























B. Wylie

Worklist: 1444

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
C2016-1405	1	73123	AM 25/AM 26 Blood MultiDrug/	
C2016-2080	1	73154	AM 25/AM 26 Blood MultiDrug/	
C2016-2304	1	72781	AM 25/AM 26 Blood MultiDrug/	
M2016-3640	1	73128	AM 25/AM 26 Blood MultiDrug/	
M2016-3677	1	73124	AM 25/AM 26 Blood MultiDrug/	
M2016-3677	2	73125	AM 25/AM 26 Blood MultiDrug/	
M2016-3792	1	73126	AM 25/AM 26 Blood MultiDrug/	
M2016-3948	1	73127	AM 25/AM 26 Blood MultiDrug/	
M2016-3995	1	73129	AM 25/AM 26 Blood MultiDrug/	
M2016-4114	1	73130	AM 25/AM 26 Blood MultiDrug/	
M2016-4137	1	73131	AM 25/AM 26 Blood MultiDrug/	
M2016-4195	1	73132	AM 25/AM 26 Blood MultiDrug/	
M2016-4366	1	73133	AM 25/AM 26 Blood MultiDrug/	
M2016-4367	1	73134	AM 25/AM 26 Blood MultiDrug/	
M2016-4368	1	73135	AM 25/AM 26 Blood MultiDrug/	
M2016-4477	1	73136	AM 25/AM 26 Blood MultiDrug/	
M2016-4536	1	73137	AM 25/AM 26 Blood MultiDrug/	
M2016-4547	1	73138	AM 25/AM 26 Blood MultiDrug/	
M2016-4740	1	73139	AM 25/AM 26 Blood MultiDrug/	
M2016-4741	1	73140	AM 25/AM 26 Blood MultiDrug/	
M2016-4821	1	73141	AM 25/AM 26 Blood MultiDrug/	
M2016-4821	2	73142	AM 25/AM 26 Blood MultiDrug/	
M2016-4866	1	73143	AM 25/AM 26 Blood MultiDrug/	



Worklist: 1444

<u>LAB CASE</u>	<u>ITEM</u>	<u>TASK ID</u>	<u>DESCRIPTION</u>	
M2016-4969	1	72459	AM 25/AM 26 Blood MultiDrug/	
M2016-4969	2	72886	AM 25/AM 26 Blood MultiDrug/	
M2016-4989	1	72458	AM 25/AM 26 Blood MultiDrug/	
M2016-5099	2	73151	AM 25/AM 26 Blood MultiDrug/	
P2016-1858	1	73144	AM 25/AM 26 Blood MultiDrug/	
P2016-1877	1	73145	AM 25/AM 26 Blood MultiDrug/	
P2016-2102	1	73146	AM 25/AM 26 Blood MultiDrug/	
P2016-2157	1	73147	AM 25/AM 26 Blood MultiDrug/	
P2016-2556	1	73148	AM 25/AM 26 Blood MultiDrug/	
P2016-2590	1	73149	AM 25/AM 26 Blood MultiDrug/	
P2016-2624	1	73150	AM 25/AM 26 Blood MultiDrug/	
P2016-2653	1	73153	AM 25/AM 26 Blood MultiDrug/	
P2016-2762	1	73152	AM 25/AM 26 Blood MultiDrug/	



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

Extraction Date: 12-29-16 Analyst: Anne Nord

PRE-ANALYTIC

Plate Lot# 0495940

Plate. Exp. 12-12-17

1. Ensure all solutions are within expiration date.

Mobile Phase A:
10mM Amm Formate

0.5M Ammonium Hydroxide

Lot #: 111716

Mobile Phase B
0.1% FA in MeOH

Column: **Phenomenex Phenyl Hexyl (4.6 x 50mm; 2.6um)**

Blank/Negative Blood Lot #: 321632-2

- 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: 12-29-16 multdrug screen * AMN 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

- 1. Open quantitation software and create a new quantitation batch. Batch name: 122916 multdrug screen a
- 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:

**Idaho State Police
Forensic Services
Toxicology Discipline**

Request for Departure from an Analytical Method

Date of Request

12/14/16

Analytical Method

AM 25 multidrug screen

Deviation

4.3.1.5 Retention time criterion for peak identification is a $\pm 2\%$ retention time window relative to the internal control and/or internal standards around the analytes retention time.

At the analysts discretion when the analyte peak falls outside the retention time window and the internal standard also shifts comparably that sample may be evaluated as positive if the other criteria are met.

4.3.1.6 Case Samples, external controls and negative controls will generally be considered negative if the primary transition response is less than 10 times less that of the internal control.

Samples between 5 and 10 times less response may be evaluated as negative at the analyst's discretion.

If the primary transition response for methamphetamine is less than the internal control it may be evaluated as negative. The administrative threshold is currently 10 ng/ml for methamphetamine.

Discipline Leader Review

Departure approved

Comments: These are minor deviations, this deviation approval will be in effect until the method is updated to include these criteria.

Departure Not Approved

Comments:



Celena Shrum

Date: 12/14/16

Celena Shrum

Toxicology Program Discipline Leader

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Compound Method			cal 1a			cal 1a Results			Qualifier 1 M...			Qualifier...			ISTD Method			ISTD Results		
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	S/N	Transition	S/N	Transition	S/N	Name	Transition	RT	Resp.	Name	Transition	RT	Resp.		
6-MAM	328.2 -> 165...	12/29/2016 9:21 PM	4.892	1558	5.12	5.12	328.2 -> 211...	6.62	334.2 -> 165...	6.62	6-MAM-D6	334.2 -> 165...	4.871	47675	6-MAM-D6	334.2 -> 165...	4.871	47675		
7-aminoclonazepam	286.1 -> 121...	12/29/2016 9:21 PM	5.567	27968	219.18	219.18	286.1 -> 222...	61.25	290.1 -> 121...	61.25	7-Aminoclonazepam-D4	290.1 -> 121...	5.545	140254	7-Aminoclonazepam-D4	290.1 -> 121...	5.545	140254		
Acetyl Fentanyl	323.2 -> 105...	12/29/2016 9:21 PM	5.726	19758	53.50	53.50	323.2 -> 188...	123.68	328.2 -> 105...	123.68	Acetyl Fentanyl-D5	328.2 -> 105...	5.704	1182935	Acetyl Fentanyl-D5	328.2 -> 105...	5.704	1182935		
Acetyl Norfentanyl	219.1 -> 84.2	12/29/2016 9:21 PM	4.866	9743	206.87	206.87	219.1 -> 56.3	7.75	224.2 -> 84.2	7.75	Acetyl Norfentanyl-D5	224.2 -> 84.2	4.845	496733	Acetyl Norfentanyl-D5	224.2 -> 84.2	4.845	496733		
a-hydroxylprazolam	325.1 -> 297...	12/29/2016 9:21 PM	6.457	7793	28.51	28.51	325.1 -> 215...	31.62	330.1 -> 302...	31.62	a-hydroxylprazolam-D5	330.1 -> 302...	6.436	41112	a-hydroxylprazolam-D5	330.1 -> 302...	6.436	41112		
alpha-PVP	232.2 -> 91.0	12/29/2016 9:21 PM	5.493	141180	74.96	74.96	232.2 -> 77.1	80.46	240.2 -> 91.1	80.46	alpha-PVP-d8	240.2 -> 91.1	5.492	597856	alpha-PVP-d8	240.2 -> 91.1	5.492	597856		
Alprazolam	309.1 -> 281...	12/29/2016 9:21 PM	6.542	61010	146.21	146.21	309.1 -> 205...	617.74	314.1 -> 286...	617.74	Alprazolam-D5	314.1 -> 286...	6.541	255286	Alprazolam-D5	314.1 -> 286...	6.541	255286		
Amphetamine	136.1 -> 91.1	12/29/2016 9:21 PM	4.788	164694	16.30	16.30	136.1 -> 119...	142.86	147.2 -> 130...	142.86	Amphetamine-D11	147.2 -> 130...	4.747	168244	Amphetamine-D11	147.2 -> 130...	4.747	168244		
Bupropion	240.1 -> 184...	12/29/2016 9:21 PM	5.696	122153	33511.67	240.1 -> 131...	77.42	242.1 -> 129...	77.42	Ketamine-D4	242.1 -> 129...	5.308	339436	Ketamine-D4	242.1 -> 129...	5.308	339436			
Carisoprodol	261.2 -> 176...	12/29/2016 9:21 PM	6.184	62183	58.73	58.73	261.2 -> 55.3	32.95	268.2 -> 183...	32.95	Carisoprodol-D7	268.2 -> 183...	6.163	407731	Carisoprodol-D7	268.2 -> 183...	6.163	407731		
Citalopram	325.2 -> 109...	12/29/2016 9:21 PM	6.030	179190	313.64	313.64	325.2 -> 262...	128.83	331.2 -> 109...	128.83	Citalopram-D6	331.2 -> 109...	6.029	848097	Citalopram-D6	331.2 -> 109...	6.029	848097		
Clonazepam	316.1 -> 269...	12/29/2016 9:21 PM	6.398	17156	75.75	75.75	316.1 -> 213...	22.37	320.1 -> 217...	22.37	Clonazepam-D4	320.1 -> 217...	6.398	28977	Clonazepam-D4	320.1 -> 217...	6.398	28977		
Codeine	300.2 -> 215...	12/29/2016 9:21 PM	4.756	7847	44.76	44.76	300.2 -> 165...	24.41	306.2 -> 218...	24.41	Codeine-D6	306.2 -> 218...	4.713	36007	Codeine-D6	306.2 -> 218...	4.713	36007		
Cyclobenzaprine	276.2 -> 214...	12/29/2016 9:21 PM	6.283	99819	69.82	69.82	276.2 -> 231...	Infinity	279.2 -> 215...	Infinity	Cyclobenzaprine-D3	279.2 -> 215...	6.282	519013	Cyclobenzaprine-D3	279.2 -> 215...	6.282	519013		
Dextromethorphan	272.2 -> 171...	12/29/2016 9:21 PM	6.040	51406	Infinity	272.2 -> 147...	92.11	275.2 -> 171...	92.11	Dextromethorphan-D3	275.2 -> 171...	6.040	245701	Dextromethorphan-D3	275.2 -> 171...	6.040	245701			
Dextropropofol	258.2 -> 157...	12/29/2016 9:21 PM	5.388	47471	66.71	66.71	258.2 -> 133...	567.54	261.2 -> 157...	567.54	Dextropropofol-D3	261.2 -> 157...	5.388	271625	Dextropropofol-D3	261.2 -> 157...	5.388	271625		
Diazepam	285.1 -> 193...	12/29/2016 9:21 PM	6.769	48928	72.27	72.27	285.1 -> 153...	409.65	290.1 -> 198...	409.65	Diazepam-D5	290.1 -> 198...	6.748	220179	Diazepam-D5	290.1 -> 198...	6.748	220179		
Dihydrocodeine	302.2 -> 198...	12/29/2016 9:21 PM	4.714	25615	753.34	302.2 -> 128...	51.80	308.2 -> 202...	51.80	Dihydrocodeine-D6	308.2 -> 202...	4.692	132143	Dihydrocodeine-D6	308.2 -> 202...	4.692	132143			
Diphenhydramine	256.2 -> 167...	12/29/2016 9:21 PM	5.981	265456	154.04	256.2 -> 152...	71.05	259.2 -> 167...	71.05	Diphenhydramine-D3	259.2 -> 167...	5.981	1519231	Diphenhydramine-D3	259.2 -> 167...	5.981	1519231			
Doxylamine	271.2 -> 182...	12/29/2016 9:21 PM	5.673	210629	44.85	271.2 -> 167...	13.57	276.2 -> 187...	13.57	Doxylamine-D5	276.2 -> 187...	5.650	1271303	Doxylamine-D5	276.2 -> 187...	5.650	1271303			
EDDP	279.2 -> 235...	12/29/2016 9:21 PM	6.038	248638	44637.92	279.2 -> 250...	229.28	282.2 -> 235...	229.28	EDDP-D3	282.2 -> 235...	6.038	110827	EDDP-D3	282.2 -> 235...	6.038	110827			
Fentanyl	337.2 -> 105...	12/29/2016 9:21 PM	5.926	22619	27.48	337.2 -> 188...	90.66	342.3 -> 105...	90.66	Fentanyl-D5	342.3 -> 105...	5.926	1084250	Fentanyl-D5	342.3 -> 105...	5.926	1084250			
Fluoxetine	310.1 -> 44.3	12/29/2016 9:21 PM	6.257	293720	274.51	310.1 -> 148...	22.74	316.2 -> 44.3	22.74	Fluoxetine-D6	316.2 -> 44.3	6.256	1269382	Fluoxetine-D6	316.2 -> 44.3	6.256	1269382			
Hydrocodone	300.2 -> 198...	12/29/2016 9:21 PM	4.978	34541	99.11	300.2 -> 128...	Infinity	306.2 -> 202...	Infinity	Hydrocodone-D6	306.2 -> 202...	4.955	204463	Hydrocodone-D6	306.2 -> 202...	4.955	204463			
Hydromorphone	286.2 -> 184...	12/29/2016 9:21 PM	4.352	24718	70.48	286.2 -> 157...	1596.07	292.2 -> 185...	1596.07	Hydromorphone-D6	292.2 -> 185...	4.350	98741	Hydromorphone-D6	292.2 -> 185...	4.350	98741			
Ketamine	238.1 -> 125...	12/29/2016 9:21 PM	5.330	80239	44.74	238.1 -> 220...	38.18	242.1 -> 129...	38.18	Ketamine-D4	242.1 -> 129...	5.308	339436	Ketamine-D4	242.1 -> 129...	5.308	339436			
Meprobamate	219.1 -> 158...	12/29/2016 9:21 PM	5.678	16236	24.89	219.1 -> 97.1	9.42	226.2 -> 165...	9.42	Meprobamate-D7	226.2 -> 165...	5.656	91344	Meprobamate-D7	226.2 -> 165...	5.656	91344			
Methadone	310.2 -> 265...	12/29/2016 9:21 PM	6.318	202212	76.33	310.2 -> 105...	70.59	319.3 -> 268...	70.59	Methadone-D9	319.3 -> 268...	6.317	1143923	Methadone-D9	319.3 -> 268...	6.317	1143923			
Methamphetamine	150.1 -> 91.1	12/29/2016 9:21 PM	4.948	473259	5.10	150.1 -> 119...	40.82	161.2 -> 97.1	40.82	Methamphetamine-D11	161.2 -> 97.1	4.907	580358	Methamphetamine-D11	161.2 -> 97.1	4.907	580358			
Morphine	286.2 -> 201...	12/29/2016 9:21 PM	4.095	6565	13.75	286.2 -> 165...	106.65	292.2 -> 152...	106.65	Morphine-D6	292.2 -> 152...	4.350	8291	Morphine-D6	292.2 -> 152...	4.350	8291			
Naloxone	328.2 -> 309...	12/29/2016 9:21 PM	4.892	433	5.45	328.2 -> 211...	1.82	333.2 -> 315...	1.82	Naloxone-D5	333.2 -> 315...	5.074	233	Naloxone-D5	333.2 -> 315...	5.074	233			
Naltrexol	344.2 -> 326...	12/29/2016 9:21 PM	4.891	79683	271.26	344.2 -> 308...	57.50	347.2 -> 329...	57.50	Naltrexol-D3	347.2 -> 329...	4.890	333624	Naltrexol-D3	347.2 -> 329...	4.890	333624			
Naltrexone	342.2 -> 324...	12/29/2016 9:21 PM	4.831	41859	11519.90	342.2 -> 55.3	82.26	333.2 -> 315...	82.26	Naltrexone-D5	333.2 -> 315...	5.074	233	Naltrexone-D5	333.2 -> 315...	5.074	233			
Norbuprenorphine	414.3 -> 101...	12/29/2016 9:21 PM	5.802	8710	63.63	414.3 -> 57.3	92.47	417.3 -> 101...	92.47	Norbuprenorphine-D3	417.3 -> 101...	5.781	38129	Norbuprenorphine-D3	417.3 -> 101...	5.781	38129			
Nordiazepam	273.1 -> 140...	12/29/2016 9:21 PM	6.631	21976	5349.67	271.1 -> 208...	6.23	276.1 -> 140...	6.23	Nordiazepam-D5	276.1 -> 140...	6.610	65807	Nordiazepam-D5	276.1 -> 140...	6.610	65807			
Norfentanyl	233.2 -> 84.2	12/29/2016 9:21 PM	5.330	168845	437.77	233.2 -> 55.3	169.11	238.2 -> 84.2	169.11	Norfentanyl-D5	238.2 -> 84.2	5.309	751630	Norfentanyl-D5	238.2 -> 84.2	5.309	751630			
Norhydrocodone	286.2 -> 199...	12/29/2016 9:21 PM	4.920	3565	8.52	286.2 -> 171...	10.59	289.2 -> 202...	10.59	Norhydrocodone-D3	289.2 -> 202...	4.919	76035	Norhydrocodone-D3	289.2 -> 202...	4.919	76035			
Noroxycodone	302.1 -> 284...	12/29/2016 9:21 PM	4.856	28227	32.87	302.1 -> 186...	50.44	305.2 -> 287...	50.44	Noroxycodone-D3	305.2 -> 287...	4.855	133431	Noroxycodone-D3	305.2 -> 287...	4.855	133431			
O-desmethyl-tramadol	250.2 -> 58.3	12/29/2016 9:21 PM	4.904	181470	268.24	250.2 -> 42.3	23.02	256.2 -> 64.3	23.02	O-desmethyl-tramadol-D...	256.2 -> 64.3	4.883	837040	O-desmethyl-tramadol-D...	256.2 -> 64.3	4.883	837040			
Oxazepam	287.1 -> 240...	12/29/2016 9:21 PM	6.464	13309	90.76	287.1 -> 268...	14.95	292.1 -> 246...	14.95	Oxazepam-D5	292.1 -> 246...	6.443	63949	Oxazepam-D5	292.1 -> 246...	6.443	63949			
Oxycodone	316.2 -> 298...	12/29/2016 9:21 PM	4.894	48817	157.45	316.2 -> 241...	29.08	322.2 -> 304...	29.08	Oxycodone-D6	322.2 -> 304...	4.873	256805	Oxycodone-D6	322.2 -> 304...	4.873	256805			
Oxymorphone	302.1 -> 284...	12/29/2016 9:21 PM	4.186	51878	585.82	302.1 -> 227...	101.98	305.2 -> 287...	101.98	Oxymorphone-D3	305.2 -> 287...	4.184	262340	Oxymorphone-D3	305.2 -> 287...	4.184	262340			
Phentermine	150.1 -> 65.2	12/29/2016 9:21 PM	5.110	37408	Infinity	150.1 -> 133...	8.45	155.2 -> 96.2	8.45	Phentermine-D5	155.2 -> 96.2	5.089	487187	Phentermine-D5	155.2 -> 96.2	5.089	487187			
Promethazine	285.1 -> 86.2	12/29/2016 9:21 PM	6.240	333045	55490.37	285.1 -> 71.3	Infinity	288.2 -> 89.2	Infinity	Promethazine-D3	288.2 -> 89.2	6.239	1891949	Promethazine-D3	288.2 -> 89.2	6.239	1891949			
Quetiapine	384.2 -> 253...	12/29/2016 9:21 PM	6.169	229104	307.76	384.2 -> 221...	18896...	392.2 -> 226...	18896...	Quetiapine-D8	392.2 -> 226...	6.168	336316	Quetiapine-D8	392.2 -> 226...	6.168	336316			

Not evaluated

Compound Method		cal 1a		cal 1a Results			Qualifier 1 M...		Qualifier...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Transition	S/N	Name	Transition	RT	Resp.	
Sertraline	306.1 -> 158...	12/29/2016 9:21 PM	6.462	89609	352.07	306.1 -> 275...	393.77	309.1 -> 275...	6.481	Sertraline-D3	309.1 -> 275...	6.481	419463	
Sufentanil	387.2 -> 238...	12/29/2016 9:21 PM	6.148	15251	244.01	387.2 -> 111...	46.14	392.2 -> 238...	6.148	Sufentanil-D5	392.2 -> 238...	6.148	686601	
Temazepam	301.1 -> 255...	12/29/2016 9:21 PM	6.605	81629	103.30	301.1 -> 283...	19.90	306.1 -> 260...	6.584	Temazepam-D5	306.1 -> 260...	6.584	455320	
Tramadol	264.2 -> 58.3	12/29/2016 9:21 PM	5.427	254762	94.06	264.2 -> 43.3	11.03	268.2 -> 58.3	5.407	Tramadol-13C-D3	268.2 -> 58.3	5.407	1163545	
Trazodone	372.2 -> 176...	12/29/2016 9:21 PM	6.007	162989	505.49	372.2 -> 148...	278.22	392.2 -> 238...	6.148	Sufentanil-D5	392.2 -> 238...	6.148	686601	
Venlafaxine	278.2 -> 58.3	12/29/2016 9:21 PM	5.774	218071	131.78	278.2 -> 260...	31.23	284.2 -> 64.3	5.773	Venlafaxine-D6	284.2 -> 64.3	5.773	1042480	
Zolpidem	308.2 -> 235...	12/29/2016 9:21 PM	5.749	156934	130.13	308.2 -> 263...	89.80	314.2 -> 235...	5.728	Zolpidem-D6	314.2 -> 235...	5.728	797702	

Compound Method			cal 1b			cal 1b Results			Qualifier 1 M...			Qualifier...			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Transition	S/N	Transition	S/N	Transition	Name	Transition	RT	Resp.			
7-aminoflunitrazepam	284.1 -> 135...	12/29/2016 9:30 PM	5.761	60629	19794.60	284.1 -> 93.2	200.14	284.1 -> 93.2	200.14	284.1 -> 138...	200.14	284.1 -> 138...	7-aminoflunitrazepam-D7	291.2 -> 328...	5.740	266583			
alpha-hydroxymidazolam	342.1 -> 324...	12/29/2016 9:30 PM	6.445	79015	176.97	342.1 -> 203...	162.03	342.1 -> 203...	162.03	346.1 -> 328...	162.03	346.1 -> 328...	alpha-hydroxymidazolam-	346.1 -> 328...	6.445	421608			
Amitriptyline	278.2 -> 91.2	12/29/2016 9:30 PM	6.354	229408	Infinity	278.2 -> 105...	80.39	278.2 -> 105...	80.39	281.2 -> 91.2	80.39	281.2 -> 91.2	Amitriptyline-D3	281.2 -> 91.2	6.353	480258			
Amoxapine	314.1 -> 271...	12/29/2016 9:30 PM	6.307	75022	171.57	314.1 -> 193...	7694.05	314.1 -> 193...	7694.05	281.2 -> 91.2	7694.05	281.2 -> 91.2	Amitriptyline-D3	281.2 -> 91.2	6.353	480258			
Benzoyllecgonine	290.1 -> 168...	12/29/2016 9:30 PM	5.391	17712	200.06	290.1 -> 105...	20.81	290.1 -> 105...	20.81	298.2 -> 171...	20.81	298.2 -> 171...	Benzoyllecgonine-D8	298.2 -> 171...	5.390	6113			
Carbamazepine	237.1 -> 193...	12/29/2016 9:30 PM	6.196	27991	156.41	237.1 -> 194...	219.35	237.1 -> 194...	219.35	243.1 -> 200...	219.35	243.1 -> 200...	Carbamazepine-13C6	243.1 -> 200...	6.196	12126...			
Chlordiazepoxide	300.1 -> 227...	12/29/2016 9:30 PM	6.553	30705	891.85	300.1 -> 282...	215.88	300.1 -> 282...	215.88	305.1 -> 286...	215.88	305.1 -> 286...	Chlordiazepoxide-D5	305.1 -> 286...	6.553	309560			
Clomipramine	315.2 -> 86.2	12/29/2016 9:30 PM	6.531	315671	Infinity	315.2 -> 58.3	381.98	315.2 -> 58.3	381.98	318.2 -> 89.2	381.98	318.2 -> 89.2	Clomipramine-D3	318.2 -> 89.2	6.530	16989...			
Cocaine	304.2 -> 182...	12/29/2016 9:30 PM	5.573	153051	306.62	304.2 -> 105...	43.69	304.2 -> 105...	43.69	307.2 -> 185...	43.69	307.2 -> 185...	Cocaine-D3	307.2 -> 185...	5.572	645865			
Desipramine	267.2 -> 72.3	12/29/2016 9:30 PM	6.315	261887	Infinity	267.2 -> 44.3	273.65	267.2 -> 44.3	273.65	270.2 -> 75.3	273.65	270.2 -> 75.3	Desipramine-D3	270.2 -> 75.3	6.314	12843...			
Doxepin	280.2 -> 107...	12/29/2016 9:30 PM	6.109	110693	Infinity	280.2 -> 77.2	69.98	280.2 -> 77.2	69.98	283.2 -> 107...	69.98	283.2 -> 107...	Doxepin-D3	283.2 -> 107...	6.088	581452			
Estazolam	295.1 -> 267...	12/29/2016 9:30 PM	6.474	63369	12489.80	295.1 -> 205...	428.76	295.1 -> 205...	428.76	300.1 -> 272...	428.76	300.1 -> 272...	Estazolam-D5	300.1 -> 272...	6.451	303808			
Flunitrazepam	314.1 -> 268...	12/29/2016 9:30 PM	6.511	63584	9078.62	314.1 -> 239...	51.19	314.1 -> 239...	51.19	321.1 -> 245...	51.19	321.1 -> 245...	Flunitrazepam-D7	321.1 -> 245...	6.490	13383			
Flurazepam	388.2 -> 315...	12/29/2016 9:30 PM	6.058	137501	826.39	388.2 -> 317...	458.22	388.2 -> 317...	458.22	393.1 -> 244...	458.22	393.1 -> 244...	Zopiclone-D4	393.1 -> 244...	5.733	184299			
Imipramine	281.2 -> 86.2	12/29/2016 9:30 PM	6.313	344568	Infinity	281.2 -> 58.3	148.84	281.2 -> 58.3	148.84	284.2 -> 61.3	148.84	284.2 -> 61.3	Imipramine-D3	284.2 -> 61.3	6.312	973473			
Levamisole	205.1 -> 91.2	12/29/2016 9:30 PM	4.917	48703	Infinity	205.1 -> 178...	Infinity	205.1 -> 178...	Infinity	307.2 -> 185...	Infinity	307.2 -> 185...	Cocaine-D3	307.2 -> 185...	5.572	645865			
Maprotiline	278.2 -> 91.2	12/29/2016 9:30 PM	6.354	229408	Infinity	278.2 -> 117...	Infinity	278.2 -> 117...	Infinity	252.2 -> 224...	Infinity	252.2 -> 224...	Meperidine-D4	252.2 -> 224...	5.581	293302			
MDA	180.1 -> 163...	12/29/2016 9:30 PM	4.961	50161	133.68	180.1 -> 105...	148.44	180.1 -> 105...	148.44	185.1 -> 168...	148.44	185.1 -> 168...	MDA-D5	185.1 -> 168...	4.961	267329			
MDEA	208.1 -> 163...	12/29/2016 9:30 PM	5.241	109138	214.15	208.1 -> 105...	Infinity	208.1 -> 105...	Infinity	214.2 -> 166...	Infinity	214.2 -> 166...	MDEA-D6	214.2 -> 166...	5.221	580905			
MDMA	194.1 -> 163...	12/29/2016 9:30 PM	5.082	92775	2001.72	194.1 -> 105...	427.14	194.1 -> 105...	427.14	200.2 -> 166...	427.14	200.2 -> 166...	MDMA-D6	200.2 -> 166...	5.062	56222			
Meperidine	248.2 -> 220...	12/29/2016 9:30 PM	5.581	54046	642.53	248.2 -> 174...	119.82	248.2 -> 174...	119.82	252.2 -> 224...	119.82	252.2 -> 224...	Meperidine-D4	252.2 -> 224...	5.581	293302			
Methyphenidate	234.2 -> 84.2	12/29/2016 9:30 PM	5.502	277261	Infinity	234.2 -> 56.3	Infinity	234.2 -> 56.3	Infinity	252.2 -> 224...	Infinity	252.2 -> 224...	Meperidine-D4	252.2 -> 224...	5.581	293302			
Metoprolol	268.2 -> 116...	12/29/2016 9:30 PM	5.434	33272	73.27	268.2 -> 56.3	227.80	268.2 -> 56.3	227.80	252.2 -> 224...	227.80	252.2 -> 224...	Meperidine-D4	252.2 -> 224...	5.581	293302			
Midazolam	326.1 -> 223...	12/29/2016 9:30 PM	6.366	21704	41.32	326.1 -> 249...	Infinity	326.1 -> 249...	Infinity	330.1 -> 295...	Infinity	330.1 -> 295...	Midazolam-D4	330.1 -> 295...	6.345	345928			
Mirtazapine	266.2 -> 195...	12/29/2016 9:30 PM	5.682	138833	143.32	266.2 -> 72.3	174.29	266.2 -> 72.3	174.29	330.1 -> 295...	174.29	330.1 -> 295...	Midazolam-D4	330.1 -> 295...	6.345	345928			
Mitragynine	399.2 -> 174...	12/29/2016 9:30 PM	6.057	71135	219.41	399.2 -> 238...	171.48	399.2 -> 238...	171.48	243.1 -> 200...	171.48	243.1 -> 200...	Carbamazepine-13C6	243.1 -> 200...	6.196	12126...			
Normeperidine	234.1 -> 42.3	12/29/2016 9:30 PM	5.605	73565	Infinity	234.1 -> 160...	Infinity	234.1 -> 160...	Infinity	238.2 -> 164...	Infinity	238.2 -> 164...	Normeperidine-D4	238.2 -> 164...	5.603	282419			
Norpropoxyphene	326.2 -> 44.3	12/29/2016 9:30 PM	6.203	36808	118.43	326.2 -> 252...	3365.63	326.2 -> 252...	3365.63	331.2 -> 44.3	3365.63	331.2 -> 44.3	Norpropoxyphene-D5	331.2 -> 44.3	6.202	163155			
Nortriptyline	264.2 -> 91.2	12/29/2016 9:30 PM	6.275	383829	291.63	264.2 -> 233...	2410.75	264.2 -> 233...	2410.75	267.2 -> 233...	2410.75	267.2 -> 233...	Nortriptyline-D3	267.2 -> 233...	6.335	480428			
Ondansetron	294.2 -> 184...	12/29/2016 9:30 PM	5.739	80129	203.23	294.2 -> 212...	241.43	294.2 -> 212...	241.43	289.2 -> 72.3	241.43	289.2 -> 72.3	Pentazocine-13C3	289.2 -> 72.3	5.658	468056			
Pentazocine	286.2 -> 218...	12/29/2016 9:30 PM	5.658	112202	2226.06	286.2 -> 41.3	Infinity	286.2 -> 41.3	Infinity	289.2 -> 72.3	Infinity	289.2 -> 72.3	Pentazocine-13C3	289.2 -> 72.3	5.658	468056			
Phenazepam	349.0 -> 206...	12/29/2016 9:30 PM	6.587	44765	387.90	349.0 -> 183...	170.22	349.0 -> 183...	170.22	353.0 -> 183...	170.22	353.0 -> 183...	Phenazepam-D4	353.0 -> 183...	6.566	16086			
Phencyclidine	244.2 -> 86.2	12/29/2016 9:30 PM	5.870	196707	67883.95	244.2 -> 91.1	Infinity	244.2 -> 91.1	Infinity	249.2 -> 86.2	Infinity	249.2 -> 86.2	Phencyclidine-D5	249.2 -> 86.2	5.869	988294			
Phenytol	253.1 -> 104...	12/29/2016 9:30 PM	6.113	2776	5.89	253.1 -> 182...	18.84	253.1 -> 182...	18.84	263.2 -> 192...	18.84	263.2 -> 192...	Phenytol-D10	263.2 -> 192...	6.093	18070			
Prazepam	325.1 -> 271...	12/29/2016 9:30 PM	7.016	231342	1373.92	325.1 -> 140...	199.96	325.1 -> 140...	199.96	330.1 -> 276...	199.96	330.1 -> 276...	Prazepam-D5	330.1 -> 276...	6.994	10732...			
Primidone	219.1 -> 91.2	12/29/2016 9:30 PM	5.463	10129	Infinity	219.1 -> 162...	107.00	219.1 -> 162...	107.00	330.1 -> 276...	107.00	330.1 -> 276...	Praxepam-D5	330.1 -> 276...	6.994	10732...			
Propoxyphene	340.2 -> 58.3	12/29/2016 9:30 PM	6.202	226135	86.60	340.2 -> 266...	113.86	340.2 -> 266...	113.86	351.3 -> 277...	113.86	351.3 -> 277...	Propoxyphene-D11	351.3 -> 277...	6.201	266787			
Protriptyline	264.2 -> 155...	12/29/2016 9:30 PM	6.275	617917	Infinity	264.2 -> 161...	0.78	264.2 -> 161...	0.78	267.2 -> 155...	0.78	267.2 -> 155...	Protriptyline-D3	267.2 -> 155...	6.274	383844			
Pseudoephedrine	166.1 -> 148...	12/29/2016 9:30 PM	4.581	11890...	385.55	166.1 -> 133...	1345.64	166.1 -> 133...	1345.64	169.1 -> 151...	1345.64	169.1 -> 151...	Pseudoephedrine-D3	169.1 -> 151...	4.580	585844			
Tapentadol	222.2 -> 107...	12/29/2016 9:30 PM	5.442	165845	Infinity	222.2 -> 121...	Infinity	222.2 -> 121...	Infinity	225.2 -> 107...	Infinity	225.2 -> 107...	Tapentadol-D3	225.2 -> 107...	5.442	872667			
Trimipramine	295.2 -> 100...	12/29/2016 9:30 PM	6.391	382801	128742...	295.2 -> 58.3	11686...	295.2 -> 58.3	11686...	298.2 -> 103...	11686...	298.2 -> 103...	Trimipramine-D3	298.2 -> 103...	6.391	19059...			
Verapamil	455.3 -> 165...	12/29/2016 9:30 PM	6.138	211782	46413.78	455.3 -> 150...	413.62	455.3 -> 150...	413.62	298.2 -> 103...	413.62	298.2 -> 103...	Trimipramine-D3	298.2 -> 103...	6.391	19059...			
Zaleplon	306.1 -> 236...	12/29/2016 9:30 PM	6.308	51626	590.54	306.1 -> 264...	5701.88	306.1 -> 264...	5701.88	310.2 -> 240...	5701.88	310.2 -> 240...	Zaleplon-D4	310.2 -> 240...	6.287	201272			
Zopiclone	389.1 -> 244...	12/29/2016 9:30 PM	5.733	39063	247.02	389.1 -> 216...	97.10	389.1 -> 216...	97.10	393.1 -> 244...	97.10	393.1 -> 244...	Zopiclone-D4	393.1 -> 244...	5.733	184299			



Compound Method		p1 negative			p1 negative Results			Qualifier 1 M...			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Transition	S/N	Name	Transition	RT	Resp.		
6-MAM	328.2 -> 165...	12/29/2016 10:00 PM	5.013	39	0.52	328.2 -> 211...	27.03	328.2 -> 165...	27.03	6-MAM-D6	334.2 -> 165...	4.871	50057		
7-aminoclonazepam	286.1 -> 121...	12/29/2016 10:00 PM	5.834	71	0.80	286.1 -> 222...		286.1 -> 121...		7-Aminoclonazepam-D4	290.1 -> 121...	5.545	136879		
Acetyl Fentanyl	323.2 -> 105...	12/29/2016 10:00 PM	5.746	125	0.31	323.2 -> 188...		323.2 -> 105...		Acetyl Fentanyl-D5	328.2 -> 105...	5.704	10445...		
Acetyl Norfentanyl	219.1 -> 84.2	12/29/2016 10:00 PM	4.866	157	6.04	219.1 -> 56.3	0.34	219.1 -> 84.2	0.34	Acetyl Norfentanyl-D5	224.2 -> 84.2	4.845	452433		
a-hydroxyalprazolam	325.1 -> 297...	12/29/2016 10:00 PM				325.1 -> 215...		325.1 -> 297...		a-hydroxyalprazolam-D5	330.1 -> 302...	6.436	35220		
alpha-PVP	232.2 -> 91.0	12/29/2016 10:00 PM	5.514	437	0.59	232.2 -> 77.1		232.2 -> 91.0		alpha-PVP-d8	240.2 -> 91.1	5.492	533166		
Alprazolam	309.1 -> 281...	12/29/2016 10:00 PM	6.380	1452	7.83	309.1 -> 205...	0.63	309.1 -> 281...	0.63	Alprazolam-D5	314.1 -> 286...	6.521	236959		
Amphetamine	136.1 -> 91.1	12/29/2016 10:00 PM				136.1 -> 119...		136.1 -> 91.1		Amphetamine-D11	147.2 -> 130...	4.747	117622		
Bupropion	240.1 -> 184...	12/29/2016 10:00 PM	5.532	85	1.81	240.1 -> 131...	4.14	240.1 -> 184...	4.14	Ketamine-D4	242.1 -> 129...	5.308	305156		
Carisoprodol	261.2 -> 176...	12/29/2016 10:00 PM	6.285	361	0.72	261.2 -> 55.3		261.2 -> 176...		Carisoprodol-D7	268.2 -> 183...	6.163	344486		
Citalopram	325.2 -> 109...	12/29/2016 10:00 PM				325.2 -> 262...		325.2 -> 109...		Citalopram-D6	331.2 -> 109...	6.029	756622		
Clonazepam	316.1 -> 269...	12/29/2016 10:00 PM	6.520	364	1.46	316.1 -> 213...	1.25	316.1 -> 269...	1.25	Clonazepam-D4	320.1 -> 217...	6.378	25236		
Codeine	300.2 -> 215...	12/29/2016 10:00 PM	4.917	111	1.05	300.2 -> 165...		300.2 -> 215...		Codeine-D6	306.2 -> 218...	4.713	34960		
Cyclobenzaprine	276.2 -> 214...	12/29/2016 10:00 PM	6.629	137	1.43	276.2 -> 231...	2.49	276.2 -> 214...	2.49	Cyclobenzaprine-D3	279.2 -> 215...	6.261	468556		
Dextromethorphan	272.2 -> 171...	12/29/2016 10:00 PM	6.040	632	0.50	272.2 -> 147...	0.69	272.2 -> 171...	0.69	Dextromethorphan-D3	275.2 -> 171...	6.040	223105		
Dextropropion	258.2 -> 157...	12/29/2016 10:00 PM				258.2 -> 133...		258.2 -> 157...		Dextropropion-D3	261.2 -> 157...	5.388	246223		
Diazepam	285.1 -> 193...	12/29/2016 10:00 PM	6.769	408	0.63	285.1 -> 153...	2.80	285.1 -> 193...	2.80	Diazepam-D5	290.1 -> 198...	6.748	208317		
Dihydrocodeine	302.2 -> 198...	12/29/2016 10:00 PM	4.694	46	0.44	302.2 -> 128...	0.28	302.2 -> 198...	0.28	Dihydrocodeine-D6	308.2 -> 202...	4.692	132030		
Diphenhydramine	256.2 -> 167...	12/29/2016 10:00 PM				256.2 -> 152...		256.2 -> 167...		Diphenhydramine-D3	259.2 -> 167...	5.981	14055...		
Doxylamine	271.2 -> 182...	12/29/2016 10:00 PM	5.673	22333	4.21	271.2 -> 167...	2.90	271.2 -> 182...	2.90	Doxylamine-D5	276.2 -> 187...	5.650	10720...		
EDDP	279.2 -> 235...	12/29/2016 10:00 PM	6.079	94	1.09	279.2 -> 250...		279.2 -> 235...		EDDP-D3	282.2 -> 235...	6.038	94242		
Fentanyl	337.2 -> 105...	12/29/2016 10:00 PM	5.886	50	0.71	337.2 -> 188...		337.2 -> 105...		Fentanyl-D5	342.3 -> 105...	5.926	933499		
Fluoxetine	310.1 -> 44.3	12/29/2016 10:00 PM	6.135	89	0.67	310.1 -> 148...		310.1 -> 44.3		Fluoxetine-D6	316.2 -> 44.3	6.256	11629...		
Hydrocodone	300.2 -> 198...	12/29/2016 10:00 PM	4.958	111	2.09	300.2 -> 128...	0.84	300.2 -> 198...	0.84	Hydrocodone-D6	306.2 -> 202...	4.955	191431		
Hydromorphone	286.2 -> 184...	12/29/2016 10:00 PM	4.618	7	0.94	286.2 -> 157...	0.56	286.2 -> 184...	0.56	Hydromorphone-D6	292.2 -> 185...	4.350	88272		
Ketamine	238.1 -> 125...	12/29/2016 10:00 PM	5.289	1531	0.96	238.1 -> 220...	0.47	238.1 -> 125...	0.47	Ketamine-D4	242.1 -> 129...	5.308	305156		
Meprobamate	219.1 -> 158...	12/29/2016 10:00 PM	5.719	528	0.44	219.1 -> 97.1	0.43	219.1 -> 158...	0.43	Meprobamate-D7	226.2 -> 165...	5.656	94246		
Methadone	310.2 -> 265...	12/29/2016 10:00 PM	6.521	3044	1.12	310.2 -> 105...		310.2 -> 265...		Methadone-D9	319.3 -> 268...	6.296	987195		
Methamphetamine	150.1 -> 91.1	12/29/2016 10:00 PM	5.008	271454	Infinity	150.1 -> 119...		150.1 -> 91.1		Methamphetamine-D11	161.2 -> 97.1	4.907	395860		
Morphine	286.2 -> 201...	12/29/2016 10:00 PM				286.2 -> 165...		286.2 -> 201...		Morphine-D6	292.2 -> 152...	4.350	7783		
Naloxone	328.2 -> 309...	12/29/2016 10:00 PM				328.2 -> 211...		328.2 -> 309...		Naloxone-D5	333.2 -> 315...				
Naltrexol	344.2 -> 326...	12/29/2016 10:00 PM	4.810	4278	7.33	344.2 -> 308...		344.2 -> 326...		Naltrexol-D3	347.2 -> 329...	4.890	316698		
Naltrexone	342.2 -> 324...	12/29/2016 10:00 PM				342.2 -> 55.3		342.2 -> 324...		Naltrexone-D5	333.2 -> 315...				
Norbuprenorphine	414.3 -> 101...	12/29/2016 10:00 PM	5.985	211	2.75	414.3 -> 57.3	15.37	414.3 -> 101...	15.37	Norbuprenorphine-D3	417.3 -> 101...	5.781	32557		
Nordiazepam	271.1 -> 140...	12/29/2016 10:00 PM	6.610	88	0.29	271.1 -> 208...		271.1 -> 140...		Nordiazepam-D5	276.1 -> 140...	6.610	65025		
Norfentanyl	233.2 -> 84.2	12/29/2016 10:00 PM	5.432	69	3.93	233.2 -> 55.3	3.06	233.2 -> 84.2	3.06	Norfentanyl-D5	238.2 -> 84.2	5.309	720478		
Norhydrocodone	286.2 -> 199...	12/29/2016 10:00 PM	4.879	110	1.53	286.2 -> 171...	1.35	286.2 -> 199...	1.35	Norhydrocodone-D3	289.2 -> 202...	4.919	69980		
Noroxycodone	302.1 -> 284...	12/29/2016 10:00 PM	4.876	573	0.69	302.1 -> 186...	34.53	302.1 -> 284...	34.53	Noroxycodone-D3	305.2 -> 287...	4.855	128018		
O-desmethyl-tramadol	250.2 -> 58.3	12/29/2016 10:00 PM	4.884	1418	2.24	250.2 -> 42.3	2.13	250.2 -> 58.3	2.13	O-desmethyl-tramadol...	256.2 -> 64.3	4.883	830468		
Oxazepam	287.1 -> 240...	12/29/2016 10:00 PM	6.484	134	0.52	287.1 -> 268...		287.1 -> 240...		Oxazepam-D5	292.1 -> 246...	6.463	62403		
Oxycodone	316.2 -> 298...	12/29/2016 10:00 PM	4.732	457	0.97	316.2 -> 241...	0.27	316.2 -> 298...	0.27	Oxycodone-D6	322.2 -> 304...	4.873	244281		
Oxymorphone	302.1 -> 284...	12/29/2016 10:00 PM	4.186	472	0.91	302.1 -> 227...	0.42	302.1 -> 284...	0.42	Oxymorphone-D3	305.2 -> 287...	4.184	245623		
Phentermine	150.1 -> 65.2	12/29/2016 10:00 PM	5.008	48812	Infinity	150.1 -> 133...	0.35	150.1 -> 65.2	0.35	Phentermine-D5	155.2 -> 96.2	5.089	397264		
Promethazine	285.1 -> 86.2	12/29/2016 10:00 PM	6.098	82	0.73	285.1 -> 71.3	0.77	285.1 -> 86.2	0.77	Promethazine-D3	288.2 -> 89.2	6.239	14955...		
Quetiapine	384.2 -> 253...	12/29/2016 10:00 PM	6.169	31	0.48	384.2 -> 221...		384.2 -> 253...		Quetiapine-D8	392.2 -> 226...	6.168	300127		

Compound Method		p1 negative			p1 negative Results			Qualifier 1 M...		ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Transition	Name	Transition	RT	Resp.	
Sertraline	306.1 -> 158...	12/29/2016 10:00 PM	6.665	53	0.71	306.1 -> 275...	9.98	309.1 -> 275...	Sertraline-D3	309.1 -> 275...	6.461	343838	
Sufentanil	387.2 -> 238...	12/29/2016 10:00 PM	6.148	507	7.88	387.2 -> 111...	4.27	392.2 -> 238...	Sufentanil-D5	392.2 -> 238...	6.148	591568	
Temazepam	301.1 -> 255...	12/29/2016 10:00 PM				301.1 -> 283...			Temazepam-D5	306.1 -> 260...	6.584	400941	
Tramadol	264.2 -> 58.3	12/29/2016 10:00 PM	5.407	5661	3.73	264.2 -> 43.3	0.66	268.2 -> 58.3	Tramadol-13C-D3	268.2 -> 58.3	5.407	10949...	
Trazodone	372.2 -> 176...	12/29/2016 10:00 PM	6.007	2629	2.18	372.2 -> 148...	2.91	392.2 -> 238...	Sufentanil-D5	392.2 -> 238...	6.148	591568	
Venlafaxine	278.2 -> 58.3	12/29/2016 10:00 PM	5.406	1862	0.99	278.2 -> 260...	0.72	284.2 -> 64.3	Venlafaxine-D6	284.2 -> 64.3	5.773	938774	
Zolpidem	308.2 -> 235...	12/29/2016 10:00 PM	5.770	632	1.56	308.2 -> 263...	1.27	314.2 -> 235...	Zolpidem-D6	314.2 -> 235...	5.728	730824	

Compound Method		p2 negative			p2 negative Results			Qualifier 1 M...			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Quali...	Name	Transition	RT	Resp.			
7-aminoflunitrazepam	284.1 -> 135...	12/29/2016 10:09 PM	5.761	1404	7.76	284.1 -> 93.2	√0.79	7-aminoflunitrazepam-D7	291.2 -> 138...	5.740	247497				
alpha-hydroxymidazolam	342.1 -> 324...	12/29/2016 10:09 PM	6.476	2076	2.18	342.1 -> 203...		alpha-hydroxymidazolam-	346.1 -> 328...	6.445	403445				
Amitriptyline	278.2 -> 91.2	12/29/2016 10:09 PM	6.408	153	49.05	278.2 -> 105...	0.52	Amitriptyline-D3	281.2 -> 91.2	6.353	375495				
Amoxapine	314.1 -> 271...	12/29/2016 10:09 PM	5.411	122	0.72	314.1 -> 193...	1.34	Amitriptyline-D3	281.2 -> 91.2	6.353	375495				
Benzoyllecgonine	290.1 -> 168...	12/29/2016 10:09 PM	6.319	469	2.77	290.1 -> 105...	0.91	Benzoyllecgonine-D8	298.2 -> 171...	5.370	5289				
Carbamazepine	237.1 -> 193...	12/29/2016 10:09 PM	6.451	408	3.92	237.1 -> 194...	8.89	Carbamazepine-13C6	243.1 -> 200...	6.196	10185...				
Chlordiazepoxide	300.1 -> 227...	12/29/2016 10:09 PM	6.612	152	0.32	300.1 -> 282...	0.58	Chlordiazepoxide-D5	305.1 -> 286...	6.553	284658				
Clomipramine	315.2 -> 86.2	12/29/2016 10:09 PM	5.573	896	1.36	315.2 -> 58.3	0.37	Clomipramine-D3	318.2 -> 89.2	6.530	13896...				
Cocaine	304.2 -> 182...	12/29/2016 10:09 PM	6.315	√2911	12.66	304.2 -> 105...	12.67	Cocaine-D3	307.2 -> 185...	5.550	636535				
Desipramine	267.2 -> 72.3	12/29/2016 10:09 PM	6.130	191	0.50	267.2 -> 44.3	2.40	Desipramine-D3	270.2 -> 75.3	6.294	11354...				
Doxepin	280.2 -> 107...	12/29/2016 10:09 PM	6.351	53	0.63	280.2 -> 77.2	0.27	Doxepin-D3	283.2 -> 107...	6.088	513220				
Estazolam	295.1 -> 267...	12/29/2016 10:09 PM	6.531	1268	1.79	295.1 -> 205...	2.40	Estazolam-D5	300.1 -> 272...	6.451	283530				
Flunitrazepam	314.1 -> 268...	12/29/2016 10:09 PM	6.374	3369	61.92	314.1 -> 239...	√1.52	Flunitrazepam-D7	321.1 -> 245...	6.490	12908				
Flurazepam	388.2 -> 315...	12/29/2016 10:09 PM	6.476	2076	2.18	388.2 -> 317...		Zopiclone-D4	393.1 -> 244...	5.733	188404				
Imipramine	281.2 -> 86.2	12/29/2016 10:09 PM	6.799	48	0.50	281.2 -> 58.3	0.77	Imipramine-D3	284.2 -> 61.3	6.312	871377				
Levamisole	205.1 -> 91.2	12/29/2016 10:09 PM	6.476	2076	2.18	205.1 -> 178...		Cocaine-D3	307.2 -> 185...	5.550	636535				
Maprotiline	278.2 -> 91.2	12/29/2016 10:09 PM	4.983	76	0.45	278.2 -> 117...		Meperidine-D4	252.2 -> 224...	5.581	272596				
MDA	180.1 -> 163...	12/29/2016 10:09 PM	5.727	176	0.48	180.1 -> 105...		MDA-D5	185.1 -> 168...	4.940	253731				
MDEA	208.1 -> 163...	12/29/2016 10:09 PM	5.725	2241	3.50	208.1 -> 105...		MDEA-D6	214.2 -> 166...	5.221	530971				
MDMA	194.1 -> 163...	12/29/2016 10:09 PM	5.727	176	0.48	194.1 -> 105...		MDMA-D6	200.2 -> 166...	5.062	52248				
Meperidine	248.2 -> 220...	12/29/2016 10:09 PM	6.946	51	0.36	248.2 -> 174...		Meperidine-D4	252.2 -> 224...	5.581	272596				
Methylphenidate	234.2 -> 84.2	12/29/2016 10:09 PM	5.619	24	1.40	234.2 -> 56.3	9.14	Meperidine-D4	252.2 -> 224...	5.581	272596				
Metoprolol	268.2 -> 116...	12/29/2016 10:09 PM	6.946	51	0.36	268.2 -> 56.3	9.14	Meperidine-D4	252.2 -> 224...	5.581	272596				
Midazolam	326.1 -> 223...	12/29/2016 10:09 PM	6.946	51	0.36	326.1 -> 249...		Midazolam-D4	330.1 -> 295...	6.345	342100				
Mirtazapine	266.2 -> 195...	12/29/2016 10:09 PM	5.605	149	0.78	266.2 -> 72.3	0.67	Midazolam-D4	330.1 -> 295...	6.345	342100				
Mitragamine	399.2 -> 174...	12/29/2016 10:09 PM	6.325	228	4.91	399.2 -> 238...	1.31	Carbamazepine-13C6	243.1 -> 200...	6.196	10185...				
Normeperidine	234.1 -> 42.3	12/29/2016 10:09 PM	6.325	228	4.91	234.1 -> 160...	1.31	Normeperidine-D4	238.2 -> 164...	5.583	266492				
Norpropoxyphene	326.2 -> 44.3	12/29/2016 10:09 PM	6.336	1253	283.75	326.2 -> 252...	√1.47	Norpropoxyphene-D5	331.2 -> 44.3	6.182	140792				
Nortriptyline	264.2 -> 91.2	12/29/2016 10:09 PM	6.799	48	0.50	264.2 -> 233...	0.77	Nortriptyline-D3	267.2 -> 233...	6.335	407264				
Ondansetron	294.2 -> 184...	12/29/2016 10:09 PM	6.445	2085	548.85	294.2 -> 212...		Pentazocine-13C3	289.2 -> 72.3	5.658	411093				
Pentazocine	286.2 -> 218...	12/29/2016 10:09 PM	6.445	2085	548.85	286.2 -> 41.3		Pentazocine-13C3	289.2 -> 72.3	5.658	411093				
Phenazepam	349.0 -> 206...	12/29/2016 10:09 PM	6.033	301	1.16	349.0 -> 183...		Phenazepam-D4	353.0 -> 183...	6.567	14272				
Phencyclidine	244.2 -> 86.2	12/29/2016 10:09 PM	6.194	61	0.23	244.2 -> 91.1		Phencyclidine-D5	249.2 -> 86.2	5.869	857625				
Phenylethylamine	253.1 -> 104...	12/29/2016 10:09 PM	6.813	19	0.32	253.1 -> 182...	12.34	Phenylethylamine-D10	263.2 -> 192...	6.093	15373				
Praxapram	325.1 -> 271...	12/29/2016 10:09 PM	5.607	1665	2.02	325.1 -> 140...	12.34	Praxapram-D5	330.1 -> 276...	6.994	902823				
Primidone	219.1 -> 91.2	12/29/2016 10:09 PM	6.432	307	7.95	219.1 -> 162...		Praxapram-D5	330.1 -> 276...	6.994	902823				
Propoxyphene	340.2 -> 58.3	12/29/2016 10:09 PM	4.782	1647	0.70	340.2 -> 266...	0.87	Propoxyphene-D11	351.3 -> 277...	6.181	218708				
Proprietyline	264.2 -> 155...	12/29/2016 10:09 PM	6.369	81	0.49	264.2 -> 161...		Proprietyline-D3	267.2 -> 155...	6.253	338852				
Pseudoephedrine	166.1 -> 148...	12/29/2016 10:09 PM	6.432	307	7.95	166.1 -> 133...	0.87	Pseudoephedrine-D3	169.1 -> 151...	4.580	471924				
Tapentadol	222.2 -> 107...	12/29/2016 10:09 PM	6.432	307	7.95	222.2 -> 121...		Tapentadol-D3	225.2 -> 107...	5.442	797161				
Trimipramine	295.2 -> 100...	12/29/2016 10:09 PM	6.369	81	0.49	295.2 -> 58.3		Trimipramine-D3	298.2 -> 103...	6.391	16210...				
Verapamil	455.3 -> 165...	12/29/2016 10:09 PM	6.369	81	0.49	455.3 -> 150...		Trimipramine-D3	298.2 -> 103...	6.391	16210...				
Zaleplon	306.1 -> 236...	12/29/2016 10:09 PM	6.369	81	0.49	306.1 -> 264...		Zaleplon-D4	310.2 -> 240...	6.287	214318				
Zopiclone	389.1 -> 244...	12/29/2016 10:09 PM	6.369	81	0.49	389.1 -> 216...		Zopiclone-D4	393.1 -> 244...	5.733	188404				

Compound Method		p1 external control a			p1 external control a Resu...			Qualifier 1 M...			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Transition	S/N	Name	Transition	RT	Resp.		
6-MAM	328.2 -> 165...	12/29/2016 9:40 PM	4.852	22	0.31	328.2 -> 211...		328.2 -> 211...		6-MAM-D6	334.2 -> 165...	4.871	40640		
7-aminoclonazepam	286.1 -> 121...	12/29/2016 9:40 PM	5.526	132	2.43	286.1 -> 222...		286.1 -> 222...		7-Aminoclonazepam-D4	290.1 -> 121...	5.566	114234		
Acetyl Fentanyl	323.2 -> 105...	12/29/2016 9:40 PM				323.2 -> 188...		323.2 -> 188...		Acetyl Fentanyl-D5	328.2 -> 105...	5.724	812159		
Acetyl Norfentanyl	219.1 -> 84.2	12/29/2016 9:40 PM	4.886	140	4.67	219.1 -> 56.3	1.00	219.1 -> 56.3	1.00	Acetyl Norfentanyl-D5	224.2 -> 84.2	4.845	400934		
a-hydroxylprazolam	325.1 -> 297...	12/29/2016 9:40 PM	6.356	145	0.65	325.1 -> 215...		325.1 -> 215...		a-hydroxylprazolam-D5	330.1 -> 302...	6.456	32990		
alpha-PVP	232.2 -> 91.0	12/29/2016 9:40 PM	5.514	62	0.44	232.2 -> 77.1		232.2 -> 77.1		alpha-PVP-d8	240.2 -> 91.1	5.492	467249		
Alprazolam	309.1 -> 281...	12/29/2016 9:40 PM	6.380	1381	3.56	309.1 -> 205...	1.27	309.1 -> 205...	1.27	Alprazolam-D5	314.1 -> 286...	6.541	191220		
Amphetamine	136.1 -> 91.1	12/29/2016 9:40 PM	4.788	12640	4.10	136.1 -> 119...	1.10	136.1 -> 119...	1.10	Amphetamine-D11	147.2 -> 130...	4.747	128899		
Bupropion	240.1 -> 184...	12/29/2016 9:40 PM	5.614	270	1.89	240.1 -> 131...	2.85	240.1 -> 131...	2.85	Ketamine-D4	242.1 -> 129...	5.329	264836		
Carisoprodol	261.2 -> 176...	12/29/2016 9:40 PM				261.2 -> 55.3		261.2 -> 55.3		Carisoprodol-D7	268.2 -> 183...	6.163	311561		
Citalopram	325.2 -> 109...	12/29/2016 9:40 PM				325.2 -> 262...		325.2 -> 262...		Citalopram-D6	331.2 -> 109...	6.029	610989		
Clonazepam	316.1 -> 269...	12/29/2016 9:40 PM	6.540	491	1.50	316.1 -> 213...	0.68	316.1 -> 213...	0.68	Clonazepam-D4	320.1 -> 217...	6.398	200177		
Codeine	300.2 -> 215...	12/29/2016 9:40 PM	4.958	8007	72.77	300.2 -> 165...	225.96	300.2 -> 165...	225.96	Codeine-D6	306.2 -> 218...	4.733	304477		
Cyclobenzaprine	276.2 -> 214...	12/29/2016 9:40 PM	6.324	85	0.24	276.2 -> 231...	0.87	276.2 -> 231...	0.87	Cyclobenzaprine-D3	279.2 -> 215...	6.282	360484		
Dextromethorphan	272.2 -> 171...	12/29/2016 9:40 PM	6.040	318729	171.02	272.2 -> 147...	1064....	272.2 -> 147...	1064....	Dextromethorphan-D3	275.2 -> 171...	6.040	179503		
Dextropropfan	258.2 -> 157...	12/29/2016 9:40 PM	5.004	14	0.35	258.2 -> 133...		258.2 -> 133...		Dextropropfan-D3	261.2 -> 157...	5.388	200039		
Diazepam	285.1 -> 193...	12/29/2016 9:40 PM	6.729	294	0.48	285.1 -> 153...	0.63	285.1 -> 153...	0.63	Diazepam-D5	290.1 -> 198...	6.768	170181		
Dihydrocodeine	302.2 -> 198...	12/29/2016 9:40 PM	4.774	117	0.43	302.2 -> 128...		302.2 -> 128...		Dihydrocodeine-D6	308.2 -> 202...	4.692	107141		
Diphenhydramine	256.2 -> 167...	12/29/2016 9:40 PM	6.022	858	0.38	256.2 -> 152...		256.2 -> 152...		Diphenhydramine-D3	259.2 -> 167...	5.981	11442...		
Doxylamine	271.2 -> 182...	12/29/2016 9:40 PM	5.651	16714...	196.32	271.2 -> 167...	948.13	271.2 -> 167...	948.13	Doxylamine-D5	276.2 -> 187...	5.650	920359		
EDDP	279.2 -> 235...	12/29/2016 9:40 PM	6.058	56	0.55	279.2 -> 250...	0.78	279.2 -> 250...	0.78	EDDP-D3	282.2 -> 235...	6.038	64570		
Fentanyl	337.2 -> 105...	12/29/2016 9:40 PM	5.987	96	0.80	337.2 -> 188...		337.2 -> 188...		Fentanyl-D5	342.3 -> 105...	5.926	753233		
Fluoxetine	310.1 -> 44.3	12/29/2016 9:40 PM	6.297	465	0.89	310.1 -> 148...	0.83	310.1 -> 148...	0.83	Fluoxetine-D6	316.2 -> 44.3	6.256	933160		
Hydrocodone	300.2 -> 198...	12/29/2016 9:40 PM	4.978	272118	Infinity	300.2 -> 128...	Infinity	300.2 -> 128...	Infinity	Hydrocodone-D6	306.2 -> 202...	4.955	158876		
Hydromorphone	286.2 -> 184...	12/29/2016 9:40 PM	4.476	25	38.75	286.2 -> 157...		286.2 -> 157...		Hydromorphone-D6	292.2 -> 185...	4.372	74370		
Ketamine	238.1 -> 125...	12/29/2016 9:40 PM	5.309	1623	0.66	238.1 -> 220...	0.51	238.1 -> 220...	0.51	Ketamine-D4	242.1 -> 129...	5.329	264836		
Meprobamate	219.1 -> 158...	12/29/2016 9:40 PM	5.841	513	0.41	219.1 -> 97.1	0.69	219.1 -> 97.1	0.69	Meprobamate-D7	226.2 -> 165...	5.678	75627		
Methadone	310.2 -> 265...	12/29/2016 9:40 PM	6.501	1905	0.97	310.2 -> 105...	0.48	310.2 -> 105...	0.48	Methadone-D9	319.3 -> 268...	6.317	790166		
Methamphetamine	150.1 -> 91.1	12/29/2016 9:40 PM	5.008	250361	Infinity	150.1 -> 119...		150.1 -> 119...		Methamphetamine-D11	161.2 -> 97.1	4.927	411967		
Morphine	286.2 -> 201...	12/29/2016 9:40 PM	4.095	48889	46.43	286.2 -> 165...	57.20	286.2 -> 165...	57.20	Morphine-D6	292.2 -> 152...	4.350	6677		
Naloxone	328.2 -> 309...	12/29/2016 9:40 PM	4.872	469	0.35	328.2 -> 211...		328.2 -> 211...		Naloxone-D5	333.2 -> 315...	4.973	161		
Naltrexol	344.2 -> 326...	12/29/2016 9:40 PM	4.810	4226	13.31	344.2 -> 308...		344.2 -> 308...		Naltrexol-D3	347.2 -> 329...	4.890	260606		
Naltrexone	342.2 -> 324...	12/29/2016 9:40 PM	4.871	82	0.44	342.2 -> 55.3		342.2 -> 55.3		Naltrexone-D5	333.2 -> 315...	4.973	161		
Norbuprenorphine	414.3 -> 101...	12/29/2016 9:40 PM	5.822	118	6.31	414.3 -> 57.3	0.50	414.3 -> 57.3	0.50	Norbuprenorphine-D3	417.3 -> 101...	5.801	30281		
Nordiazepam	271.1 -> 140...	12/29/2016 9:40 PM	6.692	21	0.13	271.1 -> 208...		271.1 -> 208...		Nordiazepam-D5	276.1 -> 140...	6.630	52964		
Norfentanyl	233.2 -> 84.2	12/29/2016 9:40 PM	5.330	103	0.57	233.2 -> 55.3	0.61	233.2 -> 55.3	0.61	Norfentanyl-D5	238.2 -> 84.2	5.309	602989		
Norhydrocodone	286.2 -> 199...	12/29/2016 9:40 PM	4.940	68	0.57	286.2 -> 171...		286.2 -> 171...		Norhydrocodone-D3	289.2 -> 202...	4.919	61416		
Noroxycodone	302.1 -> 284...	12/29/2016 9:40 PM	5.240	550	1.28	302.1 -> 186...	7.53	302.1 -> 186...	7.53	Noroxycodone-D3	305.2 -> 287...	4.855	108384		
O-desmethyl-tramadol	250.2 -> 58.3	12/29/2016 9:40 PM	4.924	1300	1.57	250.2 -> 42.3	2.16	250.2 -> 42.3	2.16	O-desmethyl-tramadol...	256.2 -> 64.3	4.904	678045		
Oxazepam	287.1 -> 240...	12/29/2016 9:40 PM				287.1 -> 268...		287.1 -> 268...		Oxazepam-D5	292.1 -> 246...	6.463	47756		
Oxycodone	316.2 -> 298...	12/29/2016 9:40 PM	5.136	49	0.39	316.2 -> 241...	0.48	316.2 -> 241...	0.48	Oxycodone-D6	322.2 -> 304...	4.873	207778		
Oxymorphone	302.1 -> 284...	12/29/2016 9:40 PM	4.473	106	0.69	302.1 -> 227...	0.20	302.1 -> 227...	0.20	Oxymorphone-D3	305.2 -> 287...	4.204	205787		
Phentermine	150.1 -> 65.2	12/29/2016 9:40 PM	5.008	52968	1.84	150.1 -> 133...	0.09	150.1 -> 133...	0.09	Phentermine-D5	155.2 -> 96.2	5.089	354137		
Promethazine	285.1 -> 86.2	12/29/2016 9:40 PM	6.260	754	1.83	285.1 -> 71.3	0.64	285.1 -> 71.3	0.64	Promethazine-D3	288.2 -> 89.2	6.239	11355...		
Quetiapine	384.2 -> 253...	12/29/2016 9:40 PM	6.169	322	2.00	384.2 -> 221...		384.2 -> 221...		Quetiapine-D8	392.2 -> 226...	6.168	244856		



Compound Method		p1 external control a			p1 external control a Resu...			Qualifier 1 M...		Qualifi...	ISTD Method		ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Transition	S/N	Name	Transition	RT	Resp.	
Sertraline	306.1 -> 158...	12/29/2016 9:40 PM	6.523	50	✓ 0.29	306.1 -> 275...	2.42	309.1 -> 275...	6.481	Sertraline-D3	309.1 -> 275...	6.481	264842	
Sufentanil	387.2 -> 238...	12/29/2016 9:40 PM	6.189	835	121.69	387.2 -> 111...	✓ 1.77	392.2 -> 238...	6.148	Sufentanil-D5	392.2 -> 238...	6.148	450813	
Temazepam	301.1 -> 255...	12/29/2016 9:40 PM			✓	301.1 -> 283...		306.1 -> 260...	6.584	Temazepam-D5	306.1 -> 260...	6.584	329030	
Tramadol	264.2 -> 58.3	12/29/2016 9:40 PM	5.427	3721	✓ 1.72	264.2 -> 43.3	0.38	268.2 -> 58.3	5.407	Tramadol-13C-D3	268.2 -> 58.3	5.407	915350	
Trazodone	372.2 -> 176...	12/29/2016 9:40 PM	6.027	12165...	728.29	372.2 -> 148...	2809...	392.2 -> 238...	6.148	Sufentanil-D5	392.2 -> 238...	6.148	450813	
Venlafaxine	278.2 -> 58.3	12/29/2016 9:40 PM	5.896	341	✓ 0.51	278.2 -> 260...		284.2 -> 64.3	5.773	Venlafaxine-D6	284.2 -> 64.3	5.773	778538	
Zolpidem	308.2 -> 235...	12/29/2016 9:40 PM	5.871	895	✓ 1.57	308.2 -> 263...	75.45	314.2 -> 235...	5.748	Zolpidem-D6	314.2 -> 235...	5.748	633569	

Compound Method			p2 external control			p2 external control Results			Qualifier 1 M...			Qualif...			ISTD Method			ISTD Results	
Name	Transition	Acq. Date-Time	RT	Resp.	S/N	Transition	S/N	Transition	S/N	Name	Transition	RT	Resp.						
7-aminoflunitrazepam	284.1 -> 135...	12/29/2016 9:50 PM	5.761	667	39.79	284.1 -> 93.2	1.04	7-aminoflunitrazepam-D7	291.2 -> 138...	5.740	207297								
alpha-hydroxymidazolam	342.1 -> 324...	12/29/2016 9:50 PM	6.487	62	0.91	342.1 -> 203...		alpha-hydroxymidazolam-	346.1 -> 328...	6.445	349252								
Amiripryline	278.2 -> 91.2	12/29/2016 9:50 PM	6.476	1053	0.69	278.2 -> 105...		Amiripryline-D3	281.2 -> 91.2	6.353	301955								
Amoxapine	314.1 -> 271...	12/29/2016 9:50 PM	6.531	266	3.25	314.1 -> 193...	37.40	Amiripryline-D3	281.2 -> 91.2	6.353	301955								
Benzoyllecgonine	290.1 -> 168...	12/29/2016 9:50 PM	5.513	13	0.24	290.1 -> 105...	2.08	Benzoyllecgonine-D8	298.2 -> 171...	5.370	5067								
Carbamazepine	237.1 -> 193...	12/29/2016 9:50 PM	6.339	212	0.87	237.1 -> 194...		Carbamazepine-13C6	243.1 -> 200...	6.196	10056...								
Chlordiazepoxide	300.1 -> 227...	12/29/2016 9:50 PM	6.472	580	3.92	300.1 -> 282...		Chlordiazepoxide-D5	305.1 -> 286...	6.533	236876								
Clomipramine	315.2 -> 86.2	12/29/2016 9:50 PM	6.592	39	0.56	315.2 -> 58.3		Clomipramine-D3	318.2 -> 89.2	6.530	10382...								
Cocaine	304.2 -> 182...	12/29/2016 9:50 PM	5.593	443	1.40	304.2 -> 105...		Cocaine-D3	307.2 -> 185...	5.572	496523								
Desipramine	267.2 -> 72.3	12/29/2016 9:50 PM	6.315	2230	8.08	267.2 -> 44.3	11.96	Desipramine-D3	270.2 -> 75.3	6.314	895910								
Doxepin	280.2 -> 107...	12/29/2016 9:50 PM	6.415	203	0.48	280.2 -> 77.2	2.20	Doxepin-D3	283.2 -> 107...	6.088	398365								
Estazolam	295.1 -> 267...	12/29/2016 9:50 PM	6.474	113	0.61	295.1 -> 205...		Estazolam-D5	300.1 -> 272...	6.451	242859								
Flunitrazepam	314.1 -> 268...	12/29/2016 9:50 PM				314.1 -> 239...		Flunitrazepam-D7	321.1 -> 245...	6.490	8694								
Flurazepam	388.2 -> 315...	12/29/2016 9:50 PM				388.2 -> 317...		Zopiclone-D4	393.1 -> 244...	5.733	148296								
Imipramine	281.2 -> 86.2	12/29/2016 9:50 PM	6.374	2627	3.18	281.2 -> 58.3	1.85	Imipramine-D3	284.2 -> 61.3	6.312	673725								
Levamisole	205.1 -> 91.2	12/29/2016 9:50 PM	6.476	1053	0.69	205.1 -> 178...		Cocaine-D3	307.2 -> 185...	5.572	496523								
Maprotiline	278.2 -> 91.2	12/29/2016 9:50 PM	6.476	1053	0.69	278.2 -> 117...	0.28	Meperidine-D4	252.2 -> 224...	5.581	219124								
MDA	180.1 -> 163...	12/29/2016 9:50 PM				180.1 -> 105...		MDA-D5	185.1 -> 168...	4.961	210518								
MDEA	208.1 -> 163...	12/29/2016 9:50 PM				208.1 -> 105...		MDEA-D6	214.2 -> 166...	5.221	444726								
MDMA	194.1 -> 163...	12/29/2016 9:50 PM	5.203	68	0.39	194.1 -> 105...	0.50	MDMA-D6	200.2 -> 166...	5.062	42409								
Meperidine	248.2 -> 220...	12/29/2016 9:50 PM	5.581	414837	12173.07	248.2 -> 174...	Infini...	Meperidine-D4	252.2 -> 224...	5.581	219124								
Methylphenidate	234.2 -> 84.2	12/29/2016 9:50 PM	5.563	210	0.58	234.2 -> 56.3	0.77	Meperidine-D4	252.2 -> 224...	5.581	219124								
Metoprolol	268.2 -> 116...	12/29/2016 9:50 PM				268.2 -> 56.3		Meperidine-D4	252.2 -> 224...	5.581	219124								
Midazolam	326.1 -> 223...	12/29/2016 9:50 PM				326.1 -> 249...		Midazolam-D4	330.1 -> 295...	6.345	287786								
Mirtazapine	266.2 -> 195...	12/29/2016 9:50 PM	6.417	282	0.50	266.2 -> 72.3	0.40	Midazolam-D4	330.1 -> 295...	6.345	287786								
Mitragynine	399.2 -> 174...	12/29/2016 9:50 PM	6.118	94	1.15	399.2 -> 238...		Carbamazepine-13C6	243.1 -> 200...	6.196	10056...								
Normeperidine	234.1 -> 42.3	12/29/2016 9:50 PM	5.605	877	2.54	234.1 -> 160...	2.79	Normeperidine-D4	238.2 -> 164...	5.583	210571								
Norpropoxyphene	326.2 -> 44.3	12/29/2016 9:50 PM	6.284	85	2.91	326.2 -> 252...	3.64	Norpropoxyphene-D5	331.2 -> 44.3	6.202	130237								
Nortriptyline	264.2 -> 91.2	12/29/2016 9:50 PM	6.336	809	1.09	264.2 -> 233...	1.11	Nortriptyline-D3	267.2 -> 233...	6.335	316068								
Ondansetron	294.2 -> 184...	12/29/2016 9:50 PM	6.474	102	0.90	294.2 -> 212...	1.07	Pentazocine-13C3	289.2 -> 72.3	5.658	314218								
Pentazocine	286.2 -> 218...	12/29/2016 9:50 PM				286.2 -> 41.3		Pentazocine-13C3	289.2 -> 72.3	5.658	314218								
Phenazepam	349.0 -> 206...	12/29/2016 9:50 PM	6.445	1629	48.61	349.0 -> 183...		Phenazepam-D4	353.0 -> 183...	6.566	13068								
Phencyclidine	244.2 -> 86.2	12/29/2016 9:50 PM	5.930	95	0.45	244.2 -> 91.1	0.23	Phencyclidine-D5	249.2 -> 86.2	5.869	718410								
Phenytolol	253.1 -> 104...	12/29/2016 9:50 PM	5.971	128	0.79	253.1 -> 182...		Phenytolol-D10	263.2 -> 192...	6.093	12280								
Praxepam	325.1 -> 271...	12/29/2016 9:50 PM	6.956	128	0.61	325.1 -> 140...		Praxepam-D5	330.1 -> 276...	6.994	760788								
Primidone	219.1 -> 91.2	12/29/2016 9:50 PM	5.607	1220	1.31	219.1 -> 162...		Praxepam-D5	330.1 -> 276...	6.994	760788								
Propoxyphene	340.2 -> 58.3	12/29/2016 9:50 PM	6.405	34	0.71	340.2 -> 266...	1.87	Propoxyphene-D11	351.3 -> 277...	6.181	188173								
Protriptyline	264.2 -> 155...	12/29/2016 9:50 PM	6.336	80	0.24	264.2 -> 161...	2.12	Protriptyline-D3	267.2 -> 155...	6.274	264570								
Pseudoephedrine	166.1 -> 148...	12/29/2016 9:50 PM	4.702	3014	0.71	166.1 -> 133...	0.74	Pseudoephedrine-D3	169.1 -> 151...	4.600	452078								
Tapentadol	222.2 -> 107...	12/29/2016 9:50 PM	5.524	354	2.20	222.2 -> 121...	0.69	Tapentadol-D3	225.2 -> 107...	5.442	655392								
Trimipramine	295.2 -> 100...	12/29/2016 9:50 PM	6.432	342	1.33	295.2 -> 58.3		Trimipramine-D3	298.2 -> 103...	6.391	12442...								
Verapamil	455.3 -> 165...	12/29/2016 9:50 PM	6.328	41	0.53	455.3 -> 150...		Trimipramine-D3	298.2 -> 103...	6.391	12442...								
Zaleplon	306.1 -> 236...	12/29/2016 9:50 PM				306.1 -> 264...		Zaleplon-D4	310.2 -> 240...	6.287	177464								
Zopiclone	389.1 -> 244...	12/29/2016 9:50 PM				389.1 -> 216...		Zopiclone-D4	393.1 -> 244...	5.733	148296								

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

Extraction Date: 12-29-16 Analyst: Anne Nord

PRE-ANALYTIC

Plate Lot# 0490364 Plate. Exp. 9-21-2017

- ✓ 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 #: <u>321632</u>	Hexane	
<i>Column: Phenomenex Phenyl Hexyl (4.6 x 50mm; 2.6um)</i>			

- ✓ 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. Is pressure stable? Y / N
- ✓ 4. Create worklist. Data path name: 12-29-16 AMN blood screen AM 25-26

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
- ✓ 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
- ✓ 14. 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: 122916 Cann Screen
- ✓ 2. Make any necessary integration changes.
- ✓ 3. For unknown samples, calculated concentration > 3ng THC, THC-OH > 5ng Carboxy-THC +/- 2% 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

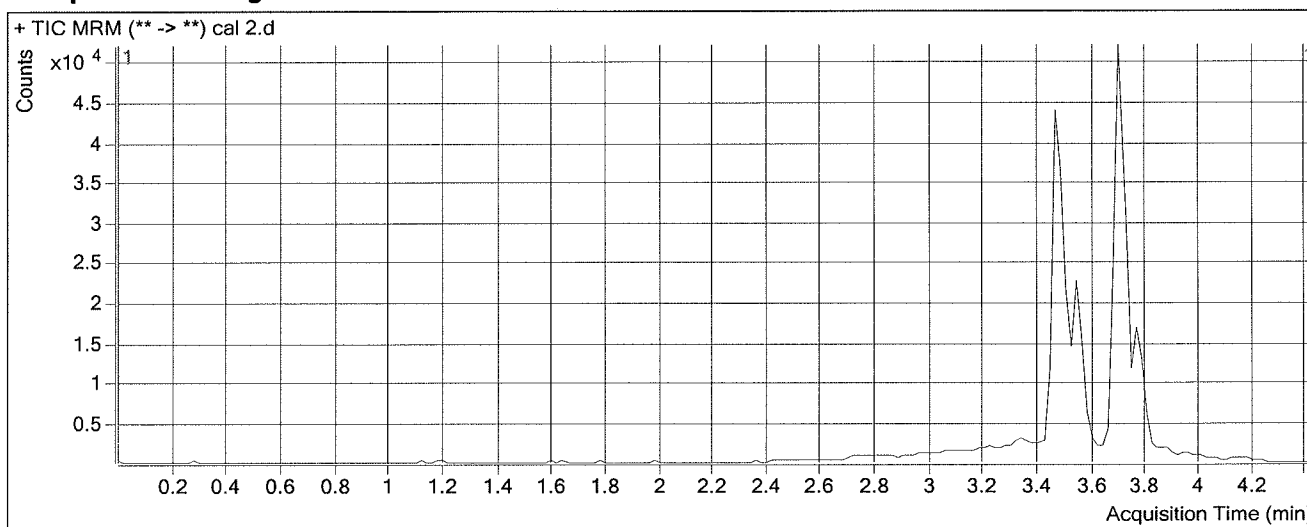
Cannabinoid Screen Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin
Analysis Time 12/30/2016 10:53 AM **Analyst Name** ISP Tox
Report Time 12/30/2016 10:58 AM **Reporter Name** ISP Tox
Last Calib Update 12/30/2016 10:53 AM **Batch State** Processed

Analysis Info

Acq Time 2016-12-29 16:15 **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 Cannabionid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.493	5385	128726	0.0418	5.3644
THC-COOH	3.566	3925	43537	0.0901	5.2993
THC	3.780	467	10301	0.0453	5.1033

ISP FORENSICS - Cd'A

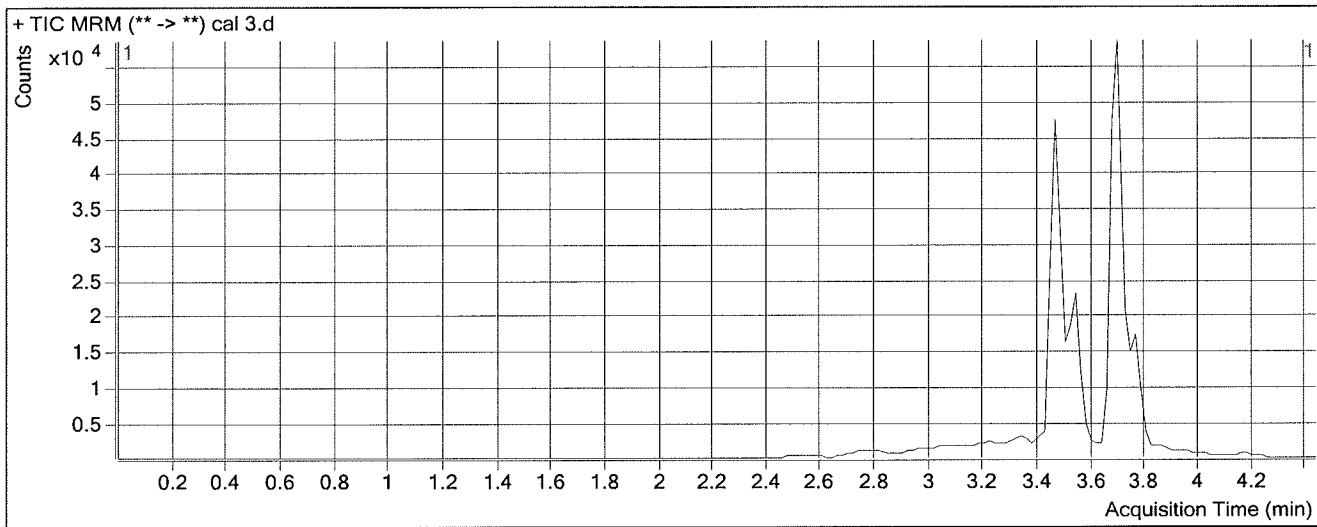
Cannabinoid Screen Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin
Analysis Time 12/30/2016 10:53 AM **Analyst Name** ISP Tox
Report Time 12/30/2016 10:58 AM **Reporter Name** ISP Tox
Last Calib Update 12/30/2016 10:53 AM **Batch State** Processed

Analysis Info

Acq Time 2016-12-29 16:21 **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 Cannabionid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	10332	128492	0.0804	9.2987
THC-COOH	3.546	7159	41370	0.1731	9.7326
THC	3.760	877	9915	0.0884	9.4394

ISP FORENSICS - Cd'A

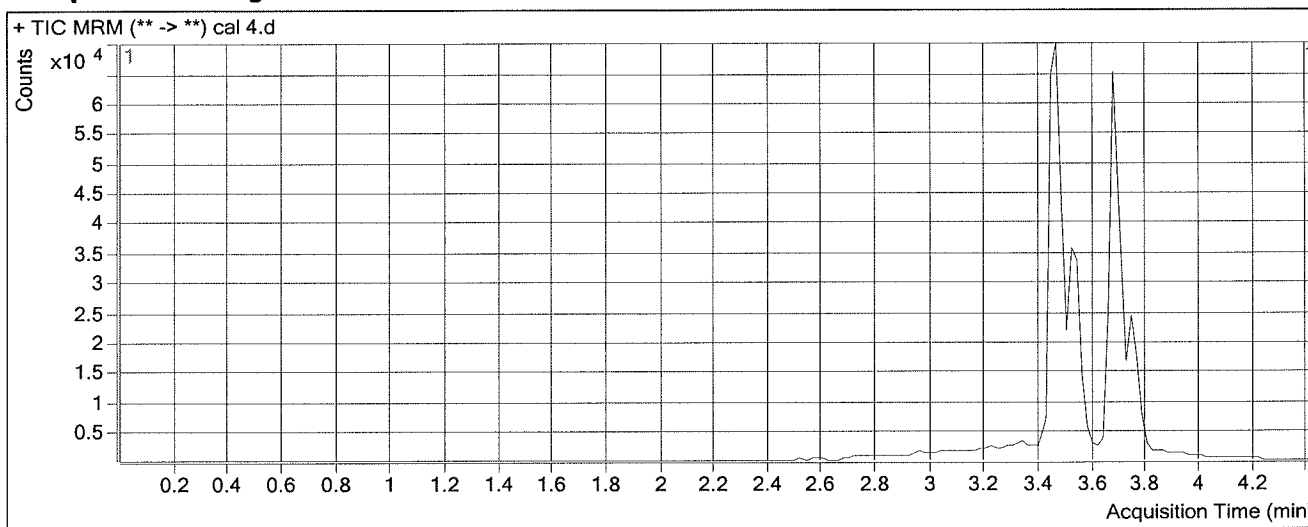
Cannabinoid Screen Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin
Analysis Time 12/30/2016 10:53 AM **Analyst Name** ISP Tox
Report Time 12/30/2016 10:58 AM **Reporter Name** ISP Tox
Last Calib Update 12/30/2016 10:53 AM **Batch State** Processed

Analysis Info

Acq Time 2016-12-29 16:28 **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 Cannabionid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	42748	186099	0.2297	24.5254
THC-COOH	3.546	24519	57261	0.4282	23.3760
THC	3.760	4128	16114	0.2562	26.3123

ISP FORENSICS - Cd'A

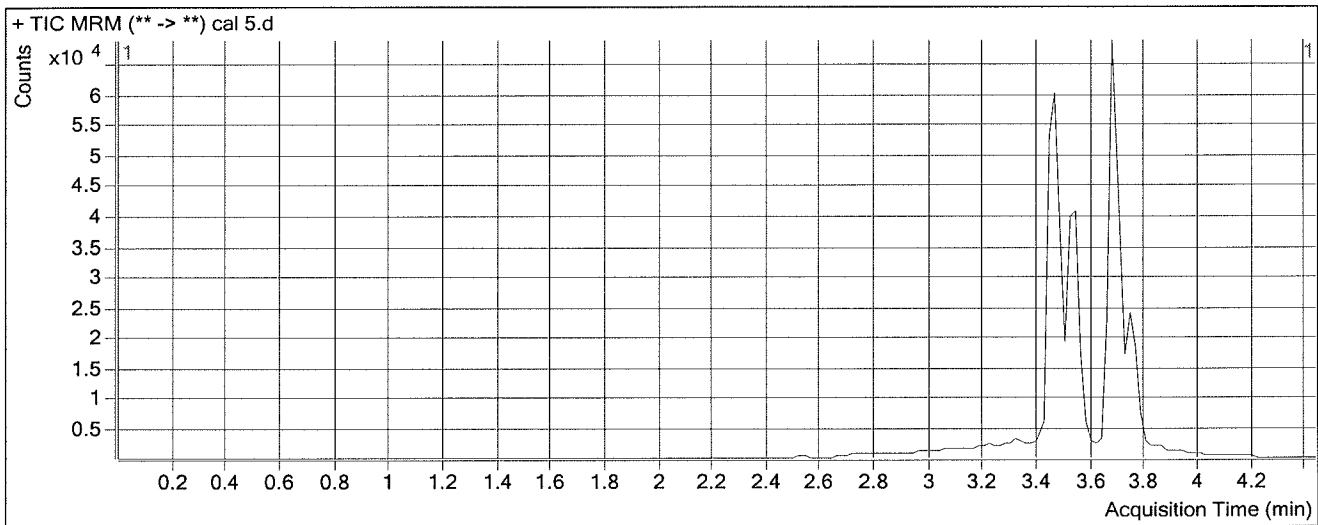
Cannabinoid Screen Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin
Analysis Time 12/30/2016 10:53 AM **Analyst Name** ISP Tox
Report Time 12/30/2016 10:58 AM **Reporter Name** ISP Tox
Last Calib Update 12/30/2016 10:53 AM **Batch State** Processed

Analysis Info

Acq Time 2016-12-29 16:34 **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 Cannabionid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	61996	127189	0.4874	50.8115
THC-COOH	3.546	42772	44748	0.9559	51.5921
THC	3.760	5755	11910	0.4832	49.1449

ISP FORENSICS - Cd'A

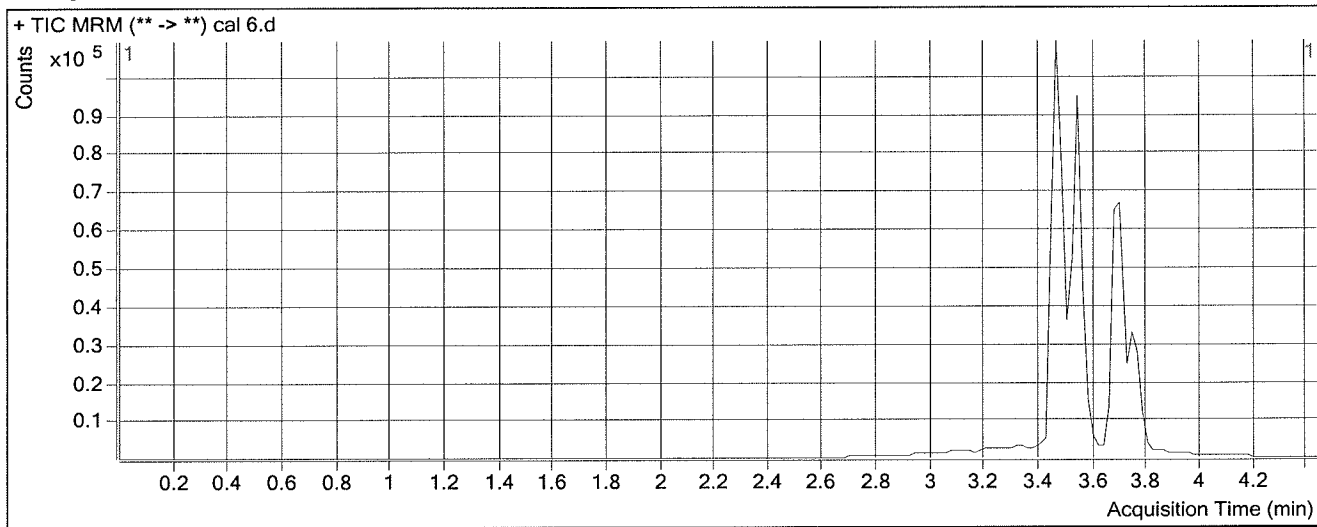
Cannabinoid Screen Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin
Analysis Time 12/30/2016 10:53 AM **Analyst Name** ISP Tox
Report Time 12/30/2016 10:58 AM **Reporter Name** ISP Tox
Last Calib Update 12/30/2016 10:53 AM **Batch State** Processed

Analysis Info

Acq Time 2016-12-29 16:41 **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 Cannabionid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	173423	147767	1.1736	120.7979
THC-COOH	3.546	114126	50207	2.2731	122.0301
THC	3.760	17614	14430	1.2207	123.3217

ISP FORENSICS - Cd'A

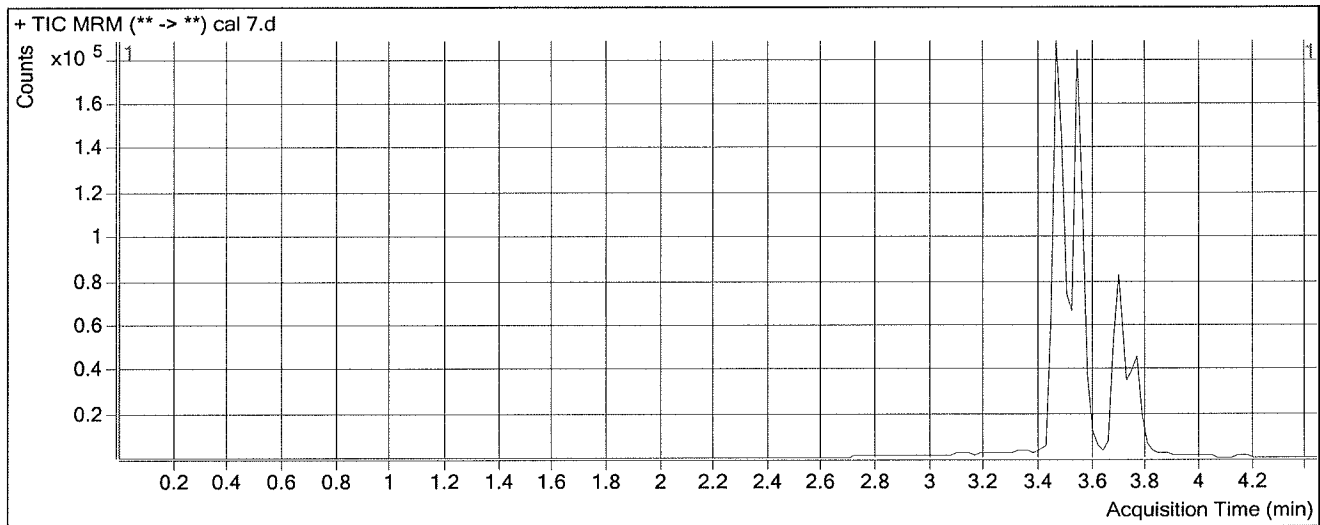
Cannabinoid Screen Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin
Analysis Time 12/30/2016 10:53 AM **Analyst Name** ISP Tox
Report Time 12/30/2016 10:58 AM **Reporter Name** ISP Tox
Last Calib Update 12/30/2016 10:53 AM **Batch State** Processed

Analysis Info

Acq Time 2016-12-29 16:54 **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 Cannabionid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	404870	130848	3.0942	316.6806
THC-COOH	3.546	252669	44556	5.6708	303.7182
THC	3.780	44600	13523	3.2980	332.2640

ISP FORENSICS - Cd'A

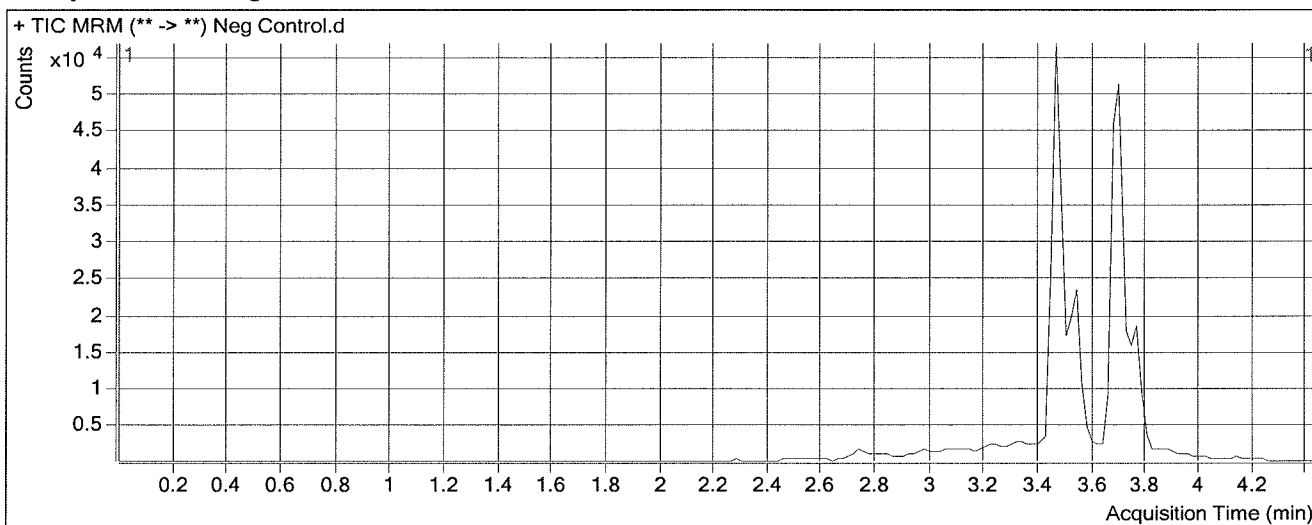
Cannabinoid Screen Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin
Analysis Time 12/30/2016 10:53 AM **Analyst Name** ISP Tox
Report Time 12/30/2016 10:58 AM **Reporter Name** ISP Tox
Last Calib Update 12/30/2016 10:53 AM **Batch State** Processed

Analysis Info

Acq Time 2016-12-29 16:48 **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 Cannabionid screen

Sample Chromatogram



Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.493	760	156828	0.0048	1.5920

ISP FORENSICS - Cd'A

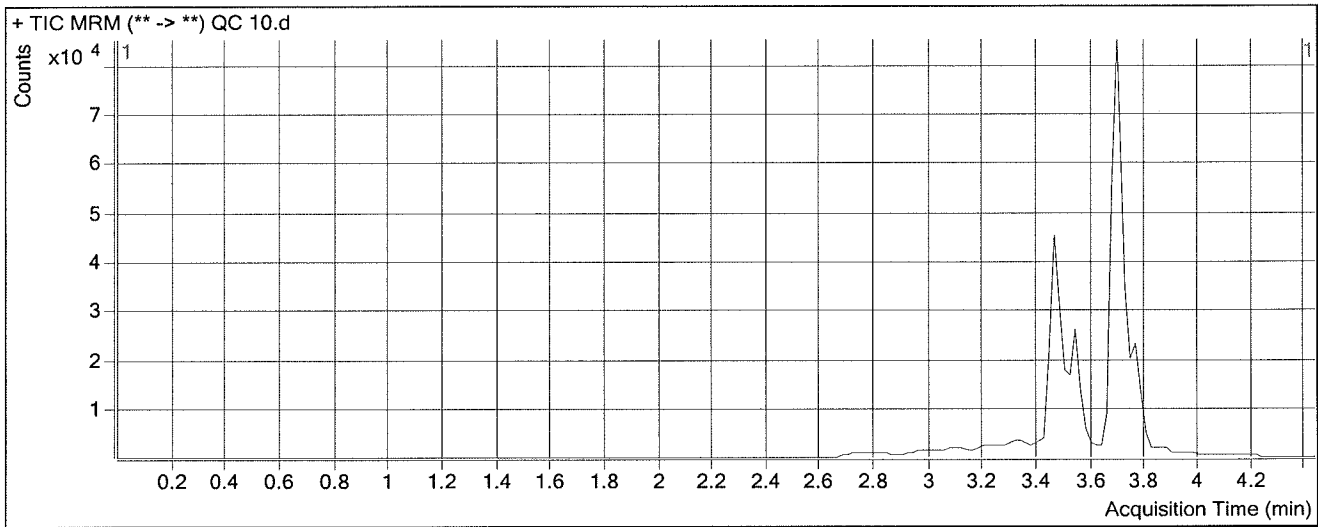
Cannabinoid Screen Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin
Analysis Time 12/30/2016 10:53 AM **Analyst Name** ISP Tox
Report Time 12/30/2016 10:58 AM **Reporter Name** ISP Tox
Last Calib Update 12/30/2016 10:53 AM **Batch State** Processed

Analysis Info

Acq Time 2016-12-29 17:01 **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 Cannabionid screen

Sample Chromatogram



Results

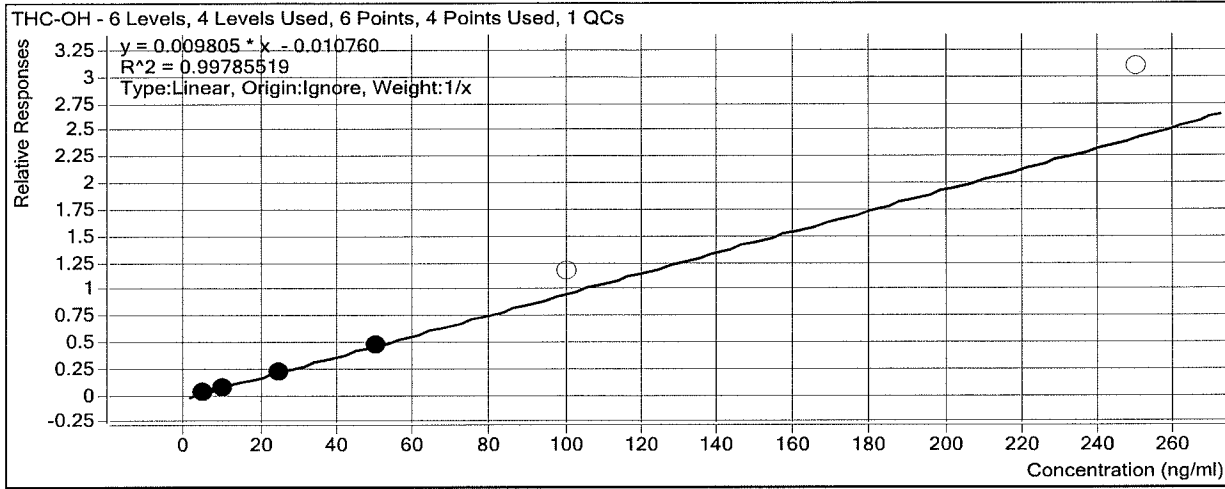
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	10485	119008	0.0881	10.0829
THC-COOH	3.546	8559	42129	0.2032	11.3425
THC	3.780	1226	12133	0.1011	10.7079

ISP Forensics Calibration Curve Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann
screen.batch.bin

Last Calib Update 12/30/2016 10:53 AM **Analyst Name** ISP TOX

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



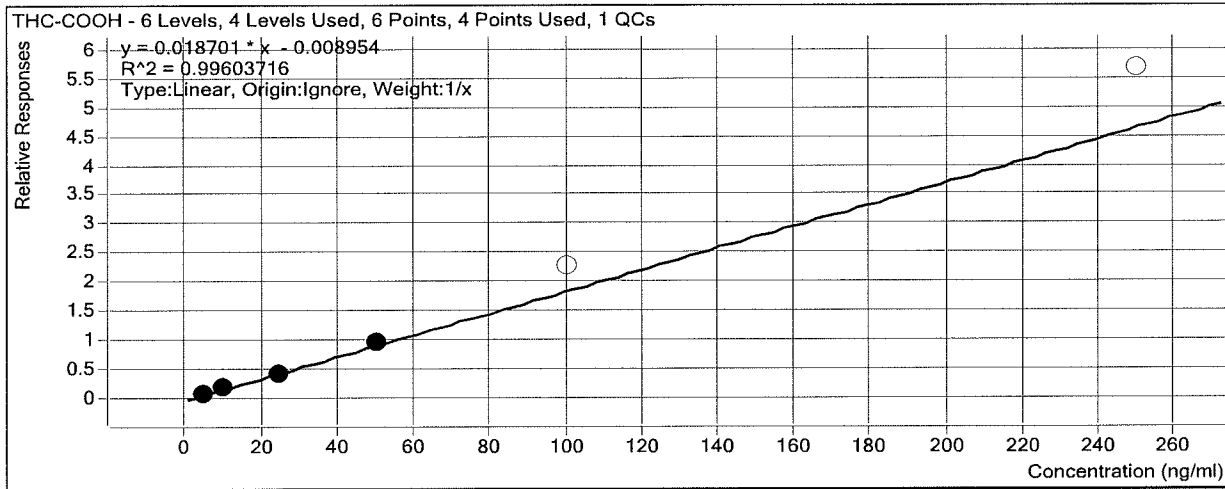
Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2	2	<input checked="" type="checkbox"/>	5	5.4	107.3
cal 3	3	<input checked="" type="checkbox"/>	10	9.3	93.0
QC 10	3	<input checked="" type="checkbox"/>	10	10.1	100.8
cal 4	4	<input checked="" type="checkbox"/>	25	24.5	98.1
cal 5	5	<input checked="" type="checkbox"/>	50	50.8	101.6
cal 6	6	<input type="checkbox"/>	100	120.8	120.8
cal 7	7	<input type="checkbox"/>	250	316.7	126.7

ISP Forensics Calibration Curve Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin

Last Calib Update 12/30/2016 10:53 AM **Analyst Name** ISP TOX

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

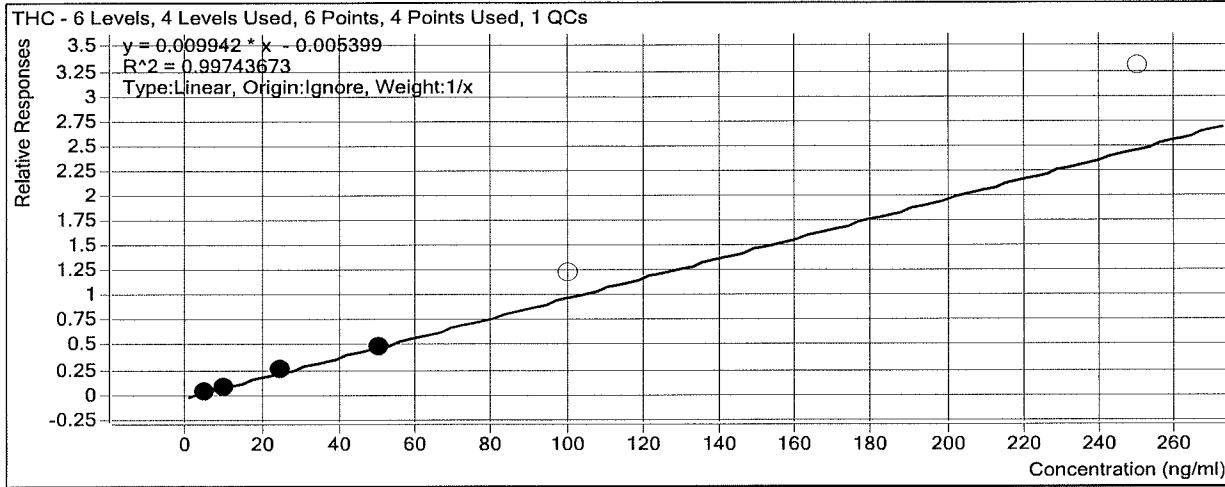


Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2	2	<input checked="" type="checkbox"/>	5	5.3	106.0
cal 3	3	<input checked="" type="checkbox"/>	10	9.7	97.3
QC 10	3	<input checked="" type="checkbox"/>	10	11.3	113.4
cal 4	4	<input checked="" type="checkbox"/>	25	23.4	93.5
cal 5	5	<input checked="" type="checkbox"/>	50	51.6	103.2
cal 6	6	<input type="checkbox"/>	100	122.0	122.0
cal 7	7	<input type="checkbox"/>	250	303.7	121.5

ISP Forensics Calibration Curve Report

Batch Data Path D:\2016 Data\12-29-16 AMN blood screen AM 25-26\QuantResults\122916 cann screen.batch.bin
Last Calib Update 12/30/2016 10:53 AM **Analyst Name** ISP TOX

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



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2	2	<input checked="" type="checkbox"/>	5	5.1	102.1
cal 3	3	<input checked="" type="checkbox"/>	10	9.4	94.4
QC 10	3	<input checked="" type="checkbox"/>	10	10.7	107.1
cal 4	4	<input checked="" type="checkbox"/>	25	26.3	105.2
cal 5	5	<input checked="" type="checkbox"/>	50	49.1	98.3
cal 6	6	<input type="checkbox"/>	100	123.3	123.3
cal 7	7	<input type="checkbox"/>	250	332.3	132.9