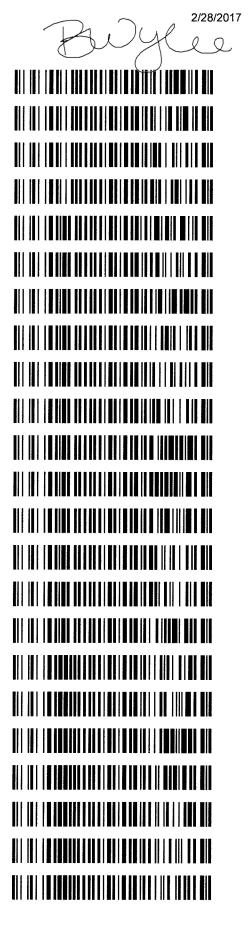
central data reviewed by B. Wylie on 3/3/17

Worklist: 1578

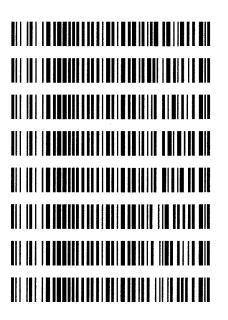
LAB CASE	ITEM	TASK ID	DESCRIPTION
C2017-0126	1	75175	AM 25/AM 26 Blood MultiDrug/
C2017-0148	1	75087	AM 25/AM 26 Blood MultiDrug/
C2017-0181	1	75508	AM 25/AM 26 Blood MultiDrug/
C2017-0225	2	77427	AM 25/AM 26 Blood MultiDrug/
M2016-4500	1.1	74992	AM 25/AM 26 Blood MultiDrug/
M2017-0112	1	75603	AM 25/AM 26 Blood MultiDrug/
M2017-0154	1	75604	AM 25/AM 26 Blood MultiDrug/
M2017-0285	1	77431	AM 25/AM 26 Blood MultiDrug/
M2017-0295	1	75609	AM 25/AM 26 Blood MultiDrug/
M2017-0400	1	77429	AM 25/AM 26 Blood MultiDrug/
M2017-0445	3	77432	AM 25/AM 26 Blood MultiDrug/
M2017-0449	2	77430	AM 25/AM 26 Blood MultiDrug/
M2017-0490	4	77433	AM 25/AM 26 Blood MultiDrug/
M2017-0561	3	77434	AM 25/AM 26 Blood MultiDrug/
M2017-0574	1	77708	AM 25/AM 26 Blood MultiDrug/
M2017-0738	1	77709	AM 25/AM 26 Blood MultiDrug/
P2017-0148	1	77435	AM 25/AM 26 Blood MultiDrug/
P2017-0149	1	77437	AM 25/AM 26 Blood MultiDrug/
P2017-0150	1	77438	AM 25/AM 26 Blood MultiDrug/
P2017-0180	1	77439	AM 25/AM 26 Blood MultiDrug/
P2017-0181	1	77440	AM 25/AM 26 Blood MultiDrug/
P2017-0182	1	77441	AM 25/AM 26 Blood MultiDrug/
P2017-0192	1	77442	AM 25/AM 26 Blood MultiDrug/





Worklist: 1578

LAB_CASE	<u>ITEM</u>	TASK_ID	DESCRIPTION
P2017-0197	1	77443	AM 25/AM 26 Blood MultiDrug/
P2017-0313	1	77444	AM 25/AM 26 Blood MultiDrug/
P2017-0329	1	77445	AM 25/AM 26 Blood MultiDrug/
P2017-0330	1	77446	AM 25/AM 26 Blood MultiDrug/
P2017-0331	1	77447	AM 25/AM 26 Blood MultiDrug/
P2017-0348	1	77448	AM 25/AM 26 Blood MultiDrug/
P2017-0360	1	76974	AM 25/AM 26 Blood MultiDrug/
P2017-0401	1	77208	AM 25/AM 26 Blood MultiDrug/





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

Extraction Date: 2-27-17 Analyst: Anne Nord **PRE-ANALYTIC** Plate Lot# 0495940 Plate. Exp. 12/12/2017 1. Ensure all solutions are within expiration date. 0.5M Ammonium Hydroxide Mobile Phase A: 10mM Amm Formate Mobile Phase B 0.1% FA in MeOH Column: Phenomenex Phenyl Hexyl (4.6 x 50mm; 2.6um) • Blank/Negative Blood: Lot 321623-1 **Ethyl Acetate** • ~ 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. Create worklist. Data path name: 2-27-17 blood screen AM 25-26 4. ANALYTIC Remove standards plate, blood, and samples from cold storage. Allow to reach room temperature. . 1. / 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 Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID 66759 3. 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. $\begin{array}{c} \checkmark & \mathbf{6.} \\ 7. \\ \hline & \mathbf{7.} \\ \hline & \mathbf{7.} \\ \hline & \mathbf{9.} \\ \hline & \mathbf{9.} \\ \hline & \mathbf{10.} \\ \hline & \mathbf{11.} \\ \hline & \mathbf{12} \\ \end{array}$ 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. Add 900µL ethyl acetate and allow to flow for 5 minutes under gravity. Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left) Add 900µL ethyl acetate and allow to flow for 5 minutes under gravity. 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. 022717 multidrug screen a **POST-ANALYTIC** Open quantitation software and create a new quantitation batch. Batch name: O22717 multidrug Screen b J 1. $\frac{\swarrow}{\swarrow} \begin{array}{c} 1. \\ 2. \\ 3. \\ \hline \checkmark \\ 4. \\ 5. \end{array}$ Make any necessary integration changes. 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. > $\frac{1}{1/10}$ the response of administrative control. > $\frac{1}{1/5}$ Å Did all QCs pass for each analyte? $\frac{Y}{N}$ Central File Packet to include: \checkmark LIMS Worklist: \checkmark Method Checklist Calibration and **Control Reports**

COMMENTS:

587 471880	306.1 -> 260 6.587	05		301.1 -> 283				P2	2/27/2017 8:10 PM	301.1 -> 255	lemazepam
	·	Sufentanil-D5	V 1.42	387.2 ->	6.17	1736	6.799	P2	2/27/2017 8:10 PM	387.2 -> 238	Sufentanil
		Sertraline-D3	1.62	306.1 ->	0.75	66	6.688	P2	2/27/2017 8:10 PM	306.1 -> 158	Sertraline
	392.2 -> 226 6.697		0.35	1	2.21	322	6.759	P2	2/27/2017 8:10 PM	384.2 -> 253	Quetiapine
		3			0.44	293	6.590	P2	2/27/2017 8:10 PM	285.1 -> 86.2	Promethazine
				150.1 -> 133				P2	2/27/2017 8:10 PM	150.1 -> 65.2	Phentermine
1		ບ ຜ	0.64	302.1	0.20		4.837	P2	2/27/2017 8:10 PM	302.1 -> 284	Oxymorphone
		Oxycodone-D6	1.12	316.2 -> 241	0.22	104	5.119	P2	2/27/2017 8:10 PM	316.2 -> 298	Oxycodone
	-		3.51		2.19	777	6.222	P2	2/27/2017 8:10 PM	287.1 -> 240	Oxazepam
		ladol	0.32	250.2 -> 42.3	1.70		5.128	P2	2/27/2017 8:10 PM	250.2 -> 58.3	O-desmethyl-tramadol
		Noroxycodone-D3		302.1	0.31	430	5.060	P2	2/27/2017 8:10 PM	302.1 -> 284	Noroxycodone
	:	Norhydrocodone-D3	12.96	286.2 -> 1	17.16	2	4.881	P2	2/27/2017 8:10 PM	286.2 -> 199	Norhydrocodone
<u>س</u>			3.37		1.31	103	5.537	P2	2/27/2017 8:10 PM	233.2 -> 84.2	Norfentanyl
				271.1 -> 208				P2	2/27/2017 8:10 PM	271.1 -> 140	Nordiazepam
		phine-D3	0.81	414.3 -> 57	1.53	31	6.028	P2	2/27/2017 8:10 PM	414.3 -> 101	Norbuprenorphine
								P2	2/27/2017 8:10 PM	342.2 -> 324	Naltrexone
				344.2 -> 3	1593.71	5693	5.502	P2	2/27/2017 8:10 PM	344.2 -> 326	Naltrexol
		Naloxone-D5	1.95		1.74	1215	5.707	P2	2/27/2017 8:10 PM	328.2 -> 309	Naloxone
		Morphine-D6	236.78	286.2 -> 165	83.58	2550	4.840	P2	2/27/2017 8:10 PM	286.2 -> 201	Morphine
		Methamphetamine-D11	√ 2.48	150.1 ->	4.34	81846	5.234	P2	2/27/2017 8:10 PM	150.1 -> 91.1	Methamphetamine
	319.3 -> 268 6.543			310.2 -> 105	0.54	762	6.585	P2	2/27/2017 8:10 PM	310.2 -> 265	Methadone
	226.2 -> 165 5.681	Meprobamate-D7	0.50	219.1 -> 97.1	0.84	1566	5.640	P2	2/27/2017 8:10 PM	219.1 -> 158	Meprobamate
		Ketamine-D4	0.89	238.1 -> 220	0.45	234	5.925	P2	2/27/2017 8:10 PM	238.1 -> 125	Ketamine
		06		286.2				P2	2/27/2017 8:10 PM	286.2 -> 184	Hydromorphone
		Hydrocodone-D6	167.63		Infinity	290	5.630	P2	2/27/2017 8:10 PM	300.2 -> 198	Hydrocodone
		Fluoxetine-D6	0.82	310.1 ->	0.37		6.566	P2	2/27/2017 8:10 PM	310.1 -> 44.3	Fluoxetine
		Fentanyl-D5	0.74	337.2 ->	0.68	сл	6.600	P2	2/27/2017 8:10 PM	337.2 -> 105	Fentanyl
				279.2 ->	0.69		6.224	P2	2/27/2017 8:10 PM	279.2 -> 235	EDDP
			101.14	271.2 ->	399.01	30434	5.880	P2	2/27/2017 8:10 PM		Doxylamine
		Diphenhydramine-D3		*				P2	2/27/2017 8:10 PM	256.2 -> 167	Diphenhydramine
		Dihydrocodeine-D6	9.14	302.2 ->	1.71		5.222	P2	2/27/2017 8:10 PM	302.2 -> 198	Dihydrocodeine
				285.1 ->	0.77	761	6.386	P2	2/27/2017 8:10 PM	285.1 -> 193	Diazepam
	j-			258.2 ->	1.11	274	5.800	P2	2/27/2017 8:10 PM	258.2 -> 157	Dextrorphan
		Dextromethorphan-D3	1340.98	272.2 -> 1.	1876.72	573530	6.308	P2	2/27/2017 8:10 PM	272.2 -> 171	Dextromethorphan
		Cyclobenzaprine-D3	0.61	276.2 ->	0.35		6.612	P2	2/27/2017 8:10 PM	276.2 -> 214	Cyclobenzaprine
		Codeine-D6	0.18	300.2 -> 1	2.75		5.468	P2	2/27/2017 8:10 PM	300.2 -> 215	Codeine
		4		316.1 ->	0.96		6.340	P2	2/27/2017 8:10 PM	316.1 -> 269	Clonazepam
	109		1.22		0.46		6.093	P2	2/27/2017 8:10 PM		Citalopram
		07			0.74	4	6.228	P2	2/27/2017 8:10 PM	261.2 -> 176	Carisoprodol
		Ketamine-D4			1.17	324	6.107	P2	2/27/2017 8:10 PM	240.1 -> 184	Bupropion
		Amphetamine-D11	J 2.23	136.1 -> 1	7.19	4	5.033	P2	2/27/2017 8:10 PM	136.1 -> 91.1	Amphetamine
	<u> </u>	Alprazolam-D5	1.44	309.1 ->	4.78	22	6.362	P2	2/27/2017 8:10 PM	309.1 -> 281	Alprazolam
		alpha-PVP-d8	0.25		0.26		5.986	P2	2/27/2017 8:10 PM	232.2 -> 91.0	alpha-PVP
		a-hydroxyalprazolam-D5	8.81	325.1	0.76		6.521	P2	2/27/2017 8:10 PM	325.1 -> 297	a-hydroxyalprazolam
	[·		0.62	219.1 ->	1.55		5.233	P2	2/27/2017 8:10 PM	219.1 -> 84.2	Acetyl Norfentanyl
	[323.2 -> 1	0.45		6.216	P2	2/27/2017 8:10 PM	323.2 -> 105	Acetyl Fentanyl
5.590 163462		nazepam-D4		286.1 -> 222	0.69	63	5.692	P2	2/27/2017 8:10 PM	286.1 -> 121	7-aminoclonazepam
5.443 61618	334.2 -> 165 5.4	6-MAM-D6		328.2 -> 211				P2	2/27/2017 8:10 PM	328.2 -> 165	6-MAM
T Resp.	Transition RT	Name	S/N	Transition	S/N	Resp.	RT	Pos.	Acq. Date-Time	Transition	Name
ISTD Results		ISTD Method	Qualifier	Qualifier 1 M	ol Results	p1 external control Results	p1 ex	trol	p1 external control	Ъ	Compound Method
				<u> .</u>		And on the local data of the second statement of the s	and a survey of the	and the second se			

A

Compound Method	Name	Tramadol	Trazodone	Venlafaxine	Zolpidem
lethod	Transition	264.2 -> 58.3	372.2 -> 176	278.2 -> 58.3	308.2 -> 235
p1 external control	Acq. Date-Time				
trol	Pos.	P2	P2	P2	P2
p1 ext	RT	5.676	6.881		6.138
ernal cont	Resp.	6887	32889		35
p1 external control Results	N/S	2.59	6643.17		0.6
Qualifier 1 M	Transition) 264.2 -> 43.3	7 372.2 -> 148	278.2 -> 260	0.60 308.2 -> 263
Qualifier	N/S		8498		0.32
ISTD Method	Name	Tramadol-13C-D3		Venlafaxine-D6	Zolpidem-D6
lod	Transition	268.2 -> 58.3	392.2 -> 238	284.2 -> 64.3	204.2 -> 04.3 314.2 -> 235
ISTD	꼭	5.656			5.9/9 6.463
ISTD Results	Resp.	10395	10092	10110	10744

Å

\square																[-													_		_	<u> </u>		-				ļ	ļ			
Temazepam	Sufentanil	Sertraline	Quetiapine	Promethazine	Phentermine	Oxymorphone	Oxycodone	Oxazepam	O-desmethyl-tramadol	Noroxycodone	Norhydrocodone	Norfentanyl	Nordiazepam	Norbuprenorphine	Naltrexone	Naltrexol	Naloxone	Morphine	Methamphetamine	Methadone	Meprobamate	Ketamine	Hydromorphone	Hydrocodone	Fluoxetine	Fentanyl	EDDP	Doxylamine	Diphenhydramine	Dihydrocodeine	Diazepam	Dextrorphan	Dextromethorphan	Cyclobenzaprine	Codeine	Clonazepam		Supropion	Amphetamine	Alprazolam	alpha-PVP	a-hydroxyalprazolam	Acetyl Norfentanyl	Acetyl Fentanyl	7-aminoclonazepam	6-MAM	Name	Compound Method
301.1 -> 255	387.2 -> 238	306.1 -> 158	384.2 -> 253	285.1 -> 86.2	150.1 -> 65.2	\v	316.2 -> 298	287.1 -> 240	250.2 -> 58.3	302.1 -> 284	286.2 -> 199	233.2 -> 84.2	271.1 -> 140	414.3 -> 101	342.2 -> 324	344.2 -> 326	328.2 -> 309	286.2 -> 201	150.1 -> 91.1	265	219.1 -> 158	238.1 -> 125	286.2 -> 184	300.2 -> 198	310.1 -> 44.3	105	279.2 -> 235	271.2 -> 182	۷	v	\$	258.2 -> 157	*	v		316.1 -> 269	/ {			309.1 -> 281	232.2 -> 91.0	325.1 -> 297	219.1 -> 84.2	323.2 -> 105	286.1 -> 121	328.2 -> 165	Transition	ă
2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/2/1/U1/ 1.01 FW	2/2//2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	Acq. Date-Time	p1 cal 1a									
P2-A1 6.608	******	P2-A1 6.749	P2-A1 6.719	P2-A1 6.630	P2-A1 5.316		P2-A1 5.383	P2-A1 6.467					P2-A1 6.634	P2-A1 6.028	P2-A1 5.543	P2-A1 5.278	P2-A1 5.849	P2-A1 4.840			P2-A1 5.702	P2-A1 6.067	P2-A1 5.063	P2-A1 5.630	P2-A1 6.463	P2-A1 6.437	P2-A1 6.224									P2-A1 6.421			-		-	P2-A1 6.459	P2-A1 5.050	P2-A1 6.236	P2-A1 5.611	P2-A1 5.504	Pos. RT	
		9 75227	9 325026	0 395784	6 39937				_			-		8 11469	3 46985	8 98421	9 52093	0 3392		N	2 20391		3 29560	0 28275	3 279054	7 30694								_		1 18232			-	-		9. 8246		6 24587	1 33962	4 1324	Resp.	p1 cal 1a Results
		/ 332.81	Infinity						6					56.08	167.62	329.66	3192.63	2 21.43		~		-) Infinity	Infinity	1									N		2145 60		32		4		316.83	28.18	22.96	2 71.60	1 7.38	S/N	esults
-> 283	387.2 -> 111	306.1 -> 275	384.2 -> 221	285.1 ->	150.1 -> 133	302.1 -> 227	316.2 ->		250.2 -> 42.3	302.1 ->					342.2 -> 55.3	344.2	328.2 -> 211	286.2 -> 165	150.1 ->		219.1 -> 97.1	238.1 -> 220	286.2 -> 157	300.2 -> 128	310.1 ->	337.2 ->	279.2 -> 250	271.2 ->	256.2 -> 152	302.2 ->	285.1 -> 153	258.2 ->	272.2 ->	276.2 -> 231	300.2 ->	316 1 -> 213	201.2 ->		136.1 ->	1	232.2 ->	325.1 -> 215	219.1 -> 56.3	323.2 -> 188	286.1 -> 222	328.2 -> 211	Transition	Qualifier 1 M
		227.86	1192.02	1520.84	Infinity	373.20	2711.96	6.22	26.20	Infinity	2.94	51.59	Infinity	36.93	45.98	47.86	45.37		45.56	85.44	3.55		Infinity		27.59	102.67	1742.05	74.45							07 47	57 57	17.00	26.61	Infinity	72.80	47.05	83.01	5.27	2	98.22	4.30	S/N	Qualifier
	Sufentanil-D5		Quetiapine-D8							Noroxycodone-D3			Nordiazepam-D5	36.93 Norbuprenorphine-D3	Naltrexol-D3	47.86 Naltrexol-D3	Naloxone-D5	17.28 Morphine-D6				Ketamine-D4	Hydromorphone-D6	Hydrocodone-D6	27.59 Fluoxetine-D6									Cvclobenzaprine-D3							alpha-PVP-d8	1	1		7-Aminoclonazepam-D4	6-MAM-D6	Name	ISTD Method
306.1 -> 260	392.2 -> 238	309.1 -> 275	392.2 -> 226	288.2 -> 89.2	155.2 -> 96.2	305.2 -> 287	322.2 -> 304	292.1 -> 246	256.2 -> 64.3	305.2 -> 287	289.2 -> 202	238.2 -> 84.2	276.1 -> 140	417.3 -> 101	347.2 -> 329	347.2 -> 329	333.2 -> 315	292.2 -> 152	161.2 -> 97.1	319.3 -> 268	226.2 -> 165	242.1 -> 129	292.2 -> 185	306.2 -> 202	316.2 -> 44.3	342.3 -> 105	282.2 -> 235	276.2 -> 187	259.2 -> 167	308.2 -> 202	290.1 -> 198	261.2 -> 157	275.2 -> 171_	279.2 -> 215	306.2 -> 218	320 1 -> 217	208.2 -> 183	242.1 -> 129	147.2 -> 130	314.1 -> 286	240.2 -> 91.1	330.1 -> 302	224.2 -> 84.2	328.2 -> 105	290.1 -> 121	334.2 -> 165	Transition	
		6.748	6.697	6.609						[-				6.028						·	5.681	6.046		[-	*******						6.551					-			. 6.458	5.050		. 5.590	. 5.422	꾹	ISTD
417700	993758	362811	437257	20825	419586			69573	795915	323218	80134	685675	61896	45586	346288	346288	309171	10492			108736	290331				13295	19606	13217					292130	578073	15050	35713	418436	290331	175632	209220	632941	44112	500899	14597	156195	65064	Resp.	ISTD Results

Å

	Zolpidem	Venlafaxine	Trazodone	Tramadol	Name	Compound Method
	308.2 -> 235	278.2 -> 58.3	372.2 -> 176	264.2 -> 58.3	Transition	thod
	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	2/27/2017 7:31 PM	Acq. Date-Time	p1 cal 1a
	P2-A1	P2-A1	P2-A1	P2-A1	Pos.	-
	6.465			-	RT	- p1
	218987	230078	295461	230111	Resp.	p1 cal 1a Results
	277.24	154.72	785.41	163.20	S/N	sults
	277.24 308.2 -> 263	278.2 -> 260	372.2 -> 148	264.2 -> 43.3	Transition	Qualifier 1 M
	306.10	27.5	193.09	9.52	S/N	Qualifier
	306.10 Zolpidem-D6	27.53 Venlafaxine-D6		2 Tramadol-13C-D3	Name	ISTD Method
	314.2 -> 235	284.2 -> 64.3	392.2 -> 238	268.2 -> 58.3	Transition	thod
\bigotimes	- 6.463				RT	ISTE
(\uparrow)		1	993758	1 1	Resp.	ISTD Results

Compound Method	Transition	p1 negative Acq. Date-Time	Pos.	RT p	p1 negative Results	esults S/N	Qualifier	Qualifi S/N	. ISTD Method	S	Transi	Transition
6-MAM	-> 165	2/27/2017 7:50 PM	P2	5.199	630	48.53	328.2 ->	3.72			334.2 -> 165	334.2 -> 165
7-aminoclonazepam Acetyl Fentanyl	286.1 -> 121 2	2/27/2017 7:50 PM	P2	5.550 6 216	130	0.87	286.1 -> 222	1.74	7-Aminoclonazepam-D4	azepam-D4	290.1 -> 121	290.1 ->
Acetyl Norfentanyl	84.2	2/27/2017 7:50 PM	P2	5.132	176	69.20	219.1 ->	√1.27		Acetyl Norfentanyl-D5	5	D5 224.2 -> 84.2
a-hydroxyalprazolam		2/27/2017 7:50 PM	P2	6.663	111	1.30				a-hydroxyalprazolam-D5	9	D5 330.1 -> 302
alpha-PVP	-> 91.0	2/27/2017 7:50 PM	P2	5.925	857	0.61	232.2 -> 77.1	0.67		P-d8		240.2 -> 91.1
Alprazolam	309.1 -> 281 2	2/27/2017 7:50 PM	P2	6.382	2726	13 00	309.1 -> 205	く 0.16	1	am-D5	am-D5 314.1 -> 286	
Bupropion	184	2/27/2017 7:50 PM	P2	6.148	162	0.54	240.1 ->	2.32	,	Ketamine-D4		242.1 -> 129
Carisoprodol	176	2/27/2017 7:50 PM	P2				261.2 ->		- 1	Carisoprodol-D7	D7	D7 268.2 -> 183
Citalopram	-> 109	2/27/2017 7:50 PM	P2	6.642	531	0.59	325.2 -> 262	0.37		Citalopram-D6	331.2 -> 109	331.2 -> 109
Clonazepam	-> 269	2/27/2017 7:50 PM	P2	6:544	336	1.05	V	0.76	Clon	Clonazepam-D4	320.1 -> 217	320.1 -> 217
Codeine	300.2 -> 215 2/	2/27/2017 7:50 PM	P2	5:203	895	0.90	300.2 -> 165	18.69	Cod	18.69 Codeine-D6		306.2 -> 218
Cyclobenzaprine	276.2 -> 214 2/	2/27/2017 7:50 PM	P2	6.531	523	1.21	276.2 -> 231	0.47	0	0.47 Cyclobenzaprine-D3	orine-D3 279.2 -> 215	orine-D3 279.2 -> 215
Dextromethorphan	-> 171	2/27/2017 7:50 PM	P2	6.144	115	0.74	272.2 ->	0.40		Dextromethorphan-D3	ω 	ω
Dextrorphan		2/27/2017 7:50 PM	P2	5,760	553	2.48	258.2 -> 133			Dextrorphan-D3		261.2 -> 157
Diazepam	193	2/27/2017 7:50 PM	P2	6.590	1966	0.74	285.1 ->	0.60	-	Diazepam-D5	290.1 -> 198	290.1 -> 198
Dihydrocodeine	-> 198	2/27/2017 7:50 PM	P2	5.243	16	0.20	302.2 -> 128			Dihydrocodeine-D6	308.2 -> 202	308.2 -> 202
Doxvlamine	271.2 -> 182 2/	2/27/2017 7:50 PM	P2	0.2U8	1138	66.N	271.2 -> 152		_1_	Diphennydramine-D3	259.2 -> 167	259.2 ->
EDDP	235	2/27/2017 7:50 PM	P2	6.326	41	0.30	279.2 ->		m	EDDP-D3	282.2 -> 235	282.2 -> 235
Fentanyl	337.2 -> 105 2/	2/27/2017 7:50 PM	P2	6.600	1115	0.48	337.2 -> 188	1.56		Fentanyl-D5)5 342.3 -> 105)5 342.3 -> 105
Fluoxetine	44.3	2/27/2017 7:50 PM	P2	6.422	507	0.47	148	0.34		Fluoxetine-D6	316.2 -> 44.3	316.2 -> 44.3
Hydromornhone	286.2 -> 198 2	2/27/2017 7:50 PM	P2-	5 083	310	0 57	286.2 -> 128	316 44		Hydrocodone-D6	306.2 -> 202	306.2 -> 202
Ketamine	125	2/27/2017 7:50 PM	P2	0.000	0.0	0.07	\	0.0.1		Ketamine-D4	242.1 -> 129	
Meprobamate	-> 158	2/27/2017 7:50 PM	P2	5.702	1761	0.75	219.1 -> 97.1		Me	Meprobamate-D7	-D7	-D7 226.2 -> 165
Methadone	310.2 -> 265 2/	2/27/2017 7:50 PM	P2				310.2 -> 105		Me	Methadone-D9		319.3 -> 268
Methamphetamine	150.1 -> 91.1 2/	2/27/2017 7:50 PM	P2	5.255	78623	1.17	150.1 -> 119	2.05		Methamphetamine-D11	161.2 -> 97.1	161.2 -> 97.1
Morphine	286.2 -> 201 2/	2/27/2017 7:50 PM	P2	4.740	708	0.84	286.2 -> 165	44.74		Morphine-D6	292.2 -> 152	292.2 -> 152
Naloxone	-> 309	2/27/2017 7:50 PM	P2	6.397	1106	8.22		2.99		Naloxone-D5	333.2 -> 315	333.2 -> 315
Naltreyone	347 2 -> 320 2	2/27/2017 7:50 PM		স সমি	111	20.02	344.2 -> 308	L		Naitrexol-D3		
Norbuprenorphine	-> 101	2/27/2017 7:50 PM	P2	6.028	45	0.84		0.66		Norbuprenorphine-D3	417.3 -> 101	417.3 -> 101
Nordiazepam		2/27/2017 7:50 PM	P2	6.634	149	0.42				Nordiazepam-D5	276.1 -> 140	276.1 -> 140
Norfentanyl	233.2 -> 84.2 2/	2/27/2017 7:50 PM	P2	5.333	26	0.24	233.2 ->	2.10		Norfentanyl-D5		238.2 -> 84.2
Norhydrocodone	286.2 -> 199 2/	2/27/2017 7:50 PM	P2	5.245	166	1.62		1.30		Norhydrocodone-D3	orhydrocodone-D3 289.2 -> 202	e-D3
Noroxycodone	1	2/27/2017 7:50 PM	P2	4.958	735	0.56	302.1 -> 186		z	Noroxycodone-D3	oroxycodone-D3 305.2 -> 287	
O-desmethyl-tramadol	58.3	2/27/2017 7:50 PM	P2	5,128	1086	2.21	250.2 ->	0.27		O-desmethyl-tramadol		256.2 -> 64.3
Oxazepam	287.1 -> 240 2	2/27/2017 7:50 PM	P2	6.528	163	0.32	287.1 ->			Oxazepam-D5	292.1 -> 246	292.1 -> 246
Oxymorphone	-> 284	2/27/2017 7:50 PM	P2-	4 958	971	0.87	302 1 -> 227	50 35		Oxymomhone-D3	305 2 -> 287	
Phentermine	-> 65.2	2/27/2017 7:50 PM	P2	5.519	3951	Infinity	150.1 ->			Phentermine-D5		155.2 -> 96.2
Promethazine		2/27/2017 7:50 PM	P2	6.630	1374	1.58	285.1 -> 71.3	1.08		Promethazine-D3		288.2 -> 89.2
Quetiapine	384.2 -> 253 2/	2/27/2017 7:50 PM	P2	6.820	42	0.42	384.2 ->	0.74		Quetiapine-D8		392.2 -> 226
Sertraline		2/27/2017 7:50 PM	P2	6.668	40	0.49	306.1 ->	4.97		Sertraline-D3		309.1 -> 275
Sufentanil		2/27/2017 7:50 PM	P2	6.799	1648	13.75	387.2 -> 111	$\sqrt{2.24}$	Sufe	2.24 Sufentanil-D5		392.2 -> 238
Tomasonam	301.1 -> 255 2/	2/27/2017 7:50 PM	P2	6.446	1021	1.39	301.1 -> 283	0.27	Тe	Temazepam-D5	05	D5 306.1 -> 260

		Zolpidem	Venlafaxine	Irazodone	Tramadol	Name	Compound Method
		308.2 -> 235	278.2 -> 58.3	372.2 -> 176	264.2 -> 58.3		
		2/27/2017 7:50 PM	2/27/2017 7:50 PM	2/27/2017 7:50 PM	2/27/2017 7:50 PM	Acq. Date-Time	p1 negative
		P2	P2	P2	P2	Pos.	4
		6.281		6.881	5.656	RT	- p1
		166		2321	5130	Resp.	p1 negative Results
		14.77		2.41	2.11	S/N	esults
		308.2 -> 263	278.2 -> 260	372.2 -> 148	264.2 -> 43.3	Transition	Qualifier 1 M
		イ 0.52		1.12		10	Qualifi
		Zolpidem-D6	Venlafaxine-D6	Sufentanil-D5	Tramadol-13C-D3	Name	ISTD Method
	·	314.2 -> 235	284.2 -> 64.3	392.2 -> 238	268.2 -> 58.3	Transition	ethod
$\langle \! $		6.463				RT	ISTD
		10637	10029	983738	10270	Resp.	ISTD Results

	Zopiclone	Zaleplon	Verapamil	Trimipramine	Tapentadol	Pseudoephedrine	Protriptyline	Propoxyphene	Primidone	Prazepam	Phenytoin	Phencyclidine	Phenazepam	Pentazocine	Ondansetron	Nortriptyline	Norpropoxyphene	Normeperidine	Mitragynine	Mirtazapine	Midazolam	Metoprolol	Methylphenidate	Meperidine	MDMA	MDEA	MDA	Maprotiline	Levamisole	Imipramine	Flurazepam	Flunitrazepam	Estazolam	Doxenin	Desipramine	Cocaine	Clomipramine	Chlordiazepoxide	Carhamazenine	Benzovlecaonine	Amoxanine	Amitriptyline	alpha-hydroxymidazolam	7-aminoflunitrazepam	Name	Compound Method
	389.1 -> 244	306.1 -> 236		100		166.1 -> 148				325.1 -> 271	253.1 -> 104		349.0 -> 206	286.2 -> 218	:			234.1 -> 42.3		266.2 -> 195		268.2 -> 116		248.2 -> 220		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	304 2 -> 182	315.2 -> 86.2	300,1 -> 227	237 1 -> 193			278.2 -> 91.2	342.1 -> 324	284.1 -> 135	Transition	α
	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8-20 PM	2/27/2017 8:20 PM	2/27/2017 2:20 DM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8-20 PM	2/27/2017 8:20 PM	2/27/2017 8-20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	2/27/2017 8:20 PM	Acq. Date-Time	p2 external control					
	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2	P2-	P)-	P?-	5	P2-	P2	P.2-	P2-	P.2-	P2	P2	P2	Pos.	0
	6.344	-	6.384	6.800	5.629	4.823	6.562	6.590	5.406	7.118	6.279	6.177	6.508		5.659	6.623	6.571	5.710			6.653	5.643	5.730	5.912			5.470	6.459	5.427	6.599	6.284	6.573	6.597	6 377	6.561	7 26.2	6.977	6.960	Cat y	5.496	B 223	6.721	6.589	5.988	RT	p2 exte
	80		34	48	252	173	180	167	143	41	261	162	1736		32	√6752	100	49990			24	83	595	543809			45	1203	276	3896	69	1604	96 600	330	1879	570	106	2926	314	38	531	1642	133	1728	Resp.	mal contr
	0.83		0.41	1.22	0.42	0.36	5.61	0.55	0.33	0.93	0.48	61.89	202.93		0.91	7.65	1.02	102.91			0.38	2.88	0.76	814.58			Infinity	1.23	1.98	43.82	0.44	5.90	0.70	0.00	3.03		2.87	25.62	co 0	1.45	150 53	0.91	0.66	5.20	S/N	p2 external control Results
	389.1 -> 216	264	455.3 -> 150		222.2 ->		-> 161	340.2 -> 266	219.1 -> 162			244.2 -> 91.1			294.2 -> 212	264.2 -> 233		234.1 -> 160	399.2 -> 238	266.2 -> 72.3					194.1 -> 105		180.1 -> 105						295.1 -> 205		267.2 -> 44.3					290 1 -> 105		278.2 ->	342.1 -> 203	284.1 -> 93.2	Transition	Qualifier 1 M
				2.71	0.18	0.30	<					へ _	<u>く</u>			3.83		$\sqrt{1.24}$				3.87	17.91	56508			く 0.42		0.18	< 1.60	0.32	. / 0.51	6.12	11111111	→ U.J.J	0.10	n 43	く 0 28		1 63	1/30 6/	0.83	1.76	12.48	S/N	Qualifier
	Zopiclone-D4	Zaleplon-D4	Trimipramine-D3	Trimipramine-D3	Tapentadol-D3	Pseudoephedrine-D3	Nortriptyline-D3	Propoxyphene-D11	Prazepam-D5	Prazepam-D5	Phenytoin-D10	Phencydlidine-D5	Phenazepam-D4	Pentazocine-13C3	Pentazocine-13C3	Nortriptyline-D3	Norpropoxyphene-D5	Normeperidine-D4	Carbamazepine-13C6	Midazolam-D4	Midazolam-D4	Meperidine-D4	Meperidine-D4	Meperidine-D4	MDMA-D6	MDEA-D6	MDA-D5	Meperidine-D4	Cocaine-D3	Imipramine-D3	Zopiclone-D4	Flunitrazenam-D7	Fstazolam-D5		Desinramine_D3		Clominramine-D3	Chlordiazenoxide-D5	Carbamazonino 1206	Benzovlecconine-D8	Amitrintyling D3	Amitrintyline-D3	alpha-hydroxymidazolam-	7-aminoflunitrazepam-D7	Name	ISTD Method
C	393.1 -> 244	310.2 -> 240	298.2 -> 103	298.2 -> 103	225.2 -> 107	169.1 -> 151	267.2 -> 233	351.3 -> 277	330.1 -> 276	330.1 -> 276	263.2 -> 192	249.2 -> 86.2	353.0 -> 183	289.2 -> 72.3	289.2 -> 72.3	267.2 -> 233	331.2 -> 44.3	238.2 -> 164	243.1 -> 200	330.1 -> 295	330.1 -> 295	252.2 -> 224	252.2 -> 224	252.2 -> 224	200.2 -> 166	214.2 -> 166	185.1 -> 168	252.2 -> 224	307.2 -> 185	284.2 -> 61.3	393.1 -> 244	301 1 -> 245	300 1 -> 272	202 2 ~ 107	370 2 -> 75 3	3070 - 10F	318 2 -> 80 2	305 1 -> 286		201.2 -> 171	201 2 101 2	2812->912	346 1 -> 328	291.2 -> 138	Transition	
$ \mathcal{A}\rangle$	6.446	6.310	6.698	6.698	5.649	4.822	6.581	6.447	7.014	7.014	6.115	6.095	6.588	5.865	5.865	6.581	6.388	5.791	6.198	6.692	6.692	5.912	5.912	5.912	5.325	5.467	5.185	5.912	5.862	6.618	6.446	6 5 1 3	6 474	070.0	6 540	0.01/	A 017	6 657	6 100	7 202	0.000	6.659	6 529	5 783	RT	ISTD F
	138277	240024	20700	20700	795447	434587	511253	279226	10118	10118	18582	960732	16805	422814	422814	511253	150981	310955	12537	405251	405251	300081	300081	300081	49548	555662	279234	300081	720621	10471	138277	17/8/	318103	10142	121/2	190001	10003	210170	10507	5761	100010	498610	412960	250981	Resp.	ISTD Results

(χ
	И
À	()
/	-

									Γ				Γ						Γ		Ľ		Ι			Ĺ			[L			Ľ		Ľ			-
Zopiclone	Zaleplon	Verapamil	Trimipramine	Tapentadol	Pseudoephedrine	Protriptyline	Propoxyphene	Primidone	Prazepam	Phenytoin	Phencyclidine	Phenazepam	Pentazocine	Ondansetron	Nortriptyline	Norpropoxyphene	Normeperidine	Mitragynine	Mirtazapine	Midazolam	Metoprolol	Methylphenidate	Meperidine	MDMA	MDEA	MDA	Maprotiline	Levamisole	Imipramine	Flurazepam	Flunitrazepam	Estazolam	Doxepin	Desipramine	Cocaine	Clomipramine	Chlordiazepoxide	Carbamazepine	Benzoylecgonine	Amoxapine	Amitriptyline	alpha-hydroxymidazolam	7-aminoflunitrazepam	Name	Compound Method
389.1 -> 244	306.1 -> 236	455.3 -> 165	295.2 -> 100	222.2 -> 107	166.1 -> 148	264.2 -> 155	340.2 -> 58.3	219.1 -> 91.2	325.1 -> 271	104	86.2	349.0 -> 206	286.2 -> 218	294.2 -> 184	264.2 -> 91.2	326.2 -> 44.3	234.1 -> 42.3	399.2 -> 174	266.2 -> 195	326.1 -> 223	268.2 -> 116	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	268		280.2 -> 107	267.2 -> 72.3	304.2 -> 182	315.2 -> 86.2	300.1 -> 227	237.1 -> 193	290.1 -> 168	314.1 -> 271	278.2 -> 91.2		284.1 -> 135	Transition	ă
2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	2/27/2017 7:41 PM	Acq. Date-Time	p2 cal 1b					
		P2-A1 6.465	P2-A1 6.718	P2-A1 5.650	P2-A1 4.803	P2-A1 6.481	P2-A1 6.489	P2-A1 5.466	P2-A1 7.016	P2-A1 6.115	P2-A1 6.096	P2-A1 6.589	P2-A1 5.866	P2-A1 6.149	P2-A1 6.583	P2-A1 6.389	P2-A1 5.792	P2-A1 6.486	P2-A1 6.461	P2-A1 6.693	P2-A1 5.622	P2-A1 5.771	P2-A1 5.912	P2-A1 5.326	P2-A1 5.447	P2-A1 5.185	P2-A1 6.661					******		P2-A1 6.541	P2-A1 5.883	P2-A1 6.917	P2-A1 6.677	P2-A1 6.219	P2-A1 5.394	P2-A1 6.634	P2-A1 6.661		P2-A1 5.784	Pos. RT	
	0 65704	5 232821	8 441167		3 976268		9 231893	6 11759	6 221667	5 3978	6 198647	1	6 114277	9 96061	3 142080	9 38138	2 80497	6 61236	1 214972	3 24585	2 26579	1 265608	2 64032	6 84121	7 107076		1 140615									7 389650	7 22990	9 25051	4 18602	4 73000			4 50283	Resp.	p2 cal 1b Results
Infinity	238.08	31736	119.84	97.44	Infinity	1722.17	529.52	111.69	1523.84	Infinity	36.41	10207	18389	66.84	Infinity	1207.65	24047	83.54	239.03	122.78	10239	Infinity	213.42	984.42	Infinity	Infinity	Infinity	Infinity	531.74	46.83			Infinity	2088.35		Infinity	5099.62	15.12	172.31			180.12	353.98	S/N	esults
389.1 -> 216	306.1 -> 264	455.3 -> 150	295.2 -> 58.3	222.2 -> 121	166.1 -> 133	264.2 -> 161	340.2 -> 266	219.1 -> 162	325.1 -> 140	253.1 -> 182	244.2 -> 91.1	349.0 -> 183	286.2 -> 41.3	294.2 -> 212	264.2 -> 233	326.2 -> 252	234.1 -> 160	399.2 -> 238	266.2 -> 72.3	326.1 -> 249	268.2 -> 56.3	234.2 -> 56.3	248.2 -> 174						281.2 -> 58.3	388.2 -> 317	314.1 -> 239		280.2 -> 77.2		304.2 -> 105		300.1 -> 282	237.1 -> 194	290.1 -> 105	259.90 314.1 -> 193	278.2 -> 105	342.1 -> 203	284.1 -> 93.2	Transition	Qualifier 1 M
Infinity	105.08		Infinity		469.59	0.74	261.18		480.51	21.37	123.74	151.00	396.35	52.56	Infinity	134.15	201.58	2414.93	130.97	43.34	78.43		6931.06			Infinity	······			84.49		218.63	Infinity	Infinity	Infinity	Infinity	27.73	Infinity	36.76	5887.40	Infinity	164.72	2675.61	S/N	Qualifier
Zopiclone-D4	Zaleplon-D4	Trimipramine-D3	Trimipramine-D3	Tapentadol-D3	Pseudoephedrine-D3	Nortriptyline-D3	Propoxyphene-D11	Prazepam-D5	Prazepam-D5	Phenytoin-D10	Phencydlidine-D5	Phenazepam-D4	Pentazocine-13C3	Pentazocine-13C3	Nortriptyline-D3	Norpropoxyphene-D5	Normeperidine-D4	Carbamazepine-13C6	Midazolam-D4	Midazolam-D4	Meperidine-D4	Meperidine-D4	Meperidine-D4	MDMA-D6	MDEA-D6	MDA-D5	Meperidine-D4	Cocaine-D3	Imipramine-D3	Zopiclone-D4	Flunitrazepam-D7	Estazolam-D5	Doxepin-D3	Desipramine-D3	Cocaine-D3	Clomipramine-D3	Chlordiazepoxide-D5	Carbamazepine-13C6	Benzoylecgonine-D8	Amitriptyline-D3	Amitriptyline-D3	alpha-hydroxymidazolam	7-aminoflunitrazepam-D7	Name	ISTD Method
393.1 -> 244	310.2 -> 240	298.2 -> 103	298.2 -> 103	225.2 -> 107	169.1 -> 151	267.2 -> 233	351.3 -> 277	330.1 -> 276	330.1 -> 276	263.2 -> 192	249.2 -> 86.2	353.0 -> 183	289.2 -> 72.3	289.2 -> 72.3	267.2 -> 233	331.2 -> 44.3	238.2 -> 164	243.1 -> 200	330.1 -> 295	330.1 -> 295	252.2 -> 224	252.2 -> 224	252.2 -> 224	200.2 -> 166	214.2 -> 166	185.1 -> 168	252.2 -> 224	307.2 -> 185	284.2 -> 61.3	393.1 -> 244	321.1 -> 245	300.1 -> 272	283.2 -> 107	270.2 -> 75.3	307.2 -> 185	318.2 -> 89.2	305.1 -> 286	243.1 -> 200	298.2 -> 171	281.2 -> 91.2	281.2 -> 91.2	346.1 -> 328	291.2 -> 138	Transition	
6.446	6.310	6.698	6.698	5.649	4.782	6.581	6.447	7.014	7.014	6.095	6.095	6.568	5.865	5.865	6.581	6.388	5.791	6.198	6.692	6.692	5.912	5.912	5.912	5.305	5.447	5.165	5.912	5.862	6.618	6.446	6.491	6.474	6.376	6.540	5.862	6.897	6.656	6.198	5.373	6.659	6.659	6.528	5.783	RT	ISTD
135092	238591	21088	21088	795321	461976	408521	278615	990955	990955	15706	10144	15781	435149	435149	408521	169177	318804	12156	409063	409063	337924	337924	337924	47359	571235	268650	337924	681473	10137	135092	15977	284423	612285	13169	681473	19604	197267	12156	5900	494909	494909	384056	236564	Resp.	ISTD Results

Name	Transi	Acq. Date-Time			Resp. S/	~	Transition	S/N	Name		Transition	
7-aminoflunitrazepam	284.1 -> 135	2/27/2017 8:00 PM		5.968	1316	4.26	284.1 -> 93.2	1.71	7-aminoflunitrazepam-D7	zepam-D7	zepam-D7 291.2 -> 138	291.2
alpha-hydroxymidazolam	342.1 -> 324	2/27/2017 8:00 PM		6.569	216		342.1 -> 203	3.43	alpha-hydroxymidazolam	nidazolam	n 346.1	n 346.1 -> 328
Amitriptyline	278.2 -> 91.2	2/27/2017 8:00 PM		6.742	963		278.2 -> 105	165.52	Amitriptyline-D3			281.2 -> 91.2
Amoxapine	314.1 -> 271	2/27/2017 8:00 PM		6.533	748		314.1 -> 193	40.56		ω		281.2 -> 91.2
Benzoylecgonine	290.1 -> 168	2/27/2017 8:00 PM		5.598	28		290.1 -> 105	0.87		ne-D8		298.2 -> 171
Carbamazepine	237.1 -> 193	2/27/2017 8:00 PM					237.1 -> 194		Carbamazepine-13C6	9-13C6	ന 	6 243.1 -> 200
Chlordiazepoxide	300.1 -> 227	2/27/2017 8:00 PM		6.960	3752	14.54	300.1 -> 282	2	Chlordiazepoxide-D5	ide-D5		305.1 -> 286
Clomipramine	315.2 -> 86.2	2/27/2017 8:00 PM		6.897	159		315.2 -> 58.3		Clomipramine-D3	5		318.2 -> 89.2
Cocaine	304.2 -> 182	2/27/2017 8:00 PM		5.883	1017		304.2 -> 105		Cocaine-D3			307.2 -> 185
Desipramine	267.2 -> 72.3	2/27/2017 8:00 PM		6.541	イ 1960		267.2 -> 44.3	615.74	Desipramine-D3	-D3		270.2 -> 75.3
Doxepin	280.2 -> 107	2/27/2017 8:00 PM					280.2 -> 77.2		Doxepin-D3			283.2 -> 107
Estazolam	295.1 -> 267	2/27/2017 8:00 PM		6.557	108	0.63	295.1 -> 205	1.03	Estazolam-D5	D5	300.1	300.1 -> 272
Flunitrazepam	314.1 -> 268	2/27/2017 8:00 PM		6.736	70		314.1 -> 239	0.69	Flunitrazepam-D7	am-D7	-D7	-D7 321.1 -> 245
Flurazepam	388.2 -> 315	2/27/2017 8:00 PM		6.608	259		388.2 -> 317		Zopiclone-D4	04	393.1 ->	393.1 -> 244
Imipramine	281.2 -> 86.2	2/27/2017 8:00 PM		6.639	1904		281.2 -> 58.3	く	Imipramine-D3	D3		284.2 -> 61.3
Levamisole	205.1 -> 91.2	2/27/2017 8:00 PM		5.366	370	·····	205.1 -> 178	0.44	Cocaine-D3	ū		307.2 -> 185
Maprotiline	278.2 -> 91.2	2/27/2017 8:00 PM		6.580	2282		278.2 -> 117	0.38	Meperidine-D4	-D4		252.2 -> 224
MDA	180.1 -> 163	2/27/2017 8:00 PM		5.327	107		180.1 -> 105	0.52	MDA-D5		185.1	185.1 -> 168
MDEA	208.1 -> 163	2/27/2017 8:00 PM		5,590	82		208.1 -> 105	117.47	MDEA-D6		214.2 -> 166	166
MDMA	194.1 -> 163	2/27/2017 8:00 PM					194.1 -> 105		MDMA-D6		200.2 -> 166	·
Meperidine	248.2 -> 220	2/27/2017 8:00 PM		5.728	105	0.91	248.2 -> 174	0.50	Meperidine-D4	D4		252.2 -> 224
Methylphenidate	234.2 -> 84.2	2/27/2017 8:00 PM		5.792	47		234.2 -> 56.3		Meperidine-D4	94		252.2 -> 224
Metoprolol	268.2 -> 116	2/27/2017 8:00 PM	P2				268.2 -> 56.3		Meperidine-D4	04	04 252.2 -> 224	252.2 -> 224
Midazolam	326.1 -> 223	2/27/2017 8:00 PM		6.612	35	0.85	326.1 -> 249	6.98	Midazolam-D4	D4		330.1 -> 295
Mirtazapine	266.2 -> 195	2/27/2017 8:00 PM		6.440	242		266.2 -> 72.3	0.38	Midazolam-D4	04		330.1 -> 295
Mitragynine	399.2 -> 174	2/27/2017 8:00 PM		6.546	43	0.76	399.2 -> 238	0.90	0.90 Carbamazepine-13C6	pine-13C6		243.1 -> 200
Normeperidine	234.1 -> 42.3	2/27/2017 8:00 PM		5.812	54		234.1 -> 160	0.65	Normeperidine-D4	ne-D4		238.2 -> 164
Norpropoxyphene	326.2 -> 44.3	2/27/2017 8:00 PM		6.470	28	0.37	326.2 -> 252	0.89	Norpropoxyphene-D5	phene-D5	5	D5 331.2 -> 44.3
Nortriptyline	264.2 -> 91.2	2/27/2017 8:00 PM		6.623	7573	8.19	264.2 -> 233	<u>لا 2.05</u>	Nortriptyline-D3	ЪЗ		267.2 -> 233
Ondansetron	294.2 -> 184	2/27/2017 8:00 PM	P2		*******	-	294.2 -> 212		Pentazocine-13C3	e-13C3	ີ 	C3 289.2 -> 72.3
Pentazocine	286.2 -> 218	2/27/2017 8:00 PM	P2				286.2 -> 41.3		Pentazocine-13C3	e-13C3		289.2 -> 72.3
Phenazepam	349.0 -> 206	2/27/2017 8:00 PM		6.528	2226	27.73	349.0 -> 183	5	Phenazepam-D4	ım-D4		353.0 -> 183
Phencyclidine	244.2 -> 86.2	2/27/2017 8:00 PM		5.953	574	1.96	244.2 -> 91.1	3.06	Phencydlidine-D5	line-D5	ine-D5 249.2 -> 86.2	249.2 -> 86.2
Phenytoin	253.1 -> 104	2/27/2017 8:00 PM	P2				253.1 -> 182		Phenytoin-D10	D10	D10 263.2 -> 192	263.2 -> 192
Prazepam	325.1 -> 271	2/27/2017 8:00 PM		7.198	11		325.1 -> 140	0.70	Prazepam-D5	D5	D5 330.1 -> 276	
Primidone	219.1 -> 91.2	2/27/2017 8:00 PM	P2	5.629	1821	2.45	219.1 -> 162		Prazepam-D5	05	05 330.1 -> 276	330.1 -> 276
Propoxyphene	340.2 -> 58.3	2/27/2017 8:00 PM		6.449	77	0.53	340.2 -> 266		Propoxyphene-D11	ene-D11	-D11	-D11 351.3 -> 277
Protriptyline	264.2 -> 155	2/27/2017 8:00 PM		6.481	86		264.2 -> 161		Nortriptyline-D3	-D3		267.2 -> 233
Pseudoephedrine	166.1 -> 148	2/27/2017 8:00 PM		4.762	708		V		Pseudoephedrine-D3	drine-D3	ne-D3 169.1	ne-D3 169.1 -> 151
Tapentadol	222.2 -> 107	2/27/2017 8:00 PM					222.2 -> 121		Tapentadol-D3	ŭ		225.2 -> 107
Trimipramine	295.2 -> 100	2/27/2017 8:00 PM		6.597	386	1.25	295.2 -> 58.3	2.78	Trimipramine-D3	D3	*******	298.2 -> 103
Verapamil	455.3 -> 165	2/27/2017 8:00 PM	P2				455.3 -> 150		Trimipramine-D3	D3		298.2 -> 103
Zaleplon	306.1 -> 236	2/27/2017 8:00 PM	P2				306.1 -> 264		Zaleplon-D4		310.2	310.2 -> 240
Zoniclone	389.1 -> 244	2/27/2017 8:00 PM	P2-	6.080	224	1.03	2001 , 210		Zopiclone-D4		393 1 -> 244	311 3 1 1 1 COC

ISP Forensic Services: Toxicology Discipline

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

Extraction Date: 2-27-17 Analyst: Anne Nord

PRE-ANALYTIC

Plate Lot# Stock THC plate: 0483844

- J 1. Ensure all solutions are within expiration date.
 - Mobile Phase A: 10mM Amm Formate
 - Mobile Phase B: 0.1% FA in MeOH •
 - Blank/Negative Blood: Lot 321632-1 .
 - 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.

Create worklist. Data path name: 2-27-17blood screen AM 25-26 4.

ANALYTIC

- / 1. Remove standards plate, blood, and samples from cold storage. Allow to reach room temperature.
 - 2. Add 1000 µL blood to 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
- Pipette 500µL 0.1% formic acid to all wells of standards plate. 4.
- 5. Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
- ~ \ Transfer 800µL of blood+acid mixture to corresponding wells of SLE+ plate. 6.
 - 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
- 1 13. Reconstitute in 100 µL 100% MeOH and heat seal plate with foil. Place in autosampler and run worklist.

POST-ANALYTIC

- γ 1. Open quantitation software and create a new quantitation batch. Batch name: 02271) cann 5crccn
- \checkmark 2. Make any necessary integration changes.
- 3. For unknown samples, calculated concentration > 3ng THC, THC-OH and > 5ng Carboxy-THC +/- 2% retention time of calibrators?
- Did QCs pass for each analyte?/Y// N 4.
- Central File Packet to include: \checkmark LIMS Worklist: \checkmark Method Checklist \checkmark 5. Calibration and **Control Reports**
- Comments:

- 0.1% Formic Acid in water
- MTBE

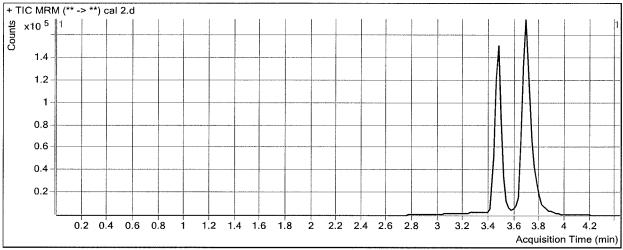
Plate Exp: 6/15/2017

• Hexane



Batch Data Path	D:\2017 Data\2-27-17	blood screen AM 25-2	26\QuantResults\022717 cann screen.batch.bin
Analysis Time	2/28/2017 9:20 AM	Analyst Name	ISP Tox
Report Time	2/28/2017 9:22 AM	Reporter Name	ISP Tox
Last Calib Update	2/28/2017 9:20 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-02-27 14:09	Data File	cal 2.d
Sample Type	Calibration	Sample Name	cal 2
Dilution	1	Acq Method	Screen THC 11102016.m
Position	P1-B1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

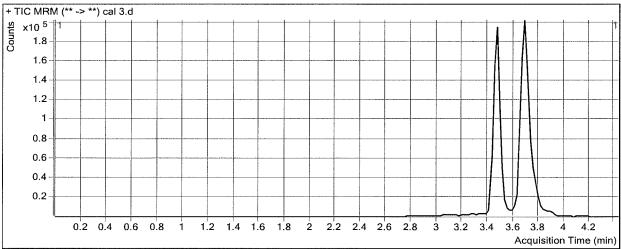
Sample Chromatogram



THC-COOH 3.446 17810 80372 0.2216 5.0598	onc
THC-OH 3.473 22953 415716 0.0552 4.9912	
THC 3.760 1272 23587 0.0539 5.7037	

Batch Data Path	D:\2017 Data\2-27-17	blood screen AM 25-2	26\QuantResults\022717 cann screen.batch.bin
Analysis Time	2/28/2017 9:20 AM	Analyst Name	ISP Tox
Report Time	2/28/2017 9:22 AM	Reporter Name	ISP Tox
Last Calib Update	2/28/2017 9:20 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-02-27 14:15	Data File	cal 3.d
Sample Type	Calibration	Sample Name	cal 3
Dilution	1	Acq Method	Screen THC 11102016.m
Position	P1-C1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

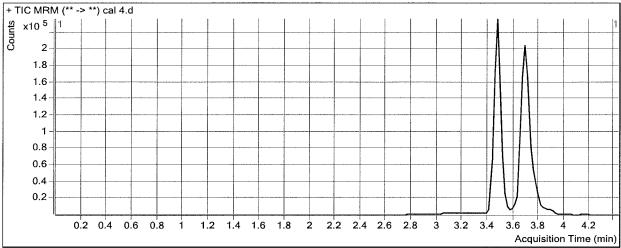
Sample Chromatogram



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.466	33795	102051	0.3312	10.7466
THC-OH	3.473	56063	509161	0.1101	10.2930
THC	3.760	2889	28075	0.1029	10.0381

Batch Data Path	D:\2017 Data\2-27-17	blood screen AM 25-2	26\QuantResults\022717 cann screen.batch.bin
Analysis Time	2/28/2017 9:20 AM	Analyst Name	ISP Tox
Report Time	2/28/2017 9:22 AM	Reporter Name	ISP Tox
Last Calib Update	2/28/2017 9:20 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-02-27 14:22	Data File	cal 4.d
Sample Type	Calibration	Sample Name	cal 4
Dilution	1	Acq Method	Screen THC 11102016.m
Position	P1-D1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

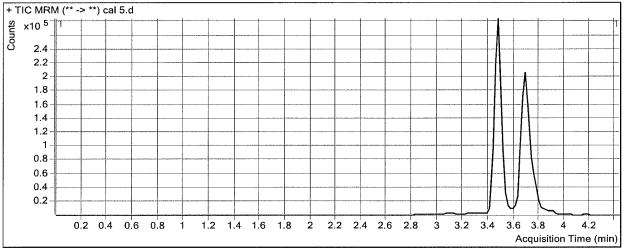
Sample Chromatogram



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.486	61144	108570	0.5632	22.7892
THC-OH	3.473	135696	530733	0.2557	24.3514
THC	3.760	7481	30141	0.2482	22,9037

Batch Data Path	D:\2017 Data\2-27-17	blood screen AM 25-2	26\QuantResults\022717 cann screen.batch.bin
Analysis Time	2/28/2017 9:20 AM	Analyst Name	ISP Tox
Report Time	2/28/2017 9:22 AM	Reporter Name	ISP Tox
Last Calib Update	2/28/2017 9:20 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-02-27 14:28	Data File	cal 5.d
Sample Type	Calibration	Sample Name	cal 5
Dilution	1	Acq Method	Screen THC 11102016.m
Position	P1-E1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

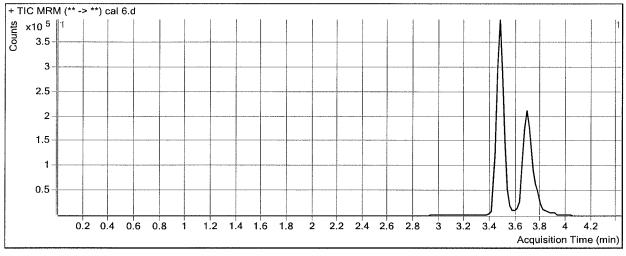
Sample Chromatogram



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.486	112866	109441	1.0313	47.0868
THC-OH	3.473	269182	538174	0.5002	47.9647
THC	3.760	16184	32329	0.5006	45.2492

Batch Data Path	D:\2017 Data\2-27-17	blood screen AM 25-2	26\QuantResults\022717 cann screen.batch.bin
Analysis Time	2/28/2017 9:20 AM	Analyst Name	ISP Tox
Report Time	2/28/2017 9:22 AM	Reporter Name	ISP Tox
Last Calib Update	2/28/2017 9:20 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-02-27 14:35	Data File	cal 6.d
Sample Type	Calibration	Sample Name	cal 6
Dilution	1	Acq Method	Screen THC 11102016.m
Position	P1-F1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

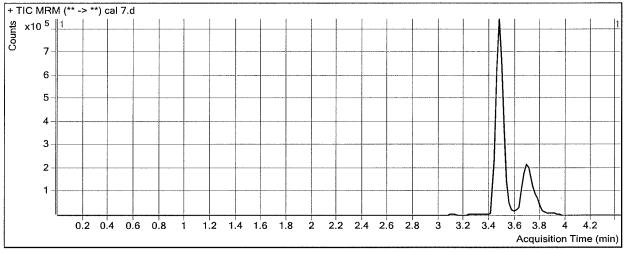
Sample Chromatogram



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.486	216020	98722	2.1882	107.1327
THC-OH	3,473	571009	523911	1.0899	104.9184
THC	3.760	34784	30577	1.1376	101.6482

Batch Data Path	D:\2017 Data\2-27-17	blood screen AM 25-2	26\QuantResults\022717 cann screen.batch.bin
Analysis Time	2/28/2017 9:20 AM	Analyst Name	ISP Tox
Report Time	2/28/2017 9:22 AM	Reporter Name	ISP Tox
Last Calib Update	2/28/2017 9:20 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-02-27 14:48	Data File	cal 7.d
Sample Type	Calibration	Sample Name	cal 7
Dilution	1	Acq Method	Screen THC 11102016.m
Position	P1-G1	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen

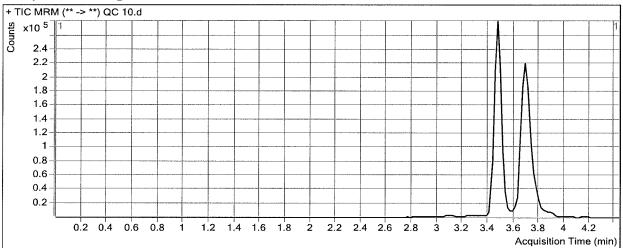
Sample Chromatogram



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.486	597198	122214	4.8865	247.1848
THC-OH	3.473	1663781	648383	2.5660	247.4813
THC	3.760	105778	36940	2.8635	254.4570

Batch Data Path	D:\2017 Data\2-27-17 blood screen AM 25-26\QuantResults\022717 cann screen.batch.bin				
Analysis Time	2/28/2017 9:20 AM	Analyst Name	ISP Tox		
Report Time	2/28/2017 9:22 AM	Reporter Name	ISP Tox		
Last Calib Update	2/28/2017 9:20 AM	Batch State	Processed		
Analysis Info					
Acq Time	2017-02-27 14:55	Data File	QC 10.d		
Sample Type	QC	Sample Name	QC 10		
Dilution	1	Acq Method	Screen THC 11102016.m		
Position	P1-A3	Sample Info			
Inj Vol	-1	Comment	AM 26 Cannabinoid screen		

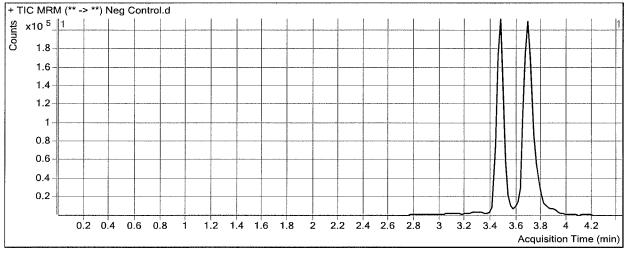
Sample Chromatogram



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3,466	57614	162706	0.3541	11.9377
THC-OH	3.473	79499	781668	0.1017	9.4813
THC	3.760	3211	34337	0.0935	9.2087

Batch Data Path	D:\2017 Data\2-27-17 b	blood screen AM 25-2	26\QuantResults\022717 cann screen.batch.bin
Analysis Time	2/28/2017 9:20 AM	Analyst Name	ISP Tox
Report Time	2/28/2017 9:22 AM	Reporter Name	ISP Tox
Last Calib Update	2/28/2017 9:20 AM	Batch State	Processed
Analysis Info			
Acq Time	2017-02-27 14:42	Data File	Neg Control.d
Sample Type	Sample	Sample Name	Neg Control
Dilution	1	Acq Method	Screen THC 11102016.m
Position	P1-a2	Sample Info	
Inj Vol	-1	Comment	AM 26 Cannabinoid screen negative blood lot 32632-1

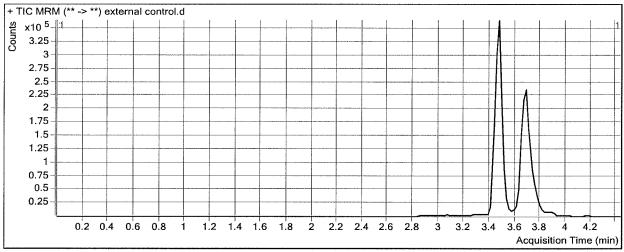
Sample Chromatogram



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.446	20682	130550	0.1584	1.7810 2 5

Batch Data Path	D:\2017 Data\2-27-17 blood screen AM 25-26\QuantResults\022717 cann screen.batch.bin			
Analysis Time	2/28/2017 9:20 AM	Analyst Name	ISP Tox	
Report Time	2/28/2017 9:22 AM	Reporter Name	ISP Tox	
Last Calib Update	2/28/2017 9:20 AM	Batch State	Processed	
Analysis Info				
Acq Time	2017-02-27 15:02	Data File	external control.d	
Sample Type	Sample	Sample Name	external control	
Dilution	1	Acq Method	Screen THC 11102016.m	
Position	p1b2	Sample Info		
Inj Vol	-1	Comment	AM 26 Cannabinoid screen 15 ng	

Sample Chromatogram



Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-COOH	3.466	63071	178391	0.3536	11.9094
THC-OH	3.473	179793	965228	0.1863	17.6484
THC	3.760	6087	39347	0.1547	14.6241

