Worklist: 1831

LAB_CASE	ITEM	TASK_ID	DESCRIPTION	
C2017-1321	1	91479	AM 25/AM 26 Blood MultiDrug/	
C2017-1350	1	89140	AM 25/AM 26 Blood MultiDrug/	
C2017-1361	1	89222	AM 25/AM 26 Blood MultiDrug/	
C2017-1459	1	90639	AM 25/AM 26 Blood MultiDrug/	
C2017-1459	2	91741	AM 25/AM 26 Blood MultiDrug/	
C2017-1459	3	91742	AM 25/AM 26 Blood MultiDrug/	
C2017-1467	1	90705	AM 25/AM 26 Blood MultiDrug/	
C2017-1469	2	90711	AM 25/AM 26 Blood MultiDrug/	
C2017-1482	1	90842	AM 25/AM 26 Blood MultiDrug/	
C2017-1488	1	90889	AM 25/AM 26 Blood MultiDrug/	
C2017-1493	1	90945	AM 25/AM 26 Blood MultiDrug/	
C2017-1494	1	90947	AM 25/AM 26 Blood MultiDrug/	
C2017-1495	1	90949	AM 25/AM 26 Blood MultiDrug/	
C2017-1496	1	90960	AM 25/AM 26 Blood MultiDrug/	
C2017-1497	1	90966	AM 25/AM 26 Blood MultiDrug/	
C2017-1501	1	90975	AM 25/AM 26 Blood MultiDrug/	
C2017-1502	1	90977	AM 25/AM 26 Blood MultiDrug/	
C2017-1505	1	90994	AM 25/AM 26 Blood MultiDrug/	
C2017-1520	1	91174	AM 25/AM 26 Blood MultiDrug/	
C2017-1550	1	91505	AM 25/AM 26 Blood MultiDrug/	
C2017-1559	1	91552	AM 25/AM 26 Blood MultiDrug/	
C2017-1560	1	91554	AM 25/AM 26 Blood MultiDrug/	
C2017-1570	1	91694	AM 25/AM 26 Blood MultiDrug/	

1

Worklist: 1831

LAB CASE	ITEM	TASK ID	DESCRIPTION	
C2017-1571	1	91696	AM 25/AM 26 Blood MultiDrug/	
M2017-3266	1	91105	AM 25/AM 26 Blood MultiDrug/	
M2017-3293	2	91690	AM 25/AM 26 Blood MultiDrug/	
M2017-3455	1	91408	AM 25/AM 26 Blood MultiDrug/	
M2017-3551	2	91692	AM 25/AM 26 Blood MultiDrug/	
P2017-1758	1	91414	AM 25/AM 26 Blood MultiDrug/	
P2017-1759	1	91415	AM 25/AM 26 Blood MultiDrug/	

2

Multi-Drug Screen in Blood by LC-MS/MS

Extraction Date: 8-7-17   **Analyst:** Anne Nord

PRE-ANALYTIC

Plate Lot# 0495940   Plate. Exp. 12-12-17

✓ 1. Ensure all solutions are within expiration date.

Mobile Phase A: **0.5M Ammonium**   Lot #: 61417
10mM Amm Formate   **Hydroxide**
Mobile Phase B   Column: **Phenomenex Phenyl Hexyl (4.6 x 50mm; 2.6um)**
0.1% FA in MeOH
Blank/Negative Blood   Lot #: 321623-1

✓ 2. Check levels of mobile phases and needle wash and refill as necessary. Ensure waste is not full.

✓ 3. Begin mobile phase flow and allow system to equilibrate for approx. 30 min.

✓ 4. Create worklist. Data path name: 8717 blood screen Am 25-26

ANALYTIC

✓ 1. Remove standards plate, blood, and samples from cold storage. Allow to reach room temperature.

✓ 2. Pipette **250µL blood** in wells of analytical (standards) plate. Mix via aspirate and dispense.
- 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 **250µL 0.5M ammonium hydroxide** buffer in wells of analytical (standards) 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. 4 seconds (or until no liquid remains on top of sorbent).
   (Load at 85-100 PSI- Selector to the right) Manifold ID 66729
   Wait 5 min.

✓ 8. Add **900µL ethyl acetate** and allow to flow for 5 minutes under gravity.

✓ 9. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*

✓ 10. Add **900µL ethyl acetate** and allow to flow for 5 minutes under gravity.

✓ 11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*

✓ 12. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C.
   SPE Dry ID 66819

✓ 13. Reconstitute in **100µL 100% MeOH** and heat seal plate with foil. Place in autosampler and run worklist.

POST-ANALYTIC

8717 mds panel 1

✓ 1. Open quantitation software and create a new quantitation batch. Batch name: 8717 mds panel 2

✓ 2. Make any necessary integration changes.

✓ 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% rt of administrative control. > 1/10 the response of administrative control.

✓ 4. Did all QCs pass for each analyte? Y / N _____

✓ 5. Central File Packet to include: ✓ LIMS Worklist: ✓ Method Checklist ✓ Calibration and Control Reports

COMMENTS:

Toxicology AM method 25 external prep information

working solution 10000 ng/ml in meoh mirtazapine, amitriptyline, codeine, diphenhydramine, 20000 ng/ml meoh morphine

Stock solution 1mg/ml 100 ul each for all except morphine 200 ul in 9400 ul meoh

Ppd 3/31/17 Exp: 9/21/17 lot 92117

Drug	lot	expiration
Morphine	fe08141515	11/1/2020
mirtazapine	fe0420l503	4/1/2020
amitriptyline	fn07081401	9/1/2019
codeine	fe10271401	11/1/2019
diphenhydramine	fn09161502	9/1/2020

AM 25 control 100 ul working solution in 9900 ul blood lot 62117

ppd 3/21/17 Exp 6/21/17   by AMN   Concentration 100ng/ml amitriptyline, codeine, diphenhydramine, mirtazapine

200/ng/ml morphine

ppd 6-26-17 Exp 9-21-17 by AMN lot 92117

Compound Method		p1 cal 1-1a	p1 cal 1-1a Results				Qualifier 1 M...	Qualifier 1 R...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	MI	Transition	S/N	MI	Name	Transition	RT	Resp.
6-MAM	328.2 -> 165..	8/7/2017 5:13..	4.975	1460	Infinity	✓	328.2 -> 211..	12.13		6-MAM-D6	334.2 -> 165..	4.954	46964
7-aminoclonazepam	286.1 -> 121..	8/7/2017 5:13..	5.571	44207	102.97		286.1 -> 222..	5378.87		7-Aminoclonazepam-D4	290.1 -> 121..	5.550	170434
Acetyl Fentanyl	323.2 -> 105..	8/7/2017 5:13..	5.810	23179	28.24		323.2 -> 188..	54.30		Acetyl Fentanyl-D5	328.2 -> 105..	5.808	1402614
Acetyl Norfentanyl	219.1 -> 84.2	8/7/2017 5:13..	4.908	8428	39.46		219.1 -> 56.3	101.30		Acetyl Norfentanyl-D5	224.2 -> 84.2	4.888	515597
a-hydroxyalprazolam	325.1 -> 297..	8/7/2017 5:13..	6.399	8228	33.13		325.1 -> 215..	30.12		a-hydroxyalprazolam-D5	330.1 -> 302..	6.377	42311
alpha-PVP	232.2 -> 91.0	8/7/2017 5:13..	5.578	128781	1025.67		232.2 -> 77.1	131.56		alpha-PVP-d8	240.2 -> 91.1	5.598	75721
Alprazolam	309.1 -> 281..	8/7/2017 5:13..	6.485	71344	258.12		309.1 -> 205..	227.15		Alprazolam-D5	314.1 -> 286..	6.463	257218
Amphetamine	136.1 -> 91.1	8/7/2017 5:13..	4.850	169499	30.40		136.1 -> 119..	16.73		Amphetamine-D11	147.2 -> 130..	4.809	140167
Bupropion	240.1 -> 184..	8/7/2017 5:13..	5.761	111872	404.03		240.1 -> 131..	16723...		Bupropion-D9	249.2 -> 185..	5.740	524418
Carisoprodol	261.2 -> 176..	8/7/2017 5:13..	6.126	70349	16974...		261.2 -> 55.3	42.20		Carisoprodol-D7	268.2 -> 183..	6.125	446075
Citalopram	325.2 -> 109..	8/7/2017 5:13..	6.073	218394	116.35		325.2 -> 262..	622.69		Citalopram-D6	331.2 -> 109..	6.072	1004742
Clonazepam	316.1 -> 269..	8/7/2017 5:13..	6.340	24041	100.15		316.1 -> 213..	23.43		Clonazepam-D4	320.1 -> 217..	6.320	31315
Codeine	300.2 -> 215..	8/7/2017 5:13..	4.837	10145	154.23		300.2 -> 165..	25.70		Codeine-D6	306.2 -> 218..	4.815	40404
Cyclobenzaprine	276.2 -> 214..	8/7/2017 5:13..	6.328	126104	423.89		276.2 -> 231..	252.85		Cyclobenzaprine-D3	279.2 -> 215..	6.327	570480
Dextromethorphan	272.2 -> 171..	8/7/2017 5:13..	6.083	56549	237.55		272.2 -> 147..	53.26		Dextromethorphan-D3	275.2 -> 171..	6.104	251897
Dextrorphan	258.2 -> 157..	8/7/2017 5:13..	5.453	51214	92.35		258.2 -> 133..	114.10		Dextrorphan-D3	261.2 -> 157..	5.452	276957
Diazepam	285.1 -> 193..	8/7/2017 5:13..	6.691	54633	43.63		285.1 -> 153..	49.03		Diazepam-D5	290.1 -> 198..	6.690	224979
Dihydrocodeine	302.2 -> 198..	8/7/2017 5:13..	4.796	25811	132.69		302.2 -> 128..	33.02		Dihydrocodeine-D6	308.2 -> 202..	4.774	141611
Diphenhydramine	256.2 -> 167..	8/7/2017 5:13..	6.025	294932	770.38		256.2 -> 152..	268.34		Diphenhydramine-D3	259.2 -> 167..	6.025	1520838
Doxylamine	271.2 -> 182..	8/7/2017 5:13..	5.697	281144	233.57		271.2 -> 167..	219.04		Doxylamine-D5	276.2 -> 187..	5.696	1363512
EDDP	279.2 -> 235..	8/7/2017 5:13..	6.081	250741	3730.57		279.2 -> 250..	758.92		EDDP-D3	282.2 -> 235..	6.081	107790
Fentanyl	337.2 -> 105..	8/7/2017 5:13..	6.031	27820	99.53		337.2 -> 188..	101.32		Fentanyl-D5	342.3 -> 105..	6.011	1283294
Fluoxetine	310.1 -> 44.3	8/7/2017 5:13..	6.281	330679	487.37		310.1 -> 148..	63.67		Oxycodone-D6	322.2 -> 304..	4.935	265226
Hydrocodone	300.2 -> 198..	8/7/2017 5:13..	5.081	41128	49.63		300.2 -> 128..	251.28		Hydrocodone-D6	306.2 -> 202..	5.038	214767
Hydromorphone	286.2 -> 184..	8/7/2017 5:13..	4.498	22836	174.39		286.2 -> 157..	79.01		Hydromorphone-D6	292.2 -> 185..	4.477	73527
Ketamine	238.1 -> 125..	8/7/2017 5:13..	5.476	82678	456.10		238.1 -> 220..	19.93		Ketamine-D4	242.1 -> 129..	5.455	322285
Meprobamate	219.1 -> 158..	8/7/2017 5:13..	5.641	20445	19.98		219.1 -> 97.1	12.61		Meprobamate-D7	226.2 -> 165..	5.640	109196
Methadone	310.2 -> 265..	8/7/2017 5:13..	6.361	267652	335.49		310.2 -> 105..	248.07		Methadone-D9	319.3 -> 268..	6.360	1406186
Methamphetamine	150.1 -> 91.1	8/7/2017 5:13..	5.011	206527	Infinity	✓	150.1 -> 119..	13.40		Methamphetamine-D11	161.2 -> 97.1	4.970	382022
Morphine	286.2 -> 201..	8/7/2017 5:13..	4.317	4780	5.07		286.2 -> 165..	33.01		Morphine-D6	292.2 -> 152..	4.276	4221
~~Naloxone~~	~~328.2 -> 309..~~	~~8/7/2017 5:13..~~					328.2 -> 211..			~~Naloxone-D5~~	~~333.2 -> 315..~~	4.853	~~232221~~
Naltrexol	344.2 -> 326..	8/7/2017 5:13..	4.933	99974	230.08		344.2 -> 308..	56.77		Naltrexol-D3	347.2 -> 329..	4.932	384405
Naltrexone	342.2 -> 324..	8/7/2017 5:13..	4.913	47364	172.41		342.2 -> 55.3	89.57		Naltrexone-D3	345.2 -> 327..	4.892	240132
Norbuprenorphine	414.3 -> 101..	8/7/2017 5:13..	5.846	9769	37.72		414.3 -> 57.3	15.52		Norbuprenorphine-D3	417.3 -> 101..	5.846	47563
Nordiazepam	271.1 -> 140..	8/7/2017 5:13..	6.553	30386	44.53		271.1 -> 208..	Infinity		Nordiazepam-D5	276.1 -> 140..	6.552	89917
Norfentanyl	233.2 -> 84.2	8/7/2017 5:13..	5.374	184460	339.16		233.2 -> 55.3	72.87		Norfentanyl-D5	238.2 -> 84.2	5.353	781891
Norhydrocodone	286.2 -> 199..	8/7/2017 5:13..	5.002	2950	36.72		286.2 -> 171..	4.49	✓	Norhydrocodone-D3	289.2 -> 202..	4.981	71532
Noroxycodone	302.1 -> 284..	8/7/2017 5:13..	4.917	31143	27.54		302.1 -> 186..	1926.33		Noroxycodone-D3	305.2 -> 287..	4.896	131224
O-desmethyl-tramadol	250.2 -> 58.3	8/7/2017 5:13..	4.945	210029	381.20		250.2 -> 42.3	2204.37		O-desmethyl-tramadol-...	256.2 -> 64.3	4.945	907888
Oxazepam	287.1 -> 240..	8/7/2017 5:13..	6.386	23766	16.01		287.1 -> 268..	Infinity		Oxazepam-D5	292.1 -> 246..	6.385	120522
Oxycodone	316.2 -> 298..	8/7/2017 5:13..	4.955	59882	731.23		316.2 -> 241..	41.13		Oxycodone-D6	322.2 -> 304..	4.935	265226
Oxymorphone	302.1 -> 284..	8/7/2017 5:13..	4.333	57720	Infinity		302.1 -> 227..	190.51		Oxymorphone-D3	305.2 -> 287..	4.332	259206
Phentermine	150.1 -> 65.2	8/7/2017 5:13..	5.153	55751	Infinity	✓	150.1 -> 133..	Infinity		Phentermine-D5	155.1 -> 96.2	5.132	477890
Promethazine	285.1 -> 86.2	8/7/2017 5:13..	6.305	397628	2426.14		285.1 -> 71.3	82.47		Promethazine-D3	288.2 -> 89.2	6.304	2018981
Quetiapine	384.2 -> 253..	8/7/2017 5:13..	6.314	289524	66340...		384.2 -> 221..	389.96		Quetiapine-D8	392.2 -> 226..	6.273	372218
Sertraline	306.1 -> 158..	8/7/2017 5:13..	6.526	92157	345.33		306.1 -> 275..	812.28		Sertraline-D3	309.1 -> 275..	6.525	449252
Sufentanil	387.2 -> 238..	8/7/2017 5:13..	6.273	22688	3250.19		387.2 -> 111..	41.06		Sufentanil-D5	392.2 -> 238..	6.273	875918

not evaluated

Compound Method		p1 cal 1-1a	p1 cal 1-1a Results				Qualifier 1 M...	Qualifier 1 R...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	MI	S/N	Transition	MI	S/N	Name	Transition	RT	Resp.
Temazepam	301.1 -> 255...	8/7/2017 5:13...	6.527	99070		Infinity	301.1 -> 283...		7.82	Temazepam-D5	306.1 -> 260...	6.506	481315
Tramadol	264.2 -> 58.3	8/7/2017 5:13...	5.472	282484		106.19	264.2 -> 43.3		6.64	Tramadol-13C-D3	268.2 -> 58.3	5.472	1237910
Trazodone	372.2 -> 176...	8/7/2017 5:13...	6.315	227213		Infinity	372.2 -> 148...		28693...	Trazodone-D6	378.2 -> 182...	6.274	984688
Venlafaxine	278.2 -> 58.3	8/7/2017 5:13...	5.817	269502		249.58	278.2 -> 260...		30.29	Venlafaxine-D6	284.2 -> 64.3	5.816	1184546
Zolpidem	308.2 -> 235...	8/7/2017 5:13...	6.078	229227		1526.40	308.2 -> 263...		447.58	Zolpidem-D6	314.2 -> 235...	6.076	1083468

Compound Method		p1 negative	p1 negative Results				Qualifier 1 M...	Qualifier...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	MI	S/N	Transition	MI	S/N	Name	Transition	RT	Resp.
6-MAM	328.2 -> 165...						328.2 -> 211...			6-MAM-D6	334.2 -> 165...	4.954	47271
7-aminoclonazepam	286.1 -> 121...	8/7/2017 5:32 PM					286.1 -> 222...			7-aminoclonazepam-D4	290.1 -> 121...	5.550	177306
Acetyl Fentanyl	323.2 -> 105...	8/7/2017 5:32 PM					323.2 -> 188...			Acetyl Fentanyl-D5	328.2 -> 105...	5.808	12909...
Acetyl Norfentanyl	219.1 -> 84.2	8/7/2017 5:32 PM	5.030	86		0.87	219.1 -> 56.3		1.08	Acetyl Norfentanyl-D5	224.2 -> 84.2	4.888	484334
a-hydroxyalprazolam	325.1 -> 297...	8/7/2017 5:32 PM	6.501	23		0.66	325.1 -> 215...			a-hydroxyalprazolam-D5	330.1 -> 302...	6.377	43347
alpha-PVP	232.2 -> 91.0	8/7/2017 5:32 PM	5.578	276		1.32	232.2 -> 77.1		0.83	alpha-PVP-d8	240.2 -> 91.1	5.945	8
Alprazolam	309.1 -> 281...	8/7/2017 5:32 PM	6.322	3868		7.68	309.1 -> 205...		0.51	Alprazolam-D5	314.1 -> 286...	6.463	260825
Amphetamine	136.1 -> 91.1	8/7/2017 5:32 PM	4.972	50202		12.62	136.1 -> 119...		0.72	Amphetamine-D11	147.2 -> 130...	4.809	139360
Bupropion	240.1 -> 184...	8/7/2017 5:32 PM	5.516	95		0.82	240.1 -> 131...		32.44	Bupropion-D9	249.2 -> 185...	5.740	510419
Carisoprodol	261.2 -> 176...	8/7/2017 5:32 PM	6.452	293		0.34	261.2 -> 55.3		0.91	Carisoprodol-D7	268.2 -> 183...	6.125	450556
Citalopram	325.2 -> 109...	8/7/2017 5:32 PM	6.073	160		0.55	325.2 -> 262...			Citalopram-D6	331.2 -> 109...	6.072	923554
Clonazepam	316.1 -> 269...	8/7/2017 5:32 PM	6.340	66		0.70	316.1 -> 213...		1.80	Clonazepam-D4	320.1 -> 217...	6.320	35098
Codeine	300.2 -> 215...	8/7/2017 5:32 PM	4.858	22		4.89	300.2 -> 165...			Codeine-D6	306.2 -> 218...	4.815	38862
Cyclobenzaprine	276.2 -> 214...	8/7/2017 5:32 PM	6.368	201		1.58	276.2 -> 231...		Infini...	Cyclobenzaprine-D3	279.2 -> 215...	6.327	523081
Dextromethorphan	272.2 -> 171...	8/7/2017 5:32 PM	6.186	31		1.64	272.2 -> 147...		0.53	Dextromethorphan-D3	275.2 -> 171...	6.083	242318
Dextrorphan	258.2 -> 157...	8/7/2017 5:32 PM	5.535	30		0.76	258.2 -> 133...			Dextrorphan-D3	261.2 -> 157...	5.452	240876
Diazepam	285.1 -> 193...	8/7/2017 5:32 PM					285.1 -> 153...			Diazepam-D5	290.1 -> 198...	6.690	217528
Dihydrocodeine	302.2 -> 198...	8/7/2017 5:32 PM					302.2 -> 128...			Dihydrocodeine-D6	308.2 -> 202...	4.774	126342
Diphenhydramine	256.2 -> 167...	8/7/2017 5:32 PM	6.025	442		0.70	256.2 -> 152...		0.44	Diphenhydramine-D3	259.2 -> 167...	6.025	14836...
Doxylamine	271.2 -> 182...	8/7/2017 5:32 PM	5.717	1431		1.61	271.2 -> 167...		0.69	Doxylamine-D5	276.2 -> 187...	5.696	12250...
EDDP	279.2 -> 235...	8/7/2017 5:32 PM	6.102	80		0.71	279.2 -> 250...		1.40	EDDP-D3	282.2 -> 235...	6.081	97863
Fentanyl	337.2 -> 105...	8/7/2017 5:32 PM	6.031	118		0.18	337.2 -> 188...		0.79	Fentanyl-D5	342.3 -> 105...	6.011	11718...
Fluoxetine	310.1 -> 44.3	8/7/2017 5:32 PM	6.403	953		0.80	310.1 -> 148...		0.70	Oxycodone-D6	322.2 -> 304...	4.935	253957
Hydrocodone	300.2 -> 198...	8/7/2017 5:32 PM	4.898	73		1.09	300.2 -> 128...			Hydrocodone-D6	306.2 -> 202...	5.038	205707
Hydromorphone	286.2 -> 184...	8/7/2017 5:32 PM	4.056	8		0.28	286.2 -> 157...		0.22	Hydromorphone-D6	292.2 -> 185...	4.477	70124
Ketamine	238.1 -> 125...	8/7/2017 5:32 PM	5.374	866		2.47	238.1 -> 220...		0.46	Ketamine-D4	242.1 -> 129...	5.455	301292
Meprobamate	219.1 -> 158...	8/7/2017 5:32 PM	5.559	272		0.94	219.1 -> 97.1			Meprobamate-D7	226.2 -> 165...	5.620	96503
Methadone	310.2 -> 265...	8/7/2017 5:32 PM	6.443	2301		2.23	310.2 -> 105...			Methadone-D9	319.3 -> 268...	6.360	12583...
Methamphetamine	150.1 -> 91.1	8/7/2017 5:32 PM	5.031	103170		2.71	150.1 -> 119...		2.42	Methamphetamine-D11	161.2 -> 97.1	4.990	378555
Morphine	286.2 -> 201...	8/7/2017 5:32 PM	4.698	209		1.47	286.2 -> 165...		0.71	Morphine-D6	292.2 -> 152...	4.296	3536
Naloxone	328.2 -> 309...	8/7/2017 5:32 PM					328.2 -> 211...			Naloxone-D5	333.2 -> 315...	4.853	217318
Naltrexol	344.2 -> 326...	8/7/2017 5:32 PM	4.912	5788		11.91	344.2 -> 308...			Naltrexol-D3	347.2 -> 329...	4.932	344737
Naltrexone	342.2 -> 324...	8/7/2017 5:32 PM	4.893	47		0.38	342.2 -> 55.3		0.51	Naltrexone-D3	345.2 -> 327...	4.912	223282
Norbuprenorphine	414.3 -> 101...	8/7/2017 5:32 PM	5.907	114		0.69	414.3 -> 57.3		0.85	Norbuprenorphine-D3	417.3 -> 101...	5.846	40165
Nordiazepam	271.1 -> 140...	8/7/2017 5:32 PM	6.634	64		0.37	271.1 -> 208...		1.33	Nordiazepam-D5	276.1 -> 140...	6.552	90635
Norfentanyl	233.2 -> 84.2	8/7/2017 5:32 PM	5.354	25		2.71	233.2 -> 55.3		2.50	Norfentanyl-D5	238.2 -> 84.2	5.353	752156
Norhydrocodone	286.2 -> 199...	8/7/2017 5:32 PM	4.940	302		70.30	286.2 -> 171...			Norhydrocodone-D3	289.2 -> 202...	4.961	64962
Noroxycodone	302.1 -> 284...	8/7/2017 5:32 PM	4.917	1328		1.20	302.1 -> 186...			Noroxycodone-D3	305.2 -> 287...	4.896	131234
O-desmethyl-tramadol	250.2 -> 58.3	8/7/2017 5:32 PM	4.925	466		Infinity	250.2 -> 42.3			O-desmethyl-tramadol-...	256.2 -> 64.3	4.945	825393
Oxazepam	287.1 -> 240...	8/7/2017 5:32 PM					287.1 -> 268...			Oxazepam-D5	292.1 -> 246...	6.385	134086
Oxycodone	316.2 -> 298...	8/7/2017 5:32 PM	4.955	560		1.45	316.2 -> 241...		0.37	Oxycodone-D6	322.2 -> 304...	4.935	253957
Oxymorphone	302.1 -> 284...	8/7/2017 5:32 PM					302.1 -> 227...			Oxymorphone-D3	305.2 -> 287...	4.332	253158
Phentermine	150.1 -> 65.2	8/7/2017 5:32 PM	5.011	28679		2.58	150.1 -> 133...		0.53	Phentermine-D5	155.2 -> 96.2	5.132	435094
Promethazine	285.1 -> 86.2	8/7/2017 5:32 PM	6.325	755		0.89	285.1 -> 71.3			Promethazine-D3	288.2 -> 89.2	6.304	18633...
Quetiapine	384.2 -> 253...	8/7/2017 5:32 PM	6.375	137		0.54	384.2 -> 221...		21.16	Quetiapine-D8	392.2 -> 226...	6.273	354125
Sertraline	306.1 -> 158...	8/7/2017 5:32 PM	6.486	208		1.33	306.1 -> 275...			Sertraline-D3	309.1 -> 275...	6.525	422249
Sufentanil	387.2 -> 238...	8/7/2017 5:32 PM	6.294	1193		12.35	387.2 -> 111...		3.84	Sufentanil-D5	392.2 -> 238...	6.273	794928

Compound Method		p1 negative		p1 negative Results			Qualifier 1 M...	Qualifier...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	MI	S/N	Transition	MI	S/N	Name	Transition	RT	Resp.
Temazepam	301.1 -> 255...	8/7/2017 5:32 PM	6.729	130		0.37	301.1 -> 283...			Temazepam-D5	306.1 -> 260...	6.506	471870
Tramadol	264.2 -> 58.3	8/7/2017 5:32 PM	5.472	6121		1.23	264.2 -> 43.3		0.83	Tramadol-13C-D3	268.2 -> 58.3	5.452	11426...
Trazodone	372.2 -> 176...	8/7/2017 5:32 PM	6.356	1373		29.57	372.2 -> 148...		2.68	Trazodone-D6	378.2 -> 182...	6.274	977381
Venlafaxine	278.2 -> 58.3	8/7/2017 5:32 PM	6.041	2762		3.15	278.2 -> 260...		0.90	Venlafaxine-D6	284.2 -> 64.3	5.816	10635...
Zolpidem	308.2 -> 235...	8/7/2017 5:32 PM	6.139	90		0.45	308.2 -> 263...			Zolpidem-D6	314.2 -> 235...	6.076	10201...

Compound Method Name	Transition	Acq. Date-Time	RT	Resp.	MI	S/N	Qualifier 1 Transition	MI	S/N	ISTD Name	Transition	RT	Resp.
6-MAM	328.2 -> 165...	8/8/2017 8:44 AM					328.2 -> 211...			6-MAM-D6	334.2 -> 165...	4.974	37042
7-aminoclonazepam	286.1 -> 121...	8/8/2017 8:44 AM					286.1 -> 222...			7-Aminoclonazepam-D4	290.1 -> 121...	5.550	135313
Acetyl Fentanyl	323.2 -> 105...	8/8/2017 8:44 AM					323.2 -> 188...			Acetyl Fentanyl-D5	328.2 -> 105...	5.829	10620...
Acetyl Norfentanyl	219.1 -> 84.2	8/8/2017 8:44 AM	4.949	31		1.87	219.1 -> 56.3		3.73	Acetyl Norfentanyl-D5	224.2 -> 84.2	4.908	385102
a-hydroxyalprazolam	325.1 -> 297...	8/8/2017 8:44 AM	6.155	51		2.52	325.1 -> 215...			a-hydroxyalprazolam-D5	330.1 -> 302...	6.377	31954
alpha-PVP	232.2 -> 91.0	8/8/2017 8:44 AM	5.722	117		2.00	232.2 -> 77.1		0.50	alpha-PVP-d8	240.2 -> 91.1	5.343	909
Alprazolam	309.1 -> 281...	8/8/2017 8:44 AM	6.301	2768		15.15	309.1 -> 205...			Alprazolam-D5	314.1 -> 286...	6.463	209577
Amphetamine	136.1 -> 91.1	8/8/2017 8:44 AM	4.972	38157		7.05	136.1 -> 119...		1.02	Amphetamine-D11	147.2 -> 130...	4.830	116068
Bupropion	240.1 -> 184...	8/8/2017 8:44 AM	5.986	49		0.52	240.1 -> 131...			Bupropion-D9	249.2 -> 185...	5.760	466907
Carisoprodol	261.2 -> 176...	8/8/2017 8:44 AM	6.208	60		0.52	261.2 -> 55.3		0.60	Carisoprodol-D7	268.2 -> 183...	6.105	330082
Citalopram	325.2 -> 109...	8/8/2017 8:44 AM	6.480	333		0.62	325.2 -> 262...			Citalopram-D6	331.2 -> 109...	6.072	794683
Clonazepam	316.1 -> 269...	8/8/2017 8:44 AM	6.280	70		0.70	316.1 -> 213...			Clonazepam-D4	320.1 -> 217...	6.320	24354
Codeine	300.2 -> 215...	8/8/2017 8:44 AM	4.878	70089		1863.78	300.2 -> 165...		3309.77	Codeine-D6	306.2 -> 218...	4.855	31043
Cyclobenzaprine	276.2 -> 214...	8/8/2017 8:44 AM	6.348	49		0.93	276.2 -> 231...		0.32	Cyclobenzaprine-D3	279.2 -> 215...	6.327	439096
Dextromethorphan	272.2 -> 171...	8/8/2017 8:44 AM					272.2 -> 147...			Dextromethorphan-D3	275.2 -> 171...	6.104	192981
Dextrorphan	258.2 -> 157...	8/8/2017 8:44 AM					258.2 -> 133...			Dextrorphan-D3	261.2 -> 157...	5.452	200127
Diazepam	285.1 -> 193...	8/8/2017 8:44 AM	6.386	275		0.73	285.1 -> 153...		0.57	Diazepam-D5	290.1 -> 198...	6.690	165694
Dihydrocodeine	302.2 -> 198...	8/8/2017 8:44 AM	4.876	38		0.69	302.2 -> 128...		4.86	Dihydrocodeine-D6	308.2 -> 202...	4.794	98711
Diphenhydramine	256.2 -> 167...	8/8/2017 8:44 AM	6.025	23112...		5223.60	256.2 -> 152...		2889.70	Diphenhydramine-D3	259.2 -> 167...	6.025	11551...
Doxylamine	271.2 -> 182...	8/8/2017 8:44 AM	5.717	415		3.67	271.2 -> 167...		0.60	Doxylamine-D5	276.2 -> 187...	5.696	10297...
EDDP	279.2 -> 235...	8/8/2017 8:44 AM	6.102	164		2.33	279.2 -> 250...		1.94	EDDP-D3	282.2 -> 235...	6.081	93350
Fentanyl	337.2 -> 105...	8/8/2017 8:44 AM	6.356	508		0.83	337.2 -> 188...			Fentanyl-D5	342.3 -> 105...	6.031	10804...
Fluoxetine	310.1 -> 44.3	8/8/2017 8:44 AM	6.220	114		0.63	310.1 -> 148...			Oxycodone-D6	322.2 -> 304...	4.955	200831
Hydrocodone	300.2 -> 198...	8/8/2017 8:44 AM	4.878	35357		154.58	300.2 -> 128...		10607...	Hydrocodone-D6	306.2 -> 202...	5.058	159043
Hydromorphone	286.2 -> 184...	8/8/2017 8:44 AM	4.377	33387		792.76	286.2 -> 157...		202.17	Hydromorphone-D6	292.2 -> 185...	4.517	57145
Ketamine	238.1 -> 125...	8/8/2017 8:44 AM	5.374	610		7.20	238.1 -> 220...		0.47	Ketamine-D4	242.1 -> 129...	5.475	245810
Meprobamate	219.1 -> 158...	8/8/2017 8:44 AM	5.763	112		0.47	219.1 -> 97.1			Meprobamate-D7	226.2 -> 165...	5.620	53325
Methadone	310.2 -> 265...	8/8/2017 8:44 AM	6.443	1176		2.48	310.2 -> 105...		0.73	Methadone-D9	319.3 -> 268...	6.360	11084...
Methamphetamine	150.1 -> 91.1	8/8/2017 8:44 AM	5.031	111260		6.35	150.1 -> 119...		5.13	Methamphetamine-D11	161.2 -> 97.1	5.010	292238
Morphine	286.2 -> 201...	8/8/2017 8:44 AM	4.377	76348		2319.25	286.2 -> 165...		791.22	Morphine-D6	292.2 -> 152...	4.336	2187
Naloxone	328.2 -> 309...	8/8/2017 8:44 AM					328.2 -> 211...			Naloxone-D5	333.2 -> 315...	4.914	170580
Naltrexol	344.2 -> 326...	8/8/2017 8:44 AM	4.953	3915		13.15	344.2 -> 308...			Naltrexol-D3	347.2 -> 329...	4.953	286042
Naltrexone	342.2 -> 324...	8/8/2017 8:44 AM	5.116	45		0.40	342.2 -> 55.3			Naltrexone-D3	345.2 -> 327...	4.932	182599
Norbuprenorphine	414.3 -> 101...	8/8/2017 8:44 AM	6.272	327		76.81	414.3 -> 57.3		2.74	Norbuprenorphine-D3	417.3 -> 101...	5.846	34519
Nordiazepam	271.1 -> 140...	8/8/2017 8:44 AM	6.634	61		0.42	271.1 -> 208...		0.95	Nordiazepam-D5	276.1 -> 140...	6.552	81706
Norfentanyl	233.2 -> 84.2	8/8/2017 8:44 AM					233.2 -> 55.3			Norfentanyl-D5	238.2 -> 84.2	5.374	634118
Norhydrocodone	286.2 -> 199...	8/8/2017 8:44 AM	4.940	233		9.14	286.2 -> 171...			Norhydrocodone-D3	289.2 -> 202...	4.981	53169
Noroxycodone	302.1 -> 284...	8/8/2017 8:44 AM	5.019	1023		0.80	302.1 -> 186...		14.33	Noroxycodone-D3	305.2 -> 287...	4.916	100060
O-desmethyl-tramadol	250.2 -> 58.3	8/8/2017 8:44 AM	4.945	912		6.69	250.2 -> 42.3			O-desmethyl-tramadol-...	256.2 -> 64.3	4.945	751377
Oxazepam	287.1 -> 240...	8/8/2017 8:44 AM	6.386	122		0.73	287.1 -> 268...			Oxazepam-D5	292.1 -> 246...	6.385	107629
Oxycodone	316.2 -> 298...	8/8/2017 8:44 AM	4.955	251		2.37	316.2 -> 241...		0.78	Oxycodone-D6	322.2 -> 304...	4.955	200831
Oxymorphone	302.1 -> 284...	8/8/2017 8:44 AM	4.373	35		0.22	302.1 -> 227...		0.52	Oxymorphone-D3	305.2 -> 287...	4.372	198336
Phentermine	150.1 -> 65.2	8/8/2017 8:44 AM	5.031	33872		5.40	150.1 -> 133...		1.32	Phentermine-D5	155.2 -> 96.2	5.153	343706
Promethazine	285.1 -> 86.2	8/8/2017 8:44 AM	6.406	11		0.23	285.1 -> 71.3			Promethazine-D3	288.2 -> 89.2	6.304	17019...
Quetiapine	384.2 -> 253...	8/8/2017 8:44 AM	6.274	82		1.31	384.2 -> 221...			Quetiapine-D8	392.2 -> 226...	6.293	289224
Sertraline	306.1 -> 158...	8/8/2017 8:44 AM	6.628	16		0.44	306.1 -> 275...		5.63	Sertraline-D3	309.1 -> 275...	6.525	391864
Sufentanil	387.2 -> 238...	8/8/2017 8:44 AM	6.314	1086		250.64	387.2 -> 111...		3.82	Sufentanil-D5	392.2 -> 238...	6.293	650603

| Compound Method | | p1 external control | p1 external control Results | | | | Qualifier 1 M... | Qualifier 1 R... | | ISTD Method | | ISTD Results | |
Name	Transition	Acq. Date-Time	RT	Resp.	MI	S/N	Transition	MI	S/N	Name	Transition	RT	Resp.
Temazepam	301.1 -> 255...	8/8/2017 8:44 AM	6.344	74		0.42	301.1 -> 283...		0.85	Temazepam-D5	306.1 -> 260...	6.526	386184
Tramadol	264.2 -> 58.3	8/8/2017 8:44 AM	5.472	5133		8.65	264.2 -> 43.3			Tramadol-13C-D3	268.2 -> 58.3	5.472	10224...
Trazodone	372.2 -> 176...	8/8/2017 8:44 AM	6.356	548		4.25	372.2 -> 148...		2.19	Trazodone-D6	378.2 -> 182...	6.335	770884
Venlafaxine	278.2 -> 58.3	8/8/2017 8:44 AM	5.634	336		0.63	278.2 -> 260...		0.55	Venlafaxine-D6	284.2 -> 64.3	5.816	948990
Zolpidem	308.2 -> 235...	8/8/2017 8:44 AM	6.424	78		1.59	308.2 -> 263...			Zolpidem-D6	314.2 -> 235...	6.117	833031

Compound Method Name	Transition	Acq. Date-Time	RT	Resp.	MI	S/N	Transition	MI	S/N	ISTD Method Name	Transition	RT	Resp.
7-aminoflunitrazepam	284.1 -> 135...	8/7/2017 5:23 PM	5.742	62578		318.35	284.1 ->93.2		45.19	7-aminoflunitrazepam-D7	291.2 -> 138...	5.740	285853
alpha-hydroxymidazolam	342.1 -> 324...	8/7/2017 5:23 PM	6.448	95014		Infinity	342.1 -> 203...		207.34	alpha-hydroxymidazolam-...	346.1 -> 328..	6.447	462446
Amitriptyline	278.2 -> 91.2	8/7/2017 5:23 PM	6.397	265282		Infinity	278.2 -> 105...		Infinity	Amitriptyline-D3	281.2 -> 91.2	6.396	508274
Amoxapine	314.1 -> 271...	8/7/2017 5:23 PM	6.370	79172		13641...	314.1 -> 193...		78.42	Amitriptyline-D3	281.2 -> 91.2	6.396	508274
Benzoylecgonine	290.1 -> 168...	8/7/2017 5:23 PM	5.373	16696		105.20	290.1 -> 105...		7136.56	Benzoylecgonine-D8	298.2 -> 171...	5.350	5532
Carbamazepine	237.1 -> 193...	8/7/2017 5:23 PM	6.137	27437		56.97	237.1 -> 194...		909.52	Carbamazepine-13C6	243.1 -> 200...	6.136	1275123
Chlordiazepoxide	300.1 -> 227...	8/7/2017 5:23 PM	6.596	45796		43.18	300.1 -> 282...		Infinity	Chlordiazepoxide-D5	305.1 -> 286...	6.575	318666
Clomipramine	315.2 -> 86.2	8/7/2017 5:23 PM	6.593	408535		1096.08	315.2 -> 58.3		Infinity	Clomipramine-D3	318.2 -> 89.2	6.593	1959768
Cocaine	304.2 -> 182...	8/7/2017 5:23 PM	5.615	177610		420.74	304.2 -> 105...		74.75	Cocaine-D3	307.2 -> 185...	5.615	760865
Desipramine	267.2 -> 72.3	8/7/2017 5:23 PM	6.357	316658		Infinity	267.2 -> 44.3		Infinity	Desipramine-D3	270.2 -> 75.3	6.357	148722
Doxepin	280.2 -> 107...	8/7/2017 5:23 PM	6.151	138125		589.74	280.2 -> 77.2		70.98	Doxepin-D3	283.2 -> 107...	6.150	621000
Estazolam	295.1 -> 267...	8/7/2017 5:23 PM	6.414	64406		177.93	295.1 -> 205...		11047...	Estazolam-D5	300.1 -> 272...	6.392	297614
Flunitrazepam	314.1 -> 268...	8/7/2017 5:23 PM	6.431	58661		11391...	314.1 -> 239...		104.64	Flunitrazepam-D7	321.1 -> 245...	6.430	10135
Flurazepam	388.2 -> 315...	8/7/2017 5:23 PM	6.141	176219		432.13	388.2 -> 317...		83.37	Zopiclone-D4	393.1 -> 244...	5.978	301280
Imipramine	281.2 -> 86.2	8/7/2017 5:23 PM	6.376	430932		3125.79	281.2 -> 58.3		Infinity	Imipramine-D3	284.2 -> 61.3	6.375	1162946
Levamisole	205.1 -> 91.2	8/7/2017 5:23 PM	5.001	55890		Infinity	205.1 -> 178...		Infinity	Cocaine-D3	307.2 -> 185...	5.615	760865
Maprotiline	278.2 -> 163...	8/7/2017 5:23 PM	6.091	171720		766.28	278.2 -> 117...	✓	Infinity	Meperidine-D4	252.2 -> 224...	5.645	343183
MDA	180.1 -> 163...	8/7/2017 5:23 PM	5.004	66791		Infinity	180.1 -> 105...		Infinity	MDA-D5	185.1 -> 168...	5.003	335363
MDEA	208.1 -> 163...	8/7/2017 5:23 PM	5.283	114340		473.02	208.1 -> 105...		Infinity	MDEA-D6	214.2 -> 166...	5.282	568971
MDMA	194.1 -> 163...	8/7/2017 5:23 PM	5.123	116197		Infinity	194.1 -> 105...		Infinity	MDMA-D6	200.2 -> 166...	5.123	56630
Meperidine	248.2 -> 220...	8/7/2017 5:23 PM	5.646	63619		355.76	248.2 -> 174...		Infinity	Meperidine-D4	252.2 -> 224...	5.645	343183
Methylphenidate	234.2 -> 84.2	8/7/2017 5:23 PM	5.566	329546		1088.95	234.2 -> 56.3		Infinity	Meperidine-D4	252.2 -> 224...	5.645	343183
Metoprolol	268.2 -> 116...	8/7/2017 5:23 PM	5.479	33733		71.01	268.2 -> 56.3		187.19	Meperidine-D4	252.2 -> 224...	5.645	343183
Midazolam	326.1 -> 223...	8/7/2017 5:23 PM	6.571	34936		744.38	326.1 -> 249...		7098.04	Midazolam-D4	330.1 -> 295...	6.570	508520
Mirtazapine	266.2 -> 195...	8/7/2017 5:23 PM	5.828	163555		Infinity	266.2 -> 72.3		797.96	Midazolam-D4	330.1 -> 295...	6.570	508520
Mitragynine	399.2 -> 174...	8/7/2017 5:23 PM	6.140	70602		648.17	399.2 -> 238...		132.66	Carbamazepine-13C6	243.1 -> 200...	6.136	1275123
Normeperidine	234.1 -> 42.3	8/7/2017 5:23 PM	5.648	85041		Infinity	234.1 -> 160...		Infinity	Normeperidine-D4	238.2 -> 164...	5.647	322746
Norpropoxyphene	326.2 -> 44.3	8/7/2017 5:23 PM	6.225	54142		335.39	326.2 -> 252...		4352.68	Norpropoxyphene-D5	331.2 -> 44.3	6.225	243985
Nortriptyline	264.2 -> 91.2	8/7/2017 5:23 PM	6.358	114344	✓	Infinity	264.2 -> 233...	✓	Infinity	Nortriptyline-D3	267.2 -> 233...	6.378	426075
Ondansetron	294.2 -> 184...	8/7/2017 5:23 PM	5.802	104170		21325...	294.2 -> 212...		206.16	Pentazocine-13C3	289.2 ->72.3	5.699	496008
Pentazocine	286.2 -> 218...	8/7/2017 5:23 PM	5.700	133710		1088.95	286.2 -> 41.3		Infinity	Pentazocine-13C3	289.2 ->72.3	5.699	496008
Phenazepam	349.0 -> 206...	8/7/2017 5:23 PM	6.508	67585		12762...	349.0 -> 183...		141.22	Phenazepam-D4	353.0 -> 183...	6.487	22638
Phencyclidine	244.2 -> 86.2	8/7/2017 5:23 PM	5.932	198487		186.85	244.2 -> 91.1		81.19	Phencyclidine-D5	249.2 -> 86.2	5.932	1075246
Phenytoin	253.1 -> 104...	8/7/2017 5:23 PM	6.074	4372		6245.74	253.1 -> 182...		14.94	Phenytoin-D10	263.2 -> 192...	6.053	18122
Prazepam	325.1 -> 271...	8/7/2017 5:23 PM	6.937	292315		1243.53	325.1 -> 140...		267.97	Prazepam-D5	330.1 -> 276...	6.935	1195109
Primidone	219.1 -> 91.2	8/7/2017 5:23 PM	5.425	10030		19.41	219.1 -> 162...		21.73	Prazepam-D5	330.1 -> 276...	6.935	1195109
Propoxyphene	340.2 -> 58.3	8/7/2017 5:23 PM	6.245	305032		Infinity	340.2 -> 266...		68.24	Propoxyphene-D11	351.3 -> 277...	6.223	342183
Protriptyline	264.2 -> 155...	8/7/2017 5:23 PM	6.297	707998		2684.73	264.2 -> 161...	✓	Infinity	Nortriptyline-D3	267.2 -> 233...	6.378	426075
Pseudoephedrine	166.1 -> 148...	8/7/2017 5:23 PM	4.661	12619...		442.07	166.1 -> 133...		254.64	Pseudoephedrine-D3	169.1 -> 151...	4.660	560356
Tapentadol	222.2 -> 107...	8/7/2017 5:23 PM	5.486	168158		Infinity	222.2 -> 121...		38942...	Tapentadol-D3	225.2 -> 107...	5.485	820994
Trimipramine	295.2 -> 100...	8/7/2017 5:23 PM	6.434	488616		604.61	295.2 -> 58.3		477.70	Trimipramine-D3	298.2 -> 103...	6.434	2313813
Verapamil	455.3 -> 165...	8/7/2017 5:23 PM	6.200	229844		7157.17	455.3 -> 150...		192.81	Trimipramine-D3	298.2 -> 103...	6.434	2313813
Zaleplon	306.1 -> 236...	8/7/2017 5:23 PM	6.248	67381		86.20	306.1 -> 264...		968.18	Zaleplon-D4	310.2 -> 240...	6.227	252531
Zopiclone	389.1 -> 244...	8/7/2017 5:23 PM	5.978	65658		320.48	389.1 -> 216...		3764.49	Zopiclone-D4	393.1 -> 244...	5.978	301280

Compound Method		p2 negative		p2 negative Results			Qualifier 1 M..	Qualifi...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	MI	S/N	Transition	MI	S/N	Name	Transition	RT	Resp.
7-aminoflunitrazepam	284.1 -> 135..	8/7/2017 5:42 PM					284.1 -> 93.2			7-aminoflunitrazepam-D7	291.1 -> 138..	5.740	268051
alpha-hydroxymidazolam	342.1 -> 324..	8/7/2017 5:42 PM					342.1 -> 203..			alpha-hydroxymidazolam-...	346.1 -> 328..	6.447	447402
Amitriptyline	278.2 -> 91.2	8/7/2017 5:42 PM					278.2 -> 105..			Amitriptyline-D3	281.2 -> 91.2	6.396	455327
Amoxapine	314.1 -> 271...	8/7/2017 5:42 PM					314.1 -> 193...			Amitriptyline-D3	281.2 -> 91.2	6.396	455327
Benzoylecgonine	290.1 -> 168..	8/7/2017 5:42 PM					290.1 -> 105..			Benzoylecgonine-D8	298.2 -> 171..	5.350	6310
Carbamazepine	237.1 -> 193..	8/7/2017 5:42 PM					237.1 -> 194...			Carbamazepine-13C6	243.1 -> 200..	6.136	12411...
Chlordiazepoxide	300.1 -> 227...	8/7/2017 5:42 PM					300.1 -> 282...			Chlordiazepoxide-D5	305.1 -> 286...	6.575	311524
Clomipramine	315.2 -> 86.2	8/7/2017 5:42 PM					315.2 -> 58.3			Clomipramine-D3	318.2 -> 89.2	6.593	17478...
Cocaine	304.2 -> 182..	8/7/2017 5:42 PM					304.2 -> 105..			Cocaine-D3	307.2 -> 185..	5.615	686691
Desipramine	267.2 -> 72.3	8/7/2017 5:42 PM					267.2 -> 44.3			Desipramine-D3	270.2 -> 75.3	6.336	13748...
Doxepin	280.2 -> 107..	8/7/2017 5:42 PM					280.2 -> 77.2			Doxepin-D3	283.2 -> 107..	6.150	586423
Estazolam	295.1 -> 267..	8/7/2017 5:42 PM					295.1 -> 205..			Estazolam-D5	300.1 -> 272..	6.392	294193
Flunitrazepam	314.1 -> 268..	8/7/2017 5:42 PM					314.1 -> 239..			Flunitrazepam-D7	321.1 -> 245..	6.430	9804
Flurazepam	388.2 -> 315..	8/7/2017 5:42 PM					388.2 -> 317...			Zopiclone-D4	393.1 -> 244..	5.958	254048
Imipramine	281.2 -> 86.2	8/7/2017 5:42 PM					281.2 -> 58.3			Imipramine-D3	284.2 -> 61.3	6.354	10633...
Levamisole	205.1 -> 91.2	8/7/2017 5:42 PM					205.1 -> 178..			Cocaine-D3	307.2 -> 185..	5.615	686691
Maprotiline	278.2 -> 91.2	8/7/2017 5:42 PM					278.2 -> 117...			Meperidine-D4	252.2 -> 224..	5.624	309172
MDA	180.1 -> 163..	8/7/2017 5:42 PM					180.1 -> 105..			MDA-D5	185.1 -> 168..	5.003	306452
MDEA	208.1 -> 163..	8/7/2017 5:42 PM					208.1 -> 105..			MDEA-D6	214.2 -> 166..	5.282	514296
MDMA	194.1 -> 163..	8/7/2017 5:42 PM					194.1 -> 105..			MDMA-D6	200.2 -> 166..	5.123	54139
Meperidine	248.2 -> 220...	8/7/2017 5:42 PM					248.2 -> 174...			Meperidine-D4	252.2 -> 224..	5.624	309172
Methylphenidate	234.2 -> 84.2	8/7/2017 5:42 PM					234.2 -> 56.3			Meperidine-D4	252.2 -> 224..	5.624	309172
Metoprolol	268.2 -> 116...	8/7/2017 5:42 PM					268.2 -> 56.3			Meperidine-D4	252.2 -> 224..	5.624	309172
Midazolam	326.1 -> 223..	8/7/2017 5:42 PM					326.1 -> 249..			Midazolam-D4	330.1 -> 295..	6.570	461642
Mirtazapine	266.2 -> 195...	8/7/2017 5:42 PM					266.2 -> 72.3			Midazolam-D4	330.1 -> 295..	6.570	461642
Mitragynine	399.2 -> 174...	8/7/2017 5:42 PM					399.2 -> 238...			Carbamazepine-13C6	243.1 -> 200..	6.136	12411...
Normeperidine	234.1 -> 42.3	8/7/2017 5:42 PM					234.1 -> 160...			Normeperidine-D4	238.2 -> 164...	5.647	300649
Norpropoxyphene	326.2 -> 44.3	8/7/2017 5:42 PM					326.2 -> 252...			Norpropoxyphene-D5	331.2 -> 44.3	6.225	215061
Nortriptyline	264.2 -> 91.2	8/7/2017 5:42 PM	6.542	2152			264.2 -> 233..		0.54	Nortriptyline-D3	267.2 -> 233..	6.378	476746
Ondansetron	294.2 -> 184...	8/7/2017 5:42 PM					294.2 -> 212...			Pentazocine-13C3	289.2 -> 72.3	5.699	455210
Pentazocine	286.2 -> 218...	8/7/2017 5:42 PM	6.447	2486			286.2 -> 41.3		14.17	Pentazocine-13C3	289.2 -> 72.3	5.699	455210
Phenazepam	349.0 -> 206...	8/7/2017 5:42 PM					349.0 -> 183...			Phenazepam-D4	353.0 -> 183...	6.487	20736
Phencyclidine	244.2 -> 86.2	8/7/2017 5:42 PM					244.2 -> 91.1			Phencyclidine-D5	249.2 -> 86.2	5.932	979746
Phenytoin	253.1 -> 104...	8/7/2017 5:42 PM					253.1 -> 182...			Phenytoin-D10	263.2 -> 192...	6.033	16383
Prazepam	325.1 -> 271...	8/7/2017 5:42 PM					325.1 -> 140...			Prazepam-D5	330.1 -> 276...	6.935	11068...
Primidone	219.1 -> 91.2	8/7/2017 5:42 PM	5.568	2796			219.1 -> 162...		1.05	Prazepam-D5	330.1 -> 276...	6.935	11068...
Propoxyphene	340.2 -> 58.3	8/7/2017 5:42 PM					340.2 -> 266...			Propoxyphene-D11	351.3 -> 277...	6.223	312037
Protriptyline	264.2 -> 155...	8/7/2017 5:42 PM					264.2 -> 161...			Nortriptyline-D3	267.2 -> 233...	6.378	476746
Pseudoephedrine	166.1 -> 148...	8/7/2017 5:42 PM					166.1 -> 133...			Pseudoephedrine-D3	169.1 -> 151...	4.660	541440
Tapentadol	222.2 -> 107...	8/7/2017 5:42 PM					222.2 -> 121...			Tapentadol-D3	225.2 -> 107...	5.485	757989
Trimipramine	295.2 -> 100...	8/7/2017 5:42 PM					295.2 -> 58.3			Trimipramine-D3	298.2 -> 103...	6.434	21247...
Verapamil	455.3 -> 165...	8/7/2017 5:42 PM					455.3 -> 150...			Trimipramine-D3	298.2 -> 103...	6.434	21247...
Zaleplon	306.1 -> 236...	8/7/2017 5:42 PM					306.1 -> 264...			Zaleplon-D4	310.2 -> 240...	6.227	244164
Zopiclone	389.1 -> 244...	8/7/2017 5:42 PM					389.1 -> 216...			Zopiclone-D4	393.1 -> 244..	5.958	254048

Compound Method Name	Transition	p2 external control Acq. Date-Time	RT	Resp.	MI	S/N	Qualifier 1 M... Transition	MI	S/N	MI	S/N	ISTD Method Name	Transition	ISTD RT	Resp.
7-aminoflunitrazepam	284.1 -> 135.	8/8/2017 8:54 AM					284.1 -> 93.2					7-aminoflunitrazepam-D7	291.2 -> 138.	5.740	232153
alpha-hydroxymidazolam	342.1 -> 324.	8/8/2017 8:54 AM					342.1 -> 203.				764.67	alpha-hydroxymidazolam-...	346.1 -> 328.	6.447	391574
Amitriptyline	278.2 -> 91.2	8/8/2017 8:54 AM	6.417	14076...		Infinity	278.2 -> 105.					Amitriptyline-D3	281.2 -> 91.2	6.416	439951
Amoxapine	314.1 -> 271.	8/8/2017 8:54 AM					314.1 -> 193.					Amitriptyline-D3	281.2 -> 91.2	6.416	439951
Benzoylecgonine	290.1 -> 168.	8/8/2017 8:54 AM					290.1 -> 105.					Benzoylecgonine-D8	298.2 -> 171.	5.350	4553
Carbamazepine	237.1 -> 193.	8/8/2017 8:54 AM					237.1 -> 194.					Carbamazepine-13C6	243.1 -> 200.	6.136	10132...
Chlordiazepoxide	300.1 -> 227.	8/8/2017 8:54 AM					300.1 -> 282.					Chlordiazepoxide-D5	305.1 -> 286.	6.575	299770
Clomipramine	315.2 -> 86.2	8/8/2017 8:54 AM					315.2 -> 58.3					Clomipramine-D3	318.2 -> 89.2	6.613	16343...
Cocaine	304.2 -> 182.	8/8/2017 8:54 AM					304.2 -> 105.					Cocaine-D3	307.2 -> 185.	5.615	606797
Desipramine	267.2 -> 72.3	8/8/2017 8:54 AM					267.2 -> 44.3					Desipramine-D3	270.2 -> 75.3	6.357	12703...
Doxepin	280.2 -> 107.	8/8/2017 8:54 AM	6.396	2169		15.44	280.2 -> 77.2				2.80	Doxepin-D3	283.2 -> 107.	6.150	537651
Estazolam	295.1 -> 267.	8/8/2017 8:54 AM					295.1 -> 205.					Estazolam-D5	300.1 -> 272.	6.392	246238
Flunitrazepam	314.1 -> 268.	8/8/2017 8:54 AM					314.1 -> 239.					Flunitrazepam-D7	321.1 -> 245.	6.430	10536
Flurazepam	388.2 -> 315.	8/8/2017 8:54 AM					388.2 -> 317.					Zopiclone-D4	393.1 -> 244.	5.998	132558
Imipramine	281.2 -> 86.2	8/8/2017 8:54 AM					281.2 -> 58.3					Imipramine-D3	284.2 -> 61.3	6.375	984218
Levamisole	205.1 -> 91.2	8/8/2017 8:54 AM					205.1 -> 178.					Cocaine-D3	307.2 -> 185.	5.615	606797
Maprotiline	278.2 -> 91.2	8/8/2017 8:54 AM					278.2 -> 117.					Meperidine-D4	252.2 -> 224.	5.645	257300
MDA	180.1 -> 163.	8/8/2017 8:54 AM					180.1 -> 105.					MDA-D5	185.1 -> 168.	5.023	237412
MDEA	208.1 -> 163.	8/8/2017 8:54 AM					208.1 -> 105.					MDEA-D6	214.2 -> 166.	5.282	431642
MDMA	194.1 -> 163.	8/8/2017 8:54 AM					194.1 -> 105.					MDMA-D6	200.2 -> 166.	5.143	47020
Meperidine	248.2 -> 220.	8/8/2017 8:54 AM					248.2 -> 174.					Meperidine-D4	252.2 -> 224.	5.645	257300
Methylphenidate	234.2 -> 84.2	8/8/2017 8:54 AM					234.2 -> 56.3					Meperidine-D4	252.2 -> 224.	5.645	257300
Metoprolol	268.2 -> 116.	8/8/2017 8:54 AM					268.2 -> 56.3					Meperidine-D4	252.2 -> 224.	5.645	257300
Midazolam	326.1 -> 223.	8/8/2017 8:54 AM					326.1 -> 249.					Midazolam-D4	330.1 -> 295.	6.570	390780
Mirtazapine	266.2 -> 195.	8/8/2017 8:54 AM	5.869	12484...		3146.73	266.2 -> 72.3				Infinity	Midazolam-D4	330.1 -> 295.	6.570	390780
Mitragynine	399.2 -> 174.	8/8/2017 8:54 AM					399.2 -> 238.					Carbamazepine-13C6	243.1 -> 200.	6.136	10132...
Normeperidine	234.1 -> 42.3	8/8/2017 8:54 AM					234.1 -> 160.					Normeperidine-D4	238.2 -> 164.	5.647	230348
Norpropoxyphene	326.2 -> 44.3	8/8/2017 8:54 AM					326.2 -> 252.					Norpropoxyphene-D5	331.2 -> 44.3	6.225	140962
Nortriptyline	264.2 -> 91.2	8/8/2017 8:54 AM					264.2 -> 233.					Nortriptyline-D3	267.2 -> 233.	6.398	409412
Ondansetron	294.2 -> 184.	8/8/2017 8:54 AM					294.2 -> 212.					Pentazocine-13C3	289.2 -> 72.3	5.699	459197
Pentazocine	286.2 -> 218.	8/8/2017 8:54 AM					286.2 -> 41.3					Pentazocine-13C3	289.2 -> 72.3	5.699	459197
Phenazepam	349.0 -> 206.	8/8/2017 8:54 AM	6.447	2268		37.31	349.0 -> 183.					Phenazepam-D4	353.0 -> 183.	6.487	20268
Phencyclidine	244.2 -> 86.2	8/8/2017 8:54 AM					244.2 -> 91.1					Phencyclidine-D5	249.2 -> 86.2	5.932	798569
Phenytoin	253.1 -> 104.	8/8/2017 8:54 AM					253.1 -> 182.					Phenytoin-D10	263.2 -> 192.	6.053	9454
Prazepam	325.1 -> 271.	8/8/2017 8:54 AM					325.1 -> 140.					Prazepam-D5	330.1 -> 276.	6.935	889727
Primidone	219.1 -> 91.2	8/8/2017 8:54 AM	5.588	2426		0.90	219.1 -> 162.					Prazepam-D5	330.1 -> 276.	6.935	889727
Propoxyphene	340.2 -> 58.3	8/8/2017 8:54 AM					340.2 -> 266.					Propoxyphene-D11	351.3 -> 277.	6.243	276621
Protriptyline	264.2 -> 155.	8/8/2017 8:54 AM					264.2 -> 161.					Nortriptyline-D3	267.2 -> 233.	6.398	409412
Pseudoephedrine	166.1 -> 148.	8/8/2017 8:54 AM					166.1 -> 133.					Pseudoephedrine-D3	169.1 -> 151.	4.660	464301
Tapentadol	222.2 -> 107.	8/8/2017 8:54 AM					222.2 -> 121.					Tapentadol-D3	225.2 -> 107.	5.485	664593
Trimipramine	295.2 -> 100.	8/8/2017 8:54 AM					295.2 -> 58.3					Trimipramine-D3	298.2 -> 103.	6.454	19275...
Verapamil	455.3 -> 165.	8/8/2017 8:54 AM					455.3 -> 150.					Trimipramine-D3	298.2 -> 103.	6.454	19275...
Zaleplon	306.1 -> 236.	8/8/2017 8:54 AM					306.1 -> 264.					Zaleplon-D4	310.2 -> 240.	6.227	198753
Zopiclone	389.1 -> 244.	8/8/2017 8:54 AM					389.1 -> 216.					Zopiclone-D4	393.1 -> 244.	5.998	132558

THC and Metabolites Screen in Blood by LC-MS/MS

Extraction Date: 3-7-17   **Analyst:** Anne Nord

PRE-ANALYTIC

Plate Lot#_____Custom THC plate: 0499102_____Plate Exp: 1/29/2018

✓ 1. Ensure all solutions are within expiration date.
- Mobile Phase A: **10mM Amm Formate**
- **0.1% Formic Acid in water**
- Mobile Phase B: *0.1% FA in MeOH*
- **MTBE**
- Blank/Negative Blood: **Lot *321632-1***
- **Hexane**
- *Column: Phenomenex Phenyl Hexyl (4.6 x 50mm; 2.6um)*

✓ 2. Check levels of mobile phases and needle wash and refill as necessary. Ensure waste is not full.

✓ 3. Begin mobile phase flow and allow system to equilibrate for approx. 30 min.

✓ 4. Create worklist. Data path name: _____

ANALYTIC

✓ 1. Remove standards plate, blood, and samples from cold storage. Allow to reach room temperature.

✓ 2. Add **1000 μL blood** *(calibrated pipette)* to 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 **500μL 0.1% formic acid** to all wells of standards plate.

✓ 5. Place on shaking incubator at ambient temp., **900rpm for 15 minutes.**

✓ 6. Transfer **800μL of blood+acid** 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)   Pressure Manifold ID 66729
Wait 5 min.

✓ 8. Add **2.25mL MTBE** and allow to flow under gravity for 5 minutes. *(add in 3 increments of 750uL)*

✓ 9. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*

✓ 10. Add **2.25mL Hexane** and allow to flow under gravity for 5 minutes. *(add in 3 increments of 750uL)*

✓ 11. Apply positive pressure for approx. 15 seconds. *(10-15 PSI- Selector to the left)*

✓ 12. Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. *SPE Dry ID 66819*

✓ 13. Reconstitute in **100 μL 100% 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: 8 7/7 cann Screen

✓ 2. Make any necessary integration changes.

✓ 3. For unknown samples, calculated concentration > 3ng THC, THC-OH and > 5ng Carboxy-THC and +/- 2% or +/- 0.100 min (whichever is greater) retention time of calibrators?

✓ 4. Did QCs pass for each analyte? Y / N _____

5. Central File Packet to include: ✓ LIMS Worklist: ✓ Method Checklist
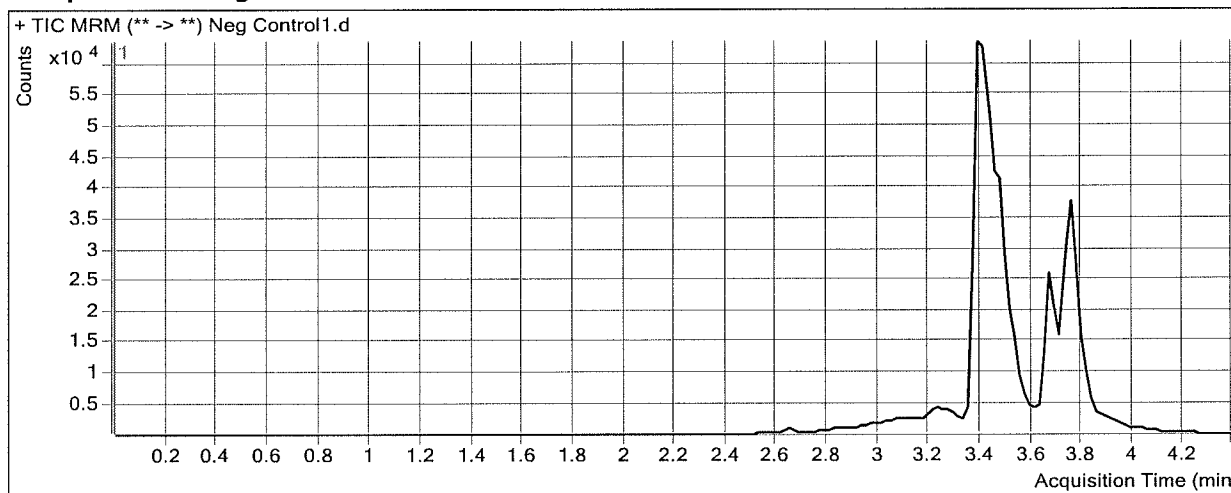✓   ✓ Calibration and Control Reports

Comments:

ISP FORENSICS - Cd'A
Cannabionoid Screen Report

Batch Data Path   D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin

Analysis Time	8/10/2017 7:52 AM	**Analyst Name**	ISP Tox
Report Time	8/10/2017 7:54 AM	**Reporter Name**	ISP Tox
Last Calib Update	8/10/2017 7:52 AM	**Batch State**	Processed

Analysis Info

Acq Time	2017-08-07 16:28	**Data File**	Neg Control1.d
Sample Type	Sample	**Sample Name**	Neg Control
Dilution	1	**Acq Method**	Screen THC 8-2017.m
Position	p1a2	**Sample Info**	
Inj Vol	-1	**Comment**	AM 26 Cannabinoid screen negative blood lot 32632-1

Sample Chromatogram

+ TIC MRM (** -> **) Neg Control1.d

Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.546	16060	101185	0.1587	0.4340

ISP FORENSICS - Cd'A
Cannabionoid Screen Report

Batch Data Path	D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin
Analysis Time	8/10/2017 7:52 AM
Report Time	8/10/2017 7:54 AM
Last Calib Update	8/10/2017 7:52 AM

Analysis Time	8/10/2017 7:52 AM	**Analyst Name**	ISP Tox
Report Time	8/10/2017 7:54 AM	**Reporter Name**	ISP Tox
Last Calib Update	8/10/2017 7:52 AM	**Batch State**	Processed

Analysis Info

Acq Time	2017-08-07 12:24	**Data File**	QC 10 ng.d
Sample Type	QC	**Sample Name**	QC 10 ng
Dilution	1	**Acq Method**	Screen THC 8-2017.m
Position	P1-H1	**Sample Info**	
Inj Vol	-1	**Comment**	AM 26 Cannabinoid screen

Sample Chromatogram

Results

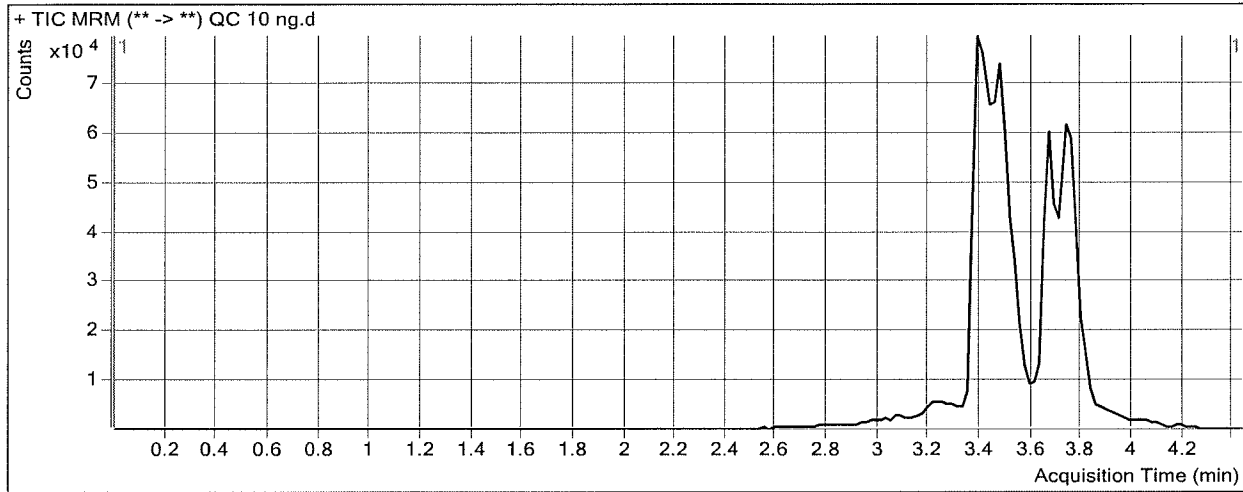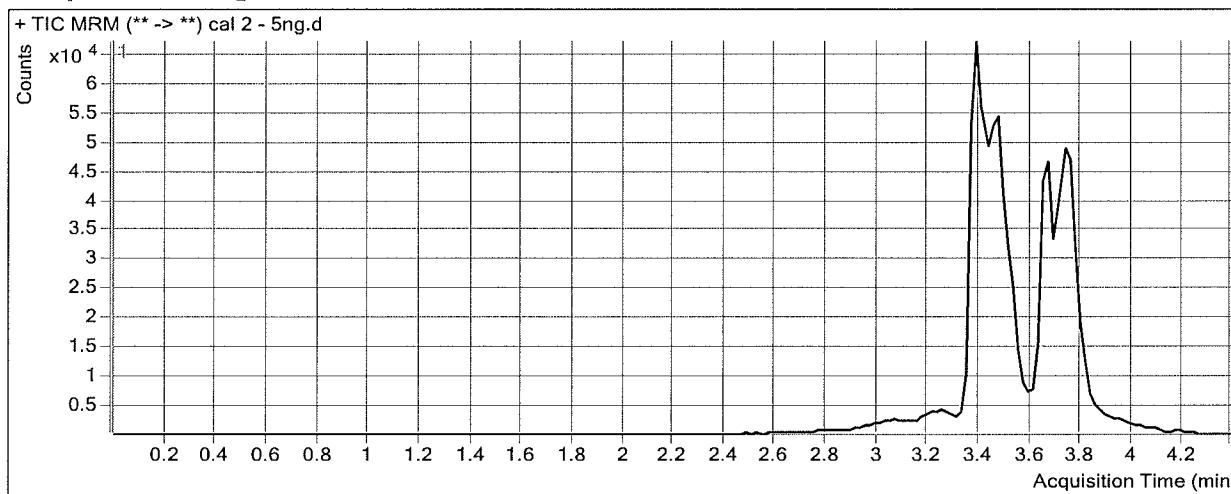| Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.412	30268	370423	0.0817	10.2571
THC-COOH	3.526	56839	163727	0.3472	9.5284
THC	3.740	7408	81943	0.0904	10.1988

ISP FORENSICS - Cd'A
Cannabionoid Screen Report

Batch Data Path   D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin
Analysis Time   8/10/2017 7:52 AM   **Analyst Name**   ISP Tox
Report Time   8/10/2017 7:54 AM   **Reporter Name** ISP Tox
Last Calib Update   8/10/2017 7:52 AM   **Batch State**   Processed

Analysis Info

Acq Time   2017-08-07 11:37   **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-B1   **Sample Info**
Inj Vol   -1   **Comment**   AM 26 Cannabinoid screen

Sample Chromatogram

+ TIC MRM (** -> **) cal 2 - 5ng.d

Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.392	12729	304347	0.0418	5.8040
THC-COOH	3.526	37928	145148	0.2613	5.3850
THC	3.740	3478	74774	0.0465	5.4738

ISP FORENSICS - Cd'A
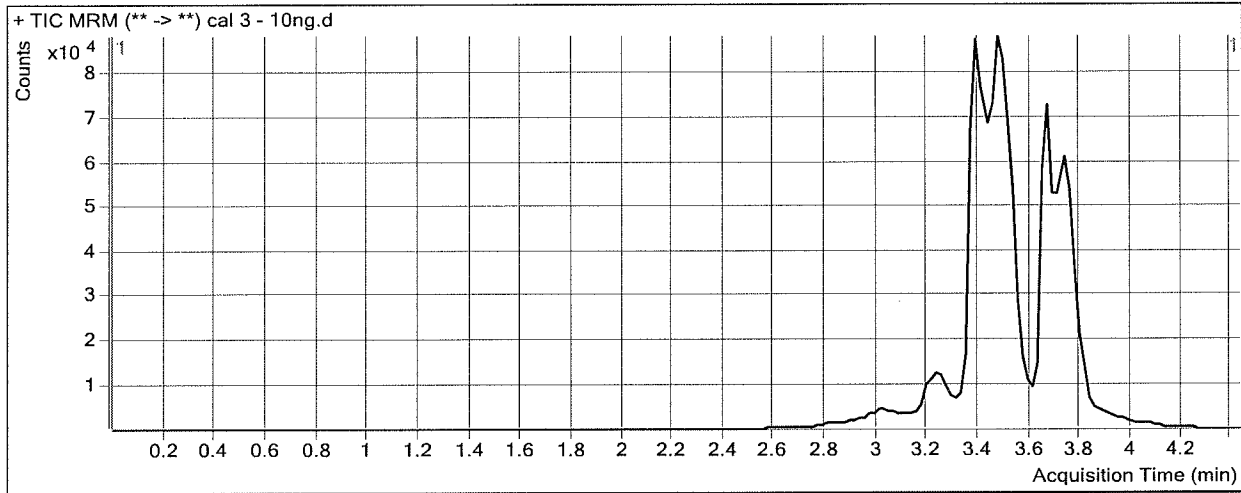## Cannabionoid Screen Report

Batch Data Path   D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin

Analysis Time	8/10/2017 7:52 AM	**Analyst Name**	ISP Tox
Report Time	8/10/2017 7:54 AM	**Reporter Name**	ISP Tox
Last Calib Update	8/10/2017 7:52 AM	**Batch State**	Processed

Analysis Info

Acq Time	2017-08-07 11:43	**Data File**	cal 3 - 10ng.d
Sample Type	Calibration	**Sample Name**	cal 3 - 10ng
Dilution	1	**Acq Method**	Screen THC 8-2017.m
Position	P1-C1	**Sample Info**	
Inj Vol	-1	**Comment**	AM 26 Cannabinoid screen

Sample Chromatogram

+ TIC MRM (** -> **) cal 3 - 10ng.d

Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.392	30688	415573	0.0738	9.3789
THC-COOH	3.526	83590	238602	0.3503	9.6814
THC	3.740	7430	81046	0.0917	10.3352

ISP FORENSICS - Cd'A
Cannabionoid Screen Report

Batch Data Path	D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin		
Analysis Time	8/10/2017 7:52 AM	**Analyst Name**	ISP Tox
Report Time	8/10/2017 7:54 AM	**Reporter Name**	ISP Tox
Last Calib Update	8/10/2017 7:52 AM	**Batch State**	Processed

Analysis Info

Acq Time	2017-08-07 11:50	**Data File**	cal 4 - 25ng.d
Sample Type	Calibration	**Sample Name**	cal 4 - 25ng
Dilution	1	**Acq Method**	Screen THC 8-2017.m
Position	P1-D1	**Sample Info**	
Inj Vol	-1	**Comment**	AM 26 Cannabinoid screen

Sample Chromatogram

+ TIC MRM (** -> **) cal 4 - 25ng.d
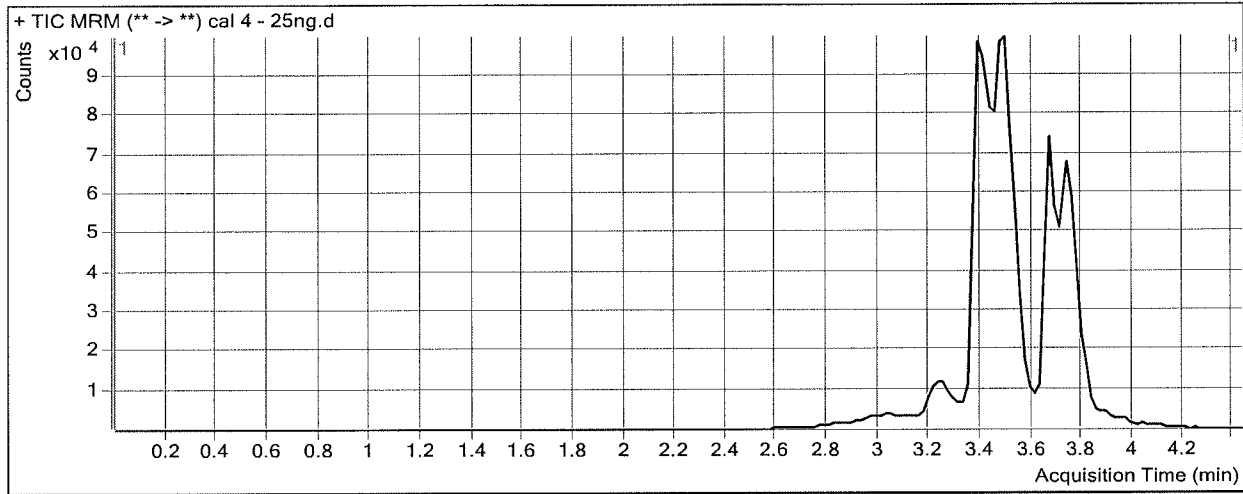
Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.412	87971	420280	0.2093	24.5032
THC-COOH	3.486	126162	189065	0.6673	24.9787
THC	3.740	17025	77035	0.2210	24.2561

ISP FORENSICS - Cd'A
Cannabionoid Screen Report

Batch Data Path	D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin		
Analysis Time	8/10/2017 7:52 AM	**Analyst Name**	ISP Tox
Report Time	8/10/2017 7:54 AM	**Reporter Name**	ISP Tox
Last Calib Update	8/10/2017 7:52 AM	**Batch State**	Processed

Analysis Info

Acq Time	2017-08-07 11:57	**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-E1	**Sample Info**	
Inj Vol	-1	**Comment**	AM 26 Cannabinoid screen

Sample Chromatogram

+ TIC MRM (** -> **) cal 5 - 50ng.d
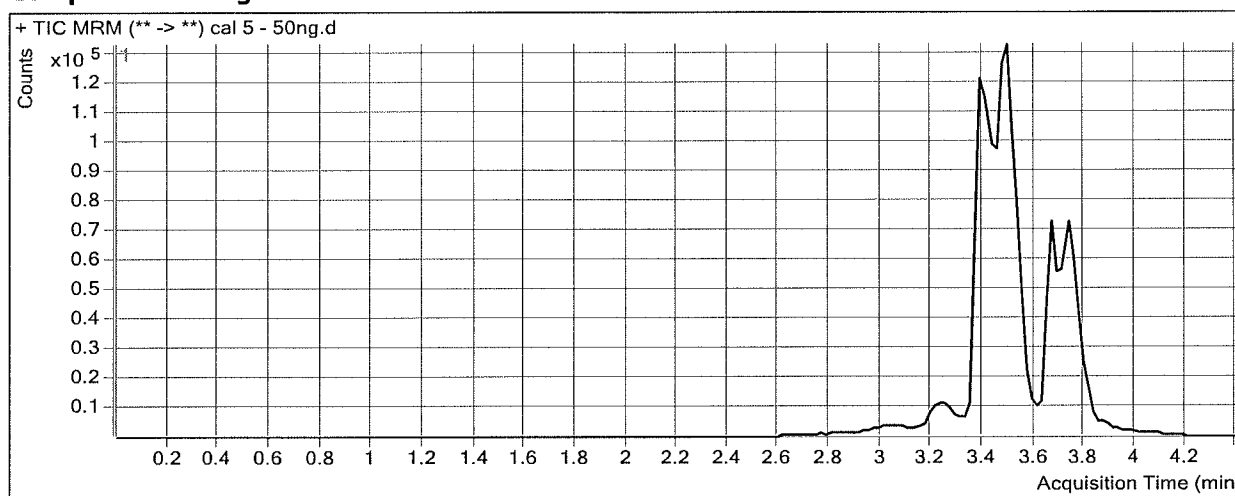
Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.392	178755	432783	0.4130	47.2473
THC-COOH	3.486	222245	189066	1.1755	49.5053
THC	3.740	35521	81016	0.4384	47.6633

ISP FORENSICS - Cd'A
Cannabionoid Screen Report

Batch Data Path	D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin		
Analysis Time	8/10/2017 7:52 AM	**Analyst Name**	ISP Tox
Report Time	8/10/2017 7:54 AM	**Reporter Name**	ISP Tox
Last Calib Update	8/10/2017 7:52 AM	**Batch State**	Processed

Analysis Info

Acq Time	2017-08-07 12:03	**Data File**	cal 6 - 100ng.d
Sample Type	Calibration	**Sample Name**	cal 6 - 100ng
Dilution	1	**Acq Method**	Screen THC 8-2017.m
Position	P1-F1	**Sample Info**	
Inj Vol	-1	**Comment**	AM 26 Cannabinoid screen

Sample Chromatogram

+ TIC MRM (** --> **) cal 6 - 100ng.d
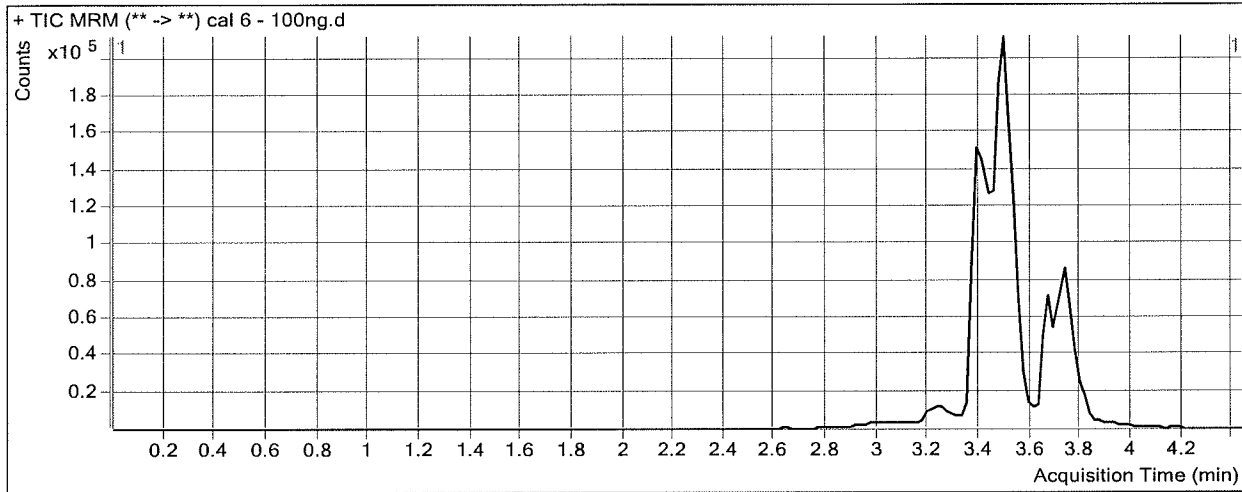
Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.412	353854	425430	0.8318	93.9944
THC-COOH	3.486	423853	202148	2.0967	93.9670
THC	3.740	65320	78661	0.8304	89.8543

ISP FORENSICS - Cd'A
Cannabionoid Screen Report

Batch Data Path	D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin		
Analysis Time	8/10/2017 7:52 AM	**Analyst Name**	ISP Tox
Report Time	8/10/2017 7:54 AM	**Reporter Name**	ISP Tox
Last Calib Update	8/10/2017 7:52 AM	**Batch State**	Processed

Analysis Info

Acq Time	2017-08-07 12:11	**Data File**	cal 7 - 250ng.d
Sample Type	Calibration	**Sample Name**	cal 7 - 250ng
Dilution	1	**Acq Method**	Screen THC 8-2017.m
Position	P1-G1	**Sample Info**	
Inj Vol	-1	**Comment**	AM 26 Cannabinoid screen

Sample Chromatogram

+ TIC MRM (** -> **) cal 7 - 250ng.d
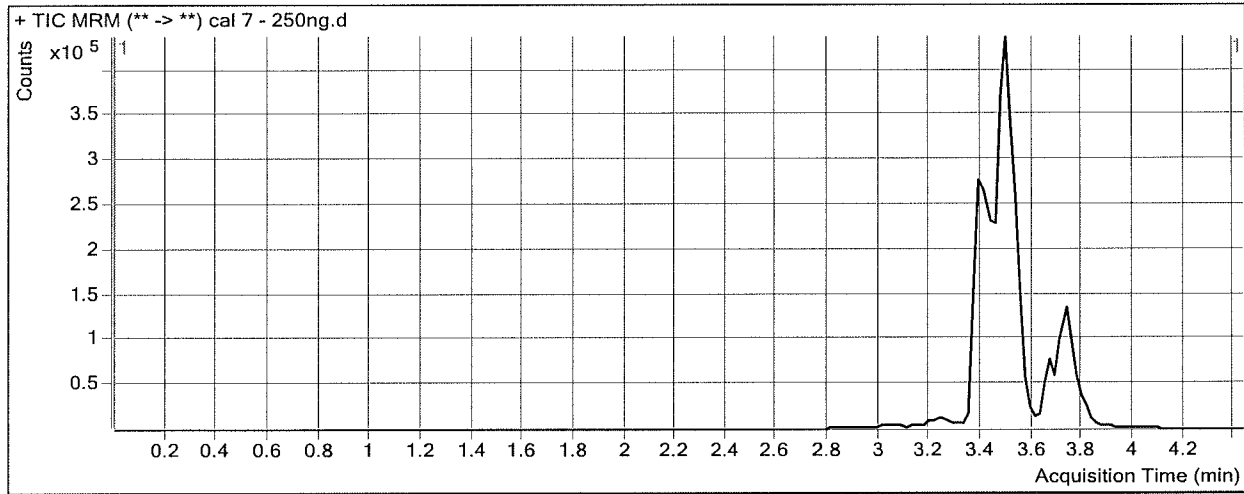
Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.392	967241	418651	2.3104	259.0721
THC-COOH	3.486	1039522	190246	5.4641	256.4825
THC	3.740	192410	79067	2.4335	262.4173

ISP Forensics
Calibration Curve Report
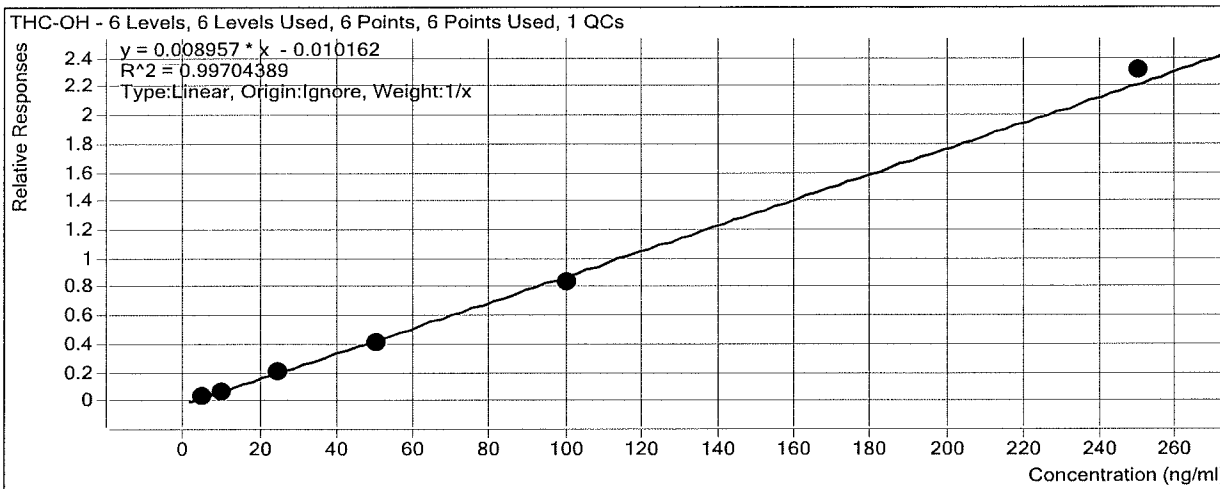
Batch Data Path   D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin

Last Calib Update   8/10/2017 7:52 AM   **Analyst Name**   ISP TOX

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

THC-OH - 6 Levels, 6 Levels Used, 6 Points, 6 Points Used, 1 QCs

y = 0.008957 * x - 0.010162
R^2 = 0.99704389
Type:Linear, Origin:Ignore, Weight:1/x

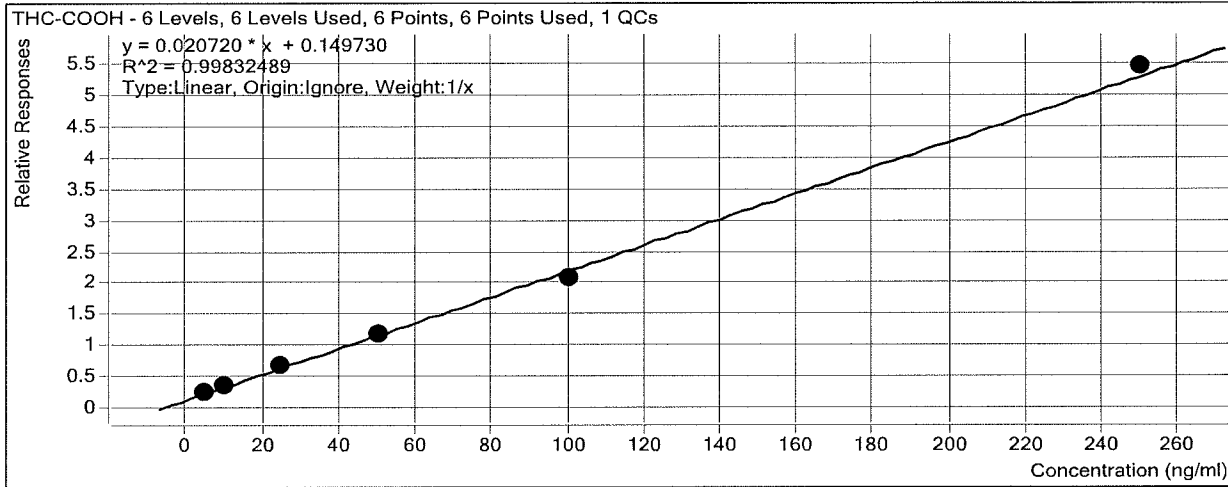| Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2 - 5ng	2	☑	5	5.8	116.1
cal 3 - 10ng	3	☑	10	9.4	93.8
QC 10 ng	3	☑	10	10.3	102.6
cal 4 - 25ng	4	☑	25	24.5	98.0
cal 5 - 50ng	5	☑	50	47.2	94.5
cal 6 - 100ng	6	☑	100	94.0	94.0
cal 7 - 250ng	7	☑	250	259.1	103.6

ISP Forensics
Calibration Curve Report

Batch Data Path   D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin

Last Calib Update   8/10/2017 7:52 AM   **Analyst Name**   ISP TOX

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

THC-COOH - 6 Levels, 6 Levels Used, 6 Points, 6 Points Used, 1 QCs
y = 0.020720 * x + 0.149730
R^2 = 0.99832489
Type:Linear, Origin:Ignore, Weight:1/x

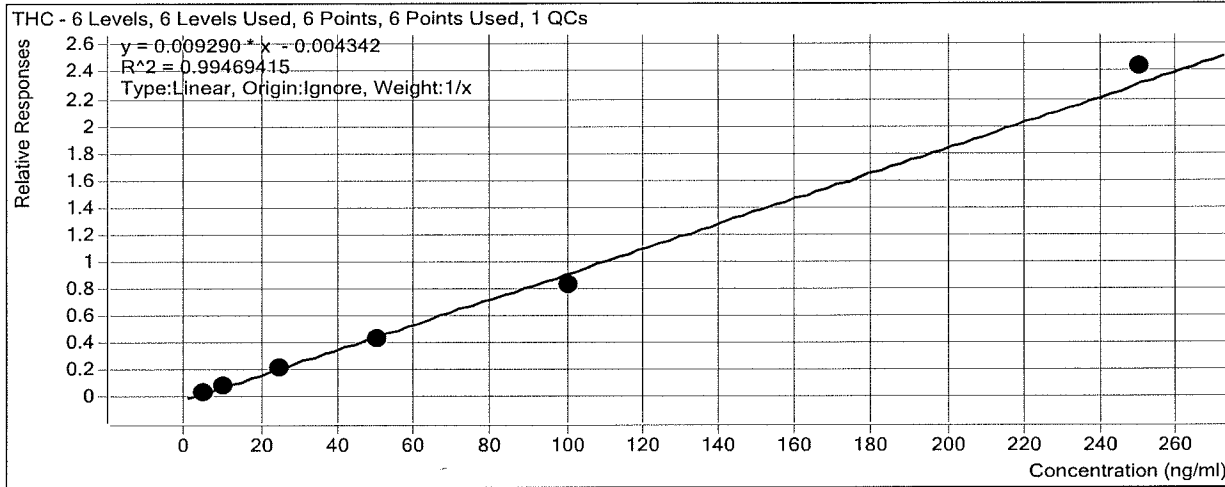| Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2 - 5ng	2	☑	5	5.4	107.7
cal 3 - 10ng	3	☑	10	9.7	96.8
QC 10 ng	3	☑	10	9.5	95.3
cal 4 - 25ng	4	☑	25	25.0	99.9
cal 5 - 50ng	5	☑	50	49.5	99.0
cal 6 - 100ng	6	☑	100	94.0	94.0
cal 7 - 250ng	7	☑	250	256.5	102.6

ISP Forensics
Calibration Curve Report

Batch Data Path   D:\2017 Data\8717 blood screen AM 26\QuantResults\8717 cann screen.batch.bin

Last Calib Update   8/10/2017 7:52 AM   **Analyst Name**   ISP TOX

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

THC - 6 Levels, 6 Levels Used, 6 Points, 6 Points Used, 1 QCs

y = 0.009290 * x - 0.004342
R^2 = 0.99469415
Type:Linear, Origin:Ignore, Weight:1/x

Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2 - 5ng	2	☑	5	5.5	109.5
cal 3 - 10ng	3	☑	10	10.3	103.4
QC 10 ng	3	☑	10	10.2	102.0
cal 4 - 25ng	4	☑	25	24.3	97.0
cal 5 - 50ng	5	☑	50	47.7	95.3
cal 6 - 100ng	6	☑	100	89.9	89.9
cal 7 - 250ng	7	☑	250	262.4	105.0