

Hemp Proficiency Testing

Summary Statistics



Samples: HM19SEP

Issue Date: 10/19/2019

By Analyte

HM19SEP-1 (hemp)

Analyte	Code	Trueness (Lab Value)				Horwitz %RSD	Precision (Lab RSDr)		
		Rob Mean	n	Rob StDev	%RSD		Rob Mean	min	max
Δ9-THC (%AR)	001	0.248	41	0.0286	11.5	4.92	4.37	0.23	11.9
Δ9-THCA (%AR)	002	0.0385	35	0.0164	42.6	6.5	10.3	1.25	85.4
CBD (%AR)	003	5.2061	38	0.4285	8.23	3.12	3.38	0.18	12.7
CBDA (%AR)	004	3.5865	35	0.4536	12.6	3.29	3.48	0.27	11.6
CBN (%AR)	005	0.0371	29	0.011	29.7	6.54	6.05	0	35.5
Total Δ9-THC (%AR)	006	0.2869	52	0.044	15.3	4.81	4	0.44	11.9
Total CBD (%AR)	007	8.4177	39	0.8078	9.6	2.9	3.54	0.34	12.3
Moisture (%)	500	7.1483	12	1.7671	24.7	2.97	5.42	1.51	36.5
Δ9-THC (%DW)	501	0.2793	7	0.0361	12.9	4.83	8.1	1.14	11.1
CBD (%DW)	503	5.6617	6	0.5412	9.56	3.08	4.16	0.63	13.4
CBDA (%DW)	504	3.8859	6	0.7217	18.6	3.26	5.43	0.67	17.8
CBN (%DW)	505	0.0376	6	0.0096	25.6	6.53	6.83	0	21.4
Total Δ9-THC (%DW)	506	0.3064	8	0.0541	17.6	4.77	7.15	1.42	11.5

Total CBD (%DW)	507	9.1249	8	1.112	12.2	2.86	5.44	0.68	15
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HM19SEP-2 (hemp)

Analyte	Code	Trueness (Lab Value)				Horwitz %RSD	Precision (Lab RSDr)		
		Rob Mean	n	Rob StDev	%RSD		Rob Mean	min	max
Δ9-THC (%AR)	001	0.1097	40	0.016	14.5	5.56	4.56	0.36	27.2
Δ9-THCA (%AR)	002	0.039	35	0.0152	38.9	6.49	8.09	1.17	35
CBD (%AR)	003	1.4844	38	0.1338	9.01	3.76	3.63	0.32	14.5
CBDA (%AR)	004	1.7176	35	0.2511	14.6	3.68	3.57	0.26	9.31
CBN (%AR)	005	0.0138	18	0.0096	69.1	7.58	10.77	2.35	50.8
Total Δ9-THC (%AR)	006	0.1437	52	0.0273	19	5.34	4.49	0.38	21.6
Total CBD (%AR)	007	3.0202	40	0.3422	11.3	3.38	3.38	0.51	11.3
Moisture (%)	500	7.159	12	2.2817	31.9	2.97	5.42	0.27	33.4
Δ9-THC (%DW)	501	0.1213	7	0.0191	15.8	5.48	7.89	1.34	24.7
CBD (%DW)	503	1.6288	6	0.1278	7.85	3.71	5.03	1.4	10.5
CBDA (%DW)	504	1.9104	6	0.399	20.9	3.62	5.81	1.09	10.6
Total Δ9-THC (%DW)	506	0.1504	8	0.0334	22.2	5.3	5.14	0.46	19.6
Total CBD (%DW)	507	3.3989	7	0.5224	15.4	3.32	4.73	1.25	10.5

By Method Group

HM19SEP-1 (hemp)

Analyte	Code	Trueness (Lab Value)				Horwitz %RSD	Precision (Lab RSDr)		
		Rob Mean	n	Rob StDev	%RSD		Rob Mean	min	max
Δ9-THC (%AR)	LC	0.246	39	0.0272	11.1	4.92	3.93	0.23	11

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Δ9-THCA (%AR)	LC	0.0372	34	0.0148	39.7	6.54	10.3	1.25	85.4
CBD (%AR)	LC	5.2107	36	0.4469	8.58	3.12	3.25	0.18	12.3
CBDA (%AR)	LC	3.6204	33	0.4372	12.1	3.29	3.34	0.27	8.7
CBN (%AR)	LC	0.0348	26	0.0085	24.4	6.6	5.32	0	35.5
Total Δ9-THC (%AR)	GC	0.3067	13	0.049	16	4.76	3.18	1.27	9.13
Total Δ9-THC (%AR)	LC	0.2783	36	0.0381	13.7	4.83	3.96	0.44	10.1
Total CBD (%AR)	LC	8.3988	31	0.7637	9.09	2.9	2.93	0.34	7.51

HM19SEP-2 (hemp)

Analyte	Code	Trueness (Lab Value)				Horwitz %RSD	Precision (Lab RSDr)		
		Rob Mean	n	Rob StDev	%RSD		Rob Mean	min	max
Δ9-THC (%AR)	LC	0.1092	38	0.0163	14.9	5.56	4.38	0.36	27.2
Δ9-THCA (%AR)	LC	0.039	35	0.0152	38.9	6.49	8.09	1.17	35
CBD (%AR)	LC	1.4893	36	0.1332	8.94	3.76	3.69	0.32	14.5
CBDA (%AR)	LC	1.7382	33	0.2356	13.6	3.67	3.56	0.26	9.31
CBN (%AR)	LC	0.0124	16	0.0082	66.1	7.71	10.03	2.35	50.8
Total Δ9-THC (%AR)	GC	0.1611	13	0.0449	27.9	5.25	5.05	2.27	20.4
Total Δ9-THC (%AR)	LC	0.1403	36	0.0251	17.9	5.36	4.35	0.38	21.6
Total CBD (%AR)	LC	3.0055	32	0.2893	9.62	3.38	3.08	0.51	11.3

By Method

HM19SEP-1 (hemp)

Analyte	Code		Trueness (Lab Value)				Horwitz %RSD	Precision (Lab RSDr)		
			Rob Mean	n	Rob StDev	%RSD		Rob Mean	min	max
Δ9-THC (%AR)	001.02	AOAC 2018.11, diode array	0.238	8	0.0247	10.4	4.95	3.02	0.53	10.1
Δ9-THC (%AR)	001.10	LC-UV, other	0.2433	18	0.0315	13	4.93	3.64	0.23	11
Δ9-THC (%AR)	001.30	LC-MS, other	0.2566	9	0.0333	13	4.89	5.99	1.65	9.69
Δ9-THCA (%AR)	002.02	AOAC 2018.11, diode array	0.0333	7	0.0167	50.2	6.65	9.09	1.66	85.4
Δ9-THCA (%AR)	002.10	LC-UV, other	0.0421	15	0.0224	53.2	6.42	11.53	1.25	25.6
Δ9-THCA (%AR)	002.30	LC-MS, other	0.0348	8	0.0028	7.96	6.6	11.1	3.7	18.7
CBD (%AR)	003.02	AOAC 2018.11, diode array	5.1325	7	0.3727	7.26	3.12	1.91	0.18	9.03
CBD (%AR)	003.10	LC-UV, other	5.1799	18	0.5464	10.5	3.12	3.06	0.96	6.28
CBD (%AR)	003.30	LC-MS, other	5.3134	7	0.5134	9.66	3.11	5.67	2.47	12.3
CBDA (%AR)	004.02	AOAC 2018.11, diode array	3.5581	6	0.416	11.7	3.3	1.44	0.97	5.75
CBDA (%AR)	004.10	LC-UV, other	3.561	17	0.4998	14	3.3	3.11	0.78	5.96
CBDA (%AR)	004.30	LC-MS, other	3.8298	7	0.5099	13.3	3.26	5.69	1.19	8.7
CBN (%AR)	005.10	LC-UV, other	0.0388	13	0.0157	40.4	6.5	5.37	1.05	35.5
CBN (%AR)	005.20	LC-MS, other	0.0337	7	0.0068	20.1	6.64	7.39	3.87	16.3
Total Δ9-THC (%AR)	006.02	AOAC 2018.11, diode array	0.2655	7	0.0601	22.6	4.87	3.84	1.24	8.72
Total Δ9-THC (%AR)	006.10	LC-UV, other	0.2747	17	0.044	16	4.84	3.69	0.44	9.45
Total Δ9-THC (%AR)	006.30	LC-MS, other	0.2903	8	0.0376	12.9	4.8	5.46	0.98	10.1
Total Δ9-THC (%AR)	006.40	GC-FID	0.2982	11	0.0494	16.6	4.78	2.83	1.27	5.24
Total CBD (%AR)	007.10	LC-UV, other	8.3112	16	0.9067	10.9	2.9	2.94	0.97	6.16
Total CBD (%AR)	007.30	LC-MS, other	8.7713	6	0.9456	10.8	2.88	4.5	1.73	7.51

Moisture (%)	500.99	Other	6.9106	9	1.8498	26.8	2.99	4.94	1.51	36.5
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HM19SEP-2 (hemp)

Analyte	Code		Trueness (Lab Value)				Horwitz %RSD	Precision (Lab RSDr)		
			Rob Mean	n	Rob StDev	%RSD		Rob Mean	min	max
Δ9-THC (%AR)	001.02	AOAC 2018.11, diode array	0.1072	8	0.0151	14.1	5.58	4.25	1.22	17.7
Δ9-THC (%AR)	001.10	LC-UV, other	0.1099	17	0.0178	16.2	5.56	4.1	0.36	27.2
Δ9-THC (%AR)	001.30	LC-MS, other	0.1144	9	0.0179	15.6	5.52	6.08	0.66	13.1
Δ9-THCA (%AR)	002.02	AOAC 2018.11, diode array	0.0338	7	0.0123	36.3	6.63	6.7	1.9	35
Δ9-THCA (%AR)	002.10	LC-UV, other	0.0429	15	0.022	51.1	6.4	7.9	3.33	26.2
Δ9-THCA (%AR)	002.30	LC-MS, other	0.0403	9	0.0058	14.4	6.46	10.48	3.49	27.7
CBD (%AR)	003.02	AOAC 2018.11, diode array	1.4908	7	0.1375	9.22	3.76	2.51	0.57	7.29
CBD (%AR)	003.10	LC-UV, other	1.4825	18	0.1396	9.42	3.76	3.44	0.65	9.15
CBD (%AR)	003.30	LC-MS, other	1.5181	7	0.1047	6.9	3.75	4.95	0.32	14.5
CBDA (%AR)	004.02	AOAC 2018.11, diode array	1.7182	6	0.2788	16.2	3.68	2.44	0.79	8.24
CBDA (%AR)	004.10	LC-UV, other	1.714	17	0.2703	15.8	3.68	3.25	0.26	9.31
CBDA (%AR)	004.30	LC-MS, other	1.8997	7	0.2675	14.1	3.62	5.26	1.12	8.9
CBN (%AR)	005.10	LC-UV, other	0.0242	8	0.0294	122	6.97	9.91	2.37	22
Total Δ9-THC (%AR)	006.02	AOAC 2018.11, diode array	0.135	6	0.0434	32.2	5.39	3.09	1.11	5.38
Total Δ9-THC (%AR)	006.10	LC-UV, other	0.1421	16	0.0307	21.6	5.35	4.55	1.16	21.6
Total Δ9-THC (%AR)	006.30	LC-MS, other	0.1491	9	0.0217	14.6	5.31	4.93	0.38	11.1
Total Δ9-THC (%AR)	006.40	GC-FID	0.1483	11	0.0224	15.1	5.31	4.63	2.27	9.22
Total CBD (%AR)	007.02	AOAC 2018.11, diode array	3.0108	6	0.261	8.67	3.38	2.31	0.51	4.93
Total CBD (%AR)	007.10	LC-UV, other	2.9734	16	0.3533	11.9	3.39	2.8	0.57	9.23
Total CBD (%AR)	007.30	LC-MS, other	3.2354	7	0.3633	11.2	3.35	4.59	0.74	11.3

Moisture (%)	500.99	Other	6.8957	9	2.5684	37.2	2.99	3.66	0.27	11.4
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%AR and % refer to concentration in percent on as-received basis. %DW refers to concentration in percent on dry weight basis.

Data summarized for trueness and precision if 6 or more Lab values and 6 or more Lab RSDr values were available.