

**Worklist: 2851**

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2018-2341	1	132341	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2410	1	133094	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2442	1	133543	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2445	2	133611	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2446	1	133620	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2459	1	133833	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2463	1	133935	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2476	1	134130	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2489	1	134275	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2492	1	134282	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2507	1	134356	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
C2018-2521	1	134617	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
M2018-5908	2	133077	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
M2018-5910	3	133084	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
M2018-5936	1	133255	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
M2018-5994	1	133499	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
M2018-6026	1	133603	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
M2018-6044	1	133704	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
M2018-6075	1	134106	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
P2018-3407	1	133510	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
P2018-3429	1	133674	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
P2018-3430	1	133677	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	
P2018-3487	1	134268	AM 25/AM 26 Blood MultiDrug/THC Screen by Lt	



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

Extraction Date: 12-19-18  
Plate lot#: 0543908

Analyst: Anne Nord  
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:** 18G207D7

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

**LCMS-QQQ ID:** 62340

### Pre-Analytic:

- 1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- 2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
- 3. Create worklist:

### Analytic:

- 1. Remove standards, plate, controls, and samples from cold storage. Allow to reach room temperature.
- 2. Pipette **250µL blood (calibrated pipette) Pipette ID: 1926134** in wells of analytical (standards) plate.
- 3. Place on shaking incubator at ambient temp., 900rpm for 15 minutes. *Shaker ID: 66759*
- 4. Pipette **250µL 0.5M ammonium hydroxide** in wells of analytical plate.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **300µL of blood+base** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).  
*(Load at 85-100 PSI- Selector to the right) Manifold ID: 66792*
- 8. Wait 5 minutes.
- 9. Add **900uL ethyl acetate.**
- 10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 12. Add **900uL ethyl acetate.**
- 13. Wait 5 minutes.
- 14. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left).*
- 15. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.  
*SPE Dry ID: 66819*
- 16. Reconstitute in **100µL 100% LC MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

### Post-Analytic

- 1. Open quantitation software and create a new quantitation batch.  
Batch Name: 121918 AM 25-26 Worklist path: mdsp1, mdsp2
- 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?
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:



Toxicology AM method 25 external prep information

working solution 10000 ng/ml in meoh Hydromorphone, Hydrocodone, Nortriptyline, Sertraline

Stock solution 1mg/ml 100 ul each in 9600ul meOH

Ppd 4/23/18 Exp: 4/23/19 lot 42318 by Amn

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

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

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

Compound Method		p1 cal 1-1a		p1 cal 1-1a Results		Qualifier 1 M...		Qualifier 1 Results		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	Area	MI	Name	RT	Resp.
6-MAM	328.2 -> 165...	12/19/2018 3:32 PM	5.360	1173	5.72	328.2 -> 211...	3.50	802	6-MAM-D6	5.319	26827		
7-aminoclonazepam	286.1 -> 121...	12/19/2018 3:32 PM	5.632	19620	65.60	286.1 -> 222...	210.14	13104	7-Aminoclonazepam-D4	5.611	92308		
Benzylecgonine	290.1 -> 168...	12/19/2018 3:32 PM	5.426	9671	145.79	290.1 -> 105...	2220...	7077	Benzylecgonine-D8	5.426	41749		
Metoprolol	268.2 -> 116...	12/19/2018 3:32 PM	5.573	15384	3334.28	268.2 -> 56.3	106.89	17853	Noroxycodone-D3	5.057	77415		
a-hydroxylprazosin	325.1 -> 297...	12/19/2018 3:32 PM	6.400	4536	19.75	325.1 -> 215...	18.26	2315	a-hydroxylprazosin-D5	6.379	22955		
alpha-PVP	232.2 -> 91.0	12/19/2018 3:32 PM	5.885	4536	68.86	232.2 -> 77.1	45.83	43862	alpha-PVP-d8	5.822	437217		
Alprazolam	309.1 -> 281...	12/19/2018 3:32 PM	6.465	28584	318.81	309.1 -> 205...	5898...	29668	Alprazolam-D5	6.464	135330		
Amphetamine	136.1 -> 91.1	12/19/2018 3:32 PM	4.972	159093	105.57	136.1 -> 119...	28.56	1088...	Amphetamine-D11	4.931	178193		
Cocaine	304.2 -> 182...	12/19/2018 3:32 PM	5.834	106248	216.56	304.2 -> 105...	219.69	25968	Cocaine-D3	5.813	396727		
Bupropion	240.1 -> 184...	12/19/2018 3:32 PM	6.129	97091	20853.58	240.1 -> 131...	99.06	46966	Bupropion-D9	6.087	410387		
Carisoprodol	261.2 -> 176...	12/19/2018 3:32 PM	6.147	35764	184.13	261.2 -> 55.3	34.80	41888	Carisoprodol-D7	6.146	230000		
Citalopram	325.2 -> 109...	12/19/2018 3:32 PM	6.175	112623	52.08	325.2 -> 262...	4407...	25795	Citalopram-D6	6.154	563234		
Clonazepam	316.1 -> 269...	12/19/2018 3:32 PM	6.340	10244	20.06	316.1 -> 213...	22.97	2440	Clonazepam-D4	6.340	13411		
Codeine	300.2 -> 215...	12/19/2018 3:32 PM	5.324	6031	2387.68	300.2 -> 165...	69.61	5250	Codeine-D6	5.240	21132		
Cyclobenzaprine	276.2 -> 214...	12/19/2018 3:32 PM	6.471	71623	348.15	276.2 -> 231...	42.79	24319	Cyclobenzaprine-D3	6.470	352777		
Dextromethorphan	272.2 -> 171...	12/19/2018 3:32 PM	6.185	31701	124.81	272.2 -> 147...	91.53	25934	Dextromethorphan-D3	6.185	147743		
Dextropropofol	258.2 -> 157...	12/19/2018 3:32 PM	5.596	27010	4317.07	258.2 -> 133...	1610...	17075	Dextropropofol-D3	5.575	150852		
Diazepam	285.1 -> 193...	12/19/2018 3:32 PM	6.691	29620	88.57	285.1 -> 153...	81.21	18475	Diazepam-D5	6.670	119118		
Dihydrocodeine	302.2 -> 198...	12/19/2018 3:32 PM	5.038	14513	22.59	302.2 -> 128...	1685...	9871	Dihydrocodeine-D6	4.996	70831		
Diphenhydramine	256.2 -> 167...	12/19/2018 3:32 PM	6.148	212877	194.76	256.2 -> 152...	97.90	54383	Diphenhydramine-D3	6.127	986623		
Doxylamine	271.2 -> 182...	12/19/2018 3:32 PM	5.778	147572	58.81	271.2 -> 167...	55.58	1013...	Doxylamine-D5	5.756	727299		
EDDP	279.2 -> 235...	12/19/2018 3:32 PM	6.082	120451	27885.72	279.2 -> 250...	2374...	35502	EDDP-D3	6.082	652180		
Fentanyl	337.2 -> 105...	12/19/2018 3:32 PM	6.520	17923	17.95	337.2 -> 188...	65.81	13012	Fentanyl-D5	6.500	984853		
Fluoxetine	310.1 -> 44.3	12/19/2018 3:32 PM	6.321	165936	10248.15	310.1 -> 148...	26.53	4962	Fluoxetine-D6	6.319	759775		
Hydrocodone	300.2 -> 198...	12/19/2018 3:32 PM	5.507	22193	Infinity	300.2 -> 128...	Infinity	10092	Hydrocodone-D6	5.464	121540		
Hydromorphone	286.2 -> 184...	12/19/2018 3:32 PM	4.860	11274	16.46	286.2 -> 157...	Infinity	7419	Hydromorphone-D6	4.798	33395		
Ketamine	238.1 -> 125...	12/19/2018 3:32 PM	6.109	72980	175.43	238.1 -> 220...	16.20	27743	Ketamine-D4	6.087	283995		
Mirtazapine	266.2 -> 195...	12/19/2018 3:32 PM	6.473	135716	791.39	266.2 -> 72.3	Infinity	86385	Tamadol-13C-D3	5.594	763347		
Mirtazapine	399.2 -> 238...	12/19/2018 3:32 PM	6.517	21111	120.94	399.2 -> 174...	314.34	45371	Tamadol-13C-D3	5.594	763347		
Meprobarbital	219.1 -> 158...	12/19/2018 3:32 PM	5.701	15153	38.58	219.1 -> 97.1	97.17	15282	Meprobarbital-D7	5.681	101108		
Methadone	310.2 -> 265...	12/19/2018 3:32 PM	6.362	112065	25630.31	310.2 -> 105...	145.08	1169...	Methadone-D9	6.360	657216		
Methamphetamine	150.1 -> 91.1	12/19/2018 3:32 PM	5.132	376620	102.42	150.1 -> 119...	33.45	1375...	Methamphetamine-D11	5.092	481419		
Morphine	286.2 -> 201...	12/19/2018 3:32 PM	4.598	2658	18.64	286.2 -> 165...	3.70	2091	Morphine-D6	4.517	2255		
Norbuprenorphine	414.3 -> 101...	12/19/2018 3:32 PM	6.029	3279	32.89	414.3 -> 57.3	16.65	4235	Norbuprenorphine-D3	6.029	21110		
Nordiazepam	271.1 -> 140...	12/19/2018 3:32 PM	6.553	13605	147.56	271.1 -> 208...	33.22	8666	Nordiazepam-D5	6.552	41620		
Nortofentanyl	233.2 -> 84.2	12/19/2018 3:32 PM	5.455	112058	707.27	233.2 -> 55.3	73.33	34836	Nortofentanyl-D5	5.455	474933		
Norhydrocodone	286.2 -> 199...	12/19/2018 3:32 PM	5.164	1556	9.22	286.2 -> 171...	Infinity	194	Norhydrocodone-D3	5.143	40167		
Noroxycodone	302.1 -> 284...	12/19/2018 3:32 PM	5.079	11264	9.66	302.1 -> 186...	14.61	6871	Noroxycodone-D3	5.057	77415		
O-desmethyl-tramadol	250.2 -> 58.3	12/19/2018 3:32 PM	5.088	135427	318.36	250.2 -> 42.3	29.16	7448	O-desmethyl-tramadol...	5.068	612987		
Oxazepam	287.1 -> 240...	12/19/2018 3:32 PM	6.386	9565	36.15	287.1 -> 268...	12.86	5320	Oxazepam-D5	6.385	49336		
Oxycodone	316.2 -> 298...	12/19/2018 3:32 PM	5.279	34297	250.88	316.2 -> 241...	18.94	11217	Oxycodone-D6	5.238	165216		
Oxycodone	302.1 -> 284...	12/19/2018 3:32 PM	4.574	31990	Infinity	302.1 -> 227...	13.90	6790	Oxycodone-D3	4.532	135986		
Phentermine	150.1 -> 65.2	12/19/2018 3:32 PM	5.295	36486	13.32	150.1 -> 133...	Infinity	1791	Phentermine-D5	5.254	461424		
Promethazine	285.1 -> 86.2	12/19/2018 3:32 PM	6.631	261837	1021.10	285.1 -> 71.3	34.30	53689	Promethazine-D3	6.590	14602		
Quetiapine	384.2 -> 253...	12/19/2018 3:32 PM	6.681	191552	5740.33	384.2 -> 221...	1076...	98103	Quetiapine-D8	6.659	268452		

Compound Method	p1 cal 1-1a		p1 cal 1-1a Results				Qualifier 1 M...	Qualifier 1 Results		ISTD Method	ISTD Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	Area	MI	Name	RT	Resp.
Sertraline	306.1 -> 158...	12/19/2018 3:32 PM	6.648	48592	129.77	306.1 -> 275...	151.23	42777	306.1 -> 275...	306.1 -> 275...	Sertraline-D3	6.627	207467
Temazepam	301.1 -> 255...	12/19/2018 3:32 PM	6.527	45522	281.69	301.1 -> 283...	11.15	16179	301.1 -> 283...	301.1 -> 283...	Temazepam-D5	6.506	213124
Tramadol	264.2 -> 58.3	12/19/2018 3:32 PM	5.595	162086	93.54	264.2 -> 43.3	10.27	9403	264.2 -> 43.3	264.2 -> 43.3	Tramadol-13C-D3	5.594	763547
Trazodone	372.2 -> 176...	12/19/2018 3:32 PM	6.884	168659	1372.92	372.2 -> 148...	224.73	1231...	372.2 -> 148...	372.2 -> 148...	Trazodone-D6	6.863	780751
Venlafaxine	278.2 -> 58.3	12/19/2018 3:32 PM	5.919	142931	136.59	278.2 -> 260...	27.99	29177	278.2 -> 260...	278.2 -> 260...	Venlafaxine-D6	5.898	631601
Zolpidem	308.2 -> 235...	12/19/2018 3:32 PM	6.404	146667	130663...	308.2 -> 263...	273.33	52155	308.2 -> 263...	308.2 -> 263...	Zolpidem-D6	6.402	817275

Compound Method	p1 negative			p1 negative Results			Qualifier 1 M...			Qualifier 1 R...			ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	Area	MI	Name	RT	Resp.			
6-MAM	328.2 -> 165...	12/19/2018 3:51 PM					328.2 -> 211...				6-MAM-D6	5.319	28685			
7-aminoclonazepam	286.1 -> 121...	12/19/2018 3:51 PM					286.1 -> 222...				7-Aminoclonazepam-D4	5.611	91412			
Benzoylcegonine	290.1 -> 168...	12/19/2018 3:51 PM					290.1 -> 105...				Benzoylcegonine-D8	5.426	40937			
Metoprolol	268.2 -> 116...	12/19/2018 3:51 PM					268.2 -> 56.3				Noroxycodone-D3	5.057	78419			
a-hydroxyvalprazolam	325.1 -> 297...	12/19/2018 3:51 PM					325.1 -> 215...				a-hydroxyvalprazolam-D5	6.379	23562			
alpha-PVP	232.2 -> 91.0	12/19/2018 3:51 PM					232.2 -> 77.1				alpha-PVP-d8	5.822	434794			
Alprazolam	309.1 -> 281...	12/19/2018 3:51 PM					309.1 -> 205...				Alprazolam-D5	6.464	131625			
Amphetamine	136.1 -> 91.1	12/19/2018 3:51 PM					136.1 -> 119...				Amphetamine-D11	4.931	159583			
Cocaine	304.2 -> 182...	12/19/2018 3:51 PM					304.2 -> 105...				Cocaine-D3	5.813	364814			
Bupropion	240.1 -> 184...	12/19/2018 3:51 PM					240.1 -> 131...				Bupropion-D9	6.087	386428			
Carisoprodol	261.2 -> 176...	12/19/2018 3:51 PM					261.2 -> 55.3				Carisoprodol-D7	6.146	239065			
Citalopram	325.2 -> 109...	12/19/2018 3:51 PM					325.2 -> 262...				Citalopram-D6	6.154	566960			
Clonazepam	316.1 -> 269...	12/19/2018 3:51 PM					316.1 -> 213...				Clonazepam-D4	6.340	16251			
Codeine	300.2 -> 215...	12/19/2018 3:51 PM					300.2 -> 165...				Codeine-D6	5.261	24710			
Cyclobenzaprine	276.2 -> 214...	12/19/2018 3:51 PM					276.2 -> 231...				Cyclobenzaprine-D3	6.470	362965			
Dextromethorphan	272.2 -> 171...	12/19/2018 3:51 PM					272.2 -> 147...				Dextromethorphan-D3	6.185	155813			
Dextrophan	258.2 -> 157...	12/19/2018 3:51 PM					258.2 -> 133...				Dextrophan-D3	5.575	141503			
Diazepam	285.1 -> 193...	12/19/2018 3:51 PM					285.1 -> 153...				Diazepam-D5	6.670	123105			
Dihydrocodeine	302.2 -> 198...	12/19/2018 3:51 PM					302.2 -> 128...				Dihydrocodeine-D6	4.996	69618			
Diphenhydramine	256.2 -> 167...	12/19/2018 3:51 PM					256.2 -> 152...				Diphenhydramine-D3	6.127	963235			
Doxylamine	271.2 -> 182...	12/19/2018 3:51 PM					271.2 -> 167...				Doxylamine-D5	5.756	715773			
EDDP	279.2 -> 235...	12/19/2018 3:51 PM					279.2 -> 250...				EDDP-D3	6.082	680369			
Fentanyl	337.2 -> 105...	12/19/2018 3:51 PM					337.2 -> 188...				Fentanyl-D5	6.500	996861			
Fluoxetine	310.1 -> 44.3	12/19/2018 3:51 PM					310.1 -> 148...				Fluoxetine-D6	6.320	761633			
Hydrocodone	300.2 -> 198...	12/19/2018 3:51 PM					300.2 -> 128...				Hydrocodone-D6	5.464	116050			
Hydromorphone	286.2 -> 184...	12/19/2018 3:51 PM					286.2 -> 157...				Hydromorphone-D6	4.798	30453			
Ketamine	238.1 -> 125...	12/19/2018 3:51 PM					238.1 -> 220...				Ketamine-D4	6.087	286197			
Mirtazapine	266.2 -> 195...	12/19/2018 3:51 PM					266.2 -> 72.3				Tramadol-13C-D3	5.573	741062			
Mitragynine	399.2 -> 238...	12/19/2018 3:51 PM					399.2 -> 174...				Tramadol-13C-D3	5.573	741062			
Meprobamate	219.1 -> 158...	12/19/2018 3:51 PM					219.1 -> 97.1				Meprobamate-D7	5.701	93414			
Methadone	310.2 -> 265...	12/19/2018 3:51 PM					310.2 -> 105...				Methadone-D9	6.360	647265			
Methamphetamine	150.1 -> 91.1	12/19/2018 3:51 PM					150.1 -> 119...				Methamphetamine-D11	5.092	358524			
Morphine	286.2 -> 201...	12/19/2018 3:51 PM					286.2 -> 165...				Morphine-D6	4.517	2300			
Norbuprenorphine	414.3 -> 101...	12/19/2018 3:51 PM					414.3 -> 57.3				Norbuprenorphine-D3	6.009	22540			
Nordiazepam	271.1 -> 140...	12/19/2018 3:51 PM					271.1 -> 208...				Nordiazepam-D5	6.552	46993			
Norfentanyl	233.2 -> 84.2	12/19/2018 3:51 PM					233.2 -> 55.3				Norfentanyl-D5	5.455	474224			
Norhydrocodone	286.2 -> 199...	12/19/2018 3:51 PM					286.2 -> 171...				Norhydrocodone-D3	5.163	44566			
Noroxycodone	302.1 -> 284...	12/19/2018 3:51 PM					302.1 -> 186...				Noroxycodone-D3	5.057	78419			
O-desmethyl-tramadol	250.2 -> 58.3	12/19/2018 3:51 PM					250.2 -> 42.3				O-desmethyl-tramadol-...	5.068	602746			
Oxazepam	287.1 -> 240...	12/19/2018 3:51 PM					287.1 -> 268...				Oxazepam-D5	6.385	51614			
Oxycodone	316.2 -> 298...	12/19/2018 3:51 PM					316.2 -> 241...				Oxycodone-D6	5.238	159129			
Oxymorphone	302.1 -> 284...	12/19/2018 3:51 PM					302.1 -> 227...				Oxymorphone-D3	4.532	139514			
Phentermine	150.1 -> 65.2	12/19/2018 3:51 PM					150.1 -> 133...				Phentermine-D5	5.254	403140			
Promethazine	285.1 -> 86.2	12/19/2018 3:51 PM					285.1 -> 71.3				Promethazine-D3	6.590	14725...			
Quetiapine	384.2 -> 253...	12/19/2018 3:51 PM					384.2 -> 221...				Quetiapine-D8	6.659	276736			

Compound Method	p1 negative		p1 negative Results				Qualifier 1 M...			Qualifier 1 R...			ISTD Method	ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	Area	MI	Name	RT	Resp.		
Sertraline	306.1 -> 158...	12/19/2018 3:51 PM					306.1 -> 275...				Sertraline-D3	6.627	203582		
Temazepam	301.1 -> 255...	12/19/2018 3:51 PM					301.1 -> 283...				Temazepam-D5	6.506	230671		
Tamadol	264.2 -> 58.3	12/19/2018 3:51 PM					264.2 -> 43.3				Tamadol-13C-D3	5.573	741062		
Trazodone	372.2 -> 176...	12/19/2018 3:51 PM					372.2 -> 148...				Trazodone-D6	6.863	777811		
Venlafaxine	278.2 -> 58.3	12/19/2018 3:51 PM					278.2 -> 260...				Venlafaxine-D6	5.898	644281		
Zolpidem	308.2 -> 235...	12/19/2018 3:51 PM					308.2 -> 263...				Zolpidem-D6	6.402	778746		

Compound Method		p1 external control		p1 external control Results			Qualifier 1 M...			Qualifier 1 Results			ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	Area	MI	Name	RT	Resp.			
6-MAM	328.2 -> 165...	12/19/2018 4:11 PM					328.2 -> 211...				6-MAM-D6	5.339	26086			
7-aminoclonazepam	286.1 -> 121...	12/19/2018 4:11 PM					286.1 -> 222...				7-Aminoclonazepam-D4	5.631	88273			
Benzoylcegonine	290.1 -> 168...	12/19/2018 4:11 PM					290.1 -> 105...				Benzoylcegonine-D8	5.426	39036			
Metoprolol	268.2 -> 116...	12/19/2018 4:11 PM					268.2 -> 56.3				Noroxycodone-D3	5.078	71323			
a-hydroxyalprazolam	325.1 -> 297...	12/19/2018 4:11 PM					325.1 -> 215...				a-hydroxyalprazolam-D5	6.379	22455			
alpha-PVP	232.2 -> 91.0	12/19/2018 4:11 PM					232.2 -> 77.1				alpha-PVP-d8	5.822	401609			
Alprazolam	309.1 -> 281...	12/19/2018 4:11 PM					309.1 -> 205...				Alprazolam-D5	6.443	122023			
Amphetamine	136.1 -> 91.1	12/19/2018 4:11 PM					136.1 -> 119...				Amphetamine-D11	4.951	150029			
Cocaine	304.2 -> 182...	12/19/2018 4:11 PM					304.2 -> 105...				Cocaine-D3	5.813	353422			
Bupropion	240.1 -> 184...	12/19/2018 4:11 PM					240.1 -> 131...				Bupropion-D9	6.087	378495			
Carisoprodol	261.2 -> 176...	12/19/2018 4:11 PM					261.2 -> 55.3				Carisoprodol-D7	6.146	211256			
Citalopram	325.2 -> 109...	12/19/2018 4:11 PM					325.2 -> 262...				Citalopram-D6	6.154	524529			
Clonazepam	316.1 -> 269...	12/19/2018 4:11 PM					316.1 -> 213...				Clonazepam-D4	6.340	14903			
Codeine	300.2 -> 215...	12/19/2018 4:11 PM					300.2 -> 165...				Codeine-D6	5.261	18770			
Cyclobenzaprine	276.2 -> 214...	12/19/2018 4:11 PM					276.2 -> 231...				Cyclobenzaprine-D3	6.449	345091			
Dextromethorphan	272.2 -> 171...	12/19/2018 4:11 PM					272.2 -> 147...				Dextromethorphan-D3	6.185	139803			
Dextroproprphan	258.2 -> 157...	12/19/2018 4:11 PM					258.2 -> 133...				Dextroproprphan-D3	5.595	128925			
Diazepam	285.1 -> 193...	12/19/2018 4:11 PM					285.1 -> 153...				Diazepam-D5	6.670	110912			
Dihydrocodeine	302.2 -> 198...	12/19/2018 4:11 PM					302.2 -> 128...				Dihydrocodeine-D6	5.016	65276			
Diphenhydramine	256.2 -> 167...	12/19/2018 4:11 PM					256.2 -> 152...				Diphenhydramine-D3	6.127	908194			
Doxylamine	271.2 -> 182...	12/19/2018 4:11 PM					271.2 -> 167...				Doxylamine-D5	5.756	634156			
EDDP	279.2 -> 235...	12/19/2018 4:11 PM					279.2 -> 250...				EDDP-D3	6.082	693940			
Fentanyl	337.2 -> 105...	12/19/2018 4:11 PM					337.2 -> 188...				Fentanyl-D5	6.500	923491			
Fluoxetine	310.1 -> 44.3	12/19/2018 4:11 PM					310.1 -> 148...				Fluoxetine-D6	6.320	715837			
Hydrocodone	300.2 -> 198...	12/19/2018 4:11 PM	5.527	189136	Infinity	300.2 -> 128...	Infinity	91721			Hydrocodone-D6	5.464	104815			
Hydromorphone	286.2 -> 184...	12/19/2018 4:11 PM	4.860	102268	Infinity	286.2 -> 157...	Infinity	68556			Hydromorphone-D6	4.798	31349			
Ketamine	238.1 -> 125...	12/19/2018 4:11 PM					238.1 -> 220...				Ketamine-D4	6.087	253309			
Mirtazapine	266.2 -> 195...	12/19/2018 4:11 PM					266.2 -> 72.3				Tramadol-13C-D3	5.594	660696			
Mitragynine	399.2 -> 238...	12/19/2018 4:11 PM					399.2 -> 174...				Tramadol-13C-D3	5.594	660696			
Meproamate	219.1 -> 158...	12/19/2018 4:11 PM					219.1 -> 97.1				Meproamate-D7	5.701	84928			
Methadone	310.2 -> 265...	12/19/2018 4:11 PM					310.2 -> 105...				Methadone-D9	6.360	616072			
Methamphetamine	150.1 -> 91.1	12/19/2018 4:11 PM					150.1 -> 119...				Methamphetamine-D11	5.112	408517			
Morphine	286.2 -> 201...	12/19/2018 4:11 PM					286.2 -> 165...				Morphine-D6	4.537	2589			
Norbuprenorphine	414.3 -> 101...	12/19/2018 4:11 PM					414.3 -> 57.3				Norbuprenorphine-D3	6.029	18770			
Nordiazepam	271.1 -> 140...	12/19/2018 4:11 PM					271.1 -> 208...				Nordiazepam-D5	6.532	42809			
Norfentanyl	233.2 -> 84.2	12/19/2018 4:11 PM					233.2 -> 55.3				Norfentanyl-D5	5.455	429127			
Norhydrocodone	286.2 -> 199...	12/19/2018 4:11 PM					286.2 -> 171...				Norhydrocodone-D3	5.163	37631			
Noroxycodone	302.1 -> 284...	12/19/2018 4:11 PM					302.1 -> 186...				Noroxycodone-D3	5.078	71323			
O-desmethyl-tramadol	250.2 -> 58.3	12/19/2018 4:11 PM					250.2 -> 42.3				O-desmethyl-tramadol...	5.068	544315			
Oxazepam	287.1 -> 240...	12/19/2018 4:11 PM					287.1 -> 268...				Oxazepam-D5	6.385	52417			
Oxycodone	316.2 -> 298...	12/19/2018 4:11 PM					316.2 -> 241...				Oxycodone-D6	5.238	149325			
Oxymorphone	302.1 -> 284...	12/19/2018 4:11 PM					302.1 -> 227...				Oxymorphone-D3	4.552	122341			
Phentermine	150.1 -> 65.2	12/19/2018 4:11 PM					150.1 -> 133...				Phentermine-D5	5.274	398119			
Promethazine	285.1 -> 86.2	12/19/2018 4:11 PM					285.1 -> 71.3				Promethazine-D3	6.590	14882...			
Quetiapine	384.2 -> 253...	12/19/2018 4:11 PM					384.2 -> 221...				Quetiapine-D8	6.659	250089			

Compound Method		p1 external control		p1 external control Results			Qualifier 1 M...			Qualifier 1 Results			ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	Area	MI	Name	RT	Resp.			
Sertraline	306.1 -> 158...	12/19/2018 4:11 PM	6.628	428857	Infinity	<input type="checkbox"/>	306.1 -> 275...	72356...	3776..	<input type="checkbox"/>	Sertraline-D3	6.627	178499			
Temazepam	301.1 -> 255...	12/19/2018 4:11 PM				<input type="checkbox"/>	301.1 -> 283...			<input type="checkbox"/>	Temazepam-D5	6.506	218613			
Tramadol	264.2 -> 58.3	12/19/2018 4:11 PM				<input type="checkbox"/>	264.2 -> 43.3			<input type="checkbox"/>	Tramadol-13C-D3	5.594	660696			
Trazodone	372.2 -> 176...	12/19/2018 4:11 PM				<input type="checkbox"/>	372.2 -> 148...			<input type="checkbox"/>	Trazodone-D6	6.863	728933			
Venlafaxine	278.2 -> 58.3	12/19/2018 4:11 PM				<input type="checkbox"/>	278.2 -> 260...			<input type="checkbox"/>	Venlafaxine-D6	5.898	627574			
Zolpidem	308.2 -> 235...	12/19/2018 4:11 PM				<input type="checkbox"/>	308.2 -> 263...			<input type="checkbox"/>	Zolpidem-D6	6.382	714499			

Compound	Method	p2 cal 1-1b	p2 cal 1-1b Results	Qualifier 1 M...	Qualifier 1 Results	ISTD Method	ISTD Results						
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	Area	MI	Name	RT	Resp.
Acetylfentanyl	323.2 -> 188...	12/19/2018 3:42 PM	6.347	12642	2717.88	323.2 -> 105...	Infinity	19311	Acetylfentanyl-D5	6.326	10374...		
alpha-hydroxymidazolam	342.1 -> 324...	12/19/2018 3:42 PM	6.467	26472	11128.68	342.1 -> 203...	60.93	16310	alpha-hydroxymidazolam-...	6.446	202179		
Amiripryline	278.2 -> 91.2	12/19/2018 3:42 PM	6.577	124058	Infinity	278.2 -> 105...	570.39	56954	Amiripryline-D3	6.576	331017		
Acetylthorfenantyl	219.1 -> 84.2	12/19/2018 3:42 PM	5.019	7855	92.39	219.1 -> 56.3	22.14	1977	Acetylthorfenantyl-D5	4.997	346464		
Carbamazepine	237.1 -> 193...	12/19/2018 3:42 PM	6.177	18040	7062.18	237.1 -> 194...	213.08	1635...	Carbamazepine-13C6	6.176	844995		
Chlordiazepoxide	300.1 -> 227...	12/19/2018 3:42 PM	6.593	20241	5876.59	300.1 -> 282...	26.13	12319	Chlordiazepoxide-D5	6.593	195005		
Surfentanil	387.2 -> 238...	12/19/2018 3:42 PM	6.908	18058	94.44	387.2 -> 111...	6256...	15773	Surfentanil-D5	6.887	958987		
Desipramine	267.2 -> 72.3	12/19/2018 3:42 PM	6.438	170020	Infinity	267.2 -> 44.3	80.12	86191	Desipramine-D3	6.418	862323		
Doxepin	280.2 -> 107...	12/19/2018 3:42 PM	6.354	76601	Infinity	280.2 -> 77.2	17.67	30674	Doxepin-D3	6.332	452793		
Estazolam	295.1 -> 267...	12/19/2018 3:42 PM	6.392	32334	328.88	295.1 -> 205...	8449...	30020	Estazolam-D5	6.391	171348		
Flunitrazepam	314.1 -> 268...	12/19/2018 3:42 PM	6.450	28450	9945.73	314.1 -> 239...	142.67	10220	Flunitrazepam-D7	6.429	5617		
Flurazepam	388.2 -> 315...	12/19/2018 3:42 PM	6.525	125406	94.48	388.2 -> 317...	340.41	28192	Zopiclone-D4	6.423	134296		
Imipramine	281.2 -> 86.2	12/19/2018 3:42 PM	6.536	247296	4251.37	281.2 -> 58.3	Infinity	1370...	Imipramine-D3	6.515	676291		
Levamisole	205.1 -> 91.2	12/19/2018 3:42 PM	5.427	48907	Infinity	205.1 -> 178...	152.57	44864	Surfentanil-D5	6.887	958987		
Maprotiline	278.2 -> 91.2	12/19/2018 3:42 PM	6.436	33168	51.63	278.2 -> 117...	44.69	24635	Amiripryline-D3	6.576	331017		
MDA	180.1 -> 163...	12/19/2018 3:42 PM	5.166	55675	42.72	180.1 -> 105...	13.48	37727	MDA-D5	5.166	295481		
MDEA	208.1 -> 163...	12/19/2018 3:42 PM	5.427	87486	Infinity	208.1 -> 105...	39.29	73980	MDEA-D6	5.426	431857		
MDMA	194.1 -> 163...	12/19/2018 3:42 PM	5.286	107208	Infinity	194.1 -> 105...	Infinity	65287	MDMA-D6	5.265	61232		
Meperidine	248.2 -> 220...	12/19/2018 3:42 PM	5.871	46793	79.61	248.2 -> 174...	45.50	30614	Meperidine-D4	5.850	222741		
Methylphenidate	234.2 -> 84.2	12/19/2018 3:42 PM	5.709	232380	169.24	234.2 -> 56.3	Infinity	48429	Meperidine-D4	5.850	222741		
Midazolam	326.1 -> 223...	12/19/2018 3:42 PM	6.610	16529	90.26	326.1 -> 249...	97.86	15038	Midazolam-D4	6.609	242515		
Normeperidine	234.1 -> 42.3	12/19/2018 3:42 PM	5.731	50626	443.12	234.1 -> 160...	435.85	36298	Normeperidine-D4	5.729	168759		
7-Aminoflunitrazepam	284.1 -> 135...	12/19/2018 3:42 PM	5.803	26824	1570.62	284.1 -> 93.2	112.40	9761	7-aminoflunitrazepam-D7	5.783	128098		
Nortriptyline	264.2 -> 91.2	12/19/2018 3:42 PM	6.460	53409	Infinity	264.2 -> 233...	258.93	38395	Nortriptyline-D3	6.459	207086		
Phenazepam	349.0 -> 206...	12/19/2018 3:42 PM	6.506	19914	104.47	349.0 -> 183...	74.20	14326	Phenazepam-D4	6.486	74172		
Phencyclidine	244.2 -> 86.2	12/19/2018 3:42 PM	6.014	147343	344.15	244.2 -> 91.1	Infinity	1224...	Phencyclidine-D5	5.992	725292		
Phenytoln	253.1 -> 182...	12/19/2018 3:42 PM	6.093	1079	27.12	253.1 -> 104...	228.41	1040	Phenytoln-D10	6.072	8015		
Pseudoephedrine	166.1 -> 148...	12/19/2018 3:42 PM	4.743	10919...	Infinity	166.1 -> 133...	Infinity	2127...	Pseudoephedrine-D3	4.743	53287...		
Tapentadol	222.2 -> 107...	12/19/2018 3:42 PM	5.589	132067	162.40	222.2 -> 121...	Infinity	48667	Tapentadol-D3	5.588	645912		
Zaleplon	306.1 -> 236...	12/19/2018 3:42 PM	6.268	33598	89.50	306.1 -> 264...	100.36	22988	Zaleplon-D4	6.247	124711		
Zopiclone	389.1 -> 244...	12/19/2018 3:42 PM	6.423	30079	85.52	389.1 -> 216...	79.73	15764	Zopiclone-D4	6.423	134296		

Compound Method		p2 negative			p2 negative Results			Qualifier 1 M...			Qualifier 1 R...			ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	Area	MI	Name	RT	Resp.				
Acetylfentanyl	323.2 -> 188...	12/19/2018 4:01 PM					323.2 -> 105...				Acetylfentanyl-D5	6.306	975811				
alpha-hydroxymidazolam	342.1 -> 324...	12/19/2018 4:01 PM					342.1 -> 203...				alpha-hydroxymidazolam-...	6.446	205320				
Amitriptyline	278.2 -> 91.2	12/19/2018 4:01 PM					278.2 -> 105...				Amitriptyline-D3	6.556	301831				
Acetylnorfentanyl	219.1 -> 84.2	12/19/2018 4:01 PM					219.1 -> 56.3				Acetylnorfentanyl-D5	4.997	356113				
Carbamazepine	237.1 -> 193...	12/19/2018 4:01 PM					237.1 -> 194...				Carbamazepine-13C6	6.156	860025				
Chlordiazepoxide	300.1 -> 227...	12/19/2018 4:01 PM					300.1 -> 282...				Chlordiazepoxide-D5	6.573	197564				
Sufentanil	387.2 -> 238...	12/19/2018 4:01 PM					387.2 -> 111...				Sufentanil-D5	6.887	928183				
Desipramine	267.2 -> 72.3	12/19/2018 4:01 PM					267.2 -> 44.3				Desipramine-D3	6.418	867241				
Doxepin	280.2 -> 107...	12/19/2018 4:01 PM					280.2 -> 77.2				Doxepin-D3	6.312	452229				
Estazolam	295.1 -> 267...	12/19/2018 4:01 PM					295.1 -> 205...				Estazolam-D5	6.391	172738				
Flunitrazepam	314.1 -> 268...	12/19/2018 4:01 PM					314.1 -> 239...				Flunitrazepam-D7	6.429	5350				
Flurazepam	388.2 -> 315...	12/19/2018 4:01 PM					388.2 -> 317...				Zopiclone-D4	6.403	134248				
Imipramine	281.2 -> 86.2	12/19/2018 4:01 PM					281.2 -> 58.3				Imipramine-D3	6.494	661039				
Levamisole	205.1 -> 91.2	12/19/2018 4:01 PM					205.1 -> 178...				Sufentanil-D5	6.887	928183				
Maprotiline	278.2 -> 91.2	12/19/2018 4:01 PM					278.2 -> 117...				Amitriptyline-D3	6.556	301831				
MDA	180.1 -> 163...	12/19/2018 4:01 PM					180.1 -> 105...				MDA-D5	5.166	286912				
MDA	208.1 -> 163...	12/19/2018 4:01 PM					208.1 -> 105...				MDA-D6	5.406	390585				
MDMA	194.1 -> 163...	12/19/2018 4:01 PM					194.1 -> 105...				MDMA-D6	5.265	60952				
Meperidine	248.2 -> 220...	12/19/2018 4:01 PM					248.2 -> 174...				Meperidine-D4	5.850	211046				
Methylphenidate	234.2 -> 84.2	12/19/2018 4:01 PM					234.2 -> 56.3				Meperidine-D4	5.850	211046				
Midazolam	326.1 -> 223...	12/19/2018 4:01 PM					326.1 -> 249...				Midazolam-D4	6.589	244724				
Normeperidine	234.1 -> 42.3	12/19/2018 4:01 PM					234.1 -> 160...				Normeperidine-D4	5.729	161790				
7-Aminoflunitrazepam	284.1 -> 135...	12/19/2018 4:01 PM					284.1 -> 93.2				7-aminoflunitrazepam-D7	5.783	126533				
Nortriptyline	264.2 -> 91.2	12/19/2018 4:01 PM					264.2 -> 233...				Nortriptyline-D3	6.438	209403				
Phenazepam	349.0 -> 206...	12/19/2018 4:01 PM					349.0 -> 183...				Phenazepam-D4	6.486	78743				
Phencyclidine	244.2 -> 86.2	12/19/2018 4:01 PM					244.2 -> 91.1				Phencyclidine-D5	5.992	637210				
Phenylethylamine	253.1 -> 182...	12/19/2018 4:01 PM					253.1 -> 104...				Phenylethylamine-D10	6.072	8045				
Pseudoephedrine	166.1 -> 148...	12/19/2018 4:01 PM					166.1 -> 133...				Pseudoephedrine-D3	4.743	53610...				
Tapentadol	222.2 -> 107...	12/19/2018 4:01 PM					222.2 -> 121...				Tapentadol-D3	5.588	604692				
Zaleplon	306.1 -> 236...	12/19/2018 4:01 PM					306.1 -> 264...				Zaleplon-D4	6.247	138510				
Zopiclone	389.1 -> 244...	12/19/2018 4:01 PM					389.1 -> 216...				Zopiclone-D4	6.403	134248				

Compound Method		p2 external control		p2 external control Results		Qualifier 1 M...		Qualifier 1 Results		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	Area	MI	Name	RT	Resp.
Acetylfentanyl	323.2 -> 188...	12/19/2018 4:21 PM					323.2 -> 105...				Acetylfentanyl-D5	6.326	923709
alpha-hydroxymidazolam	342.1 -> 324...	12/19/2018 4:21 PM					342.1 -> 203...				alpha-hydroxymidazolam-...	6.446	184322
Amitriptyline	278.2 -> 91.2	12/19/2018 4:21 PM					278.2 -> 105...				Amitriptyline-D3	6.556	304545
Acetylnorfentanyl	219.1 -> 84.2	12/19/2018 4:21 PM					219.1 -> 56.3				Acetylnorfentanyl-D5	4.997	329616
Carbamazepine	237.1 -> 193...	12/19/2018 4:21 PM					237.1 -> 194...				Carbamazepine-13C6	6.156	782817
Chlordiazepoxide	300.1 -> 227...	12/19/2018 4:21 PM					300.1 -> 282...				Chlordiazepoxide-D5	6.573	185415
Sufentanil	387.2 -> 238...	12/19/2018 4:21 PM					387.2 -> 111...				Sufentanil-D5	6.887	856208
Desipramine	267.2 -> 72.3	12/19/2018 4:21 PM					267.2 -> 44.3				Desipramine-D3	6.418	817017
Doxepin	280.2 -> 107...	12/19/2018 4:21 PM					280.2 -> 77.2				Doxepin-D3	6.312	419420
Esazolam	295.1 -> 267...	12/19/2018 4:21 PM					295.1 -> 205...				Esazolam-D5	6.391	155582
Flunitrazepam	314.1 -> 268...	12/19/2018 4:21 PM					314.1 -> 239...				Flunitrazepam-D7	6.429	5177
Flurazepam	388.2 -> 315...	12/19/2018 4:21 PM					388.2 -> 317...				Zopiclone-D4	6.403	91616
Imipramine	281.2 -> 86.2	12/19/2018 4:21 PM					281.2 -> 58.3				Imipramine-D3	6.515	622907
Levamisole	205.1 -> 91.2	12/19/2018 4:21 PM					205.1 -> 178...				Sufentanil-D5	6.887	856208
Maprotiline	278.2 -> 91.2	12/19/2018 4:21 PM					278.2 -> 117...				Amitriptyline-D3	6.556	304545
MDA	180.1 -> 163...	12/19/2018 4:21 PM					180.1 -> 105...				MDA-D5	5.145	263723
MDEA	208.1 -> 163...	12/19/2018 4:21 PM					208.1 -> 105...				MDEA-D6	5.426	358990
MDMA	194.1 -> 163...	12/19/2018 4:21 PM					194.1 -> 105...				MDMA-D6	5.265	55290
Meperidine	248.2 -> 220...	12/19/2018 4:21 PM					248.2 -> 174...				Meperidine-D4	5.850	194370
Methyphenidate	234.2 -> 84.2	12/19/2018 4:21 PM					234.2 -> 56.3				Meperidine-D4	5.850	194370
Midazolam	326.1 -> 223...	12/19/2018 4:21 PM					326.1 -> 249...				Midazolam-D4	6.589	216038
Normeperidine	234.1 -> 42.3	12/19/2018 4:21 PM					234.1 -> 160...				Normeperidine-D4	5.729	149331
7-Amino-flunitrazepam	284.1 -> 135...	12/19/2018 4:21 PM					284.1 -> 93.2				7-amino-flunitrazepam-D7	5.783	114789
Nortriptyline	264.2 -> 91.2	12/19/2018 4:21 PM	6.460	526622	333.27		264.2 -> 233...	241.64	4250...		Nortriptyline-D3	6.459	197562
Phenazepam	349.0 -> 206...	12/19/2018 4:21 PM					349.0 -> 183...				Phenazepam-D4	6.486	70741
Phencyclidine	244.2 -> 86.2	12/19/2018 4:21 PM					244.2 -> 91.1				Phencyclidine-D5	5.992	642075
Phenytoln	253.1 -> 182...	12/19/2018 4:21 PM					253.1 -> 104...				Phenytoln-D10	6.072	6171
Pseudoephedrine	166.1 -> 148...	12/19/2018 4:21 PM					166.1 -> 133...				Pseudoephedrine-D3	4.743	48162...
Tapentadol	222.2 -> 107...	12/19/2018 4:21 PM					222.2 -> 121...				Tapentadol-D3	5.588	548036
Zaleplon	306.1 -> 236...	12/19/2018 4:21 PM					306.1 -> 264...				Zaleplon-D4	6.247	126921
Zopiclone	389.1 -> 244...	12/19/2018 4:21 PM					389.1 -> 216...				Zopiclone-D4	6.403	91616

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

Extraction Date: 12/19/18

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.  
Worklist path: 121918 AM 25-26 Click here to enter text. Batch Name: cann screen
- 2. Calculated sample concentration of 3 ng/mL or greater for THC and THC-OH, a calculated sample concentration of 10 ng/mL or greater for Carboxy-THC.
- 3. Retention time within +/- 2% or +/- .100 min whichever is greater of the average retention time of the calibrators.
- 4. Did all QCs pass for each analyte? Y / N
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS: *THC-OH dropped calibrator 3 top cut off internal standard peak. THC-COOH curve range 5-100.*



# ISP FORENSICS - Cd'A

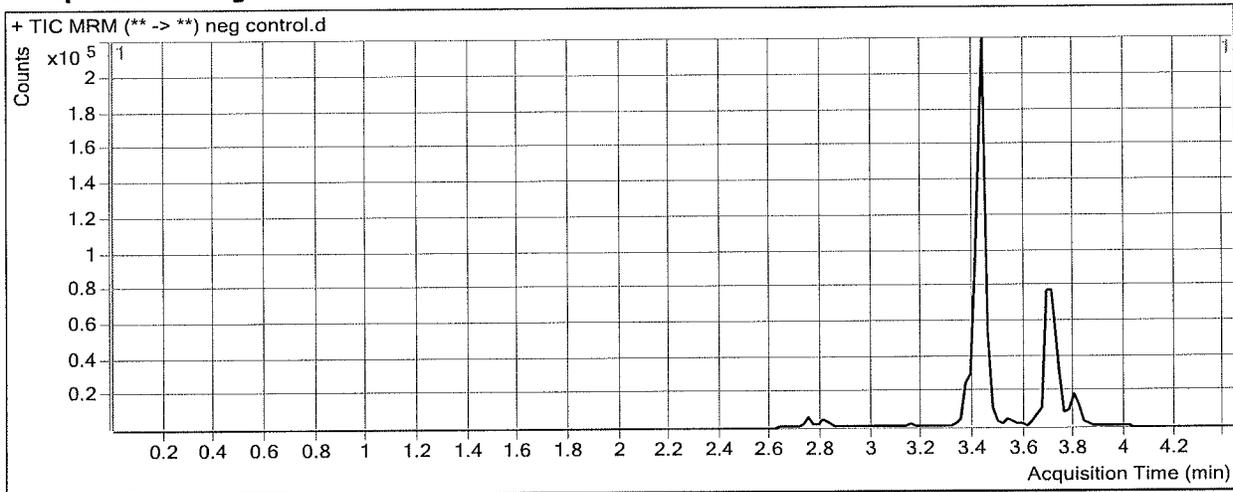
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
**Analysis Time** 12/27/2018 9:15 AM **Analyst Name** ISP Tox  
**Report Time** 12/27/2018 9:19 AM **Reporter Name** ISP Tox  
**Last Calib Update** 12/27/2018 9:15 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-12-20 01:30 **Data File** neg control.d  
**Sample Type** Sample **Sample Name** neg control  
**Dilution** 1 **Acq Method** Screen THC 8-2017.m  
**Position** P1-A2 **Sample Info**  
**Inj Vol** -1 **Comment** AM 26 Cannabinoid screen

### Sample Chromatogram



# ISP FORENSICS - Cd'A

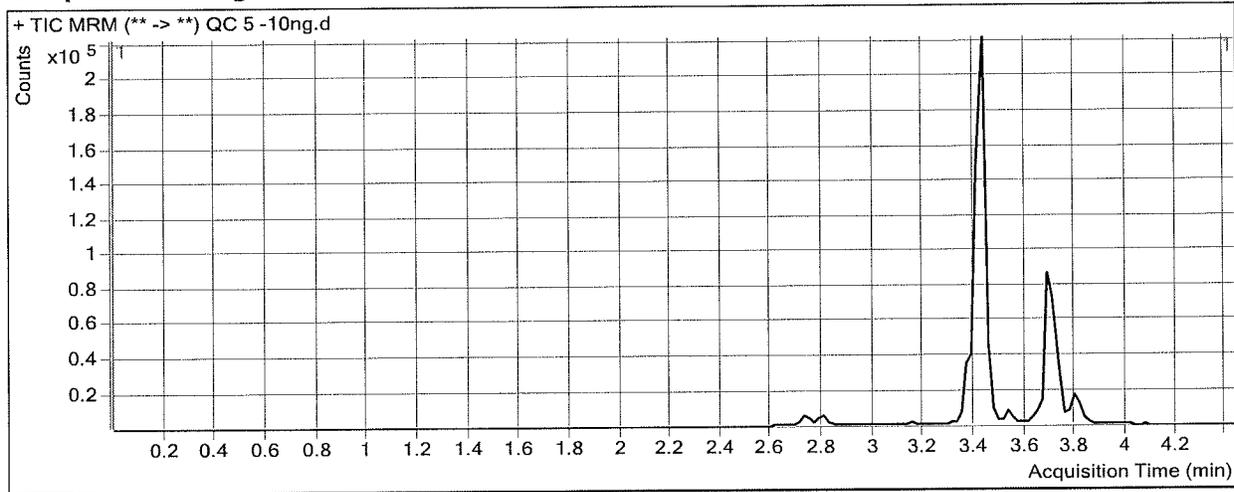
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
**Analysis Time** 12/27/2018 9:15 AM **Analyst Name** ISP Tox  
**Report Time** 12/27/2018 9:19 AM **Reporter Name** ISP Tox  
**Last Calib Update** 12/27/2018 9:15 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-12-20 01:17 **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

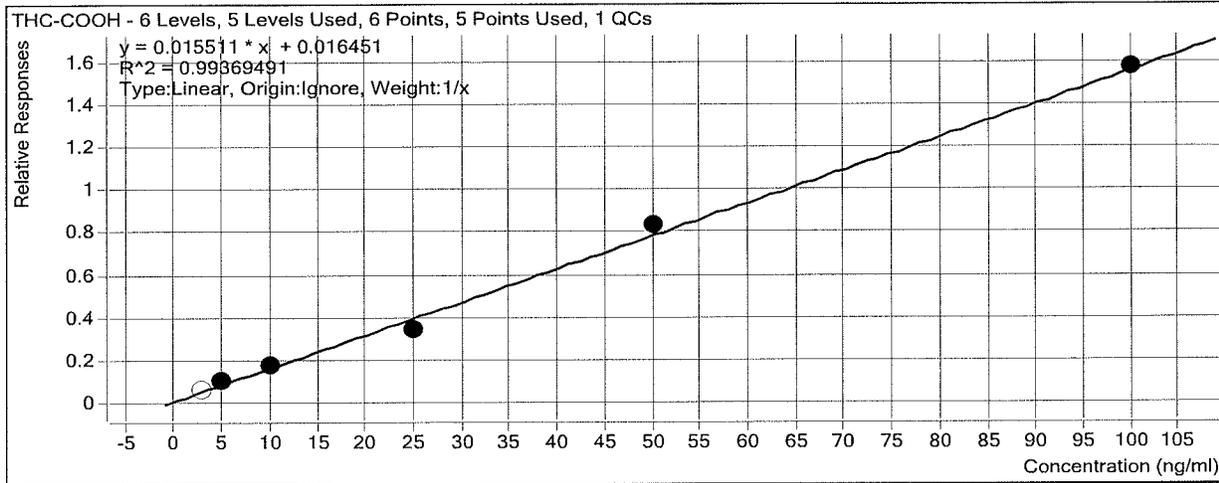
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.386	15328	94227	0.1627	9.4266
THC-OH	3.433	16855	474802	0.0355	4.9141
THC	3.800	1165	24856	0.0469	4.8385

# ISP Forensics Calibration Curve Report

**Batch Data Path**  
**Last Calib Update**

D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
12/27/2018 9:15 AM **Analyst Name** ISP TOX

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



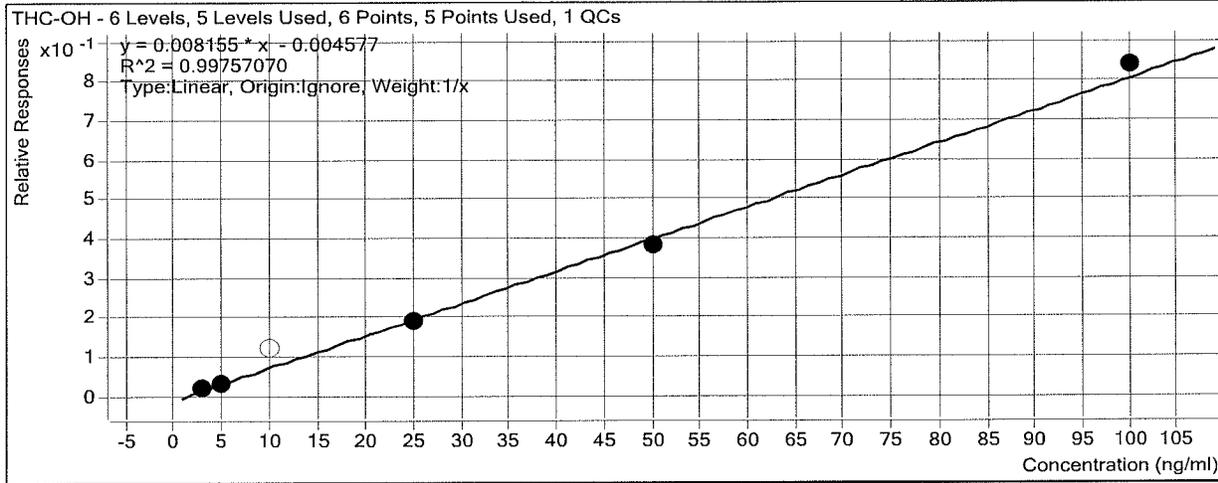
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input type="checkbox"/>	3	0.0	0.0
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	0.0	0.0
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	0.0	0.0
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	0.0	0.0
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	0.0	0.0
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	0.0	0.0
QC 5 -10ng	7	<input checked="" type="checkbox"/>	10	9.4	94.3

# ISP Forensics Calibration Curve Report

**Batch Data Path**  
**Last Calib Update**

D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
12/27/2018 9:15 AM      **Analyst Name**      ISP TOX

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



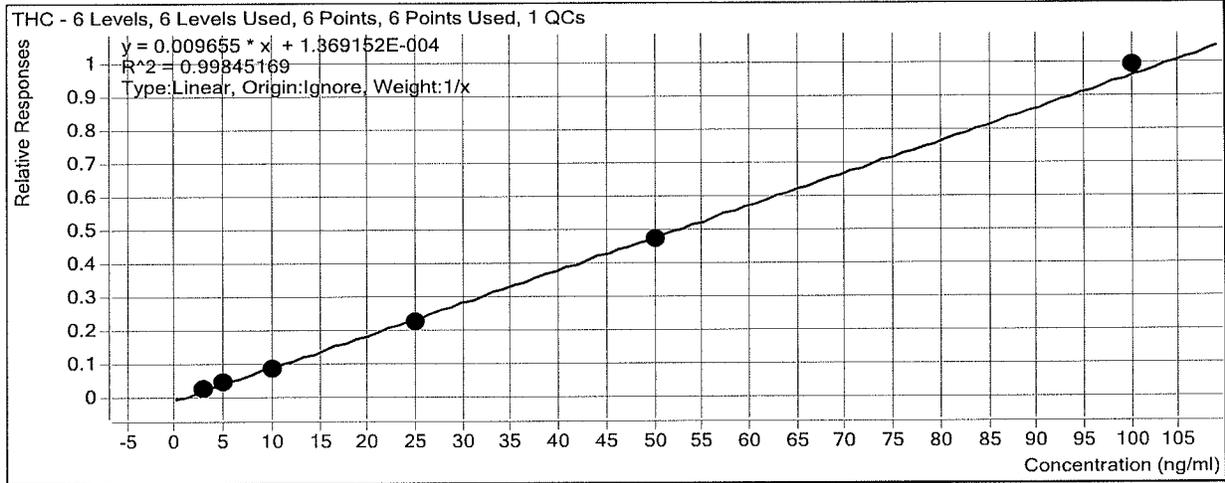
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	<input checked="" type="checkbox"/>	3	0.0	0.0
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	0.0	0.0
cal 3 - 10ng	3	<input type="checkbox"/>	10	0.0	0.0
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	0.0	0.0
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	0.0	0.0
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	0.0	0.0
QC 5 -10ng	7	<input checked="" type="checkbox"/>	5	4.9	98.3

# ISP Forensics Calibration Curve Report

**Batch Data Path**  
**Last Calib Update**

D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
12/27/2018 9:15 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	0.0	0.0
cal 2 - 5ng	2	<input checked="" type="checkbox"/>	5	0.0	0.0
cal 3 - 10ng	3	<input checked="" type="checkbox"/>	10	0.0	0.0
cal 4 - 25ng	4	<input checked="" type="checkbox"/>	25	0.0	0.0
cal 5 - 50ng	5	<input checked="" type="checkbox"/>	50	0.0	0.0
cal 6 - 100ng	6	<input checked="" type="checkbox"/>	100	0.0	0.0
QC 5 - 10ng	7	<input checked="" type="checkbox"/>	5	4.8	96.8

# ISP FORENSICS - Cd'A Instrument #62340

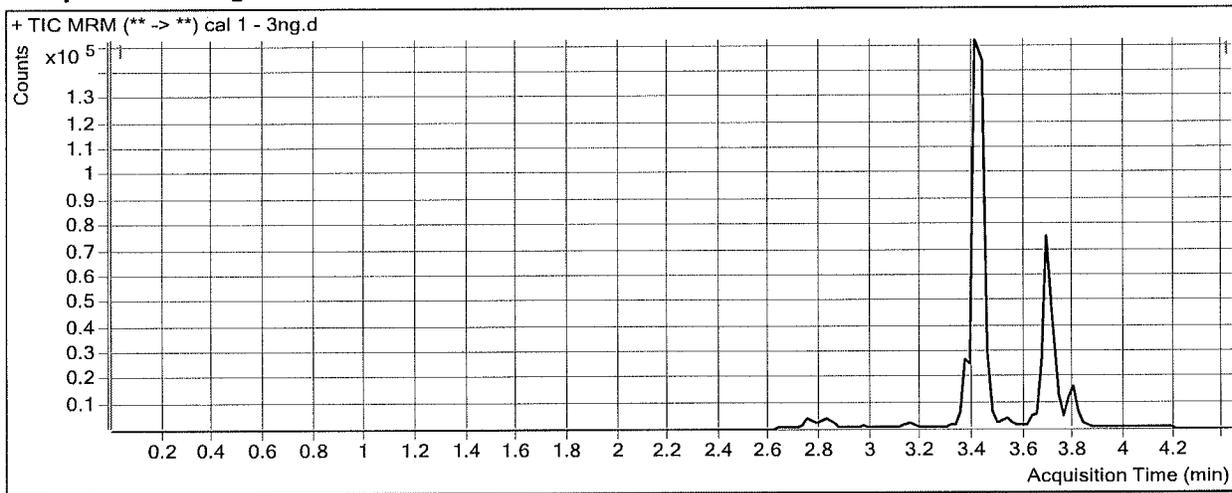
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
**Analysis Time** 1/2/2019 9:09 AM **Analyst Name** ISP Tox  
**Report Time** 1/2/2019 9:10 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2019 9:09 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-12-20 00:31 **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	3.386	4814	72302	0.0666	3.2317
THC-OH	3.433	8696	381824	0.0228	3.3539
THC	3.800	731	23620	0.0309	3.1897

# ISP FORENSICS - Cd'A Instrument #62340

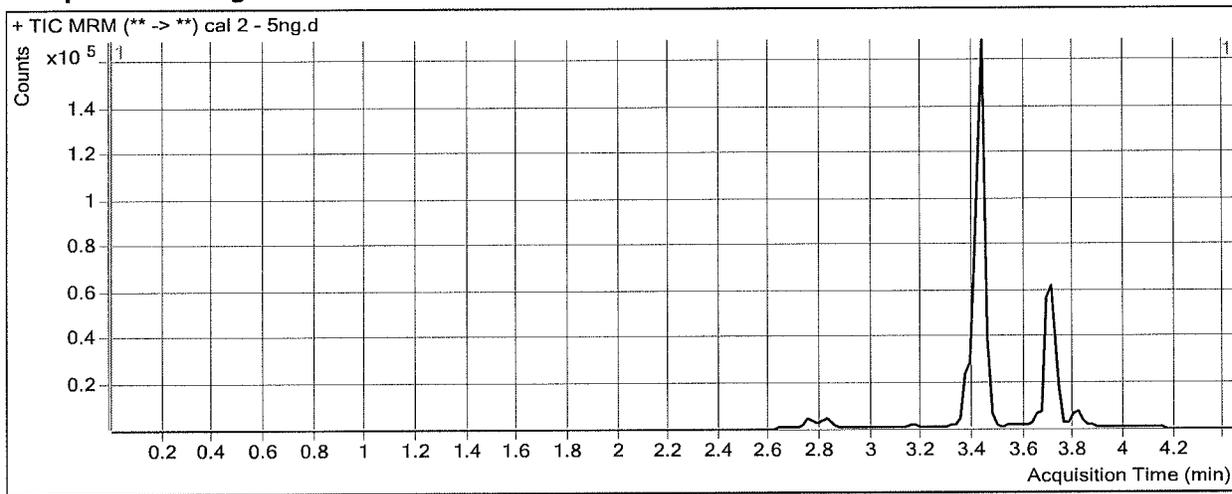
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
**Analysis Time** 1/2/2019 9:09 AM **Analyst Name** ISP Tox  
**Report Time** 1/2/2019 9:10 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2019 9:09 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-12-20 00:37 **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	3.386	7152	71197	0.1005	5.4156
THC-OH	3.433	11067	328133	0.0337	4.6970
THC	3.820	430	8464	0.0508	5.2420

# ISP FORENSICS - Cd'A Instrument #62340

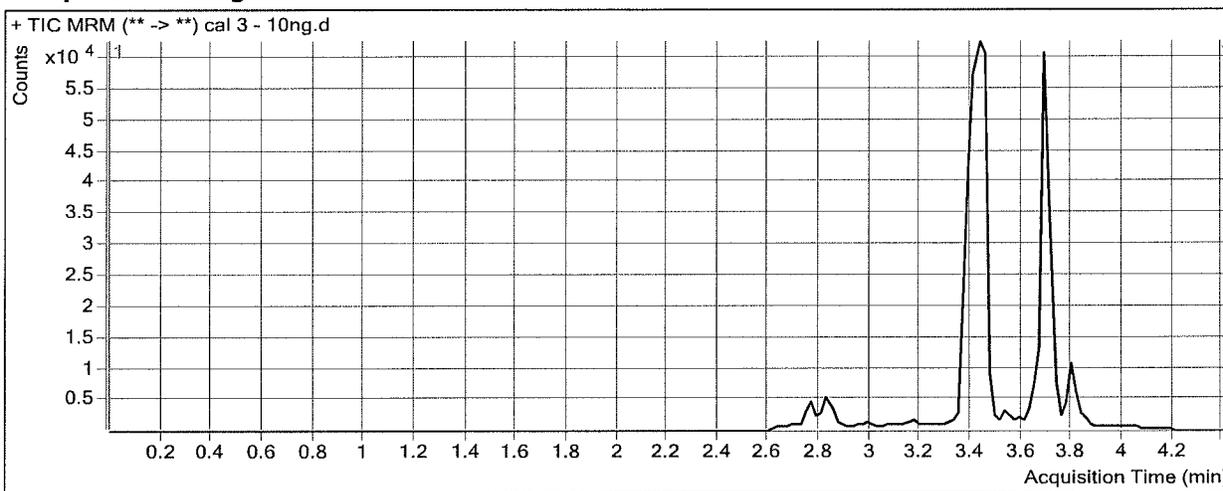
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
**Analysis Time** 1/2/2019 9:09 AM **Analyst Name** ISP Tox  
**Report Time** 1/2/2019 9:10 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2019 9:09 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-12-20 00:44 **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	3.386	14083	81701	0.1724	10.0522
THC-OH	3.433	21524	175382	0.1227	15.6101
THC	3.800	996	10972	0.0907	9.3842

# ISP FORENSICS - Cd'A Instrument #62340

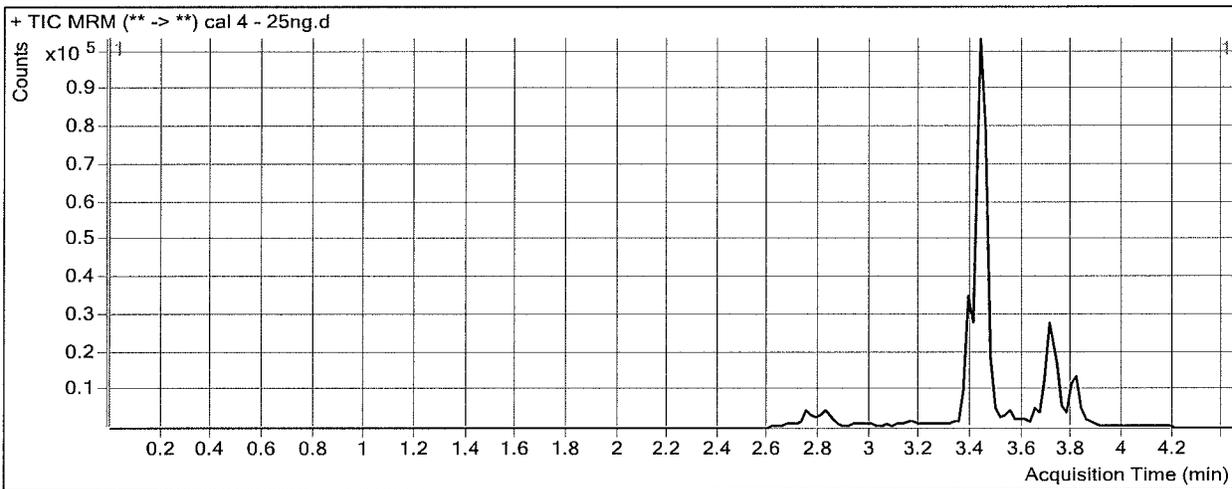
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
**Analysis Time** 1/2/2019 9:09 AM **Analyst Name** ISP Tox  
**Report Time** 1/2/2019 9:10 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2019 9:09 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-12-20 00:51 **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	3.406	20471	59200	0.3458	21.2318
THC-OH	3.433	37824	198617	0.1904	23.9129
THC	3.820	3787	16652	0.2274	23.5363

# ISP FORENSICS - Cd'A Instrument #62340

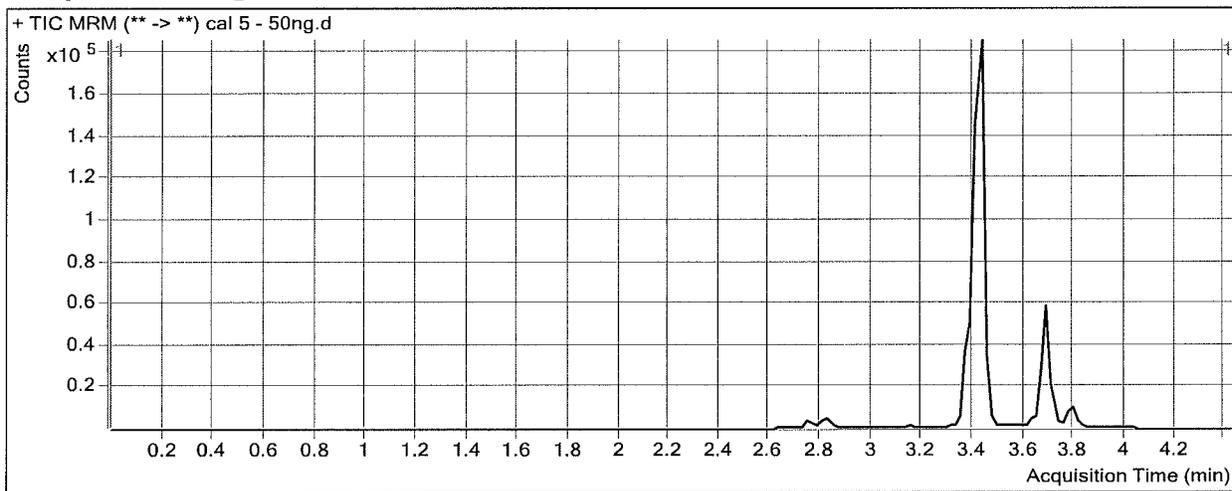
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
**Analysis Time** 1/2/2019 9:09 AM **Analyst Name** ISP Tox  
**Report Time** 1/2/2019 9:10 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2019 9:09 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-12-20 00:57 **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	3.386	51090	60995	0.8376	52.9389
THC-OH	3.433	111253	290172	0.3834	47.5754
THC	3.800	4666	9819	0.4752	49.2016

# ISP FORENSICS - Cd'A Instrument #62340

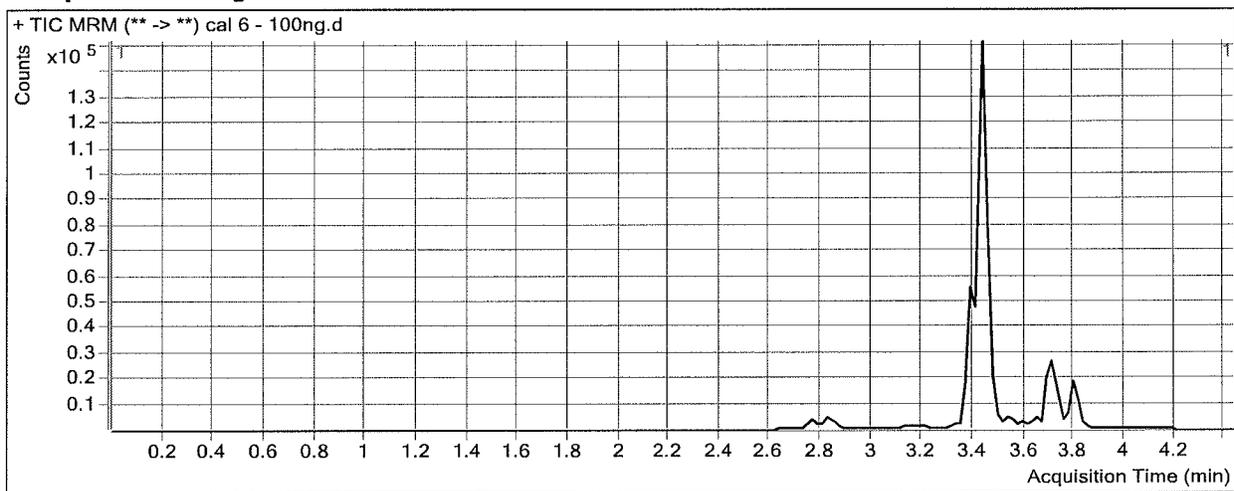
## Cannabinoid Screen Report

**Batch Data Path** D:\2018 Data\121918 AM 25-26\QuantResults\cann screen.batch.bin  
**Analysis Time** 1/2/2019 9:09 AM **Analyst Name** ISP Tox  
**Report Time** 1/2/2019 9:10 AM **Reporter Name** ISP Tox  
**Last Calib Update** 1/2/2019 9:09 AM **Batch State** Processed

### Analysis Info

**Acq Time** 2018-12-20 01:04 **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	3.386	65317	41518	1.5732	100.3615
THC-OH	3.433	131776	157034	0.8392	103.4609
THC	3.800	13065	13206	0.9893	102.4462