### reviewed 7/20/18

Vylee

### Worklist: 2578

LAB_CASE	ITEM	<u>TASK ID</u>	DESCRIPTION
C2018-1231	2	119677	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1243	1	119776	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1286	1	120471	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1287	1	120473	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1299	1	120553	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1300	1	120556	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1305	1	120701	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1318	1	120800	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1328	1	120886	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1329	1	120889	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1335	1	120898	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1339	2	120905	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1361	1	121056	AM 25/AM 26 Blood MultiDrug/THC Screen by L
C2018-1383	1	121201	AM 25/AM 26 Blood MultiDrug/THC Screen by L

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

Extraction Date: 7-17-18 Plate lot#: 0515207 Analyst: Anne Nord

Plate Expiration: 10/18/2018

Mobile phase A:10mM Amm FormMobile phase B:0.1% Formic Acid in MeOH0.5M Ammonium HydroxideEthyl AcetateLC MethanolBlank Blood Lot:17J20718Column:Phenomenex Phenyl Hexyl (4.6x50mm, 2.6um)LCMS-QQQ ID:6234062340

### **Pre-Analytic:**

- (1. Check levels of mobile phases and needle wash refill as needed. Ensure waste is not full.
- $\boxtimes$  2. Ensure correct column is installed and begin mobile phase flow allow to equilibrate ~ 30 minutes.
- $\checkmark$  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
- A. Pipette **250µL 00.5M ammonium hydroxide** in wells of analytical plate.
- ☑ 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- 6. Transfer **300µL of blood+base** mixture to corresponding wells of SLE+ plate.
- 7. Apply positive pressure for approx. 10-15 seconds (or until no liquid remains on top of sorbent).
   (Load at 85-100 PSI- Selector to the right) Manifold ID: 66792
- 🖾 8. Wait 5 minutes.
- 9. Add 900uL ethyl acetate.
- $\boxtimes$  10. Wait 5 minutes.
- 11. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- 🖾 12. Add 900uL ethyl acetate.
- $\boxtimes$  13. Wait 5 minutes.
- X 14. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- I5. 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. MdS plBatch Name: <u>071718</u> AM25-26 Worklist path: <u>MdS p</u>
- ☑ 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.
- $\mathbb{Z}$  4. Did all QCs pass for each analyte?  $\mathbb{Y}$  N
- 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

COMMENTS:

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

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

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

by Amn

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

X

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Compound Method	bo	p1 cal 1-2a	p1	p1 cal 1-2a Results	esults	Qualifier 1 M	Qualifier 1 Results	Results	ISTD Method	d	ISTD Results	
$ \begin{array}{c} \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Name	Transition	Acq. Date-Time	RT	Resp.	N/S	Transition	N/S	Area	Name	Transition	RT	5 A
$ \begin{array}{c} 2661 + 122.1, 1717/2018 1101 A, 5259 27785 47174 283 + 525 2782 4023 (https://doi.org/10.1018/1.517 47174 283 + 553 2782 4023 (https://doi.org/10.1018/1.517 10.1118/1.517 10.1118/1.517 10.1118/1.517 10.1118/1.517 10.1118/1.517 10.11111/1.517 10.11111/1.5$	5-MAM	328.2 -> 165	7/17/2018 11:01 A.	5.441	755	7.30	328.2 -> 211	4.17	1525	6-MAM-D6	334.2 -> 165	5.420	1:1
280.2         116.         117.0218         1101         4         5.505         1022         1023         1024	7-aminoclonazepam	286.1 -> 121	7/17/2018 11:01 A	5.529	27263	433.38	286.1 -> 222	320.08	20180	7-Aminoclonazepam-D4	290.1 -> 121	5.507	154083
268.2         >116.         7117.2018         1101         A.         55.5         212.2         242.2         4871         Hold Neuroscience CS         50.2         242.2         242.2         241.0         717.0018         1101         A.         50.2         247.1         50.1         50.2         247.1         50.1         50.2         247.1         50.1         50.2         50.1         50.2         50.1         50.2         50.1         50.2         50.1         50.2         50.1         50.2         50.1         50.2         50.1         50.2         50.1         50.2         50.1         50.2         50.1	Benzoylecgonine	290.1 -> 168		5.305	16004	120.41	290.1 -> 105	42.66	10326	Benzoylecgonine-D8	298.2 -> 171	5.304	, 1
352.1         327.1         7/17/2018         1101         A.         6400         ST15         1061         325.1         271.1         271.1         457.17         321.1         457.17         321.1         457.17         321.1         457.17         321.1         457.17         321.1         457.17         321.1         457.17         321.1         457.17         321.1         457.17         321.1         457.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.17         321.1         457.17         32	Metoprolol	V		5.553	21165	4717.44	268.2 -> 56.3	21822.23	24033	Noroxycodone-D3	305.2 -> 287	4.976	. 1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	a-hydroxyalprazolam	۷,		6.400	8715	109.11	325.1 -> 215	75.97	4887	a-hydroxyalprazolam-D5	330.1 -> 302	6.379	. 1
Ine         30:1         20:1         7/17/2018         11:01         A.         6.495         60/778         10:00:756         20:1         27.2         61         67.776         64.778         10:00:756         30:4         2.2.81         61.778         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         64.777         10:00:756         10:00:756         10:00         10:00:756         10:00:776         10:00:756 <td>alpha-PVP</td> <td>v  </td> <td></td> <td>5.987</td> <td>137971</td> <td>99.52</td> <td>232.2 -&gt; 77.1</td> <td>23.11</td> <td>45737</td> <td>alpha-PVP-d8</td> <td>240.2 -&gt; 91.1</td> <td>5.904</td> <td>675665</td>	alpha-PVP	v		5.987	137971	99.52	232.2 -> 77.1	23.11	45737	alpha-PVP-d8	240.2 -> 91.1	5.904	675665
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	Alprazolam	309.1 -> 281		6.485	60778	10037.50		312.09	60076	Alprazolam-D5	314.1 -> 286	6.484	- 1
Single	Amphetamine	136.1 -> 91.1		4.931	113330	10.84		22.81	40178	Amphetamine-D11	147.2 -> 130	4.890	90724
bit         2401 - 194.         717/2018         1101         6         271.2         281.7         281.2         281.6         281.2         281.6         281.2         281.6         281.2         281.6         281.2         281.6         281.2         281.6         81.8         80.095         Clanopan-D6         281.2         281.6         81.8         80.096         Clanopan-D6         281.2         281.2         182.6         182.6         182.6         182.6         182.7         182.6         281.7         282.2         281.7 <td>Cocaine</td> <td>v l</td> <td></td> <td>5.895</td> <td>180319</td> <td></td> <td>۷,</td> <td>75.86</td> <td>46727</td> <td>Cocaine-D3</td> <td>307.2 -&gt; 185</td> <td>5.874</td> <td>896727</td>	Cocaine	v l		5.895	180319		۷,	75.86	46727	Cocaine-D3	307.2 -> 185	5.874	896727
	Bupropion	v		6.210	86848		V	35.61	43975		249.2 -> 185	6.169	475028
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Carisoprodol	V I		6.127	70503	338.22	261.2 -> 55.3	86.15	80069	Carisoprodol-D7	268.2 -> 183	6.126	513412
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Citalopram	1		6.216	208582	132.80	v	8372.08	47022	Citalopram-D6	331.2 -> 109	6.195	ł
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Clonazepam	316.1 -> 269		6.340	26756	99.00		38.54	7092		320.1 -> 217	6.319	
27.62         21.1         71172018         1101         A.         6.282         182.21         272.2         -171.         1172018         1101         A.         6.282         182.21         272.2         -171.         1172018         1101         A.         6.272         45.71         133.27         54.161         Dextomethorphan-D3         272.2         171.2         172.2         171.2         172.2         171.2         172.2         171.2         172.2         172.2         172.2         172.2         172.2         172.2         172.2         172.2         172.2         172.2         172.2         172.2         172.2         172.2         172.2	Codeine	٧,		5.466	9284	125.52	V	52.47	8702		306.2 -> 218	5.403	
272.2 + 171.         1717/2018         1101 A.         6.388         56041         811.22         122.2 + 147.         155.27         5614         Dextomethorphan-D3         275.2 + 171.         6.288           288.2 + 157.         17172018         1101 A.         5.160         264.7         102.37         285.1 + 193.         109.41         261.2 + 157.         50.48         29458         Dextomethorphan-D3         281.2 + 157.         50.70           285.1 + 193.         17172018         1101 A.         5.160         264.67         70.21         302.2 + 157.         121.8         124.85         172.08         Dihydrocodeine-D6         308.2 + 202.         5.097           286.2 + 167.         17172018         1101 A.         6.163         756.22         624.77         279.2 + 250.         71.19         48505         EDDP-D3         282.2 + 255.         6.163           300.2 + 198.         17172018         1101 A.         6.163         300106         200.12         382.2 + 157.         16.17         13991         Hydromorphone-D6         292.2 + 235.         6.163           300.2 + 188.         117172018         1101 A.         6.570         207.2         286.2 + 172.         16.103         262.2 + 185.         5.599         286.2 + 172.         17.19	Cyclobenzaprine	v l		6.592	128254		Ϋ́	108.44	37097	Cyclobenzaprine-D3	279.2 -> 215	6.571	678954
288.2 × 157.         71/72/018         11101 A.         6.575         45.24         589.4         282. × 133.         169.81         306.48         Dextorphan-D3         261.2 × 157.         5.575           285.1 × 199.         71/72/018         1101 A.         5.160         284.7         70.21         302.2 × 188.         720.81         256.2 × 157.         157.4         57.57         57.57         57.57         57.57         57.57         57.57         57.57         57.57         57.57         57.57         157.4         171.501.8         110.1         1.98.         67.17         79.2 × 25.7         71.12.9         162.7         171.201.8         110.1         A.         6.163         276.2 × 25.7         71.12.9         148.0         57.52         111.9         48.50         EDDP.D.5         322.2 × 235.         6.163           300.2 × 198.         71172/018         1101 A.         5.571         10.1         1.85.71         282.4         15.2         117.11         48.50         EDDP.D.5         322.2 × 235.         6.163           301.1 × 44.3         71172/018         1101 A.         5.571         10.7         13.991         Hydrocononphone-D6         292.2 × 185.         4.539           282.2 × 195.         71172/018         1101 A. <td>Dextromethorphan</td> <td>v.</td> <td>7/17/2018 11:01 A</td> <td>6.288</td> <td>58081</td> <td>811.23</td> <td></td> <td>135.27</td> <td>54161</td> <td>Dextromethorphan-D3</td> <td>275.2 -&gt; 171</td> <td>6.288</td> <td>347393</td>	Dextromethorphan	v.	7/17/2018 11:01 A	6.288	58081	811.23		135.27	54161	Dextromethorphan-D3	275.2 -> 171	6.288	347393
285.1 > 193.         71/1/2018         1101         A.         6.711         45748         102.37         285.1 > 153.         504.87         29458         Diazepan-D5         290.1 > 198.         6.710           226.2 > 196.         71/72018         1101         A.         6.160         286.2 > 152.         164.18         7312.0         11040         266.2 > 162.         11260         Dipudricoodeline-D5         282.2 > 125.         6.163           2712.2 > 182.         71/72018         1101         A.         6.433         1762.8         127.2 > 182.         171.9         4806         EDDP-D3         282.2 > 22.5         6.163           307.2 > 105.         71/72018         1101         A.         6.433         30016         200123         310.1 > 148.         352.8         9881         Fuorestine-D6         342.3 > 105.0         342.3 > 105.0         342.3 > 105.0         342.3 >	Dextrorphan	V	7/17/2018 11:01 A	5.575	45245	589.46	V	169.81	30648	Dextrorphan-D3	261.2 -> 157	5.575	280932
302.2 > 198.         711/2018         11:01         A.         5.160         26.487         70.21         302.2 > 128.         24.85         17208         Dihydrocodeine-D6         308.2 > 202.         5.097           2712.2         182.         711/2018         11:01         A.         6.192         298138         236.2         167.         129.2         121.2         167.         219.2.4         172.4         184.         Diphenhydramine-D5         276.2         187.         5.292.         167.         6.209           2712.2         182.         711/2018         11:01         A.         6.463         300.162         200.75         337.2         188.         58.20         230.42         Fentanyl-D5         342.3         105.         54.93           300.1 > 24.8.         71172018         11:01         5.022         252.44         16.17         13991         Hydrocodone-D6         282.2         283.54         6.401           3982 > 238.1         7172018         11:01         A.         5.594         241.91         424.19         282.2         71.4         43.952         706.70         71.80         396.43         Kelamine-D4         282.2         83.54         5.594           2191.1         7172018	Diazepam	285.1 -> 193		6.711	45748	102.37		504.87	29458	Diazepam-D5	290.1 -> 198	6.710	217096
266 2 + 167.         7/17/2018         11:01 A.         6.29         298138         238.05         252.2         164.18         73154         Diphenhydramine-D3         259.2         167.         6.20           2712.2         182.         717/2018         11:01 A.         6.181         370075         472.1         712.2         182.         Doxylamine-D5         276.2         327.2         276.2         327.2         198.8         Doxylamine-D5         282.2         236.5         6.163           301.1 > 44.3         71/12018         11:01 A.         6.403         30016         200.123         310.1 > 148.         352.8         988         Fluoxetine-D6         396.2         282.2         188.         58.20         2304.2         Fentanyl-D5         342.3         10.6.5         165.9           286.2         195.         71/12018         11:01 A.         6.571         282.44         13.0         396.3         Ketamine-D4         288.2         187.1         1399         Hydrocodone-D6         292.2         188.         5.94           288.1         71712018         11:01 A.         6.564         241.291         424.21         286.2         157.1         1780         396.43         Ketamine-D4         288.2         5.594	Dihydrocodeine	V		5.160	26487	·····	Ϋ́	24.85	17208		308.2 -> 202	5.097	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Diphenhydramine	V		6.229	298138		v	1644.18	73154	Diphenhydramine-D3	259.2 -> 167	6.209	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Doxylamine	271.2 -> 182	7/17/2018 11:01 A	5.819	270075	475.19	٧,	219.24	1948	Doxylamine-D5	276.2 -> 187	5.818	15626
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	EDDP	V		6.163	176528	624.77	Ϋ́	71.19	48505	EDDP-D3	282.2 -> 235	6.163	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Fentanyl	V		6.581	31999		٧	58.20	23042	Fentanyl-D5	342.3 -> 105	6.581	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Fluoxetine	310.1 -> 44.3		6.403	300106	2001.23	310.1 -> 148	35.28	9881	Fluoxetine-D6	316.2 -> 44.3	6.401	1
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Hydrocodone	V		5.671	40039	51.08	v.	Infinity	19774	Hydrocodone-D6	306.2 -> 202	5.608	275250
238.1 ~> 125         7/17/2018         11:01         A         6.170         107825         9475.41         238.1 ~> 220         17.80         39543         Ketamine-D4         242.1 ~> 129         6.169           266.2 ~> 195         7/17/2018         11:01         A         6.554         241291         424.21         266.2 ~> 72.3         282.45         1671         Tramadol-13C-D3         268.2 ~> 58.3         5.594           319.2 ~> 238         7/17/2018         11:01         A         6.559         237274         147.42         219.1 ~> 97.1         439.52         70670         Tramadol-13C-D3         268.2 ~> 58.3         5.594           310.2 ~> 265         717/2018         11:01         A         6.502         237274         1641.10         310.2 ~> 105         199.32         2277.         Methadone-D9         319.3 ~> 268.2 ~> 56.8         5.599           150.1 ~> 119         71772018         11:01         A.         6.502         1161.10         310.2 ~> 105         199.32         2277.1         Methadone-D9         319.3 ~> 268         6.503           271.1 ~> 140         71772018         11:01         A.         6.573         25040         125.66         271.1 ~> 208         6809.55         17862	Hydromorphone	V		5.022	25240	63.81	v	16.17	13991	Hydromorphone-D6	292.2 -> 185	4.939	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Ketamine			6.170	107825	9475.41	238.1 -> 220	17.80	39543	Ketamine-D4	242.1 -> 129	6.169	514388
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Mirtazapine	v		6.554	241291	424.21	V.	282.45	1671	Tramadol-13C-D3	268.2 -> 58.3	5.594	15225
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Mitragynine	٧		6.598	29934	5307.62	v I	439.52	70670	Tramadol-13C-D3	268.2 -> 58.3	5.594	15225
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Meprobamate	219.1 -> 158		5.599	23623	147.42	219.1 -> 97.1	45.13	20275	Meprobamate-D7	226.2 -> 165	5.599	143605
150.1 -> 91.1         7/17/2018         11:01         A.         5.132         163009         Infinity         150.1 -> 119         10.84         52625         Methamphetamine-D11         161.2 -> 97.1         5.071           286.2 -> 201         7/17/2018         11:01         A.         4.759         5462         118.57         286.2 -> 165         4.89         3606         Morphine-D6         292.2 -> 152         4.677           414.3 -> 101         7/17/2018         11:01         A.         6.029         5135         38.31         414.3 -> 57.3         14.44         5669         Norbuprenorphine-D3         417.3 -> 101         6.029           271.1 -> 140         7/17/2018         11:01         A.         6.573         25040         125.66         271.1 -> 208         6809.55         17862         Nordiazepam-D5         276.1 -> 140         6.572           233.2 -> 84.2         7/17/2018         11:01         A.         5.433         141205         2011.11         233.2 -> 55.3         57.35         51796         Norfentanyl-D5         238.2 -> 84.2         5.434           302.1 -> 284.1         7/17/2018         11:01         A.         5.027         210945         302.1 -> 186         53.87         11244         Norby	Methadone	v	11:01	6.504	237274		v I	199.32	2277	Methadone-D9	319.3 -> 268	6.503	13992
286.2 -> 201         7/17/2018         11:01         A         4.759         5462         118.57         286.2 -> 165         5460         Morphine-D6         292.2 -> 152         4.677           414.3 -> 101         7/17/2018         11:01         A         6.029         5135         38.31         414.3 -> 57.3         14.44         5669         Norburrenorphine-D3         417.3 -> 101         6.029           271.1 -> 140         7/17/2018         11:01         A         6.573         25040         125.66         271.1 -> 208         6809.55         17862         Nordiazepam-D5         276.1 -> 140         6.572           233.2 -> 84.2         7/17/2018         11:01         A         5.435         144205         2011.11         233.2 -> 55.3         57.35         51796         Norfentanyl-D5         238.2 -> 84.2         5.434           286.2 -> 199         7/17/2018         11:01         A         5.103         2689         1nfinity         286.2 -> 171         Infinity         741         Norkycodone-D3         289.2 -> 202         5.082           302.1 -> 284         7/17/2018         11:01         A         5.027         2039         302.1 -> 186         53.87         11244         Norkycodone-D3 <td>Methamphetamine</td> <td>150.1 -&gt; 91.1</td> <td></td> <td>5.132</td> <td>163009</td> <td></td> <td>v I</td> <td>10.84</td> <td>52625</td> <td>Methamphetamine-D11</td> <td>161.2 -&gt; 97.1</td> <td>5.071</td> <td>103971</td>	Methamphetamine	150.1 -> 91.1		5.132	163009		v I	10.84	52625	Methamphetamine-D11	161.2 -> 97.1	5.071	103971
lee         414.3 -> 101         7/17/2018         11:01         A         6.029         5135         38.31         414.3 -> 57.3         14.44         5669         Norbuprenorphine-D3         417.3 -> 101         6.029           271.1 -> 140         7/17/2018         11:01         A         6.573         25040         125.66         271.1 -> 208         6809.55         17862         Nordiazepam-D5         276.1 -> 140         6.572           233.2 -> 84.2         7/17/2018         11:01         A         5.435         125.06         271.1 -> 208         6809.55         17862         Nordiazepam-D5         238.2 -> 84.2         5.434           286.2 -> 199         7/17/2018         11:01         A         5.103         2689         Infinity         286.2 -> 171         Infinity         741         Norhydrocodone-D3         289.2 -> 202         5.082           madol         250.2 -> 58.3         7/17/2018         11:01         A         5.027         210945         576.70         250.2 -> 42.3         41.94         10643         O-desmethyl-tramadol         256.2 -> 64.3         5.007           287.1 -> 298         7/17/2018         11:01         A         5.361         65.290         506.55         316.2 -> 24	Morphine	Ϋ́	11:01	4.759	5462	118.57	۷	4.89	3606	Morphine-D6	292.2 -> 152	4.677	
271.1 -> 140       7/17/2018       11:01       A       6.573       250.40       125.66       271.1 -> 208       6809.55       17862       Nordiazepam-D5       276.1 -> 140       6.572         233.2 -> 84.2       7/17/2018       11:01       A       5.435       144205       2011.11       233.2 -> 55.3       57.35       51796       Norfentanyl-D5       238.2 -> 84.2       5.434         286.2 -> 199       7/17/2018       11:01       A       5.103       2689       Infinity       286.2 -> 171       Infinity       741       Norhydrocodone-D3       289.2 -> 202       5.082         madol       302.1 -> 284       7/17/2018       11:01       A       5.027       210945       376.70       250.2 -> 42.3       41.94       Noroxycodone-D3       305.2 -> 287       4.976         1250.2 -> 58.3       7/17/2018       11:01       A       5.027       210945       576.70       250.2 -> 42.3       41.94       10643       O-desmethyl-tramadol       256.2 -> 64.3       5.007         287.1 -> 298       7/17/2018       11:01       A       5.361       65.290       66.65       316.2 -> 241       134.44       19376       Oxycodone-D6       322.2 -> 304       5.299	Norbuprenorphine	٧		6.029	5135	38.31	V	14.44	5669	Norbuprenorphine-D3	417.3 -> 101	6.029	- 1
233.2 -> 84.2       7/17/2018       11:01       A       5.435       144205       2011.11       233.2 -> 55.3       51796       Norfentanyl-D5       238.2 -> 84.2       5.434         286.2 -> 199       7/17/2018       11:01       A       5.103       2689       Infinity       286.2 -> 171       Infinity       741       Norhydrocodone-D3       289.2 -> 202       5.082         nadol       302.1 -> 284       7/17/2018       11:01       A       4.998       30736       34.65       302.1 -> 186       53.87       11244       Norbydrocodone-D3       305.2 -> 287       4.976         nadol       250.2 -> 58.3       7/17/2018       11:01       A       5.027       210945       576.70       250.2 -> 42.3       41.94       Norbydrocodone-D3       305.2 -> 287       4.976         287.1 -> 240       7/17/2018       11:01       A       5.361       62203       102.40       287.1 -> 268       10.02       10723       Oxazepam-D5       292.1 -> 246       6.385         316.2 -> 249       7/17/2018       11:01       A       5.361       65290       66.65       316.2 -> 241       134.44       19376       Oxycodone-D6       322.2 -> 304       5.299         305.4 -	Nordiazepam	271.1 -> 140		6.573	25040	125.66	271.1 -> 208	6809.55	17862	Nordiazepam-D5	276.1 -> 140	6.572	1
286.2 -> 199         7/17/2018         11:01         A         5.103         2689         Infinity         286.2 -> 171         Infinity         741         Norhydrocodone-D3         289.2 -> 202         5.082           302.1 -> 284         7/17/2018         11:01         A         4.998         30736         34.65         302.1 -> 186         53.87         11244         Noroxycodone-D3         305.2 -> 287         4.976           nadol         250.2 -> 58.3         7/17/2018         11:01         A         5.027         210945         576.70         250.2 -> 42.3         41.94         10643         O-desmethyl-tramadol         256.2 -> 64.3         5.007           287.1 -> 240         7/17/2018         11:01         A         6.386         22039         102.40         287.1 -> 268         10.02         10723         Oxazepam-D5         292.1 -> 246         6.385           316.2 -> 298         7/17/2018         11:01         A         5.361         65290         66.65         316.2 -> 241         134.44         19376         Oxycodone-D6         322.2 -> 304         5.299           305.1 << 504	Norfentanyl	233.2 -> 84.2		5.435	144205	2011.11	233.2 -> 55.3	57.35	51796	1	238.2 -> 84.2	5.434	726316
302.1 -> 284         7/17/2018         11:01         A         4.998         30736         34.65         302.1 -> 186         53.87         11244         Noroxycodone-D3         305.2 -> 287         4.976           nadol         250.2 -> 58.3         7/17/2018         11:01         A         5.027         210945         576.70         250.2 -> 42.3         41.94         10643         O-desmethyl-tramadol         256.2 -> 64.3         5.007           287.1 -> 240         7/17/2018         11:01         A         6.386         22039         102.40         287.1 -> 268         10.02         10723         Oxazepam-D5         292.1 -> 246         6.385           316.2 -> 298         7/17/2018         11:01         A         5.361         65290         66.65         316.2 -> 241         134.44         19376         Oxycodone-D6         322.2 -> 304         5.299           305.4 -> 294         7/17/2018         11:01         A         5.361         65.290         66.65         316.2 -> 241         134.44         19376         Oxycodone-D6         322.2 -> 304         5.299           305.4 -> 294         7177044         4.654         744.5         245.2         241         134.44         19376         <	Norhydrocodone	٧		5.103	2689	Infinity	۷	Infinity	741	Norhydrocodone-D3	289.2 -> 202	5.082	- 1
/l-tramadol         250.2 -> 58.3         7/17/2018         11:01         A         5.027         210945         576.70         250.2 -> 42.3         41.94         10643         O-desmethyl-tramadol         256.2 -> 64.3         5.007           287.1 -> 240         7/17/2018         11:01         A         6.386         22039         102.40         287.1 -> 268         10723         Oxazepam-D5         292.1 -> 246         6.385           316.2 -> 298         7/17/2018         11:01         A         5.361         65290         66.65         316.2 -> 241         134.44         19376         Oxycodone-D6         322.2 -> 304         5.299           2024	Noroxycodone	302.1 -> 284	11:01	4.998	30736	34.65	ν'	53.87	11244	Noroxycodone-D3	305.2 -> 287	4.976	178594
287.1 -> 240       7/17/2018       11:01 A       6.386       22039       102.40       287.1 -> 268       10.02       10723       Oxazepam-D5       292.1 -> 246       6.385         316.2 -> 298       7/17/2018       11:01 A       5.361       65290       66.65       316.2 -> 241       134.44       19376       Oxycodone-D6       322.2 -> 304       5.299         202.1 -> 204       7/17/2018       14.01 A       4.654       74645       60.455       316.2 -> 241       134.44       19376       Oxycodone-D6       322.2 -> 304       5.299	O-desmethyl-tramadol	v I	11:01	5.027	210945	576.70	v I	41.94	10643	O-desmethyl-tramadol	256.2 -> 64.3	5.007	1
316.2 -> 298 7/17/2018 11:01 A 5.361 65290 66.65 316.2 -> 241 134.44 19376 Oxycodone-D6 322.2 -> 304 5.299	Oxazepam	287.1 -> 240	11:01	6.386	22039	102.40	V I	10.02	10723	Oxazepam-D5	292.1 -> 246	6.385	136603
	Oxycodone	V	11:01	5.361	65290	66.65	V	134.44	19376	Oxycodone-D6	322.2 -> 304	5.299	369116
	Oximorphono	302.1 -> 284		2	. <b>)</b> . <b> </b>	~		1					i

Compound Method p	Name Transition Acq	Phentermine 150.1 -> 65.2 7/17/2	e 285.1 -> 86.2	384.2 -> 253	Sertraline   306.1 -> 158   7/17/2018 11:01 A   6.749	1	Temazepam 301.1 -> 255 7/17/2018 11:01 A 6.548	Temazepam         301.1 -> 255         7/11//2           Tramadol         264.2 -> 58.3         7/17//2	301.1 -> 255 264.2 -> 58.3 372.2 -> 176	φ 3
p1 cal 1-2a	Acq. Date-Time	7/17/2018 11:01 A 5	7/17/2018 11:01 A 6.711	018 11:01 A   6	018 11:01 A 6	018 11:01 A 6	7/17/2018 11:01 A 5.615	018 11:01 A 6	7/17/2018 11:01 A 5	308.2 -> 235 7/17/2018 11:01 A 6.445
p1 cal 1-2a Results	RT Resp.	5.234 23641	6.711 455172	6.721 249693	6.749 56282	6.548 89531	615 274446	3.884 271355	5.940 281364	445 255033
	S/N	Infinity	551.39	93609.96	159.49	169.28	178.02	46424.44	619.99	5255.93
Qualifier 1 M	Transition	Infinity 150.1 -> 133	551.39 285.1 -> 71.3	93609.96 384.2 -> 221	159.49 306.1 -> 275	169.28 301.1 -> 283	178.02 264.2 -> 43.3	46424.44 372.2 -> 148	619.99 278.2 -> 260	5255.93 308.2 -> 263
Qualifier 1 Results	S/N	Infinity	188.02	23614.01	14704.97	26.41	9.88	158197	41.05	Infinity
Results	Area	881 F	95555 F	1369	53078 \$	32979		1917	53121 \	
ISTD Method	Name	881 Phentermine-D5	95555 Promethazine-D3	1369 Quetiapine-D8	53078 Sertraline-D3	32979 Temazepam-D5	12378 Tramadol-13C-D3	1917 Trazodone-D6	53121 Venlafaxine-D6	93758 Zolpidem-D6
od	Transition	155.2 -> 96.2	288.2 -> 89.2	392.2 -> 226	309.1 -> 275 6.728	306.1 -> 260 6.527	268.2 -> 58.3	378.2 -> 182 6.863	284.2 -> 64.3	314.2 -> 235 6.422
ISTDI	RT	5.213	6.691	6.699		~~~~~	5.594	6.863	5.919	6.422
ISTD Results	Resp.	240242	26516	392738	327089	501443	15225	13589	14289	15391

5.299 382738			****			-		MV UC-LE &FUC/ZEIZ		
	322.2 -> 304 5.2	Oxycodone-D6		316.2 -> 241		-		7/17/2018 11:20 AM	316.2 -> 298	Oxycodone
6.385 156901		Oxazepam-D5		287.1 -> 268		-		7/17/2018 11:20 AM	287.1 -> 240	Oxazepam
5.007 11258	64.3	O-desmethyl-tramadol		250.2 -> 42.3			-	7/17/2018 11:20 AM	250.2 -> 58.3	O-desmethyl-tramadol
4.976 194621	305.2 -> 287 4.9	Noroxycodone-D3		302.1 -> 186				7/17/2018 11:20 AM	302.1 -> 284	Noroxycodone
5.082 79363	289.2 -> 202 5.0	Norhydrocodone-D3		286.2 -> 171				7/17/2018 11:20 AM	286.2 -> 199	Norhydrocodone
5.434 756990	238.2 -> 84.2 5.4	Norfentanyl-D5		233.2 -> 55.3				7/17/2018 11:20 AM	233.2 -> 84.2	Norfentanyl
6.572 109848	276.1 -> 140 6.5	Nordiazepam-D5		271.1 -> 208				7/17/2018 11:20 AM	271.1 -> 140	Nordiazepam
6.009 37718	417.3 -> 101 6.0	Norbuprenorphine-D3		414.3 -> 57.3				7/17/2018 11:20 AM	414.3 -> 101	Norbuprenorphine
4.677 3945	292.2 -> 152 4.6	Morphine-D6		286.2 -> 165				7/17/2018 11:20 AM	286.2 -> 201	Morphine
5.071 139584	161.2 -> 97.1 5.0	Methamphetamine-D11	25.24 44930	/ 150.1 -> 119	Infinity	3 149947	5.153	7/17/2018 11:20 AM	150.1 -> 91.1	Methamphetamine
6.503 15301	319.3 -> 268 6.5	Methadone-D9		310.2 -> 105				7/17/2018 11:20 AM	310.2 -> 265	Methadone
5.599 164990	226.2 -> 165 5.5	Meprobamate-D7		219.1 -> 97.1				7/17/2018 11:20 AM	219.1 -> 158	Meprobamate
5.594 15172	268.2 -> 58.3 5.5	Tramadol-13C-D3		399.2 -> 174				7/17/2018 11:20 AM	399.2 -> 238	Mitragynine
5.594 15172	268.2 -> 58.3 5.5	Tramadol-13C-D3		266.2 -> 72.3				7/17/2018 11:20 AM	266.2 -> 195	Mirtazapine
6.169 559623	242.1 -> 129 6.1	Ketamine-D4		238.1 -> 220				7/17/2018 11:20 AM	238.1 -> 125	Ketamine
4.939 94450	292.2 -> 185 4.9	Hydromorphone-D6		286.2 -> 157				7/17/2018 11:20 AM	286.2 -> 184	Hydromorphone
5.608 277522	306.2 -> 202 5.6	Hydrocodone-D6		300.2 -> 128				7/17/2018 11:20 AM	300.2 -> 198	Hydrocodone
6.401 16747	316.2 -> 44.3 6.4	Fluoxetine-D6		310.1 -> 148				7/17/2018 11:20 AM	310.1 -> 44.3	Fluoxetine
6.581 19574	342.3 -> 105 6.5	Fentanyl-D5		337.2 -> 188				7/17/2018 11:20 AM	337.2 -> 105	Fentanyl
6.163 110016	282.2 -> 235 6.1	EDDP-D3		279.2 -> 250				7/17/2018 11:20 AM	279.2 -> 235	EDDP
5.818 16113	276.2 -> 187 5.8	Doxylamine-D5		271.2 -> 167				7/17/2018 11:20 AM	271.2 -> 182	Doxylamine
6.209 20343	259.2 -> 167 6.2	Diphenhydramine-D3		256.2 -> 152				7/17/2018 11:20 AM	256.2 -> 167	Diphenhydramine
5.097 166900	308.2 -> 202 5.0	Dihydrocodeine-D6		302.2 -> 128				7/17/2018 11:20 AM	302.2 -> 198	Dihydrocodeine
6.710 245315	290.1 -> 198 6.7	Diazepam-D5		285.1 -> 153				7/17/2018 11:20 AM	285.1 -> 193	Diazepam
5.575 299569	261.2 -> 157 5.5	Dextrorphan-D3		258.2 -> 133				7/17/2018 11:20 AM	258.2 -> 157	Dextrorphan
6.288 354832	275.2 -> 171 6.2	Dextromethorphan-D3		272.2 -> 147				7/17/2018 11:20 AM	272.2 -> 171	Dextromethorphan
6.571 720003	279.2 -> 215 6.5	Cyclobenzaprine-D3		Ϋ́				7/17/2018 11:20 AM	V	Cyclobenzaprine
5.403 54231	306.2 -> 218 5.4	Codeine-D6		300.2 -> 165				7/17/2018 11:20 AM	300.2 -> 215	Codeine
6.319 44997	320.1 -> 217 6.3	Clonazepam-D4		316.1 -> 213				7/17/2018 11:20 AM	316.1 -> 269	Clonazepam
6.195 11783	331.2 -> 109 6.1	Citalopram-D6		325.2 -> 262				7/17/2018 11:20 AM	325.2 -> 109	Citalopram
6.126 549487	268.2 -> 183 6.1	Carisoprodol-D7		261.2 -> 55.3				7/17/2018 11:20 AM	261.2 ~> 176	Carisoprodol
6.169 675566	249.2 -> 185 6.1	Bupropion-D9		240.1 -> 131				7/17/2018 11:20 AM	240.1 -> 184	Bupropion
5.874 918351	307.2 -> 185 5.8	Cocaine-D3		304.2 -> 105				7/17/2018 11:20 AM	304.2 -> 182	Cocaine
4.890 107215	147.2 -> 130 4.8	Amphetamine-D11		136.1 -> 119	25.64	49721	4.931	7/17/2018 11:20 AM	136.1 -> 91.1	Amphetamine
6.484 292394	314.1 -> 286 6.4	Alprazolam-D5		309.1 -> 205				7/17/2018 11:20 AM	309.1 -> 281	Alprazolam
5.904 740042	240.2 -> 91.1 5.9	alpha-PVP-d8		232.2 -> 77.1				7/17/2018 11:20 AM	232.2 -> 91.0	alpha-PVP
6.379 55245	330.1 -> 302 6.3	a-hydroxyalprazolam-D5		325.1 -> 215				7/17/2018 11:20 AM	325.1 -> 297	a-hydroxyalprazolam
4.976 194621	305.2 -> 287 4.9	Noroxycodone-D3		268.2 -> 56.3				7/17/2018 11:20 AM	268.2 -> 116	Metoprolol
5.284 6692	298.2 -> 171 5.2	Benzoylecgonine-D8		290.1 -> 105				7/17/2018 11:20 AM	290.1 -> 168	Benzoylecgonine
5.507 173995	290.1 -> 121 5.5	7-Aminoclonazepam-D4		286.1 -> 222				7/17/2018 11:20 AM	286.1 -> 121	7-aminoclonazepam
5.420 68696	334.2 -> 165   5.4	6-MAM-D6		328.2 -> 211				7/17/2018 11:20 AM	328.2 -> 165	6-MAM
T Resp.	Transition RT	Name	S/N Area	Transition	S/N	Resp.	RT	Acq. Date-Time	Transition	Name
IS I D Results		ISID Method	Qualifier 1 R	Qualitier 1 M 0	ol Results	p1negative control Results	plue	p1negative control	bor	Compound Method

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<u>   </u>	322.2 -> 304	Oxycodone-D6				~~~				052 ~~ 230	
				~~	316 2 -> 241				7/17/2018 11:40 AM	2	Oxycodone
	292.1 -> 246	Oxazepam-D5			287.1 -> 268				7/17/2018 11:40 AM	287.1 -> 240	Oxazepam
	256.2 -> 64.3	O-desmethyl-tramadol			250.2 -> 42.3				7/17/2018 11:40 AM	250.2 -> 58.3	O-desmethyl-tramadol
7 4 076	305.2 -> 287	Noroxycodone-D3			302.1 -> 186				7/17/2018 11:40 AM	302.1 -> 284	Noroxycodone
2 5.082	289.2 -> 202	Norhydrocodone-D3	116	Infinity	/ 286.2 -> 171	Infinity	3 334	5.103	7/17/2018 11:40 AM	286.2 -> 199	Norhydrocodone
2 5.414	238.2 -> 84.2	Norfentanyl-D5			233.2 -> 55.3				7/17/2018 11:40 AM	233.2 -> 84.2	Norfentanyl
0 6.572	276.1 -> 140	Nordiazepam-D5			271.1 -> 208				7/17/2018 11:40 AM	271.1 -> 140	Nordiazepam
1 6.009	417.3 -> 101	Norbuprenorphine-D3			414.3 -> 57.3				7/17/2018 11:40 AM	414.3 -> 101	Norbuprenorphine
2 4.696	292.2 -> 152	Morphine-D6			286.2 -> 165				7/17/2018 11:40 AM	286.2 -> 201	Morphine
1 5.071	161.2 -> 97.1	Methamphetamine-D11	52840	Infinity	/ 150.1 -> 119	Infinity	2 161221	5.132	7/17/2018 11:40 AM	150.1 -> 91.1	Methamphetamine
8 6.503	319.3 -> 268	Methadone-D9			310.2 -> 105				7/17/2018 11:40 AM	310.2 -> 265	Methadone
5 5.599	226.2 -> 165	Meprobamate-D7			219.1 -> 97.1				7/17/2018 11:40 AM	219.1 -> 158	Meprobamate
3 5.594	268.2 -> 58.3	Tramadol-13C-D3			399.2 -> 174				7/17/2018 11:40 AM	399.2 -> 238	Mitragynine
3 5.594	268.2 -> 58.3	Tramadol-13C-D3			266.2 -> 72.3				7/17/2018 11:40 AM	266.2 -> 195	Mirtazapine
	242.1 -> 129	Ketamine-D4			238.1 -> 220				7/17/2018 11:40 AM	238.1 -> 125	Ketamine
5 4.939	292.2 -> 185	Hydromorphone-D6	1614	123.66	) 286.2 -> 157	348.90	2 237890	5.022	7/17/2018 11:40 AM	286.2 -> 184	Hydromorphone
2 5.608	306.2 -> 202	[	1471	73.18	100000	236.39	1 354285	5.651	7/17/2018 11:40 AM	300.2 -> 198	Hydrocodone
3 6.401	316.2 -> 44.3	Fluoxetine-D6			310.1 -> 148				7/17/2018 11:40 AM	310.1 -> 44.3	Fluoxetine
5 6.581	342.3 -> 105	Fentanyl-D5			337.2 -> 188				7/17/2018 11:40 AM	337.2 -> 105	Fentanyl
5 6.163	282.2 -> 235	EDDP-D3			279.2 -> 250				7/17/2018 11:40 AM	279.2 -> 235	EDDP
7 5.818	276.2 -> 187	Doxylamine-D5			271.2 -> 167				7/17/2018 11:40 AM	271.2 -> 182	Doxylamine
7 6.209	259.2 -> 167	Diphenhydramine-D3			256.2 -> 152				7/17/2018 11:40 AM	256.2 -> 167	Diphenhydramine
2 5.097	308.2 -> 202	Dihydrocodeine-D6			302.2 -> 128				7/17/2018 11:40 AM	302.2 -> 198	Dihydrocodeine
8 6.710	290.1 -> 198	Diazepam-D5			285.1 -> 153				7/17/2018 11:40 AM	285.1 -> 193	Diazepam
7 5.575	261.2 -> 157	Dextrorphan-D3			258.2 -> 133				7/17/2018 11:40 AM	258.2 -> 157	Dextrorphan
1 6.288	275.2 -> 171	Dextromethorphan-D3			272.2 -> 147				7/17/2018 11:40 AM	V V	Dextromethorphan
5 6.571	279.2 -> 215	Cyclobenzaprine-D3			276.2 -> 231				7/17/2018 11:40 AM	Ϋ́	Cyclobenzaprine
8 5.403	306.2 -> 218	Codeine-D6	31106	51.47	2 300.2 -> 165	95.82	10945	5.651	7/17/2018 11:40 AM	300.2 -> 215	Codeine
7 6.319	320.1 -> 217	Clonazepam-D4			316.1 -> 213				7/17/2018 11:40 AM	316.1 -> 269	Clonazepam
9 6.195	331.2 -> 109	Citalopram-D6			325.2 -> 262				7/17/2018 11:40 AM	325.2 -> 109	Citalopram
3 6.105	268.2 -> 183	Carisoprodol-D7			261.2 -> 55.3				7/17/2018 11:40 AM	261.2 -> 176	Carisoprodol
5 6.169	249.2 -> 185	Bupropion-D9			240.1 -> 131				7/17/2018 11:40 AM	240.1 -> 184	Bupropion
5 5.874	307.2 -> 185	Cocaine-D3			304.2 -> 105				7/17/2018 11:40 AM	304.2 -> 182	Cocaine
0 4.890	147.2 -> 130	Amphetamine-D11			/ 136.1 -> 119	Infinity	29090	4.931	7/17/2018 11:40 AM	136.1 -> 91.1	Amphetamine
6.484	314.1 -> 286	Alprazolam-D5			309.1 -> 205				7/17/2018 11:40 AM	309.1 -> 281	Alprazolam
1 5.904	240.2 -> 91.1	alpha-PVPd8			232.2 -> 77.1				7/17/2018 11:40 AM	232.2 -> 91.0	alpha-PVP
2 6.379	330.1 -> 302	a-hydroxyalprazolam-D5			325.1 -> 215				7/17/2018 11:40 AM	325.1 -> 297	a-hydroxyalprazolam
7 4.976	305.2 -> 287	Noroxycodone-D3			268.2 -> 56.3				7/17/2018 11:40 AM	268.2 -> 116	Metoprolol
1 5.284	298.2 -> 171	Benzoylecgonine-D8			290.1 -> 105				7/17/2018 11:40 AM	290.1 -> 168	Benzoylecgonine
1 5.507	290.1 -> 121	7-Aminoclonazepam-D4			286.1 -> 222				7/17/2018 11:40 AM	286.1 -> 121	7-aminoclonazepam
5 5.420	334.2 -> 165	6-MAM-D6			328.2 -> 211				7/17/2018 11:40 AM	328.2 -> 165	6-MAM
RT	Transition	Name	Area	S/N	Transition	S/N	Resp.	RT	Acq. Date-Time	Transition	Name
ISTU Results	<b>a</b>	1STU Method	Results	Qualitier 1 Results	. Qualitier 1 M	ol Resul	p1 external control Resul	p1 ext	p1 external control	hod	Compound Method

Å

Compound Method	bor	p1 external control	p1 exte	rnal contro	d Resul	p1 external control Resul Qualifier 1 M	Qualifier 1 Results	Results	ISTD Method		ISTD F	ISTD Results
Name	Transition	Acq. Date-Time	뭐	Resp.	N/S	Transition	N/S	Area	Name	Transition	RT	Resp.
Phentermine	150.1 -> 65.2	150.1 -> 65.2 7/17/2018 11:40 AM	5.153	27180	1.99	27180 1.99 150.1 -> 133			Phentermine-D5	155.2 -> 96.2	5.213 418326	418326
Promethazine	285.1 -> 86.2	285.1 -> 86.2 7/17/2018 11:40 AM				285.1 -> 71.3			Promethazine-D3	288.2 -> 89.2	6.691	27958.
Quetiapine	384.2 -> 253	384.2 -> 253 7/17/2018 11:40 AM				384.2 -> 221			Quetiapine-D8	392.2 -> 226 6.699 40937	6.699	40937
Sertraline	306.1 -> 158	306.1 -> 158 7/17/2018 11:40 AM	6.749	6.749 663353	Infinity	Infinity 306.1 -> 275	112578	6691	6691 Sertraline-D3	309.1 -> 275 6.749		349079
Temazepam	301.1 -> 255	301.1 -> 255 7/17/2018 11:40 AM			,	301.1 -> 283			Temazepam-D5	306.1 -> 260 6.527		49631:
Tramadol	264.2 -> 58.3	264.2 -> 58.3 7/17/2018 11:40 AM				264.2 -> 43.3			Tramadol-13C-D3	268.2 -> 58.3	5.594	14463
Trazodone	372.2 -> 176	372.2 -> 176 7/17/2018 11:40 AM				372.2 -> 148			Trazodone-D6	378.2 -> 182	6.863	12903.
Venlafaxine	278.2 -> 58.3	278.2 -> 58.3 7/17/2018 11:40 AM				278.2 -> 260			Venlafaxine-D6	284.2 -> 64.3	5.919	14053
Zolpidem	308.2 -> 235	308.2 -> 235 7/17/2018 11:40 AM				308.2 -> 263			Zolpidem-D6	314.2 -> 235	6.422	14127

Compound Method       Name     3       Acetylfentanyl     3       alpha-hydroxymidazol     3       Amitriptyline     2       Acetylnorfentanyl     2       Carbamazepine     2       Chlordiazepoxide     3			P2 RT 6.408 6.467 6.699 4.978 6.613 6.613	p2 cal 1-2b Results           r         Resp.         S/           08         20625         10           67         80123         In           99         180496         In           78         8754         5           78         8754         5           13         38928         19           13         38928         19	esults S/N 100.80 Infinity 59.46 253.33 191.24	ere and have been been and a second and the second se	Qualifier 1 M           Transition           323.2 -> 105           342.1 -> 203           278.2 -> 105           278.2 -> 105           279.1 -> 56.3           237.1 -> 194           300.1 -> 282           300.1 -> 282	Qualifier 1 M         Transition         323.2 -> 105         342.1 -> 203         278.2 -> 105         278.2 -> 105         279.1 -> 56.3         237.1 -> 194         300.1 -> 282         300.1 -> 282	Qualifier 1 M         Qualifier 1 R           Transition         S/N           323.2 -> 105         44.49           342.1 -> 203         22600           278.2 -> 105         Infinity           279.1 -> 56.3         31.96           237.1 -> 194         Infinity           300.1 -> 282         63.47           300.1 -> 282         63.47	Qualifier 1 M         Qualifier 1 Results           Transition         S/N         Area         Nam           323.2 -> 105         44.49         32102         Acetylfentanyl-E           342.1 -> 203         22600         49522         alpha-hydroxym           278.2 -> 105         Infinity         96211         Amitriptyline-D3           219.1 -> 56.3         31.96         2637         Acetylfontfentan           237.1 -> 194         Infinity         2424         Carbamazepine           300.1 -> 282         63.47         20958         Chlordiazepoxic           307.2 -> 144         445.00         26014         Cufurdiazepoxic	Qualifier 1 M         Qualifier 1 Results         ISTD Method           Transition         S/N         Area         Name           323.2 -> 105         44.49         32102         Acetylfentanyl-D5           342.1 -> 203         22600         49522         alpha-hydroxymidazolam           278.2 -> 105         Infinity         96211         Amitriptyline-D3           219.1 -> 56.3         31.96         2637         Acetylfortentanyl-D5           237.1 -> 194         Infinity         2424         Carbamazepine-13C6           300.1 -> 282         63.47         20958         Chlordiazepoxide-D5           307.0 -> 444         445.00         26014         Cubrateroli DE	Qualifier 1 M         Qualifier 1 Results         ISTD Method           Transition         S/N         Area         Name         Transition           323.2 -> 105         44.49         32102         Acetylfentanyl-D5         328.2 -> 105           342.1 -> 203         22600         49522         alpha-hydroxymidazolam         346.1 -> 328           278.2 -> 105         Infinity         96211         Amitriptyline-D3         281.2 -> 91.2           219.1 -> 56.3         31.96         2637         Acetylnorfentanyl-D5         224.2 -> 84.2           237.1 -> 194         Infinity         2424         Carbamazepine-13C6         243.1 -> 200           300.1 -> 282         63.47         20958         Chlordiazepoxide-D5         305.1 -> 286           300.1 -> 282         63.47         20958         Chlordiazepoxide-D5         305.1 -> 286
Sufentanil	387.2 -> 238 267.2 -> 72.3	7/17/2018	6.948	30214	154.63	154.63 387.2 -> 111 Infinity 267.2 -> 44.3	ω 📑		415.08 Infinity	415.08 Infinity	415.08 26911 Sufentanil-D5	415.08         26911         Sufentanil-D5         392.2 -> 238           Infinity         1586         Desibramine-D3         270.2 -> 75.3
Doxepin Fstazolam	280.2 -> 107		6.413	139340 61148	175.71 588.72	280.2 -> 77.2	ហីស៊ី		Infinity 4 365.72	Infinity 4 365.72	Infinity 49494 Doxepin-D3 365.72 55823 Estazolam-D5	Infinity 49494 Doxepin-D3 283.2 -> 107 365.72 55823 Estazolam-D5 300.1 -> 272
Flunitrazepam	314.1 -> 268	7/17/2018	6.450	58128		314.1 -> 2: 388.2 -> 3	239	<u> </u>			7416.56 22124 Flunitrazepam-D7 46607 Zopiclone-D4	7416.56 22124 Flunitrazepam-D7 46607 Zopiclone-D4
Imipramine	281.2 -> 86.2	7/17/2018	6.637	443314	munitor	₩	8.3		Infinity	Infinity 2544	Infinity 2544 Imipramine-D3	Infinity 2544 Imipramine-D3 284.2 -> 61.3
Levamisole	205.1 -> 91.2	7/17/2018 11:11	5.570	55695	Infinity	Infinity 205.1 -> 178.	78	78 Infinity	. Infinity	. Infinity	. Infinity	. Infinity 43593 Sufentanil-D5
Maprotiline	278.2 -> 91.2		6.699	180496	Infinity	nfinity 278.2 -> 117	7		. Infinity		. Infinity	Infinity 59428 Amitriptyline-D3
MDA		7/17/2018	5.085	39964			ים יי ויי	- : 	- Infinity 33491	- Infinity 33491	. Infinity 33491 MDA-D5 185.1 ->	. Infinity 33491 MDA-D5 185.1 -> 168
MDMA	194.1 -> 163	<u>7/17/2018_11:11</u> 7/17/2018_11:11	5.205	92000 74487	nfinity	208.1 -> 105. 194.1 -> 105.	ចុន	5 Infinity	. Infinity 50259	. Infinity	. Infinity 50259	. 05.30 /03/0 MDEA-D0 214.2 ->
Meperidine	248.2 -> 220	7/17/2018	5.952	67143						. 73.80	. 73.80 36615	. 73.80 36615 Meperidine-D4 252.2 ->
Methylphenidate	326 1 -> 223	7/17/2018 11:11	5.751	312253 28692	Infinity 12726	Infinity 234.2 -> 56.3	-   -		140.63		140.63	140.63 77554 Meperidine-D4 146 77 25278 Midazolam-D4
Normeperidine	234.1 -> 42.3		5.731	77371	Infinity	Infinity 234.1 -> 160.	1	-			652.22 52728 Normeperidine-D4	652.22 52728 Normeperidine-D4 238.2 -> 164
7-Aminoflunitrazepam Nortriptvline	284.1 -> 135 264.2 -> 91.2	<u>   7/17/2018 11:11</u>   7/17/2018 11:11	5.721 6.540	38364 109951	592.89 Infinity	592.89 284.1 -> 93.2 Infinity 264.2 -> 233		2 26.60 3 Infinity	26.60 1	•	26.60 1	
Phenazepam	349.0 -> 206	7/17/2018 11:11	6.506	100707	5420.15	349.0 -> 183.	- μ μ	3 1410.02	: 	1410.02	1410.02 37179	1410.02 37179 Phenazepam-D4
Phenytoin	253.1 -> 104	7/17/2018	6.033	3437		Infinity 253.1 -> 182.	2	:	15.47	15.47 3550	15.47 3550 Phenytoin-D10	15.47 3550 Phenytoin-D10 263.2 -> 192
Pseudoephedrine Tapentadol	166.1 -> 148 222.2 -> 107	<u>7/17/2018 11:11</u> 7/17/2018 11:11	4.723	606121 148559	409.11 Infinity	409.11 166.1 -> 133 Infinity 222.2 -> 121	- μ	3 60.37 1 32.35	60.37 1202 32.35 57639	60.37 1 32.35 5	60.37 1202 32.35 57639	60.37         1202         Pseudoephedrine-D3         169.1 ->           32.35         57639         Tapentadol-D3         225.2 ->
Zaleplon	306.1 -> 236	7/17/2018	6.227	73276	506.10		17		376.34 5	376.34 5	376.34 53471 Zaleplon-D4 310.2 ->	376.34 53471 Zaleplon-D4 310.2 -> 240
Zopiclone	389.1 -> 244		6.423	21209	312.24	389.1 -> 216	i."	5 37.08	37.08 1		37.08 1	37.08 12261 Zopicione-D4 393.1 ->

Zopiclone	Zaleplon	Tapentadol	Pseudoephedrine	Phenytoin	Phencyclidine	Phenazepam	Nortriptyline	7-Aminoflunitrazepam	Normeperidine	Midazolam	Methylphenidate	Meperidine	MDMA	MDEA	MDA	Maprotiline	Levamisole	Imipramine	Flurazepam	Flunitrazepam	Estazolam	Doxepin	Desipramine	Sufentanil	Chlordiazepoxide	Carbamazepine	AcetyInorfentanyI	Amitriptyline	alpha-hydroxymidazol	Acetylfentanyl	Name	Compound Method
389.1 -> 244	306.1 -> 236	222.2 -> 107	166.1 -> 148	253.1 -> 104	244.2 -> 86.2	349.0 -> 206	264.2 -> 91.2	284.1 -> 135	234.1 -> 42.3	326.1 -> 223	234.2 -> 84.2	248.2 -> 220	194.1 -> 163	208.1 -> 163	180.1 -> 163	278.2 -> 91.2	205.1 -> 91.2	281.2 -> 86.2	388.2 -> 315	314.1 -> 268	295.1 -> 267	280.2 -> 107	267.2 -> 72.3	387.2 -> 238	300.1 -> 227	237.1 -> 193	219.1 -> 84.2	278.2 -> 91.2	342.1 -> 324	323.2 -> 188	Transition	hod
7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	7/17/2018 11:30 AM	Acq. Date-Time	p2 negative control								
																															꾹	p2 neg
																															Resp.	ative cont
																															S/N	p2 negative control Results
389.1 -> 216	306.1 -> 264	222.2 -> 121	166.1 -> 133	253.1 -> 182	244.2 -> 91.1	349.0 -> 183	264.2 -> 233	284.1 -> 93.2	234.1 -> 160	326.1 -> 249	234.2 -> 56.3	248.2 -> 174	194.1 -> 105	208.1 -> 105	180.1 -> 105	278.2 -> 117	205.1 -> 178	281.2 -> 58.3	388.2 -> 317	314.1 -> 239	295.1 -> 205	280.2 -> 77.2	267.2 -> 44.3	387.2 -> 111	300.1 -> 282	237.1 -> 194	219.1 -> 56.3	278.2 -> 105	342.1 -> 203	323.2 -> 105	Transition	Qualifier 1 M
	• 																				-								-		S/N Area	Qualifier
Zopiclone-D4	Zaleplon-D4	Tapentadol-D3	Pseudoephedrine-D3	Phenytoin-D10	Phencydlidine-D5	Phenazepam-D4	Nortriptyline-D3	7-aminoflunitrazepam-D7	Normeperidine-D4	Midazolam-D4	Meperidine-D4	Meperidine-D4	MDMA-D6	MDEA-D6	MDA-D5	Amitriptyline-D3	Sufentanil-D5	Imipramine-D3	Zopiclone-D4	Flunitrazepam-D7	Estazolam-D5	Doxepin-D3	Desipramine-D3	Sufentanil-D5	Chlordiazepoxide-D5	Carbamazepine-13C6	AcetyInorfentanyI-D5	Amitriptyline-D3	alpha-hydroxymidazolam	Acetylfentanyl-D5	Name	ISTD Method
393.1 -> 244	310.2 -> 240	225.2 -> 107	169.1 -> 151	263.2 -> 192	249.2 -> 86.2	353.0 -> 183	267.2 -> 233	291.2 -> 138	238.2 -> 164	330.1 -> 295	252.2 -> 224	252.2 -> 224	200.2 -> 166	214.2 -> 166	185.1 -> 168	281.2 -> 91.2	392.2 -> 238	284.2 -> 61.3	393.1 -> 244	321.1 -> 245	300.1 -> 272	283.2 -> 107	270.2 -> 75.3	392.2 -> 238	305.1 -> 286	243.1 -> 200	224.2 -> 84.2	281.2 -> 91.2	346.1 -> 328	328.2 -> 105	Transition	
6.423	6.227	5.568	4.702	6.012	6.054	6.506	6.539	5.700	5.729	6.630	5.931	5.931	5.205	5.345	5.064	6.697	6.927	6.636	6.423	6.429	6.391	6.394	6.499	6.927	6.593	6.136	4.957	6.697	6.466	6.407	RT	ISTD F
307185	327578	884474	358597	20175	12029	27000	456328	266997	299608	540728	423985	423985	48710	560594	268663	653884	13230	14627	307185	16140	386848	842888	17303	13230	400997	14919	553679	653884	502728	22269	Resp.	ISTD Results

Compound Method Name	thod	p2 external control Acq. Date-Time	p2 exterr RT	p2 external control Results RT Resp. S/N	<u></u>	Qualifier 1 M Transition	Qualifier S/N	ier 1 Resul Area	ISTE Name	ISTD Method e	0 Method Transition	
Acetylfentanyl	323.2 -> 188	7/17/2018 11:50 A				323.2 -> 105			Ace	Acetylfentanyl-D5	tylfentanyl-D5 328.2 -> 105	
alpha-hydroxymidazol		7/17/2018 11:50 A				342.1 -> 203			a	alpha-hydroxymidazolam	pha-hydroxymidazolam   346.1 -> 328	
Amitriptyline		7/17/2018 11:50 A				278.2 -> 105				Amitriptyline-D3	Amitriptyline-D3 281.2 -> 91.2	
Acetylnorfentanyl	219.1 -> 84.2	7/17/2018 11:50 A				219.1 -> 56.3			1. 1	AcetyInorfentanyI-D5	AcetyInorfentanyI-D5 224.2 -> 84.2	/I-D5
Carbamazepine	237.1 -> 193	7/17/2018 11:50 A				237.1 -> 194				Carbamazepine-13C6	Carbamazepine-13C6 243.1 -> 200	6
Chlordiazepoxide	300.1 -> 227	7/17/2018 11:50 A				300.1 -> 282			······	Chlordiazepoxide-D5	Chlordiazepoxide-D5 305.1 -> 286	
Sufentanil	387.2 -> 238	7/17/2018 11:50 A				387.2 -> 111				Sufentanil-D5	Sufentanil-D5 392.2 -> 238	392.2 ->
Desipramine	267.2 -> 72.3	7/17/2018 11:50 A				267.2 -> 44.3				Desipramine-D3	Desipramine-D3 270.2 -> 75.3	
Doxepin	280.2 -> 107	7/17/2018 11:50 A				280.2 -> 77.2				Doxepin-D3	Doxepin-D3 283.2 -> 107	
Estazolam	295.1 -> 267	7/17/2018 11:50 A				295.1 -> 205				Estazolam-D5	Estazolam-D5 300.1 -> 272	-
Flunitrazepam	314.1 -> 268	7/17/2018 11:50 A				314.1 -> 239				Flunitrazepam-D7	Flunitrazepam-D7 321.1 -> 245	
Flurazepam	388.2 -> 315	7/17/2018 11:50 A				388.2 -> 317				Zopiclone-D4	Zopiclone-D4 393.1 -> 244	
Imipramine	281.2 -> 86.2	7/17/2018 11:50 A				281.2 -> 58.3				Imipramine-D3	Imipramine-D3 284.2 -> 61.3	
Levamisole	205.1 -> 91.2	7/17/2018 11:50 A				205.1 -> 178				Sufentanil-D5	Sufentanil-D5 392.2 -> 238	
Maprotiline	278.2 -> 91.2	7/17/2018 11:50 A	6.760	6698	5.80	278.2 -> 117				Amitriptyline-D3	Amitriptyline-D3 281.2 -> 91.2	
MDA	180.1 -> 163	7/17/2018 11:50 A				180.1 -> 105				MDA-D5	MDA-D5 185.1 -> 168	
MDEA	208.1 -> 163	7/17/2018 11:50 A				208.1 -> 105				MDEA-D6	MDEA-D6 214.2 -> 166	
MDMA	194.1 -> 163	7/17/2018 11:50 A				194.1 -> 105		cioneno.		MDMA-D6	MDMA-D6 200.2 -> 166	
Meperidine	248.2 -> 220	7/17/2018 11:50 A				248.2 -> 174				Meperidine-D4	Meperidine-D4 252.2 -> 224	252.2 -> 224
Methylphenidate	234.2 -> 84.2	7/17/2018 11:50 A				234.2 -> 56.3		0.0000		Meperidine-D4	Meperidine-D4 252.2 -> 224	252.2 ->
Midazolam	326.1 -> 223	7/17/2018 11:50 A				326.1 -> 249				Midazolam-D4	Midazolam-D4 330.1 -> 295	
Normeperidine	234.1 -> 42.3	7/17/2018 11:50 A				234.1 -> 160				Normeperidine-D4	Normeperidine-D4 238.2 -> 164	238.2
7-Aminoflunitrazepam	284.1 -> 135	7/17/2018 11:50 A				284.1 -> 93.2				7-aminoflunitrazepam-D7	7-aminoflunitrazepam-D7 291.2 -> 138	
Nortriptyline	264.2 -> 91.2	7/17/2018 11:50 A	6.540	986137	1344.83	264.2 -> 233	1404	1	8653	8653 Nortriptyline-D3	-	Nortriptyline-D3
Phenazepam	349.0 -> 206	7/17/2018 11:50 A				349.0 -> 183				Phenazepam-D4	Phenazepam-D4 353.0 -> 183	
Phencyclidine	244.2 -> 86.2	7/17/2018 11:50 A				244.2 -> 91.1				Phencydlidine-D5	Phencydlidine-D5 249.2 -> 86.2	
Phenytoin	253.1 -> 104	7/17/2018 11:50 A				253.1 -> 182				Phenytoin-D10	Phenytoin-D10 263.2 -> 192	
Pseudoephedrine	166.1 -> 148	7/17/2018 11:50 A				166.1 -> 133		-		Pseudoephedrine-D3	Pseudoephedrine-D3 169.1 -> 151	169.1 ->
Tapentadol	222.2 -> 107	7/17/2018 11:50 A				222.2 -> 121				Tapentadol-D3	Tapentadol-D3 225.2 -> 107	
Zaleplon	306.1 -> 236	7/17/2018 11:50 A	-			306.1 -> 264				Zaleplon-D4	Zalepion-D4 310.2 -> 240	
Zopiclone	389.1 -> 244	7/17/2018 11:50 A				389.1 -> 216				Zopiclone-D4	Zopiclone-D4 393.1 -> 244	393.1 ->

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

Extraction Date: 7-17-18

Analyst: Ame Nord

Plate lot#: 0515037

Plate Expiration: 9/28/2018

Mobile phase A:10mM Ammonium FormateMobile phase B:0.1% Formic acid in MeOH0.1% Formic Acid in WaterMTBEHexaneBlank Blood Lot:17J20718Column: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.
- $\boxtimes$  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<sup>6</sup> in wells of analytical (standards) plate.
  - Blank blood for locations containing standards/QCs and internal standards
    - Sample blood for locations containing only internal standards
- Diace on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID: 66759
- $\square$  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.
- Δ 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
- $\heartsuit$  8. Wait 5 minutes.
- 9. Add 2.25 mL MTBE (add in 3 increments of 750uL).
- 10. Wait 5 minutes.
- I1. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left).
- X 12. Add 2.25 mL hexane (add in 3 increments of 750uL).
- ☑ 13. Wait 5 minutes.
- It. 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
- If. Reconstitute in 100µL 100% MeOH and heat seal plate with foil. Place in autosampler and run worklist.

### **Post-Analytic**

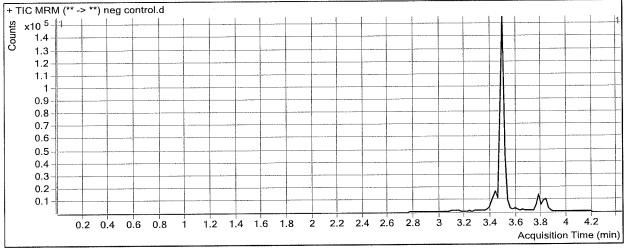
 $\bowtie$  1. Create batch and process data.

Worklist path: 071718 AM 25-26 Batch Name: Cann Screen

- 2. Calculated sample concentration of 3 ng/mL or greater for THC and THC-OH, a calculated sample concentration of 10 ng/mL or greater for Carboxy-THC.
- 3. Retention time within +/- 2% or +/-.100 min whichever is greater of the average retention time of the calibrators.
- $\checkmark$  4. Did all QCs pass for each analyte? Y / N
- 2 5. Central File Packet to include: LIMS Worklist, Method Checklist, Calibration and Control Reports

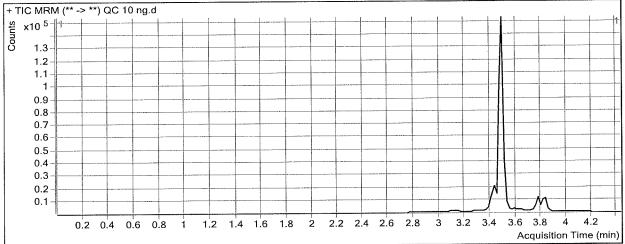
### COMMENTS:

Batch Data Path Analysis Time Report Time Last Calib Update	D:\2018 Data\071718 7/18/2018 8:03 AM 7/19/2018 9:19 AM 7/18/2018 8:03 AM	AM 25-26\QuantRest Analyst Name Reporter Name Batch State	Ilts\cann screen.batch.bin ISP Tox ISP Tox Processed
Analysis Info			
Acq Time	2018-07-17 18:10	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



Batch Data Path Analysis Time Report Time Last Calib Update	D:\2018 Data\071718 A 7/18/2018 8:03 AM 7/19/2018 9:19 AM 7/18/2018 8:03 AM	AM 25-26\QuantRest Analyst Name Reporter Name Batch State	ults\cann screen.batch.bin ISP Tox ISP Tox Processed
Analysis Info			
Acq Time	2018-07-17 17:57	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



Resu	lts
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Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.426	11563	42920	0.2694	11.9700
THC-OH	3.493	33205	316953	0.1048	9.9979
THC	3.840	2283	20437	0.1117	9.5555
THC	3.840	2283	20437	0.1117	9.5555

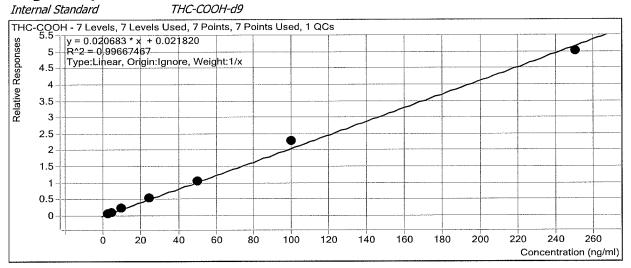
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## ISP Forensics Calibration Curve Report

Batch Data Path	D:\2018 Data\071718	AM 25-26\QuantResults\cann scr	een.batch.bin
Last Calib Update	7/18/2018 8:03 AM	Analyst Name	ISP TOX



nd THC-COOH THC-COOH-d9

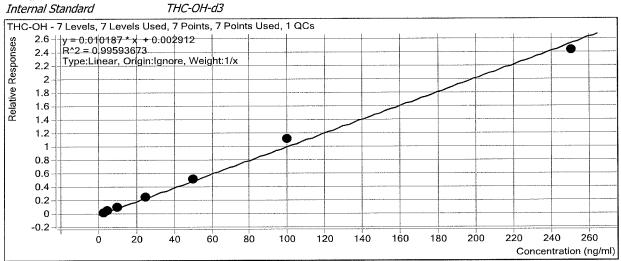


Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	$\mathbf{\nabla}$	3	3.0	98.4
cal 2 - 5ng	2	$\square$	5	4.5	90.1
cal 3 - 10ng	3	$\mathbf{\nabla}$	10	10.7	107.3
QC 10 ng	3	$\square$	10	12.0	119.7
cal 4 - 25ng	4	$\square$	25	24.8	99.1
cal 5 - 50ng	5	$\square$	50	49.7	99.5
cal 6 - 100ng	6	$\square$	100	109.1	109.1
cal 7 - 250ng	7	$\checkmark$	250	241.2	96.5

## **ISP** Forensics **Calibration Curve Report**

Batch Data Path	D:\2018 Data\071718	AM 25-26\QuantResults\cann screen.ba	atch.bin
Last Calib Update	7/18/2018 8:03 AM	Analyst Name	ISP TOX





Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	$\square$	3	2.8	92.6
cal 2 - 5ng	2	$\square$	5	4.7	94.8
cal 3 - 10ng	3	$\square$	10	10.3	103.0
QC 10 ng	3	$\square$	10	10.0	100.0
cal 4 - 25ng	4	$\mathbf{\nabla}$	25	25.3	101.1
cal 5 - 50ng	5	$\square$	50	51.8	103.5
cal 6 - 100ng	6	$\square$	100	109.5	109.5
cal 7 - 250ng	7	$\square$	250	238.6	95.5

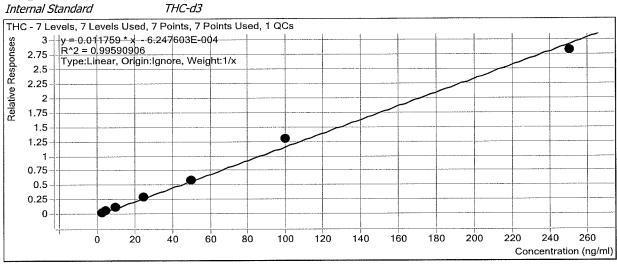
ТНС-ОН ТНС-ОН-d3

## **ISP** Forensics **Calibration Curve Report**

Batch Data Path	D:\2018 Data\071718	AM 25-26\QuantResults\cann screen.ba	tch.bin
Last Calib Update	7/18/2018 8:03 AM	Analyst Name	ISP TOX

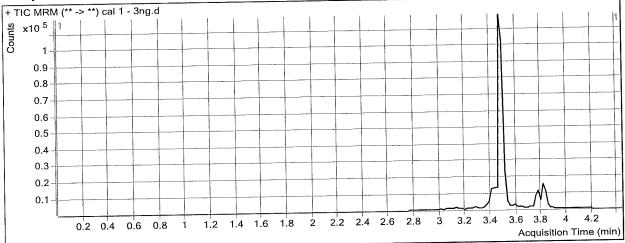


Internal Standard



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 1 - 3ng	1	$\mathbf{\nabla}$	3	2.9	96.3
cal 2 - 5ng	2	$\square$	5	4.8	96.8
cal 3 - 10ng	3	$\square$	10	10.1	100.5
QC 10 ng	3	$\mathbf{\nabla}$	10	9.6	95.6
cal 4 - 25ng	4	$\square$	25	24.8	99.3
cal 5 - 50ng	5	$\square$	50	50.4	100.8
cal 6 - 100ng	6	$\mathbf{\nabla}$	100	110.4	110.4
cal 7 - 250ng	7	$\checkmark$	250	239.6	95.8

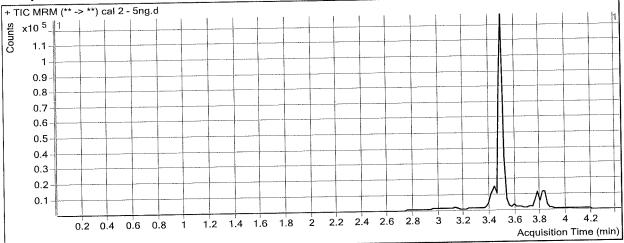
Batch Data Path	D:\2018 Data\071718	AM 25-26\QuantRest	Ilts\cann screen.batch.bin
Analysis Time	7/18/2018 8:03 AM	Analyst Name	ISP Tox
Report Time	7/19/2018 9:19 AM	Reporter Name	ISP Tox
Last Calib Update	7/18/2018 8:03 AM	Batch State	Processed
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-07-17 17:04 Calibration 1 p1-a1 -1	Data File Sample Name Acq Method Sample Info Comment	cal 1 - 3ng.d cal 1 - 3ng Screen THC 8-2017.m AM 26 Cannabinoid screen



Results					<b>-</b>
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.426	3145	37962	0.0829	2.9508
тнс-он	3.493	8880	284554	0.0312	2.7776
		1022	30622	0.0334	2.8904
THC	3.820	1022	30022		

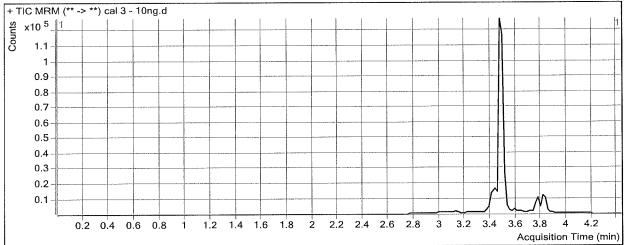


Batch Data Path	D:\2018 Data\071718	AM 25-26\QuantRest	Ilts\cann screen.batch.bin
Analysis Time	7/18/2018 8:03 AM	Analyst Name	ISP Tox
Report Time	7/19/2018 9:19 AM	Reporter Name	ISP Tox
Last Calib Update	7/18/2018 8:03 AM	Batch State	Processed
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-07-17 17:11 Calibration 1 P1-B1 -1	Data File Sample Name Acq Method Sample Info Comment	cal 2 - 5ng.d cal 2 - 5ng Screen THC 8-2017.m AM 26 Cannabinoid screen



<b>Results Compound</b> THC-COOH THC-OH THC	<b>RT</b> 3.426 3.493 3.840	<b>Response</b> 4157 14278 1336	<b>ISTD Resp</b> 36137 278747 23738	<b>Resp Ratio</b> 0.1150 0.0512 0.0563	<b>Final Conc</b> 4.5073 4.7422 4.8392
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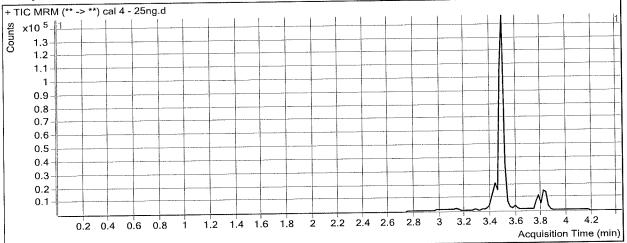
Batch Data Path Analysis Time Report Time Last Calib Update	D:\2018 Data\071718 7/18/2018 8:03 AM 7/19/2018 9:19 AM 7/18/2018 8:03 AM	AM 25-26\QuantRest Analyst Name Reporter Name Batch State	Ilts\cann screen.batch.bin ISP Tox ISP Tox Processed
Analysis Info			
Acq Time	2018-07-17 17:17	Data File	cal 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



Results					
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.426	9149	37521	0.2438	10.7343
THC-OH	3.493	31312	290460	0.1078	10.2962
THC	3.820	2767	23523	0.1176	10.0549

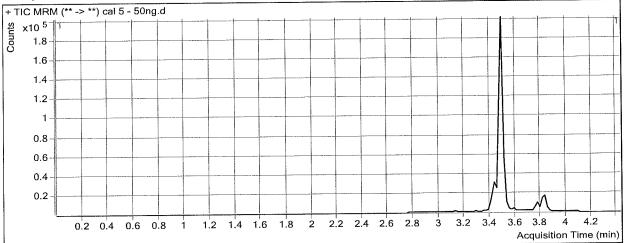


Batch Data Path	D:\2018 Data\071718	Analyst Name	Ilts\cann screen.batch.bin
Analysis Time	7/18/2018 8:03 AM		ISP Tox
Report Time	7/19/2018 9:19 AM		ISP Tox
Last Calib Update	7/18/2018 8:03 AM		Processed
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-07-17 17:24 Calibration 1 P1-D1 -1	Data File Sample Name Acq Method Sample Info Comment	cal 4 - 25ng.d cal 4 - 25ng Screen THC 8-2017.m AM 26 Cannabinoid screen



Results Compound THC-COOH THC-OH	<b>RT</b> 3.426 3.493	<b>Response</b> 17440 69610	<b>ISTD Resp</b> 32650 267298	<b>Resp Ratio</b> 0.5342 0.2604	<b>Final Conc</b> 24.7710 25.2781
THC	3.820	7271	24969	0.2912	24.8182

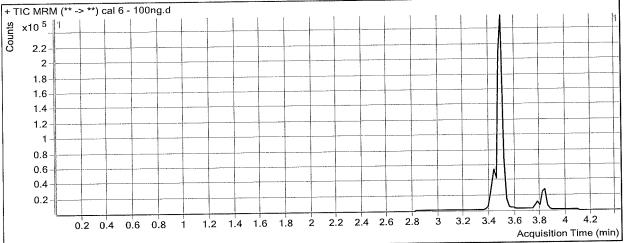
Batch Data Path Analysis Time Report Time Last Calib Update	D:\2018 Data\071718 7/18/2018 8:03 AM 7/19/2018 9:19 AM 7/18/2018 8:03 AM	AM 25-26\QuantRest Analyst Name Reporter Name Batch State	Ilts\cann screen.batch.bin ISP Tox ISP Tox Processed
Analysis Info Acq Time Sample Type	2018-07-17 17:31 Calibration	Data File Sample Name	cal 5 - 50ng.d cal 5 - 50ng
Dilution Position Inj Vol	1 p1-e1 -1	Acq Method Sample Info Comment	Screen THC 8-2017.m AM 26 Cannabinoid screen



Results
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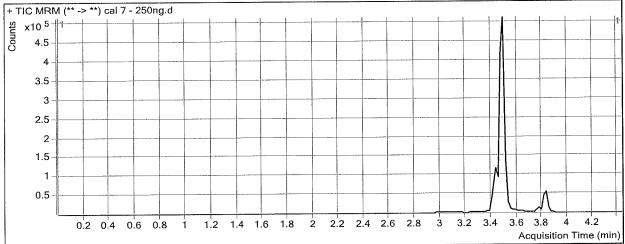
10000100						
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc	
THC-COOH	3.426	37139	35348	1.0507	49.7428	
THC-OH	3.493	147685	278514	0.5303	51.7667	
THC	3.840	11984	20245	0.5920	50.3961	
THC-OH	3.493	147685	278514	0.5303	51.7667	

Batch Data Path	D:\2018 Data\071718	AM 25-26\QuantRest	Ilts\cann screen.batch.bin
Analysis Time	7/18/2018 8:03 AM	Analyst Name	ISP Tox
Report Time	7/19/2018 9:19 AM	Reporter Name	ISP Tox
Last Calib Update	7/18/2018 8:03 AM	Batch State	Processed
Analysis Info Acq Time Sample Type Dilution Position Inj Vol	2018-07-17 17:37 Calibration 1 P1-F1 -1	Data File Sample Name Acq Method Sample Info Comment	cal 6 - 100ng.d cal 6 - 100ng Screen THC 8-2017.m AM 26 Cannabinoid screen



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.426	81778	35891	2.2785	109.1075
THC-OH	3.493	313659	280437	1.1185	109.5068
THC	3.840	30332	23371	1.2978	110.4243

Batch Data Path	D:\2018 Data\071718 /	AM 25-26\QuantRest	Ilts\cann screen.batch.bin
Analysis Time	7/18/2018 8:03 AM	Analyst Name	ISP Tox
Report Time	7/19/2018 9:19 AM	Reporter Name	ISP Tox
Last Calib Update	7/18/2018 8:03 AM	Batch State	Processed
Analysis Info	2018-07-17 17:44	Data File	cal 7 - 250ng.d
Acq Time		Sample Name	cal 7 - 250ng
Sample Type Dilution Position Inj Vol	Calibration 1 p1-g1 -1	Acq Method Sample Info Comment	Screen THC 8-2017.m



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.426	206928	41300	5.0104	241.1863
THC-OH	3.493	821397	337485	2.4339	238.6324
THC	3.840	81982	29108	2.8165	239.5769



#### **Request for Departure from an Analytical Method**

Date of Request 06/28/18

Forensic Scientist Anne Nord

Analytical Method Method 26

Type of Deviation Minor

Major

Departure

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

4.3 Evaluation of Results
4.3.1 Minimum Criteria:
4.3.1.1
Analyte Administrative Threshold
THC 3 ng/mL
Carboxy-THC 10 ng/mL
THC-OH 3 ng/mL
Calculated sample concentration of 3 ng/mL or greater for THC and THC-OH, a calculated sample concentration of 10 ng/mL or greater for Carboxy-THC.
Allow for the positive control to be prepared in house.

#### Rationale for Departure

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

#### **Discipline Leader Review**

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

Departure Not Approved Comments:

elera Shrum

Date: 06/28/18

Celena Shrum Toxicology Program Discipline Leader

added page 4/11/19

