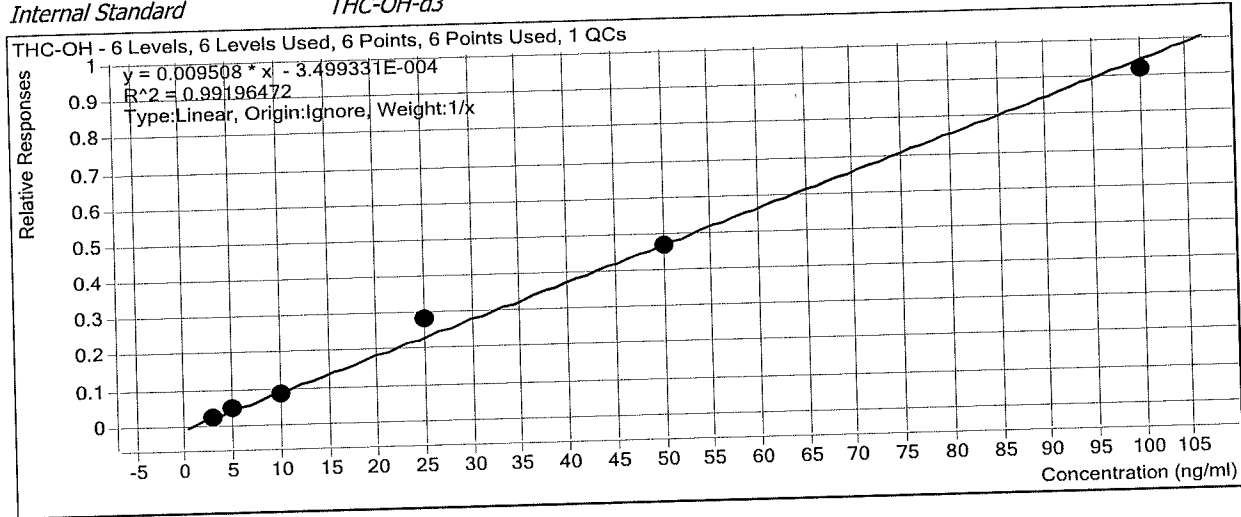
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input type="checkbox"/>	3	0.2	7.3
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.2	103.7
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	11.0	110.3
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	22.0	88.0
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	46.1	92.3
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	105.6	105.6
QC 5 -10ng	7	<input checked="" type="checkbox"/>	10	9.6	95.6

ISP Forensics Calibration Curve Report

Batch Data Path D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin

Last Calib Update 2/7/2019 8:06 AM **Analyst Name** ISP TOX

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



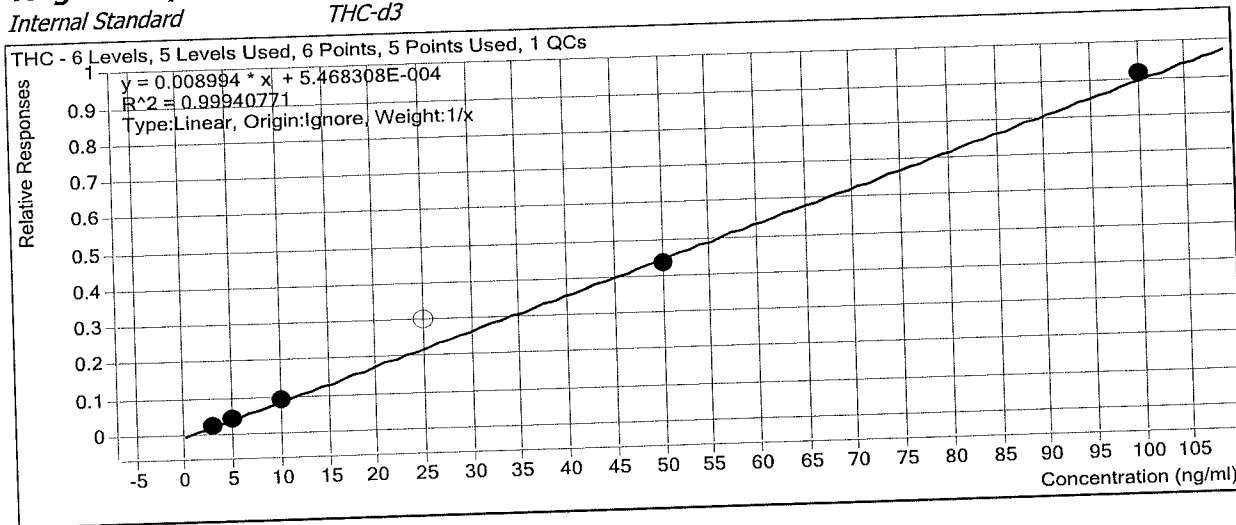
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input checked="" type="checkbox"/>	3	2.8	92.6
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.0	99.6
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	9.3	92.7
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	29.9	119.5
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	49.5	99.1
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	96.5	96.5
QC 5 -10ng	7	<input checked="" type="checkbox"/>	5	4.4	88.9

ISP Forensics Calibration Curve Report

Batch Data Path D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin

Last Calib Update 2/7/2019 8:06 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	3.0	98.8
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	5.1	101.4
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	10.2	101.6
cal 4 - 25ng	4	<input type="checkbox"/>	25	33.4	133.6
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	48.4	96.8
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	101.4	101.4
QC 5 - 10ng	7	<input checked="" type="checkbox"/>	5	5.1	101.0

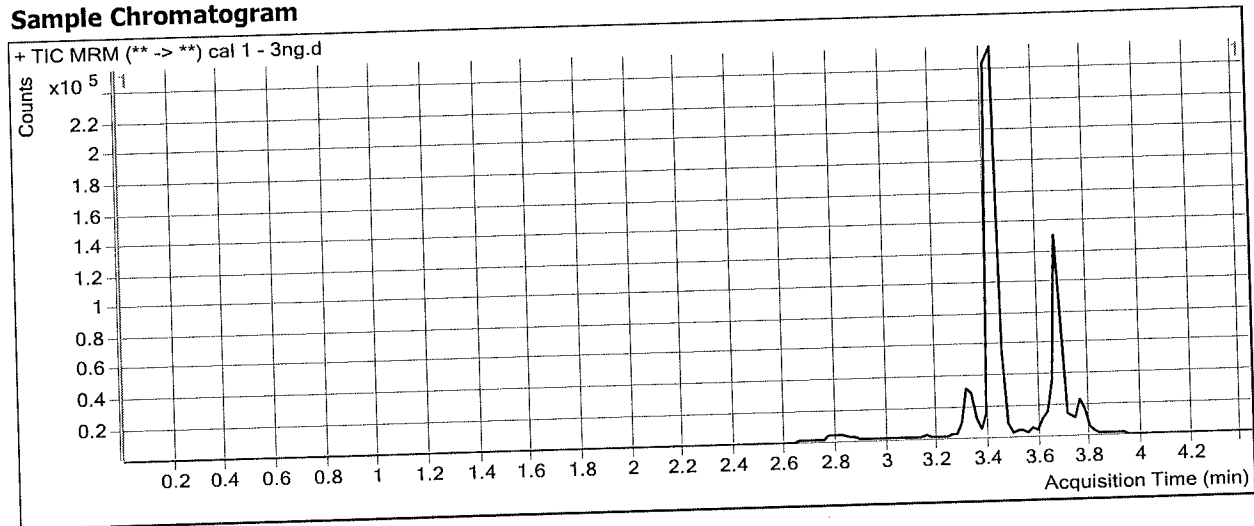
ISP FORENSICS - Cd'A Cannabinoid Screen Report

Batch Data Path	D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin		
Analysis Time	2/7/2019 8:06 AM	Analyst Name	ISP Tox
Report Time	2/7/2019 8:07 AM	Reporter Name	ISP Tox
Last Calib Update	2/7/2019 8:06 AM	Batch State	Processed

Analysis Info

Acq Time	2019-02-06 09:49	Data File	cal 1 - 3ng.d
Sample Type	Calibration	Sample Name	cal 1 - 3ng
Dilution	1	Acq Method	Screen THC 8-2017.m
Position	p1-b1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.326	8419	100795	0.0835	0.2198
THC-OH	3.433	17377	666837	0.0261	2.7775
THC	3.760	414	15206	0.0272	2.9637

ISP FORENSICS - Cd'A

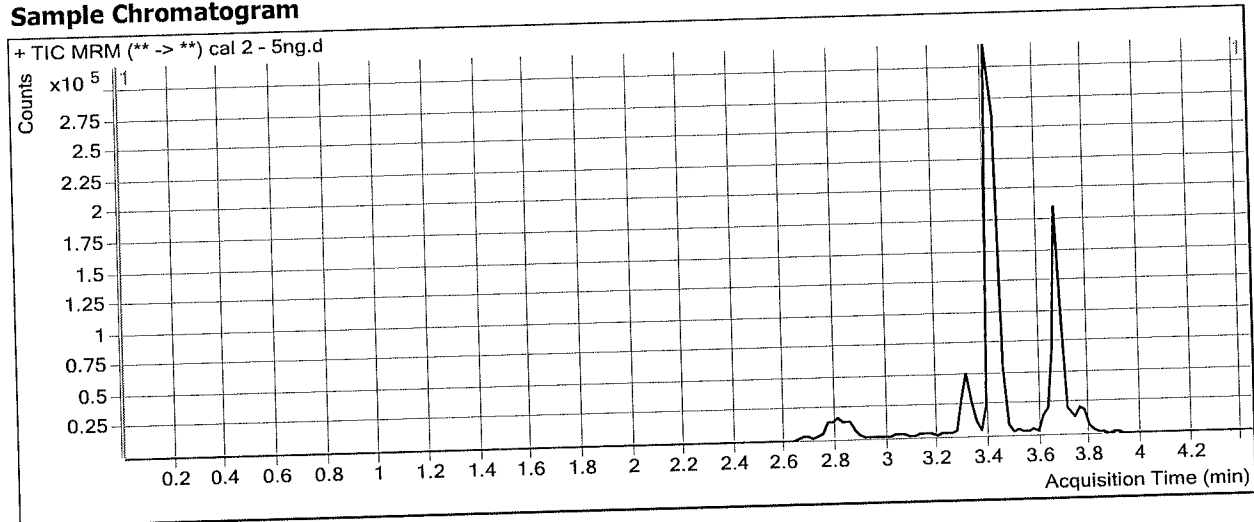
Cannabinoid Screen Report

Batch Data Path	D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin		
Analysis Time	2/7/2019 8:06 AM	Analyst Name	ISP Tox
Report Time	2/7/2019 8:07 AM	Reporter Name	ISP Tox
Last Calib Update	2/7/2019 8:06 AM	Batch State	Processed

Analysis Info

Acq Time	2019-02-06 09:55	Data File	cal 2 - 5ng.d
Sample Type	Calibration	Sample Name	cal 2 - 5ng
Dilution	1	Acq Method	Screen THC 8-2017.m
Position	P1-C1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	20383	137742	0.1480	5.1859
THC-OH	3.412	35468	754808	0.0470	4.9789
THC	3.760	647	14021	0.0461	5.0693

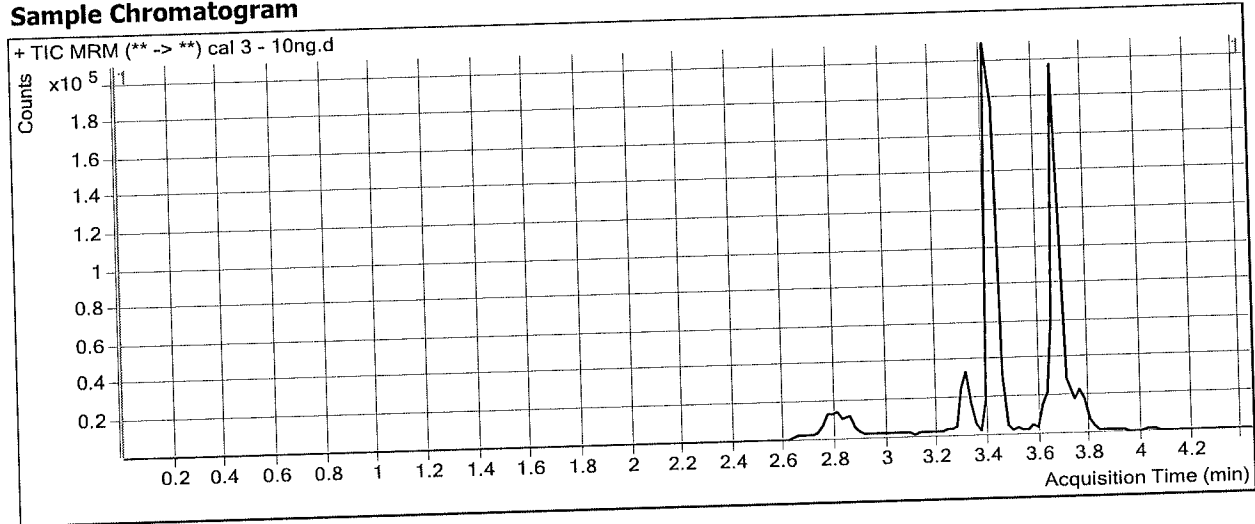
ISP FORENSICS - Cd'A Cannabinoid Screen Report

Batch Data Path D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin
Analysis Time 2/7/2019 8:06 AM **Analyst Name** ISP Tox
Report Time 2/7/2019 8:07 AM **Reporter Name** ISP Tox
Last Calib Update 2/7/2019 8:06 AM **Batch State** Processed

Analysis Info

Acq Time 2019-02-06 10:02 **Data File** cal 3 - 10ng.d
Sample Type Calibration **Sample Name** cal 3 - 10ng
Dilution 1 **Acq Method** Screen THC 8-2017.m
Position p1-d1 **Sample Info**
Inj Vol -1 **Comment** AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	17818	79585	0.2239	11.0346
THC-OH	3.412	41383	471599	0.0877	9.2659
THC	3.760	1212	13173	0.0920	10.1647

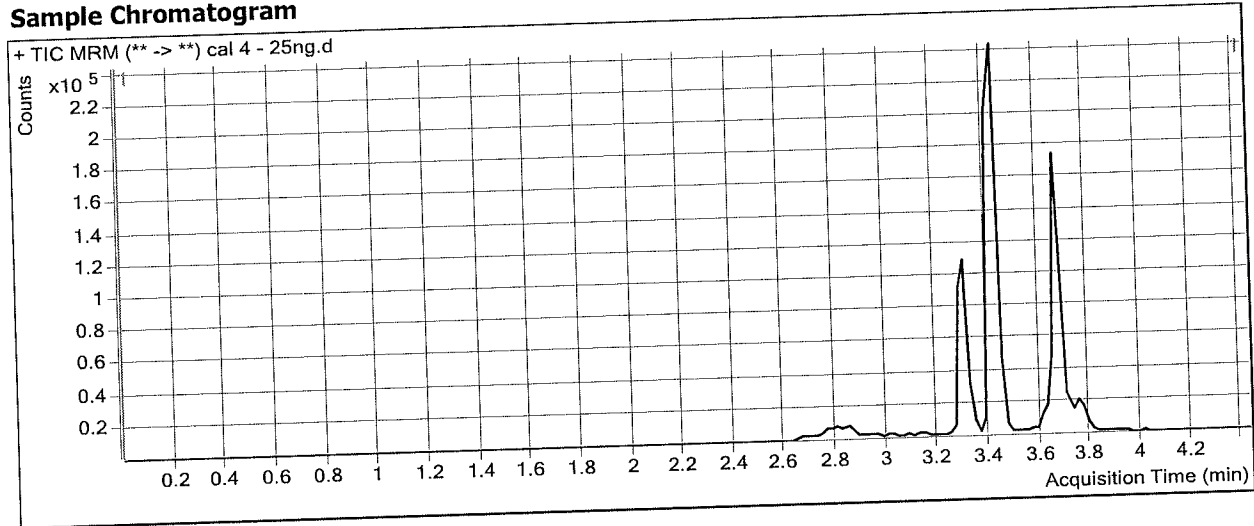
ISP FORENSICS - Cd'A Cannabinoid Screen Report

Batch Data Path	D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin		
Analysis Time	2/7/2019 8:06 AM	Analyst Name	ISP Tox
Report Time	2/7/2019 8:07 AM	Reporter Name	ISP Tox
Last Calib Update	2/7/2019 8:06 AM	Batch State	Processed

Analysis Info

Acq Time	2019-02-06 10:09	Data File	cal 4 - 25ng.d
Sample Type	Calibration	Sample Name	cal 4 - 25ng
Dilution	1	Acq Method	Screen THC 8-2017.m
Position	P1-E1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	69542	189873	0.3663	22.0044
THC-OH	3.433	126845	446947	0.2838	29.8861
THC	3.760	3314	11013	0.3009	33.3919

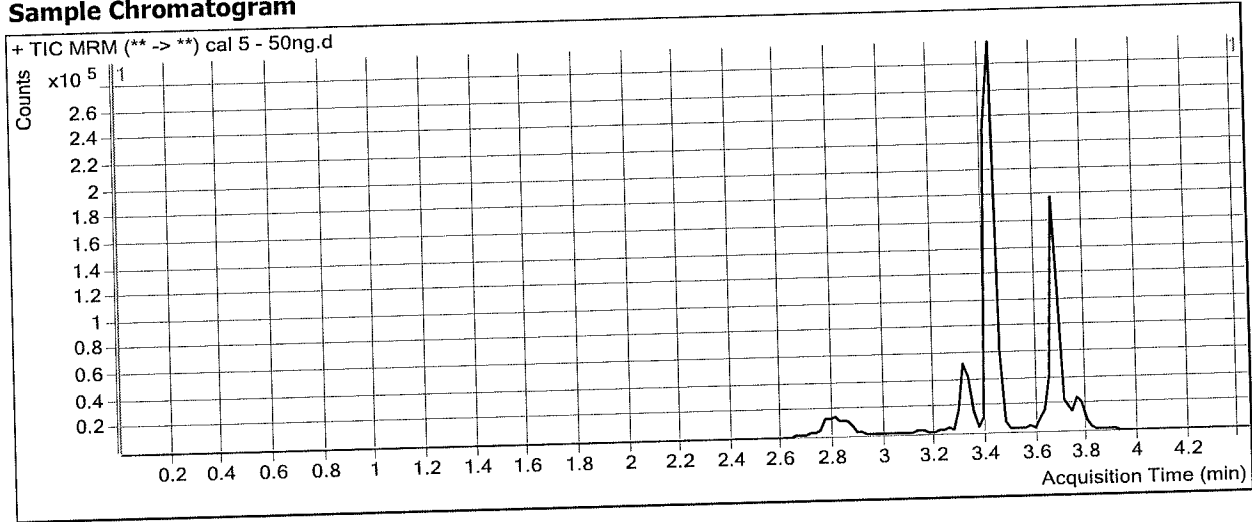
ISP FORENSICS - Cd'A Cannabinoid Screen Report

Batch Data Path D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin
Analysis Time 2/7/2019 8:06 AM **Analyst Name** ISP Tox
Report Time 2/7/2019 8:07 AM **Reporter Name** ISP Tox
Last Calib Update 2/7/2019 8:06 AM **Batch State** Processed

Analysis Info

Acq Time	2019-02-06 10:15	Data File	cal 5 - 50ng.d
Sample Type	Calibration	Sample Name	cal 5 - 50ng
Dilution	1	Acq Method	Screen THC 8-2017.m
Position	p1-f1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.326	52595	77398	0.6795	46.1437
THC-OH	3.433	221604	470790	0.4707	49.5437
THC	3.760	6807	15624	0.4357	48.3758

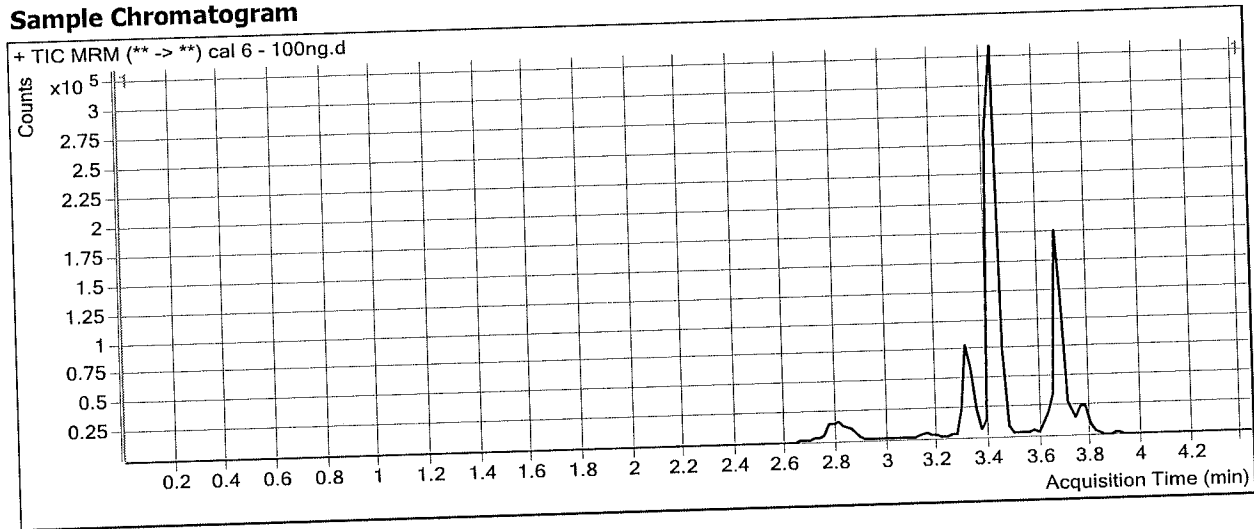
ISP FORENSICS - Cd'A Cannabinoid Screen Report

Batch Data Path	D:\2019 Data\am26\020519 AM 26\QuantResults\cann screen.batch.bin	
Analysis Time	2/7/2019 8:06 AM	Analyst Name ISP Tox
Report Time	2/7/2019 8:07 AM	Reporter Name ISP Tox
Last Calib Update	2/7/2019 8:06 AM	Batch State Processed

Analysis Info

Acq Time	2019-02-06 10:22	Data File	cal 6 - 100ng.d
Sample Type	Calibration	Sample Name	cal 6 - 100ng
Dilution	1	Acq Method	Screen THC 8-2017.m
Position	P1-G1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.306	102279	70460	1.4516	105.6314
THC-OH	3.433	369184	402328	0.9176	96.5480
THC	3.760	13163	14420	0.9128	101.4266