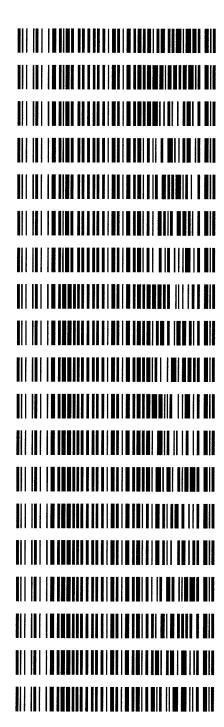


Worklist: 1481

LAB CASE M2016-4222	<u>ITEM</u> 1	TASK ID 74158	DESCRIPTION AM 25/AM 26 Blood MultiDrug/
M2016-4425	1	74159	AM 25/AM 26 Blood MultiDrug/
M2016-4546	1	74160	AM 25/AM 26 Blood MultiDrug/
M2016-4711	3	74161	AM 25/AM 26 Blood MultiDrug/
M2016-4881	3	74162	AM 25/AM 26 Blood MultiDrug/
M2016-4958	1	74163	AM 25/AM 26 Blood MultiDrug/
M2016-5244	2	74176	AM 25/AM 26 Blood MultiDrug/
P2016-2292	1	74164	AM 25/AM 26 Blood MultiDrug/
P2016-2357	1	74165	AM 25/AM 26 Blood MultiDrug/
P2016-2416	1	74166	AM 25/AM 26 Blood MultiDrug/
P2016-2456	1	74167	AM 25/AM 26 Blood MultiDrug/
P2016-2472	1	74168	AM 25/AM 26 Blood MultiDrug/
P2016-2521	1	74169	AM 25/AM 26 Blood MultiDrug/
P2016-2588	1	74170	AM 25/AM 26 Blood MultiDrug/
P2016-2589	1	74171	AM 25/AM 26 Blood MultiDrug/
P2016-2663	1	74172	AM 25/AM 26 Blood MultiDrug/
P2016-2760	1	74173	AM 25/AM 26 Blood MultiDrug/
P2016-2763	1	74174	AM 25/AM 26 Blood MultiDrug/
P2016-2804	1	74175	AM 25/AM 26 Blood MultiDrug/





### Worklist: 1486

LAB CASE	<u>ITEM</u>	TASK ID	DESCRIPTION
M2016-4114	1	74346	AM 25 Blood Multi-Drug Screer
M2016-4195	1	74345	AM 25 Blood Multi-Drug Screer
P2016-2653	1	74344	AM 25 Blood Multi-Drug Screer





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

	Extraction Date: 1-12-17 Analyst: Anne Nord
PRE-ANA	ALYTIC
	Plate Lot# 0495940 Plate. Exp. 12/12/2017
1.	Ensure all solutions are within expiration date.
	le Phase A: 10mM Amm Formate • 0.5M Ammonium Hydroxide
	e 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
	Check levels of mobile phases and needle wash and refill as necessary. Ensure waste is not full.
	Begin mobile phase flow and allow system to equilibrate for approx. 30 min.
$\int$ 4.	Create worklist. Data path name: 1-13-17 AMN blood Secon AM 25-26
ANALYT	
<u>√</u> 1.	Remove standards plate, blood, and samples from cold storage. Allow to reach room temperature.
$\sqrt{}$ 2.	Pipette 250μL blood in wells of analytical (standards) plate. Mix via aspirate and dispense.
	<ul> <li>Blank blood for locations containing standards/QCs and internal standards</li> </ul>
/ -	Sample blood for locations containing only internal standards
3.	Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID 66759
√ 4. √ 5.	Pipette 250µL 0.5M ammonium hydroxide buffer in wells of analytical (standards) plate.
	Place on shaking incubator at ambient temp., 900rpm for 15 minutes.
<u>√</u> 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.
<u>, , 8.</u>	Add 900µL ethyl acetate and allow to flow for 5 minutes under gravity.
$\frac{\sqrt{9}}{\sqrt{10}}$	Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left)
$\frac{}{}$ 10.	Add 900µL ethyl acetate and allow to flow for 5 minutes under gravity.
<u>J</u>	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
<u> </u>	Reconstitute in 100µL 100% MeOH and heat seal plate with foil. Place in autosampler and run worklist.
	analytic 01/217 multidrug scren a
1.	Open quantitation software and create a new quantitation batch. Batch name: 01/217 military screen
_J 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	
5.	Did all QCs pass for each analyte? N Central File Packet to include: LIMS Worklist: Method Checklist Calibration and Control Reports

COMMENTS:

A

	Compound Method	po <sub>l</sub>	p1 cal 1a	-	p1	I cal 1a Results	sults	Qualifier 1 M	Qualifier	ISTD Method	P	ISTD	ISTD Results	
	Name	Transition	Acq. Date-Time	Pos.	RT	Resp.	N/S	Transition	N/S	Name	Transition	RT	Resp.	
	6-MAM	328.2 -> 165	1/12/2017 8:17 PM	P2-B1	5.094	2002	8.57	328.2 -> 211	7.23	6-MAM-D6	334.2 -> 165	5.053	60073	
	7-aminoclonazepam	286.1 -> 121		P2-B1		40917	108.71	286.1 -> 222	131.59	7-Aminoclonazepam-D4	290.1 -> 121	5.585	165990	
*********	Acetyl Fentanyl	323.2 -> 105		P2-B1		22188	28.99	323.2 -> 188	51.90	Acetyl Fentanyl-D5	328.2 -> 105	5.906	13820	
msowous	Acetyl Norfentanyl	219.1 -> 84.2	-	P2-B1	4.987	9954	141.99	219.1 -> 56.3	9.60	Acetyl Norfentanyl-D5	224.2 -> 84.2	4.966	541985	
	a-hydroxyalprazolam	325.1 -> 297		P2-B1		8757		325.1 -> 215	32.24	a-hydroxyalprazolam-D5	330.1 -> 302	6.456	37817	
	alpha-PVP	232.2 -> 91.0	1/12/2017 8:17 PM	P2-B1		154199		232.2 -> 77.1	41.61	alpha-PVP-d8	240.2 -> 91.1	5.654	665363	
	Alprazolam	309.1 -> 281	1/12/2017 8:17 PM	P2-B1		63199	737.31	309.1 -> 205	78.06	Alprazolam-D5	314.1 -> 286	6.541	280064	
	Amphetamine	136.1 -> 91.1	1/12/2017 8:17 PM	P2-B1		152928	16.51	136.1 -> 119	36.08	Amphetamine-D11	147.2 -> 130	4.909	155216	
	Bupropion	240.1 -> 184	1/12/2017 8:17 PM	P2-B1	5.839	135466	1.	240.1 -> 131	119.27	Ketamine-D4	242.1 -> 129	5.592	384190	
	Carisoprodol	261.2 -> 176		P2-B1	6.184	86242	17.29	261.2 -> 55.3	15.67	Carisoprodol-D7	268.2 -> 183	6.183	472804	
	Citalopram	325.2 -> 109		P2-B1	6.151	204608	111.93	325.2 -> 262	221.92	Citalopram-D6	331.2 -> 109	6.150	943747	
	Clonazepam	316.1 -> 269	1/12/2017 8:17 PM	P2-B1	6.398	18834	56.88	316.1 -> 213	20.35	Clonazepam-D4	320.1 -> 217	6.398	28858	
	Codeine	300.2 -> 215	1/12/2017 8:17 PM	P2-B1	4.978	9867	49.50	300.2 -> 165	41.52	Codeine-D6	306.2 -> 218	4.955	50860	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Cyclobenzaprine	276.2 -> 214		P2-B1	6.426	142860	305.14	276.2 -> 231	689.23	Cyclobenzaprine-D3	279.2 -> 215	6.425	684879	
	Dextromethorphan	272.2 -> 171	—i	P2-B1	6.182	66342	380.96	272.2 -> 147	156.09	Dextromethorphan-D3	275.2 -> 171	6.202	323510	
	Dextrorphan	258.2 -> 157		P2-B1	5.530	56627	159.50	258.2 -> 133	1566.69	Dextrorphan-D3	261.2 -> 157	5.529	316568	
	Diazepam	285.1 -> 193		P2-B1	69/.9	64389	95.16	285.1 -> 153	39.75		290.1 -> 198	6.768	282219	
	Dihydrocodeine	302.2 -> 198	1/12/2017 8:17 PM	P2-B1	4.895	32285	48.97	302.2 -> 128	20.87	Dihydrocodeine-D6	308.2 -> 202	4.874	163222	
	Diphenhydramine	256.2 -> 167	1/12/2017 8:17 PM	P2-B1	6.123	354741	161.94	256.2 -> 152	18349	Diphenhydramine-D3	259.2 -> 167	6.123	19962	
	Doxylamine	271.2 -> 182		P2-B1	5.795	319610	222.50	271.2 -> 167	73.82	Doxylamine-D5	276.2 -> 187	5.794	14935	
	EDDP	279.2 -> 235	[-	P2-B1	6.159	47354	78.99	279.2 -> 250	38.61	EDDP-D3	282.2 -> 235	6.159	22248	
	Fentanyl	337.2 -> 105		P2-B1	6.129	27834	72.81	337.2 -> 188	68.89	Fentanyl-D5	342.3 -> 105	6.129	13071	
	Fluoxetine	310.1 -> 44.3	1/12/2017 8:17 PM	P2-B1	6.379	299512	372.67	310.1 -> 148	78.66	Fluoxetine-D6	316.2 -> 44.3	6.378	14015	
	Hydrocodone	300.2 -> 198	1/12/2017 8:17 PM	P2-B1	5.200	41776	Infinity	300.2 -> 128	Infinity	Hydrocodone-D6	306.2 -> 202	5.177	254802	
*****	Hydromorphone	286.2 -> 184		P2-B1	4.699	33280	87.15	286.2 -> 157	27.16	Hydromorphone-D6	292.2 -> 185	4.658	115804	
	Ketamine	238.1 -> 125		P2-B1	5.593	95423		238.1 -> 220	21.43	Ketamine-D4	242.1 -> 129	5.592	384190	
	Meprobamate	219.1 -> 158		P2-B1	5.698	23095	8.12	219.1 -> 97.1	3.80	Meprobamate-D7	226.2 -> 165	5.677	116260	
	Methadone	310.2 -> 265		P2-B1	6.460	274621		310.2 -> 105	100.51		319.3 -> 268	6.438	14951	
	Methamphetamine	150.1 -> 91.1	1/12/2017 8:17 PM	P2-B1	5.110	271319	25.91	150.1 -> 119	31.52	Methamphetamine-D11	161.2 -> 97.1	5.069	404875	
	Morphine	286.2 -> 201	[-	P2-B1	4.476	7529	- 1	286.2 -> 165	57.03	Morphine-D6	292.2 -> 152	4.412	14847	
	Naloxone	328.2 -> 309	1/12/2017 8:17 PM	P2-B1	5.094	47176	61.32	328.2 -> 211	43.28	Naltrexol-D3	347.2 -> 329	5.011	401624	
	Naitrexol	344.2 -> 326		P2-B1	5.012	105226		344.2 -> 308	81.05	Naltrexol-D3	347.2 -> 329	5.011	401624	
	Naltrexone	342.2 -> 324		P2-B1	5.033	47213		342.2 -> 55.3	43.56	1.	347.2 -> 329	5.011	401624	
	Norbuprenorphine	414.3 -> 101		P2-B1	5.923	8582		414.3 -> 57.3	45.14		417.3 -> 101	5.923	50299	
	Nordiazepam	271.1 -> 140		P2-B1	6.631	24709		271.1 -> 208	Infinity		276.1 -> 140	6.630	71298	
	Norfentanyl	233.2 -> 84.2	1/12/2017 8:17 PM	P2-B1	5.452	175909		233.2 -> 55.3	46.69	. 1.	238.2 -> 84.2	5.431	805562	
	Norhydrocodone	286.2 -> 199	1/12/2017 8:17 PM	P2-B1	5.080	3713	- 1	286.2 -> 171	6.01	Norhydrocodone-D3	289.2 -> 202	2.060	97097	
	Noroxycodone	302.1 -> 284	1/12/2017 8:17 PM	P2-B1	4.997	34033		302.1 -> 186	130.94	Noroxycodone-D3	305.2 -> 287	4.976	181869	
***********	O-desmethyl-tramadol	250.2 -> 58.3	1/12/2017 8:17 PM	P2-B1	5.025	189091		250.2 -> 42.3	43.09	O-desmethyl-tramadol	256.2 -> 64.3	5.005	911214	
	Oxazepam	287.1 -> 240	1/12/2017 8:17 PM	P2-B1	6.463	13962	- 1	4	5.40	- 1	292.1 -> 246	6.463	62679	
	Oxycodone	316.2 -> 298	1/12/2017 8:17 PM	P2-B1	5.055	62927		316.2 -> 241	96.14	Oxycodone-D6	322.2 -> 304	5.035	317463	
	Oxymorphone	302.1 -> 284	1/12/2017 8:17 PM	P2-B1	4.473	77566		302.1 -> 227	92.68	- 1	305.2 -> 287	4.449	386751	
	Phentermine	150.1 -> 65.2	1/12/2017 8:17 PM	P2-B1	5.231	46868		150.1 -> 133	3.07	Phentermine-D5	155.2 -> 96.2	5.231	427351	
	Promethazine	285.1 -> 86.2	1/12/2017 8:17 PM	P2-B1	6.423	377967		^	Infinity	Promethazine-D3	288.2 -> 89.2	6.423	22046	
	Quetiapine	384.2 -> 253	1/12/2017 8:17 PM	P2-B1	6.474	315927	1-	<b>^</b>	5226.89	Quetiapine-D8	392.2 -> 226	6.433	456825	
20000000000	Sertraline	306.1 -> 158	1/12/2017 8:17 PM	P2-B1	6.625	109612		306.1 -> 275	14996	Sertraline-D3	309.1 -> 275	6.623	512227	
was o	Sufentanil	387.2 -> 238		P2-B1	6.433	23888	- 1	387.2 -> 111	194.99	Sufentanil-D5	392.2 -> 238	6.412	970529	1
*****	Temazepam	301.1 -> 255		P2-B1	6.605	100128		301.1 -> 283	12.77		306.1 -> 260	6.584	511119	X
	Tramadol	264.2 -> 58.3	1/12/2017 8:17 PM	P2-B1	5.549	245022	112.15	264.2 -> 43.3	6.38	Tramadol-13C-D3	268.2 -> 58.3	5.528	11743	



V	7
V	X
Į,	J

Compound Method	thod	p1 cal 1a		Д	1 cal 1a Results	sults	Qualifier 1 M   Qualifier	Qualifier	ISTD Method	Ð	ISTD	STD Results
Name	Transition	Acq. Date-Time	Pos.	RT	Resp.	N/S	Transition	N/S	Name	Transition	RT	RT Resp.
Trazodone	372.2 -> 176	372.2 -> 176   1/12/2017 8:17 PM	P2-B1	6.556	273223	1000.56	1000.56 372.2 -> 148		7990.53 Sufentanil-D5	392.2 -> 238   6.412   9	6.412	970529
Venlafaxine	278.2 -> 58.3	278.2 -> 58.3   1/12/2017 8:17 PM	P2-B1	5.896	228253	75.39	75.39   278.2 -> 260		18.12 Venlafaxine-D6	284.2 -> 64.3 5.895	5.895	11610
Zolpidem	308.2 -> 235	308.2 -> 235   1/12/2017 8:17 PM	P2-B1	6.257	259750	120.91	120.91   308.2 -> 263		297.60 Zolpidem-D6	314.2 -> 235 6.256	6,256	13406

Compound Method	thod	p1 negative	external	p1.	p1-negative Results	(esults	Qualifier 1 M	Qualifi	ISTD Method	D	STD F	Results
Name	Transition	Acq. Date-Time	Pos.	R	Resp.	N/S	Transition	N/S	Name	Transition	F	Resp.
	328.2 -> 165	1/12/2017 8:56 PM	P2-B6				328.2 -> 211_	-	6-MAM-D6	334.2 -> 165	5.053	59917
7-aminoclonazepam	286.1 -> 121	1/12/2017 8:56 PM	P2-B6	5.874	226	0.84	286.1 -> 222		7-Aminoclonazepam-D4	290.1 -> 121	5.585	166676
Acetyl Fentanyl	323.2 -> 105	1/12/2017 8:56 PM	P2-B6				323.2 -> 188		Acetyl Fentanyl-D5	328.2 -> 105	5.906	12786
Acetyl Norfentanyl	219.1 -> 84.2	1/12/2017 8:56 PM	P2-B6	4.946	52	0.87	219.1 -> 56.3		Acetyl Norfentanyl-D5	224.2 -> 84.2	4.966	516152
a-hydroxyalprazolam	325.1 -> 297	1/12/2017 8:56 PM	P2-B6	6.477	38	1.47	325.1 -> 215		1.	330.1 -> 302	6.456	38365
alpha-PVP	232.2 -> 91.0	1/12/2017 8:56 PM	P2-B6	6.024	184	0.98	232.2 -> 77.1	0.46	3 alpha-PVP-d8	240.2 -> 91.1	5.634	622848
Alprazolam	309.1 -> 281	1/12/2017 8:56 PM	P2-B6	6.380	2171	28.11	309.1 -> 205	× 0.36	- E	314.1 -> 286	6.541	249465
Amphetamine	136.1 -> 91.1	1/12/2017 8:56 PM	P2-B6		<b>√</b> 30010	17.72	136.1 -> 119	4.73	3 Amphetamine-D11	147.2 -> 130	4.888	181809
Bupropion	240.1 -> 184	1/12/2017 8:56 PM	P2-B6	6, 105	215	0.88	240.1 -> 131	12.14	1 Ketamine-D4	242.1 -> 129	5.592	354472
Carisoprodol	261.2 -> 176	1/12/2017 8:56 PM	P2-B6				261.2 -> 55.3		Carisoprodol-D7	268.2 -> 183	6.183	426814
Citalopram	325.2 -> 109	1/12/2017 8:56 PM	P2-B6	6.110	348	0.53	325.2 -> 262		Citalopram-D6	331.2 -> 109	6.150	895215
Clonazepam	316.1 -> 269		P2-B6	6,861	188	2.36	316.1 -> 213	0.18		320.1 -> 217	6.398	28747
Codeine	300.2 -> 215		P2-B6	3/1/6	13814	37.76	300.2 -> 165	58.82		306.2 -> 218	4.935	45559
		1/12/2017 8:56 PM	P2-B6	6.385	82	0.91	276.2 -> 231	1.18	3   Cyclobenzaprine-D3	279.2 -> 215	6.425	655111
rphan	★ 272.2 -> 171	1/12/2017 8:56 PM	P2-B6	6.182	633329	105329	272.2 -> 147	1515	Dextromethorphan-D3	275.2 -> 171	6.182	289365
Dextrorphan	258.2 -> 157		P2-B6	5.286	100	0.43	258.2 -> 133		Dextrorphan-D3	261.2 -> 157	5.509	299213
Diazepam	285.1 -> 193		P2-B6	6.464	2316	1.06	285.1 -> 153		Diazepam-D5	290.1 -> 198	6.748	264865
Dihydrocodeine	302.2 -> 198	1/12/2017 8:56 PM	P2-B6	4.916	999	1.13	302.2 -> 128	176.46	3 Dihydrocodeine-D6	308.2 -> 202	4.874	142793
amine		1/12/2017 8:56 PM	P2-B6				256.2 -> 152		Diphenhydramine-D3	259.2 -> 167	6.103	18122
Doxylamine 🖈	<b>t</b>   271.2 -> 182	1/12/2017 8:56 PM	P2-B6	5.775	31981	181.65	271.2 -> 167	633.66	3 Doxylamine-D5	276.2 -> 187	5.774	13129
	279.2 -> 235	1/12/2017 8:56 PM	P2-B6	5.895	30	0.26	279.2 -> 250	0.26	s  EDDP-D3	282.2 -> 235	6.159	17477
Fentanyl	337.2 -> 105	1/12/2017 8:56 PM	P2-B6	6.109	86	0.43	337.2 -> 188		Fentanyl-D5	342.3 -> 105	6.129	11902
		1/12/2017 8:56 PM	P2-B6	6.379	229	1.82	310.1 -> 148	99.0	3 Fluoxetine-D6	316.2 -> 44.3	6.357	14550
Hydrocodone	-	1/12/2017 8:56 PM	P2-B6	5.179	434375	Infinity	300.2 -> 128	Infinity	/ Hydrocodone-D6	306.2 -> 202	5.157	231712
Hydromorphone	286.2 -> 184	1/12/2017 8:56 PM					286.2 -> 157		Hydromorphone-D6	292.2 -> 185	4.658	103663
Ketamine	238.1 -> 125	1/12/2017 8:56 PM	www.	5,431	1198	28.00	238.1 -> 220	7	Ketamine-D4	242.1 -> 129	5.592	354472
ıte	219.1 -> 158	1/12/2017 8:56 PM	P2-B6				219.1 -> 97.1		Meprobamate-D7	226.2 -> 165	5.677	107467
Methadone X X	310.2 -> 265	1/12/2017 8:56 PM	P2-B6	6.744	1417		310.2 -> 105			319.3 -> 268	6.438	13573
hetamine		1/12/2017 8:56 PM	P2-B6	5.110	129364		150.1 -> 119	<b>√</b> 2.35		161.2 -> 97.1	5.069	542961
Morphine		1/12/2017 8:56 PM	P2-B6	4.455	73128	114.30	286.2 -> 165	946.57		292.2 -> 152	4.412	11206
Naioxone	328.2 -> 309	1/12/2017 8:56 PM	P2-B6	5.094	822	0.49	328.2 -> 211		Naltrexol-D3	347.2 -> 329	4.991	367275
Naitrexol	344.2 -> 326	1/12/2017 8:56 PM	P2-B6	5.012	4956	19.80	344.2 -> 308	>			4.991	367275
Naitrexone	342.2 -> 324	1/12/2017 8:56 PM	P2-B6	4.972	51	0.47	342.2 -> 55.3	0.85		347.2 -> 329	4.991	367275
Norbuprenorphine	414.3 -> 101	1/12/201 / 8:56 PM	P2-86	0.71		0	414.3 -> 57.3			417.3 -> 101	5.903	47629
Nordiazepam	271.1 -> 140	1/12/2017 8:35 PM	PZ-B6	6.712	79	2.00	2/1.1 -> 208	0.47	1	276.1 -> 140	6.609	64850
Norhydrocodone	233.2 -> 64.2	1/12/2017 8:56 PM	P.Z-50	5.209	134	1 02	233.2 -> 55.3	/8.8/	1	238.2 -> 84.2	5.411	1/5511
Noroxycodone	302 1 -> 284	1/12/2017 8:56 DM	D2 B6	5.021	770	1.36.1	200.2 = 1/1	1 62	Normydradaga D2	205.2 -7 202	3.000	01000
O-desmethyl-tramadol	250.2 -> 58.3	1/12/2017 8:56 DM	D2-20	7.007	1070	0.30	250.2 > 42.3	1.02	1.92 NOIOXYCOGOINE-D3	303.2 -7 20/	4.970 F 00E	970270
Oxazepam	287.1 -> 240	1/12/2017 8:56 PM	P2-B6	6,259	231	0.38	287.1 -> 268	Infinity	1	292.1 -> 246	6.443	58877
Oxycodone	316.2 -> 298	1/12/2017 8:56 PM	P2-B6	5.075	404	2.93	316.2 -> 241	0.26		322 2 -> 304	5 035	290769
Oxymorphone	302.1 -> 284	1/12/2017 8:56 PM	P2-B6	4.554	71	99.0	302.1 -> 227	1.64	-1	305.2 -> 287	4.429	303724
Phentermine	150.1 -> 65.2	1/12/2017 8:56 PM	P2-B6	5.110	24389	1.34	150.1 -> 133	69.74		155.2 -> 96.2	5.231	446419
Promethazine	285.1 -> 86.2	1/12/2017 8:56 PM	P2-B6	6.423	150	1.71	285.1 -> 71.3		1	288.2 -> 89.2	6.402	20322
Quetiapine	384.2 -> 253	1/12/2017 8:56 PM	P2-B6	6.636	44	0.65	384.2 -> 221	0.78		392.2 -> 226	6.433	415637
Sertraline	306.1 -> 158	1/12/2017 8:56 PM	P2-B6	902.9	43	0.52	306.1 -> 275	196.46	3   Sertraline-D3	309.1 -> 275	6.623	469338
Sufentanil	387.2 -> 238	1/12/2017 8:56 PM	P2-B6	6.433	J 1594	12.72	387.2 -> 111	3.07	7 Sufentanil-D5	392.2 -> 238	6.412	874626
Temazepam	-	1/12/2017 8:56 PM	P2-B6	6.707	161	0.62	301.1 -> 283		Temazepam-D5	306.1 -> 260	6.584	433670
Tramadol	2642 -> 583	1/12/2017 8:56 PM	P2-B6	5 529	5051	2.17	2642 -> 433	1 05	Trampdol 130 Da	0 000	- (CI	11011



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ISTD Results	Resp.	60456	165989	12931	509511	40525	654144	274561	183048	383550	424127	912831	28648	45295	898299	311323	296526	257808	154072	18789	14217	7923	12510	14460	238947	104739	383550	107597	13950	12325	371908	371908	371908	44500	67651	772922	94387	169814	839975	63376	289973	354920	458839	20569	421474	488586	930995	486408	11272
ISTD	H.	5.053	5.585	5.906	4.966	6.456	5.634	6.541	4.909	5.592	6.183	6.150	6.377	4.955	6.425	6.182	5.509	6.748	4.874	6.103	5.774	6.159	6.129	6.357	5.157	4.658	5.592	5.677	5.438	5.069	5.011	5.011	5.011	5.903	6.630	5.431	5.040	4.976	5.005	6.463	5.035	4.429	5.231	6.423	6.433	6.623	6.412	6.584	002
<b>0</b>	Transition	334.2 -> 165	290.1 -> 121	328.2 -> 105	224.2 -> 84.2	330.1 -> 302	240.2 -> 91.1	314.1 -> 286		242.1 -> 129	268.2 -> 183	331.2 -> 109	320.1 -> 217	306.2 -> 218	279.2 -> 215	275.2 -> 171	261.2 -> 157	290.1 -> 198	308.2 -> 202	259.2 -> 167	276.2 -> 187	282.2 -> 235	342.3 -> 105	316.2 -> 44.3	306.2 -> 202	292.2 -> 185	242.1 -> 129	226.2 -> 165	319.3 -> 208	707.2 > 97.1	}   ^	347.2 -> 329	347.2 -> 329	417.3 -> 101	276.1 -> 140	238.2 -> 84.2	289.2 -> 202	305.2 -> 287	256.2 -> 64.3	292.1 -> 246	322.2 -> 304	305.2 -> 287	155.2 -> 96.2	4	392.2 -> 226		<b>^</b>	306.1 -> 260	0000
Quali ISTD Method	S/N Name	1.44 6-MAM-D6	21.95   7-Aminoclonazepam-D4	0.44   Acetyl Fentanyl-D5	0.44   Acetyl Norfentanyl-D5	a-hydroxyalprazolam-D5	0.74   alpha-PVP-d8	→ 0.23   Alprazolam-D5	1.41 Amphetamine-D11	1.62 Ketamine-D4		1.06 Citalopram-D6	0.44 Clonazepam-D4	Codeine-D6	0.79 Cyclobenzaprine-D3	3.21 Dextromethorphan-D3	Dextrorphan-D3	Diazepam-D5	0.43 Dihydrocodeine-D6	0.58 Diphenhydramine-D3	0.86 Doxylamine-D5	EDDP-D3	1	0.33 Fluoxetine-D6	Hydrocodone-D6		0.81 Ketamine-D4			5.12 Methamphetamine-U11			Naltrexol-D3	Norbuprenorphine-D3	2.70 Nordiazepam-D5			0.91 Noroxycodone-D3	4.34 O-desmethyl-tramadol	Oxazepam-D5	1.08 Oxycodone-D6	0.49 Oxymorphone-D3	1					2.66 Temazepam-D5	Topomest
Qualifier 1 M Qu	Transition	328.2 -> 211	286.1 -> 222   2	323.2 -> 188   (	219.1 -> 56.3   (	325.1 -> 215	232.2 -> 77.1	309.1 -> 205   ~ (	<b>-</b>	240.1 -> 131	261.2 -> 55.3 (	325.2 -> 262	213	300.2 -> 165	231	272.2 -> 147		285.1 -> 153	302.2 -> 128	256.2 -> 152	271.2 -> 167	279.2 -> 250		148		157	-	97.1		150.1 -> 119 286.2 -> 165	-	308	342.2 -> 55.3	414.3 -> 57.3	_	55.3	_	-	250.2 -> 42.3	287.1 -> 268	316.2 -> 241	227	133	-> 71.3	221	275	-> 111 	-	
	N/S	0.88 3	0.97   28	0.68	2.88 2	0.63 32	1.09 2	10.54 30	9.49 1	0.78 2		0.52 3	0.84 3	1 1	0.88 27	1.06 27		2.07 28	0.72 30	0.74 2	1.49 2.	0.46 27	0.42 33	- 1	0.19 30					Inminity 13			0.62	4.	0.78 27						2.95 3		I.			- 1			
p1 e <del>xternal codtfol</del> a Results	Resp.	58	163	694	135	21	394	1895	35152	269	1054	237	122		308	81		758	44	418	2171	39	102	830	19		/2/	826	1001	171	728	5367	111		74	21	357	1190	1107	464	974	148	26334	847	449	217	√1619	313	
p1exte	RT	4.973	5.586	5.969	5.007	6.538	5.310	6.380	5.030	5.859	5.980	6.151	6.378			6:039		6.444	4.936	6.103	5.815	5.915	6.048	1	5.078		5.41	5.554	9 L	5.110	5.074	5.012	5.053		6.692	5.472	5.000	5.017	5.025	6.239	5.095	4.493	5.110	6.403	6.515	6.666	6.433	688.6 9	
d a	Pos.	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-Ab	P2-A6	172-A0	P2-A0	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	
р і <del>Фжентан соп</del> пот а	Acq. Date-Time	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/201/ 6:30 PW	1/12/2017 8:36 PM 1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	1/12/2017 8:36 PM	
iod Incganive	Transition	328.2 -> 165						309.1 -> 281		240.1 -> 184	261.2 -> 176	325.2 -> 109	316.1 -> 269				_							-1-		—-t		210.7 -> 158		286.2 -> 20.1	-}	-	342.2 -> 324	_	[	1-		-					-				-		
Compound Mernod	Name	6-MAM	7-aminoclonazepam	Acetyl Fentanyl	Acetyl Norfentanyl	a-hydroxyalprazolam	alpha-PVP	Alprazolam	Amphetamine	Bupropion	Carisoprodol	Citalopram	Clonazepam	Codeine	Cyclobenzaprine	Dextromethorphan	Dextrorphan	Diazepam	Dihydrocodeine	Diphenhydramine	Doxylamine	EDDP	Fentanyl	Fluoxetine	Hydrocodone	Hydromorphone	Netamine	Methodono	Math	Morphine	Naloxone	Naltrexol	Naltrexone	Norbuprenorphine	Nordiazepam	Norfentanyl	Norhydrocodone	Noroxycodone	O-desmethyl-tramadol	Oxazepam	Oxycodone	Oxymorphone	Phentermine	Promethazine	Quetiapine	Sertraline	Sufentanil	Temazepam	



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Compound Met	Compound Method negative	p1 <del>external co</del> ntrol a	e la	p1 exte	malcontr	a Results	1 external control a Results   Qualifier 1 M   Quali	Quali	ISTD Method	po	ISTD	ISTD Results
Name	Transition	Acq. Date-Time	Pos.	FA	Resp.	N/S	Transition S/N	S/N	Name	Transition	RT	RT Resp.
Trazodone	372.2 -> 176	372.2 -> 176   1/12/2017 8:36 PM	P2-A6   6.556	6.556	1764	1.96	1.96 372.2 -> 148 1.04 Sufentanil-D5	1.04	Sufentanil-D5	392.2 -> 238   6,412	6.412	930995
Venlafaxine	278.2 -> 58.3	278.2 -> 58.3   1/12/2017 8:36 PM	P2-A6   5.875	5.875	780	0.45	0.45 278.2 -> 260	0.66	0.66 Venlafaxine-D6	284.2 -> 64.3 5.895		10884
Zolpidem	308.2 -> 235	308.2 -> 235   1/12/2017 8:36 PM	P2-A6	6,644	992	1.73	1.73 308.2 -> 263 2.80 Zolpidem-D6	2.80	Zolpidem-D6	314.2 -> 235 6.256	6.256	12403



lam	am-D7 291.2 -> 138 azolam 346.1 -> 328 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 305.1 -> 286 318.2 -> 89.2 307.2 -> 185 270.2 -> 75.3 283.2 -> 107 330.1 -> 274 383.1 -> 244 284.2 -> 61.3	291.2 > 138 346.1 -> 328 346.1 -> 328 281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 318.2 -> 89.2 307.2 -> 185 270.2 -> 75.3 283.2 -> 107 300.1 -> 272 321.1 -> 245 393.1 -> 245 393.1 -> 245 284.2 -> 61.3 307.2 -> 185 284.2 -> 61.3 285.2 -> 224	291.2 > 138 346.1 -> 328 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 305.1 -> 286 307.2 -> 75.3 283.2 -> 107 300.1 -> 272 321.1 -> 245 321.1 -> 245 321.1 -> 245 321.1 -> 245 282.2 -> 61.3 307.2 -> 185 282.2 -> 61.3 283.2 -> 107 284.2 -> 61.3	291.2 > 138 346.1 -> 328 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 307.2 -> 185 307.2 -> 75.3 283.2 -> 107 300.1 -> 272 321.1 -> 245 321.1 -> 245 337.2 -> 185 284.2 -> 61.3 307.2 -> 185 284.2 -> 61.3 214.2 -> 166 214.2 -> 166	291.2 > 138 346.1 -> 328 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 305.1 -> 286 307.2 -> 75.3 283.2 -> 107 300.1 -> 272 321.1 -> 245 321.1 -> 245 321.1 -> 245 321.1 -> 245 282.2 -> 224 252.2 -> 224 214.2 -> 166 200.2 -> 166 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224	291.2 > 138 346.1 -> 328 346.1 -> 328 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 318.2 -> 89.2 307.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 283.2 -> 107 300.1 -> 272 301.1 -> 244 303.1 -> 244 284.2 -> 61.3 307.2 -> 185 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224	291.2 > 138 346.1 -> 328 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 305.1 -> 286 307.2 -> 75.3 283.2 -> 107 300.1 -> 272 321.1 -> 245 321.1 -> 245 321.2 -> 61.3 307.2 -> 185 252.2 -> 224	291.2 > 138 346.1 -> 328 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 318.2 -> 89.2 307.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 281.1 -> 245 301.1 -> 244 301.1 -> 244 284.2 -> 61.3 307.2 -> 185 262.2 -> 224 252.3 -> 243.1 -> 200	by 291.2 -> 138  lam 346.1 -> 328  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  298.2 -> 171  243.1 -> 200.  307.2 -> 185  307.2 -> 185  307.2 -> 185  270.2 -> 75.3  307.2 -> 185  307.2 -> 185  284.2 -> 61.3  307.1 -> 244  284.2 -> 61.3  307.2 -> 185  252.2 -> 224	January   Janu	by 291.2 -> 138  lam 346.1 -> 328  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  298.2 -> 171  243.1 -> 200  307.2 -> 185  307.2 -> 185  307.1 -> 244  307.2 -> 185  307.2 -> 185  307.2 -> 185  214.2 -> 61.3  307.2 -> 185  225.2 -> 224  252.2 ->	January   Janu	by 291.2 -> 138  lam 346.1 -> 328  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  298.2 -> 171  243.1 -> 200  307.2 -> 185  307.2 -> 185  307.1 -> 245  307.2 -> 185  307.2 -> 185  270.2 -> 75.3  307.2 -> 185  270.2 -> 75.3  307.2 -> 185  284.2 -> 61.3  307.2 -> 185  284.2 -> 61.3  307.2 -> 185  252.2 -> 224	by 291.2 -> 138  lam 346.1 -> 328  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  281.2 -> 91.2  305.1 -> 286  307.2 -> 185  307.2 -> 185  307.2 -> 185  307.2 -> 185  252.2 -> 224	January   Janu	DT   291.2 -> 138     Alam   346.1 -> 328     281.2 -> 91.2     281.2 -> 91.2     281.2 -> 91.2     281.2 -> 91.2     281.2 -> 91.2     281.2 -> 91.2     281.2 -> 91.2     305.1 -> 286     305.1 -> 286     307.2 -> 185     307.2 -> 185     307.2 -> 185     307.2 -> 185     307.2 -> 185     307.2 -> 185     307.2 -> 185     307.2 -> 185     307.2 -> 185     307.2 -> 185     252.2 -> 224     26	DT   291.2 > 138 5.780     Jam 346.1 -> 328 6.527     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     305.1 -> 286   6.655     305.1 -> 286   6.490     307.2 -> 185   6.491     307.2 -> 185   6.491     307.2 -> 185   6.491     307.2 -> 185   6.491     307.2 -> 185   6.490     307.2 -> 185   6.490     307.2 -> 185   6.490     307.2 -> 185   6.670     307.2 -> 185   6.670     307.2 -> 166   5.725     252.2 -> 224   5.725     267.2 -> 224   5.225     267.2 -> 224   5.225     267.2 -> 224   5.225     267.2	by 291.2 > 138 5.780  lam 346.1 -> 328 6.516  281.2 -> 91.2 6.516  281.2 -> 91.2 6.516  281.2 -> 91.2 6.516  281.2 -> 91.2 6.516  281.2 -> 91.2 6.516  281.2 -> 91.2 6.516  281.2 -> 91.2 6.516  281.2 -> 91.2 6.516  281.2 -> 91.2 6.516  281.2 -> 91.2 6.516  305.1 -> 286 6.436  270.2 -> 75.3 6.436  270.2 -> 75.3 6.436  281.2 -> 107 6.231  300.1 -> 272 6.451  301.1 -> 244 6.159  301.1 -> 244 6.159  301.2 -> 185 5.083  281.2 -> 107 6.231  301.1 -> 244 6.159  281.2 -> 224 5.725  282.2 -> 224 5.725  282.2 -> 224 5.725  282.2 -> 224 5.725  283.2 -> 164 5.706  283.2 -> 164 5.706  283.2 -> 164 5.706  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.478  289.2 -> 72.3 6.995  330.1 -> 276 6.995  330.1 -> 276 6.995  330.1 -> 277 6.323  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  267.2 -> 233 6.478  269.2 -> 72.	January   Janu	DT   291.2 -> 138   5.780
	346.1 -> 346.1 -> 346.1 -> 346.1 -> 346.1 -> 346.1 -> 381.2 -> 283.2 -> 305.1 -> 307.2 -> 270.2 -> 283.2 -> 283.2 -> 380.1 -> 383.1 -> 383.1 -> 284.2 -> 284	281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 288.2 -> 171 243.1 -> 200 305.1 -> 286 305.1 -> 286 307.2 -> 185 300.1 -> 270 300.1 -> 272 301.1 -> 245 303.1 -> 245 307.2 -> 185 284.2 -> 61.3 307.2 -> 185 284.2 -> 61.3	241.2 - 1328  246.1 - 328  281.2 - 91.2  281.2 - 91.2  298.2 - 171  298.2 - 171  298.2 - 171  205.1 - 286  305.1 - 286  307.2 - 185  300.1 - 272  300.1 - 272  301.1 - 245  301.2 - 185  284.2 - 61.3  307.2 - 185  282.2 - 224  284.2 - 61.3  307.2 - 185  265.2 - 224  274.2 - 168	24.1 328 346.1 -> 328 346.1 -> 328 281.2 -> 91.2 288.2 -> 171 243.1 -> 200 305.1 -> 286 318.2 -> 89.2 307.2 -> 185 270.2 -> 75.3 283.2 -> 107 300.1 -> 272 321.1 -> 244 330.1 -> 244 330.1 -> 244 284.2 -> 61.3 307.2 -> 185 252.2 -> 224 185.1 -> 166 214.2 -> 166	346.1 -> 328 346.1 -> 328 281.2 -> 91.2 281.2 -> 91.2 288.2 -> 171 298.2 -> 171 298.2 -> 171 298.2 -> 171 305.1 -> 286 318.2 -> 89.2 307.2 -> 75.3 283.2 -> 107 300.1 -> 272 321.1 -> 245 321.1 -> 245 321.1 -> 245 321.1 -> 245 284.2 -> 61.3 307.2 -> 185 252.2 -> 224 214.2 -> 166 200.2 -> 166 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224	346.1 -> 328 346.1 -> 328 346.1 -> 328 281.2 -> 91.2 288.2 -> 171 243.1 -> 200 305.1 -> 286 318.2 -> 89.2 307.2 -> 185 300.1 -> 272 300.1 -> 272 300.1 -> 272 301.1 -> 244 303.1 -> 244 284.2 -> 61.3 307.2 -> 185 252.2 -> 224 185.1 -> 166 214.2 -> 166 252.2 -> 224 252.2 -> 224 252.2 -> 224 252.2 -> 224	241.2 - 328  246.1 - 328  281.2 - 91.2  281.2 - 91.2  281.2 - 91.2  298.2 - 171  243.1 - 200  305.1 - 286  318.2 - 89.2  307.2 - 185  270.2 - 75.3  283.2 - 107  300.1 - 272  321.1 - 245  321.1 - 245  321.1 - 245  284.2 - 61.3  307.2 - 185  252.2 - 224	346.1 > 328 346.1 > 328 281.2 > 91.2 281.2 > 91.2 281.2 > 91.2 283.2 > 171 243.1 > 200 305.1 > 286 318.2 > 89.2 307.2 > 185 307.2 > 75.3 270.2 > 75.3 283.2 > 107 300.1 > 272 301.1 > 244 301.1 > 244 284.2 > 61.3 307.2 > 185 262.2 > 224 252.2 > 224 252.3 > 224 263.1 > 224	Jan.	Mam	Jan. 1912   Jan. 1918   Jan.	Jan. 1912   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   298.2 -> 171   243.1 -> 200   305.1 -> 286   318.2 -> 89.2   318.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   252.2 -> 224   224   224   224   224   224   224   224   224	Section	Jan. 1912   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   298.2 -> 171   243.1 -> 200   305.1 -> 286   318.2 -> 89.2   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   284.2 -> 61.3   307.2 -> 186   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 224   252.2 -> 243.1 -> 295   233.2 -> 164   238.2 -> 164   238.2 -> 164   238.2 -> 72.3   289.2   289.2   289.2	Jan. 1912   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   281.2 -> 91.2   288.2 -> 171   305.1 -> 286   318.2 -> 89.2   318.2 -> 89.2   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   307.2 -> 185   339.1 -> 244   330.1 -> 244   330.1 -> 246   252.2 -> 224	Section	Jan. 1972   1972   1973   1974   1975   19	Jan. 1972   1972   1973   1974   1975   19	Man_   231.2   105.	Mann   346.1 -> 120.1.2.     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     281.2 -> 91.2   6.516     282.2 -> 171   5.390     305.1 -> 286   6.436     307.2 -> 185   6.436     307.2 -> 185   6.436     307.2 -> 185   6.436     307.2 -> 185   6.436     307.2 -> 185   6.436     307.2 -> 185   6.436     307.2 -> 185   6.436     307.2 -> 185   6.436     307.2 -> 185   6.436     307.2 -> 185   6.400     307.2 -> 1
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	281.2.> 288.2.> 288.2.> 305.1.> 305.1.> 307.2.> 270.2.> 283.2.> 301.1.> 383.1.>	281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 318.2 -> 89.2 307.2 -> 185 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 283.2 -> 107 301.1 -> 245 393.1 -> 244 284.2 -> 61.3 307.2 -> 185 284.2 -> 61.3	281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 318.2 -> 89.2 307.2 -> 185 270.2 -> 75.3 270.2 -> 75.3 283.2 -> 107 300.1 -> 272 300.1 -> 272 300.1 -> 274 283.2 -> 107 300.1 -> 272 300.1 -> 272 300.1 -> 272 300.1 -> 272 283.2 -> 107 300.1 -> 272 283.2 -> 107 283.2 -> 107 283.2 -> 107 283.2 -> 107 283.2 -> 107 283.2 -> 107 283.2 -> 107 300.1 -> 272 285.2 -> 274 285.2 -> 224 285.2 -> 2224 285.2 -> 2224 285.1 -> 168	281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 243.1 -> 200 305.1 -> 286 305.1 -> 286 307.2 -> 185 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 283.2 -> 107 301.1 -> 245 321.1 -> 245 321.1 -> 245 321.1 -> 245 321.1 -> 245 307.2 -> 185 284.2 -> 61.3 307.2 -> 185 252.2 -> 224 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-> 171 305.1 -> 286 305.1 -> 286 307.2 -> 185 307.2 -> 185 307.1 -> 245 307.2 -> 185 307.2 -> 185 307.2 -> 185 307.2 -> 185 252.2 -> 224 252.	281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 288.2 -> 171 305.1 -> 286 305.1 -> 286 307.2 -> 185 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 76.3 393.1 -> 244 393.1 -> 244 252.2 -> 224 252.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233	281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 288.2 -> 171 305.1 -> 286 305.1 -> 286 307.2 -> 185 270.2 -> 75.3 270.2 -> 75.3 283.2 -> 107 303.1 -> 244 303.1 -> 244 303.1 -> 244 252.2 -> 224 252.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233	281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 305.1 -> 286 305.1 -> 286 307.2 -> 185 270.2 -> 75.3 270.2 -> 75.3 283.2 -> 107 300.1 -> 242 301.1 -> 242 301.1 -> 242 301.2 -> 186 252.2 -> 224 253.0 -> 183 267.2 -> 272 263.2 -> 192 263.2 -> 192 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233 267.2 -> 233	281.2 -> 91.2 281.2 -> 91.2 281.2 -> 91.2 298.2 -> 171 305.1 -> 286 305.1 -> 286 307.2 -> 185 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 75.3 270.2 -> 76 270.2 -> 76 270.2 -> 76 270.2 -> 76 270.2 -> 185 270.2 -> 185 270.2 -> 185 270.2 -> 224 270.2 -> 185 270.2 -> 185 270.2 -> 185 270.2 -> 224 270.2 -> 185 270.2 -> 185 270.2 -> 185 270.2 -> 224 270.2 -> 185 270.2 -> 185 270.2 -> 183 270.2 -> 183 270.2 -> 183 270.2 -> 183 270.2 -> 183 270.2 -> 183 270.2 -> 183 270.2 -> 183 270.2 -> 183 270.2 -> 183 270.2 -> 170
326 D5	D8 32C6 D5	D8 326 D5	33C6 - D5	326 D5	D7	3 13 13 13 13 13 13 14 15 16 17 17 18 18 18 18 18 18 18 18 18 18	3 ne-D8 e-13C6 ide-D5 D3 3 3	3 3 ne-D8 e-13C6 Ide-D5 D3 N3 N3 N3 E-13C6	3 ne-D8 lde-D5 lde-D5 lde-D5 lde-D5 lde-D5 lde-D5 lde-D5 lde-D5 lde-D7 l	3 3 1 ne-D8 6-13C6 107 107 107 108 108 108 108 108 108 108 108 108 108	3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13.2	13.3	13.2 14.2 15.2 16.2	e-13C6 -13C6	13.2	e-13C6 e-13C6 e-13C6 e-13C6 e-13C6 -04 -05 -011 -011	e-13C6 e-13C6 e-13C6 e-13C6 e-13C6 e-13C6 -D4 sine-D5 3 3C3 3C3 3C3 3C3 3C3 3C3 3C3 3C3 3C3	13.3
149.58 149.58 125 120.43 120.43 16.67 165.54	Hufinity 149.58 91.25 91.25 120.43 Infinity 6.67 59.05 165.54 6307.37 Infinity Infinity Infinity	Infinity Inf	Infinity   Infinity	149.58 91.25 120.43 120.43 120.43 120.43 165.54 6307.37 10finity 19692 16908 30.74	Infinity   Infinity	Infinity   Infinity	Infinity   Infinity	Infinity   Infinity	Infinity	Infinity   Infinity	Infinity   Infinity	Infinity   Infinity	Infinity   Infinity   19.543   120.43   120.43   120.43   120.43   120.43   165.54   6307.37   19692   19692   19692   19692   19694   19.51   1	Infinity   Infinity	Infinity	Infinity	Infinity   Infinity	Infinity   Infinity	Infinity   149.58   140.58   140.58   140.58   150.43   160.54	Infinity   19692   19692   19692   19692   19692   19692   19692   19692   19692   19692   19692   19692   19692   19693
	282 282 58.3 105 77.2 205 239 317 6													194   1	194   1	1944   1944	1944   1944	194   1	194   1	1944   1944
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External control A

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Compound Method	ethod	p2 negative	*	p2	p2 negative Results	sults	Qualifier 1 M	Qualifier 1	ISTD Method		ISTD	ISTD Results
Name	Transition	Acq. Date-Time	Pos.	R	Resp.	S/N	Transition	N/S	Name	Transition	RI	Resp.
7-aminoflunitrazepam	284,1 -> 135	. 1/12/2017 9:05 PM	P2-B6	5.884	2035	10.12	284.1 -> 93.2	~ 2.48	7-aminoflunitrazepam-D7	291.2 -> 138	5.780	273814
alpha-hydroxymidazolam	342.1 -> 324	. 1/12/2017 9:05 PM	P2-B6	6.467	26	2.01	342.1 -> 203	0.34	alpha-hvdroxvmidazolam-	346.1 -> 328	6.507	423988
Amitriptyline	278.2 -> 91.2	1/12/2017 9:05 PM	P2-B6	6.314	2502	3.17	278.2 -> 105	43.63	Amitriptyline-D3	1	6.516	486935
Amoxapine	314.1 -> 271	.   1/12/2017 9:05 PM	P2-B6	6.531	576	2.36	314.1 -> 193	305.65		281.2 -> 91.2	6.516	486935
Benzoylecgonine	290.1 -> 168	. 1/12/2017 9:05 PM	P2-B6	5.452	166	38.60	290.1 -> 105	7		298.2 -> 171	5.390	6714
Carbamazepine	237.1 -> 193		P2-B6	6.421	231	1.19	237.1 -> 194	0.63	Carbamazepine-13C6	243.1 -> 200	6.196	13069
Chlordiazepoxide	300.1 -> 227		P2-B6	6.411	5048	Infinity	300.1 -> 282	7 0.43	Chlordiazepoxide-D5	305.1 -> 286	6.655	300770
Clomipramine	315.2 -> 86.2	1/12/2017 9:05 PM	P2-B6	6.531	103	1.14	315.2 -> 58.3		Clomipramine-D3	318.2 -> 89.2	6.713	18962
Cocaine	304.2 -> 182	.   1/12/2017 9:05 PM	P2-B6				304.2 -> 105		Cocaine-D3	307.2 -> 185	5.696	768285
Desipramine	267.2 -> 72.3	1/12/2017 9:05 PM	P2-B6	6.457	1104	3.68	267.2 -> 44.3	89.58	Desipramine-D3	270.2 -> 75.3	6.436	13815
Doxepin	280.2 -> 107	.   1/12/2017 9:05 PM	P2-B6	6.109	17	0.37	280.2 -> 77.2	0.49	Doxepin-D3	283.2 -> 107	6.231	604443
Estazolam	295.1 -> 267		P2-B6	6.535	81	0.73	295.1 -> 205	4.87	Estazolam-D5	300.1 -> 272	6.451	287362
Flunitrazepam	314.1 -> 268	.   1/12/2017 9:05 PM	P2-B6	6.552	1047	1.03	314.1 -> 239	0.32	Flunitrazepam-D7	321.1 -> 245	6.490	19827
Flurazepam	388.2 -> 315	.   1/12/2017 9:05 PM	P2-B6	6.160	118	3.18	388.2 -> 317		Zopiclone-D4	393.1 -> 244	6.160	242061
Imipramine	281.2 -> 86.2	1/12/2017 9:05 PM	P2-B6	6.516	2467	4.61	281.2 -> 58.3	1.53	Imipramine-D3	284.2 -> 61.3	6.475	10673
Levamisole	205.1 -> 91.2	1/12/2017 9:05 PM	P2-B6	5.081	19	0.12	205.1 -> 178		Cocaine-D3	307.2 -> 185	5.696	768285
Maprotiline	278.2 -> 91.2	1/12/2017 9:05 PM	P2-B6	6.314	2502	3.17	278.2 -> 117	2.44	Meperidine-D4	252.2 -> 224	5.725	337545
MDA	180.1 -> 163	. 1/12/2017 9:05 PM	P2-B6				180.1 -> 105		MDA-D5	185.1 -> 168	5.083	302826
MDEA	208.1 -> 163	.   1/12/2017 9:05 PM	P2-B6	5.343	40	0.79	208.1 -> 105		MDEA-D6	214.2 -> 166	5.343	644556
	[	*******	P2-B6				194.1 -> 105		MDMA-D6	200.2 -> 166	5.203	57322
	<b>X</b> 248.2 -> 220		P2-B6	5.725	657120	Infinity	248.2 -> 174	1744230	Meperidine-D4	252.2 -> 224	5.725	337545
Methylphenidate	234.2 -> 84.2		P2-B6	5.461	301	0.94	234.2 -> 56.3	4.45	Meperidine-D4	252.2 -> 224	5.725	337545
Metoprolol	268.2 -> 116		P2-B6				268.2 -> 56.3		Meperidine-D4	252.2 -> 224	5.725	337545
Midazolam	326.1 -> 223	. 1/12/2017 9:05 PM	P2-B6		24	0.73	326.1 -> 249	1.42	Midazolam-D4	330.1 -> 295	6.650	501330
Mirtazapine	266.2 -> 195	*********	P2-B6	5.496	44	0.65	266.2 -> 72.3	2.06	Midazolam-D4	330.1 -> 295	6.650	501330
Mitragynine	399.2 -> 174	.   1/12/2017 9:05 PM	P2-B6				399.2 -> 238		Carbamazepine-13C6	243.1 -> 200	6.196	13069
Normeperidine	234.1 -> 42.3	1/12/2017 9:05 PM	P2-B6	5.462	25874	15.50	234.1 -> 160	7	Normeperidine-D4	238.2 -> 164	5.706	368216
Norpropoxyphene	326.2 -> 44.3	1/12/2017 9:05 PM	P2-B6		29	0.45	326.2 -> 252		Norpropoxyphene-D5	3312 -> 443	6.305	176687
Nortriptyline	264.2 -> 91.2	1/12/2017 9:05 PM	P2-B6		7893	8.55	264.2 -> 233	7	Nortriptvline-D3	267.2 -> 233	6.478	585182
Ondansetron	294.2 -> 184	.   1/12/2017 9:05 PM	P2-B6	6,596	34	0.76	294.2 -> 212	14.39	Pentazocine-13C3	289.2 -> 72.3	5.761	473657
Pentazocine	286.2 -> 218	. 1/12/2017 9:05 PM	P2-B6	5.761	73	43.11	286.2 -> 41.3	7 0:30	Pentazocine-13C3	289.2 -> 72.3	5.761	473657
Phenazepam	349.0 -> 206		P2-B6	6.527	1785	11.67	349.0 -> 183	L,	Phenazepam-D4	353.0 -> 183	6.567	15436
Phencyclidine	244.2 -> 86.2	1/12/2017 9:05 PM	P2-B6		22	0.35	244.2 -> 91.1	1.69	Phencydlidine-D5	249.2 -> 86.2	5.991	10191
Phenytoin	253.1 -> 104		P2-B6	5.971	281	0.70	253.1 -> 182	0.58	Phenytoin-D10	263.2 -> 192	6.093	19312
Prazepam	325.1 -> 271		P2-B6				325.1 -> 140		Prazepam-D5	330.1 -> 276	6.995	12139
Primidone	219.1 -> 91.2	1/12/2017 9:05 PM	P2-B6	5.647	1330	2.45	219.1 -> 162		Prazepam-D5	330.1 -> 276	6.995	12139
Propoxyphene	340.2 -> 58.3		P2-B6	6.284	72	0.68	340.2 -> 266		Propoxyphene-D11	351.3 -> 277	6.323	304913
Protriptyline	264.2 -> 155		P2-B6				264.2 -> 161		Nortriptyline-D3	267.2 -> 233	6.478	585182
Pseudoephedrine	166.1 -> 148	. 1/12/2017 9:05 PM	P2-B6	4.762	1067	06.0	166.1 -> 133	0.72	Pseudoephedrine-D3	169.1 -> 151	4.741	567982
Tapentadol	222.2 -> 107	. 1/12/2017 9:05 PM	P2-B6				222.2 -> 121		Tapentadol-D3	225.2 -> 107	5.545	609806
Trimipramine	295.2 -> 100		P2-B6	6.534	463	1.41	295.2 -> 58.3		Trimipramine-D3	298.2 -> 103	6.554	20147
Verapamil	455.3 -> 165		P2-B6	860.9	55	0.78	455.3 -> 150		Trimipramine-D3	298.2 -> 103	6.554	20147
Zaleplon	306.1 -> 236		P2-B6				306.1 -> 264		Zaleplon-D4	310.2 -> 240	6.287	279683
Zopiclone	389.1 -> 244	. 1/12/2017 9:05 PM	P2-B6				389.1 -> 216		Zopiclone-D4	393.1 -> 244	6.160	242061



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	ISTD Results	Resp.	265958	439421	485418	485418	5594	13473	302894	19104	742045	14057	625507	299725	18045	254650	10630	742045	363330	308212	664192	55712	363330	363330	363330	516453	516453	13473	372438	175248	592581	478558	478558	17442	10113	16809	12273	12273	318391	592581	566796	935481	20392	20392	278405	254650
	ISTD	RT	5.780	6.507	6.516	6.516	5.390	6.196	6.655	6.713	5.696	6.436	6.231	6.451	6.490	6.159	6.475	5.696	5.725	5.083	5.343	5.203	5.725	5.725	5.725	6.650	6.650	6,196	5.706	6.305	6.478	5.761	5.761	6.567	5.991	6.093	6.995	6.995	6.323	6.478	4.741	5.544	6.534	6.534	6.287	6.159
	<b>77</b>	Transition	291.2 -> 138	346.1 -> 328	281.2 -> 91.2	281.2 -> 91.2	298.2 -> 171	243.1 -> 200	305.1 -> 286	318.2 -> 89.2	307.2 -> 185	270.2 -> 75.3	283.2 -> 107	300.1 -> 272	321.1 -> 245	393.1 -> 244	284.2 -> 61.3	307.2 -> 185	252.2 -> 224	185.1 -> 168	214.2 -> 166	200.2 -> 166	252.2 -> 224	252.2 -> 224	252.2 -> 224	330.1 -> 295	330.1 -> 295	243.1 -> 200	238.2 -> 164	331.2 -> 44.3	267.2 -> 233	289.2 -> 72.3	289.2 -> 72.3	353.0 -> 183	249.2 -> 86.2	263.2 -> 192	330.1 -> 276	330.1 -> 276	351.3 -> 277	267.2 -> 233	169.1 -> 151	225.2 -> 107	298.2 -> 103	298.2 -> 103	310.2 -> 240	393.1 -> 244
	ISTD Method	Name	7-aminoflunitrazepam-D7	l	Amitriptyline-D3	Amitriptyline-D3	Benzoylecgonine-D8	Carbamazepine-13C6	I	Clomipramine-D3	Cocaine-D3	Desipramine-D3	Doxepin-D3	Estazolam-D5	Flunitrazepam-D7	Zopiclone-D4	Imipramine-D3	Cocaine-D3	Meperidine-D4	MDA-D5	MDEA-D6	MDMA-D6	Meperidine-D4	Meperidine-D4	Meperidine-D4	Midazolam-D4	Midazolam-D4	Carbamazepine-13C6	Normeperidine-D4	Norpropoxyphene-D5	L	Pentazocine-13C3	Pentazocine-13C3	Phenazepam-D4	Phencydlidine-D5	Phenytoin-D10	Prazepam-D5	Prazepam-D5	Propoxyphene-D11	I		Tapentadol-D3	Trimipramine-D3	Trimipramine-D3	l i	Zopiclone-D4
	Qualifi	S/N	2.84	0.62	0.52	663.27		0.76	<b>3</b> .0.76		0.44	13.51	2.47	96.05	0.64		√ 1.98		2.53		09.0		1.77				69.0		7		0.83	1.24		7	Infinity		0.24	08.0	1.22	17.41	0.82	1.00			3.35	
	Qualifier 1 M	Transition	284.1 -> 93.2	342.1 -> 203	278.2 -> 105	314.1 -> 193	290.1 -> 105	237.1 -> 194	300.1 -> 282	315.2 -> 58.3	304.2 -> 105	267.2 -> 44.3	280.2 -> 77.2	295.1 -> 205	314.1 -> 239	388.2 -> 317	281.2 -> 58.3	205.1 -> 178	278.2 -> 117	180.1 -> 105	208.1 -> 105	194.1 -> 105	248.2 -> 174	234.2 -> 56.3	268.2 -> 56.3	326.1 -> 249	266.2 -> 72.3	399.2 -> 238	234.1 -> 160	326.2 -> 252	264.2 -> 233	294.2 -> 212	286.2 -> 41.3	349.0 -> 183	244.2 -> 91.1	253.1 -> 182	325.1 -> 140	219.1 -> 162	340.2 -> 266	264.2 -> 161	166.1 -> 133	222.2 -> 121	295.2 -> 58.3	455.3 -> 150		389.1 -> 216
)	p2 external control Results	S/N	4.91	1.81	0.56	2.00		0.58	5.76	0.36	1.81	2.91	06:0	3.39	4.75	0.59	305.70		0.56		0.82		0.22				0.46		27.79	1.08	12.46	1.21		446.76	0.88	0.47	0.22	1.20	0.45	2:92	0.54	0.51	1.39	2.44	0.71	1.14
*	ernal cont	Resp.	1878	95	1790	9/1 🏂		26	4586	58	583	1654	85	42	1509	25	2662		1790		180		16				122		84	157	7531	127		1793	142	435	35	983	21	293	1356	112	365	84	53	117
	p2 ext	Æ	5.863	6.527	6.395	6.531		5.993	6.391	6.693	5.779	6.437	6.191	6.616	6.491	6.119	6.516		6.395		5.282		5.499				6.010		5.625	6.325	6.601	6.392		6.506	6.053	6.031	7.155	5.627	6.345	6.377	4.762	5.545	6.575	6:129		6.160
	<b>☆</b>	Pos.	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6	P2-A6
ر مرد مرد ارد مرد مرد مرد ا	-p2 external control	Acq. Date-Time	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM	1/12/2017 8:46 PM
		Transition	284.1 -> 135	342.1 -> 324	278.2 -> 91.2	314.1 -> 271	290.1 -> 168	237.1 -> 193	300.1 -> 227	315.2 -> 86.2	304.2 -> 182		-	295.1 -> 267	314.1 -> 268	388.2 -> 315	281.2 -> 86.2	205.1 -> 91.2	278.2 -> 91.2	180.1 -> 163	208.1 -> 163	194.1 -> 163		234.2 -> 84.2	268.2 -> 116	326.1 -> 223	266.2 -> 195	399.2 -> 174	234.1 -> 42.3	326.2 -> 44.3	264.2 -> 91.2				244.2 -> 86.2		325.1 -> 271	219.1 -> 91.2	340.2 -> 58.3	264.2 -> 155	166.1 -> 148	222.2 -> 107	295.2 -> 100	455.3 -> 165	306.1 -> 236	389.1 -> 244
	Compound Method	Name	7-aminoflunitrazepam	alpha-hydroxymidazolam	Amitriptyline	Amoxapine	Benzoylecgonine	Carbamazepine	Chlordiazepoxide	Clomipramine	Cocaine	Desipramine	Doxepin	Estazolam	Flunitrazepam	Flurazepam	Imipramine	Levamisole	Maprotiline	MDA	MDEA	MDMA	Meperidine	Methylphenidate	Metoprolol	Midazolam	Mirtazapine	Mitragynine	Normeperidine	Norpropoxyphene	Nortriptyline	Ondansetron	Pentazocine	Phenazepam	Phencyclidine	Phenytoin	Prazepam	Primidone	Propoxyphene	Protriptyline	Pseudoephedrine	Tapentadol	Trimipramine	Verapamil	Zaleplon	Zopiclone



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

Extraction Date: 1-12-17 Analyst: Anne Word

PKE-ANA	
Plate Lot	
$\sqrt{1}$ .	Ensure all solutions are within expiration date.
	<ul> <li>Mobile Phase A: 10mM Amm Formate</li> <li>0.1% Formic Acid in water</li> </ul>
	• Mobile Phase B: 0.1% FA in MeOH • MTBE
	• Blank/Negative Blood: Lot 321632-1 • Hexane
t.	• Column: Phenomenex Phenyl Hexyl (4.6 x 50mm; 2.6um)
$\sqrt{}$ 2.	Check levels of mobile phases and needle wash and refill as necessary. Ensure waste is not full.
<u> </u>	Begin mobile phase flow and allow system to equilibrate for approx. 30 min.
<u></u>	Create worklist. Data path name: 1-12-17 AMN blood screen AM 25-26
ANALYT	IC
$\sim$ 1.	Remove standards plate, blood, and samples from cold storage. Allow to reach room temperature.
$\sqrt{}$ 2.	Add 1000 µL blood to wells of analytical (standards) plate. Mix via aspirate and dispense.
	<ul> <li>Blank blood for locations containing standards/QCs and internal standards</li> </ul>
,	Sample blood for locations containing only internal standards
$\sqrt{}$ 3.	Place on shaking incubator at ambient temp., 900rpm for 15 minutes. Shaker ID 66759
<del>✓</del> 4.	Pipette 500μL 0.1% formic acid to all wells of standards plate.
<del>√</del> 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. グ	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)
<u> </u>	Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left)
$\frac{\sqrt{}}{\sqrt{}}$ 10.	Add 2.25mL Hexane and allow to flow under gravity for 5 minutes. (add in 3 increments of 750uL)
$\sqrt{}$ 11.	Apply positive pressure for approx. 15 seconds. (10-15 PSI- Selector to the left)
<u>J</u> 12.	Remove plate containing eluate. Place on SPE Dry and evaporate to dryness at approx. 35°C. SPE Dry ID 66819
13.	Reconstitute in 100 μL 100% MeOH and heat seal plate with foil. Place in autosampler and run worklist.
POST-AN	ALYTIC
√ 1.	Open quantitation software and create a new quantitation batch. Batch name: 01/217 can screen
$\frac{\mathcal{J}}{2}$ .	Make any necessary integration changes.
<b>3.</b>	For unknown samples, calculated concentration > 3ng THC, THC-OH and > 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:	•

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Batch Data Path D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann screen.batch.bin

 Analysis Time
 1/13/2017 8:06 AM
 Analyst Name
 ISP Tox

 Report Time
 1/13/2017 8:08 AM
 Reporter Name
 ISP Tox

 Last Calib Update
 1/13/2017 8:06 AM
 Batch State
 Processed

**Analysis Info** 

 Acq Time
 2017-01-12 16:27
 Data File
 QC 10.d

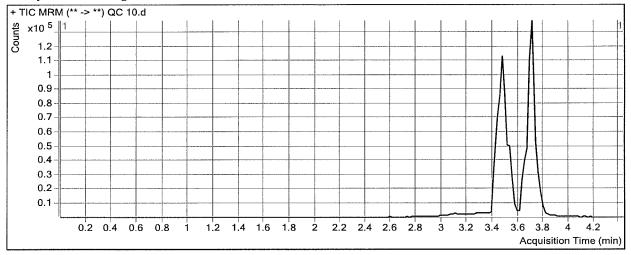
 Sample Type
 QC
 Sample Name
 QC 10

**Dilution** 1 **Acq Method** Screen THC 11102016.m

Position P1-A3 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



Recul	ŀ٠

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3,473	32398	419023	0.0773	9.4498
THC-COOH	3.526	24092	116008	0.2077	10.2261
THC	3.760	4004	41703	0.0960	10.1925



Batch Data Path D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann screen.batch.bin

 Analysis Time
 1/13/2017 8:06 AM
 Analyst Name
 ISP Tox

 Report Time
 1/13/2017 8:08 AM
 Reporter Name
 ISP Tox

 Last Calib Update
 1/13/2017 8:06 AM
 Batch State
 Processed

**Analysis Info** 

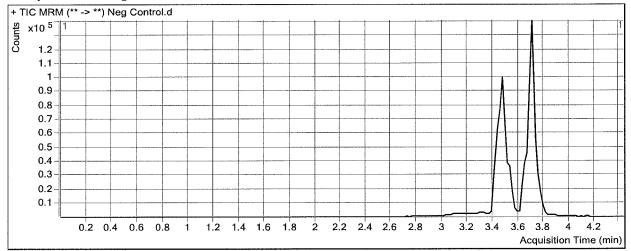
Acq Time2017-01-12 16:14Data FileNeg Control.dSample TypeSampleSample NameNeg Control

**Dilution** 1 **Acq Method** Screen THC 11102016.m

Position P1-a2 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



D	96	u	1+	c

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.513	542	399621	0.0014	1.9065
THC-COOH	3.526	2430	103212	0.0235	0.8629

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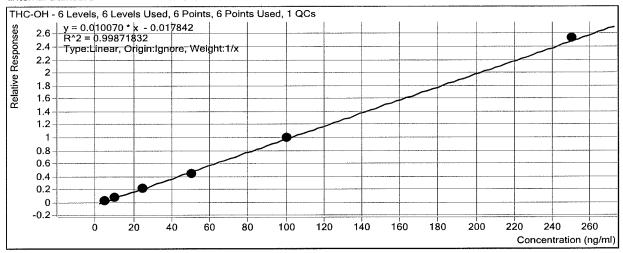
## ISP Forensics Calibration Curve Report

Batch Data Path D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann

screen.batch.bin

Last Calib Update 1/13/2017 7:58 AM Analyst Name ISP TOX

Target CompoundTHC-OHInternal StandardTHC-OH-d3



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2	2	$\square$	5	5.6	112.8
cal 3	3	$\square$	10	9.7	97.3
QC 10	3	$\square$	10	9.4	94.5
cal 4	4	$\square$	25	23.4	93.8
cal 5	5	☑	50	46.8	93.7
cal 6	6	$\square$	100	101.2	101.2
cal 7	7	$\square$	250	253.2	101.3



# ISP Forensics Calibration Curve Report

**Batch Data Path** 

D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann

screen.batch.bin

**Last Calib Update** 

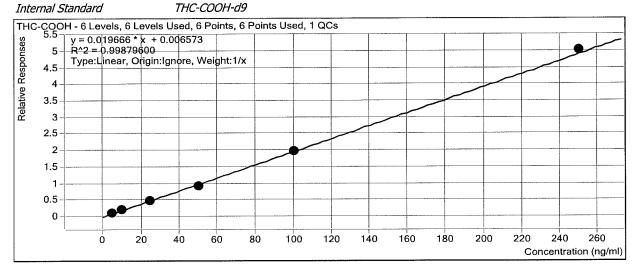
1/13/2017 7:58 AM

**Analyst Name** 

**ISP TOX** 

Target Compound

THC-COOH



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2	2	☑	5	5.4	108.9
cal 3	3	$\square$	10	10.0	99.7
QC 10	3	$\square$	10	10.2	102.3
cal 4	4	$\square$	25	24.4	97.6
cal 5	5	Ø	50	46.3	92.7
cal 6	6	☑	100	99.2	99.2
cal 7	7	$\square$	250	254.6	101.8



## **ISP Forensics Calibration Curve Report**

**Batch Data Path** 

D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann

screen.batch.bin

**Last Calib Update** 

1/13/2017 7:58 AM

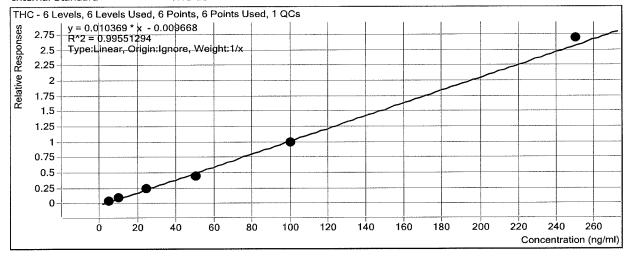
**Analyst Name** 

ISP TOX

Target Compound

THC THC-d3

Internal Standard



Sample	Level	Enabled	Exp Conc	Final Conc	Accuracy
cal 2	2	$\square$	5	5.9	118.3
cal 3	3	$\square$	10	9.6	96.2
QC 10	3	$\square$	10	10.2	101.9
cal 4	4	$\square$	25	24.5	98.0
cal 5	5	Ø	50	43.4	86.9
cal 6	6	$\square$	100	96.7	96.7
cal 7	7	$\square$	250	259.8	103.9



Batch Data Path D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann screen.batch.bin

Analysis Time1/13/2017 8:06 AMAnalyst NameISP ToxReport Time1/13/2017 8:08 AMReporter NameISP ToxLast Calib Update1/13/2017 8:06 AMBatch StateProcessed

**Analysis Info** 

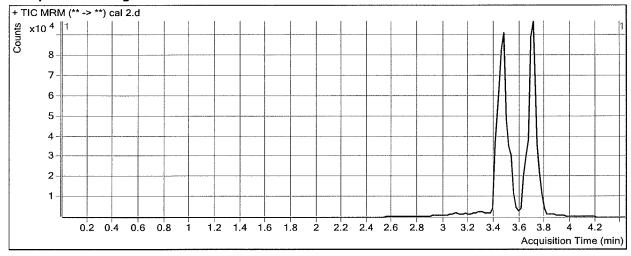
Acq Time2017-01-12 15:40Data Filecal 2.dSample TypeCalibrationSample Namecal 2

Dilution 1 Acq Method Screen THC 11102016.m

Position P1-B1 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

#### Sample Chromatogram



Results					
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	13482	346073	0.0390	5.6405
THC-COOH	3,526	9659	84981	0.1137	5.4452
THC	3,760	1430	27692	0.0517	5.9142

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ISP cann screen report.xlsx Printed at: 8:11 AM on: 1/13/2017

Batch Data Path D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann screen.batch.bin

 Analysis Time
 1/13/2017 8:06 AM
 Analyst Name
 ISP Tox

 Report Time
 1/13/2017 8:08 AM
 Reporter Name
 ISP Tox

 Last Calib Update
 1/13/2017 8:06 AM
 Batch State
 Processed

**Analysis Info** 

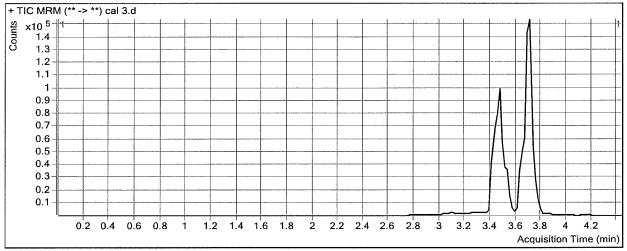
Acq Time2017-01-12 15:47Data Filecal 3.dSample TypeCalibrationSample Namecal 3

**Dilution** 1 **Acq Method** Screen THC 11102016.m

Position P1-C1 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



R	es	ul	ts

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	28841	359938	0.0801	9.7289
THC-COOH	3,526	17872	88178	0.2027	9.9718
THC	3,740	2599	28846	0.0901	9.6201

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Batch Data Path D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann screen.batch.bin

 Analysis Time
 1/13/2017 8:06 AM
 Analyst Name
 ISP Tox

 Report Time
 1/13/2017 8:08 AM
 Reporter Name
 ISP Tox

 Last Calib Update
 1/13/2017 8:06 AM
 Batch State
 Processed

**Analysis Info** 

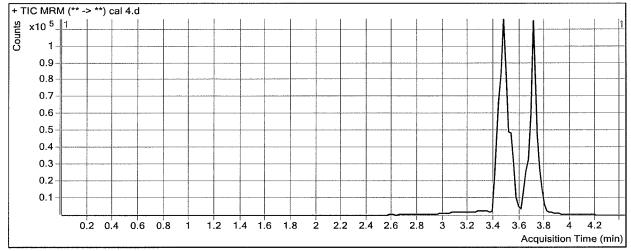
Acq Time2017-01-12 15:54Data Filecal 4.dSample TypeCalibrationSample Namecal 4

**Dilution** 1 **Acq Method** Screen THC 11102016.m

Position P1-D1 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



### Results

Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	77503	355095	0.2183	23.4460
THC-COOH	3.526	43100	88563	0.4867	24.4120
THC	3.760	7913	32377	0.2444	24,5043



Batch Data Path D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann screen.batch.bin

 Analysis Time
 1/13/2017 8:06 AM
 Analyst Name
 ISP Tox

 Report Time
 1/13/2017 8:08 AM
 Reporter Name
 ISP Tox

 Last Calib Update
 1/13/2017 8:06 AM
 Batch State
 Processed

**Analysis Info** 

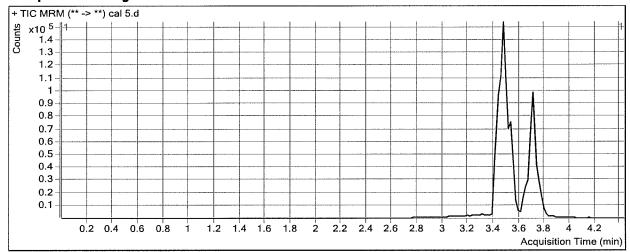
Acq Time2017-01-12 16:00Data Filecal 5.dSample TypeCalibrationSample Namecal 5

**Dilution** 1 **Acq Method** Screen THC 11102016.m

Position P1-E1 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



Result	S
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Compound	RT	Response	ISTD Resp	Resp Ratio	<b>Final Conc</b>
THC-OH	3.473	180937	398767	0.4537	46.8303
THC-COOH	3.526	92148	100419	0.9176	46.3275
THC	3.760	16304	36991	0.4407	43,4383



Batch Data Path D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann screen.batch.bin

 Analysis Time
 1/13/2017 8:06 AM
 Analyst Name
 ISP Tox

 Report Time
 1/13/2017 8:08 AM
 Reporter Name
 ISP Tox

 Last Calib Update
 1/13/2017 8:06 AM
 Batch State
 Processed

**Analysis Info** 

ISP cann screen report.xlsx

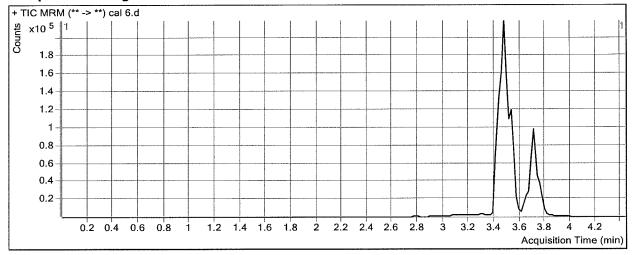
Acq Time2017-01-12 16:07Data Filecal 6.dSample TypeCalibrationSample Namecal 6

Dilution 1 Acq Method Screen THC 11102016.m

Position P1-F1 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



Results					
Compound	RT	Response	ISTD Resp	Resp Ratio	Final Conc
THC-OH	3.473	397683	397216	1.0012	101.1929
THC-COOH	3,526	195911	100056	1.9580	99.2300
THC	3.760	38384	38660	0.9929	96.6866

Printed at: 8:11 AM on: 1/13/2017

Batch Data Path D:\2017 Data\1-12-16 AMN blood screen AM 25-26\QuantResults\011217 cann screen.batch.bin

 Analysis Time
 1/13/2017 8:06 AM
 Analyst Name
 ISP Tox

 Report Time
 1/13/2017 8:08 AM
 Reporter Name
 ISP Tox

 Last Calib Update
 1/13/2017 8:06 AM
 Batch State
 Processed

**Analysis Info** 

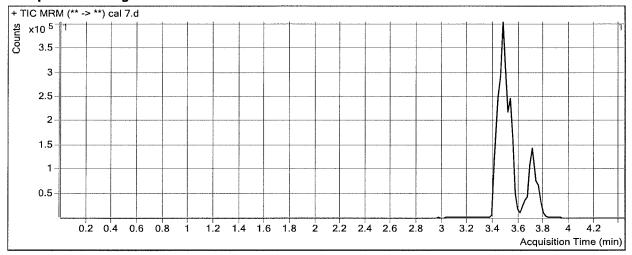
Acq Time2017-01-12 16:20Data Filecal 7.dSample TypeCalibrationSample Namecal 7

**Dilution** 1 **Acq Method** Screen THC 11102016.m

Position P1-G1 Sample Info

Inj Vol -1 Comment AM 26 Cannabinoid screen

### **Sample Chromatogram**



Res	ul	ts
-----	----	----

ISP cann screen report.xlsx

Compound	RT	Response	ISTD Resp	Resp Ratio	<b>Final Conc</b>
THC-OH	3.473	1036437	409416	2.5315	253.1614
THC-COOH	3,526	490005	97732	5.0138	254.6136
THC	3.760	108874	40556	2,6845	259.8365

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Printed at: 8:11 AM on: 1/13/2017

### 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:

Date: 12/14/16 Celena Shrum

Toxicology Program Discipline Leader