

Prepared for:

Surly Brewing Co

4811 Dusharme Dr

Brooklyn Center, MN USA 55429

SurlyTake5 Mixed Berry :: MT007

Batch ID or Lot Number: MT007	Test, Test ID and Methods: Various	Matrix: Unit	Page 1 of 6
Reported: 29Nov2023	Started: 27Nov2023	Received: 27Nov2023	


Cannabinoids


Test ID: T000262992

Methods: TM14 (HPLC-DAD)

	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.127	0.488	ND	ND	# of Servings = 1, Sample Weight=355g
Cannabichromenic Acid (CBCA)	0.116	0.447	ND	ND	
Cannabidiol (CBD)	0.582	1.344	ND	ND	
Cannabidiolic Acid (CBDA)	0.597	1.378	ND	ND	
Cannabidivarin (CBDV)	0.138	0.318	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.249	0.575	ND	ND	
Cannabigerol (CBG)	0.072	0.277	<LOQ	<LOQ	
Cannabigerolic Acid (CBGA)	0.301	1.159	ND	ND	
Cannabinol (CBN)	0.094	0.362	<LOQ	<LOQ	
Cannabinolic Acid (CBNA)	0.206	0.791	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.359	1.381	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.326	1.254	5.260	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.289	1.111	ND	ND	
Tetrahydrocannabivarin (THCV)	0.066	0.252	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.255	0.980	ND	ND	
Total Cannabinoids			5.260	0.00	
Total Potential THC			5.260	0.00	
Total Potential CBD			ND	ND	

Final Approval


 Karen Winternheimer
 29Nov2023
 01:14:00 PM MST
 PREPARED BY / DATE


 Sam Smith
 29Nov2023
 01:15:00 PM MST
 APPROVED BY / DATE

Prepared for:

Surly Brewing Co

4811 Dusharme Dr
Brooklyn Center, MN USA 55429

SurlyTake5 Mixed Berry :: MT007

Batch ID or Lot Number: MT007	Test, Test ID and Methods: Various	Matrix: Unit	Page 2 of 6
Reported: 29Nov2023	Started: 27Nov2023	Received: 27Nov2023	

Mycotoxins


Test ID: T000262997

Methods: TM18 (UHPLC-QQQ)

LCMS/MS: Mycotoxins

	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	2.17 - 126.50	ND	N/A
Aflatoxin B1	0.89 - 30.64	ND	
Aflatoxin B2	0.89 - 30.92	ND	
Aflatoxin G1	0.95 - 31.10	ND	
Aflatoxin G2	1.04 - 31.25	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval


 Sam Smith
 29Nov2023
 02:03:00 PM MST
 PREPARED BY / DATE


 Karen Winternheimer
 29Nov2023
 02:08:00 PM MST
 APPROVED BY / DATE

Prepared for:

Surly Brewing Co

4811 Dusharme Dr
Brooklyn Center, MN USA 55429

SurlyTake5 Mixed Berry :: MT007

Batch ID or Lot Number: MT007	Test, Test ID and Methods: Various	Matrix: Unit	Page 3 of 6
Reported: 29Nov2023	Started: 27Nov2023	Received: 27Nov2023	

Residual Solvents

Test ID: T000262996

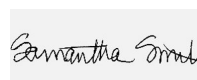
Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	92 - 1848	ND	
Butanes (Isobutane, n-Butane)	181 - 3629	ND	
Methanol	67 - 1348	ND	
Pentane	99 - 1985	ND	
Ethanol	106 - 2128	ND	
Acetone	104 - 2084	ND	
Isopropyl Alcohol	112 - 2241	ND	
Hexane	6 - 128	ND	
Ethyl Acetate	108 - 2159	ND	
Benzene	0.2 - 4.2	ND	
Heptanes	103 - 2063	ND	
Toluene	19 - 389	ND	
Xylenes (m,p,o-Xylenes)	142 - 2839	ND	

Final Approval

 Karen Winternheimer
30Nov2023
12:48:00 PM MST

PREPARED BY / DATE

 Sam Smith
30Nov2023
12:50:00 PM MST

APPROVED BY / DATE


Heavy Metals

Test ID: T000262995


Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.32	ND	
Cadmium	0.04 - 4.28	ND	
Mercury	0.04 - 4.24	ND	
Lead	0.04 - 4.34	ND	

Final Approval

 Sam Smith
30Nov2023
07:58:00 AM MST

PREPARED BY / DATE

 Karen Winternheimer
30Nov2023
08:00:00 AM MST

APPROVED BY / DATE

Prepared for:

Surly Brewing Co

4811 Dusharme Dr
Brooklyn Center, MN USA 55429

SurlyTake5 Mixed Berry :: MT007

Batch ID or Lot Number: MT007	Test, Test ID and Methods: Various	Matrix: Unit	Page 4 of 6
Reported: 29Nov2023	Started: 27Nov2023	Received: 27Nov2023	

Microbial Contaminants


Test ID: T000262994

Methods: TM25 (PCR) TM24, TM26, TM27 (Culture Plating)

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	None Detected	
Total Coliforms*	TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	

Final Approval


Eden Thompson-Wright
30Nov2023
03:40:00 PM MST
PREPARED BY / DATE


Brett Hudson
30Nov2023
04:56:00 PM MST
APPROVED BY / DATE

Prepared for:

Surly Brewing Co

4811 Dusharme Dr
Brooklyn Center, MN USA 55429

SurlyTake5 Mixed Berry :: MT007

Batch ID or Lot Number: MT007	Test, Test ID and Methods: Various	Matrix: Unit	Page 5 of 6
Reported: 29Nov2023	Started: 27Nov2023	Received: 27Nov2023	


Pesticides


Test ID: T000262993

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	385 - 3277	ND		Malathion	280 - 2762	ND
Acephate	43 - 2767	ND		Metalaxyl	46 - 2743	ND
Acetamiprid	42 - 2720	ND		Methiocarb	47 - 2707	ND
Azoxystrobin	44 - 2764	ND		Methomyl	44 - 2802	ND
Bifenazate	44 - 2711	ND		MGK 264 1	164 - 1610	ND
Boscalid	41 - 2623	ND		MGK 264 2	113 - 1089	ND
Carbaryl	43 - 2708	ND		Myclobutanil	17 - 2632	ND
Carbofuran	44 - 2682	ND		Naled	46 - 2642	ND
Chlorantraniliprole	50 - 2579	ND		Oxamyl	43 - 2793	ND
Chlorpyrifos	50 - 2781	ND		Paclobutrazol	48 - 2595	ND
Clofentezine	283 - 2691	ND		Permethrin	260 - 2759	ND
Diazinon	289 - 2727	ND		Phosmet	43 - 2585	ND
Dichlorvos	283 - 2752	ND		Prophos	303 - 2679	ND
Dimethoate	43 - 2726	ND		Propoxur	45 - 2707	ND
E-Fenpyroximate	286 - 2761	ND		Pyridaben	298 - 2830	ND
Etofenprox	43 - 2781	ND		Spinosad A	32 - 2128	ND
Etoxazole	287 - 2702	ND		Spinosad D	65 - 685	ND
Fenoxycarb	30 - 2714	ND		Spiromesifen	273 - 2747	ND
Fipronil	49 - 2636	ND		Spirotetramat	267 - 2754	ND
Flonicamid	43 - 2740	ND		Spiroxamine 1	16 - 1027	ND
Fludioxonil	315 - 2625	ND		Spiroxamine 2	28 - 1553	ND
Hexythiazox	42 - 2753	ND		Tebuconazole	286 - 2594	ND
Imazalil	263 - 2804	ND		Thiacloprid	43 - 2746	ND
Imidacloprid	43 - 2776	ND		Thiamethoxam	40 - 2752	ND
Kresoxim-methyl	45 - 2761	ND		Trifloxystrobin	46 - 2738	ND

Final Approval

 Karen Winternheimer
01Dec2023
09:36:00 AM MST
PREPARED BY / DATE

 Sam Smith
01Dec2023
09:42:00 AM MST
APPROVED BY / DATE

Prepared for:

Surly Brewing Co

4811 Dusharme Dr

Brooklyn Center, MN USA 55429

SurlyTake5 Mixed Berry :: MT007

Batch ID or Lot Number: MT007	Test, Test ID and Methods: Various	Matrix: Unit	Page 6 of 6
Reported: 29Nov2023	Started: 27Nov2023	Received: 27Nov2023	



<https://results.botanacor.com/api/v1/coas/uuid/1cb896fe-6a70-431a-a249-a7f07f88223a>

Definitions

LOD = Limit of Detection, ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation, PPB = Parts per Billion, % = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method). Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa * (0.877)) and Total CBD = CBD + (CBDa * (0.877)). Fail equates to a concentration level of Delta 9-THC, on a dry weight basis, higher than 0.3 percent + or - the measurement uncertainty. Total Potential THC is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step. Total THC = THC + (THCa * (0.877)). ALOQ = Above Limit Of Quantitation (defined by dynamic range of the method), CFU/g = Colony Forming Units per Gram. Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10² = 100 CFU, 10³ = 1,000 CFU, 10⁴ = 10,000 CFU, 10⁵ = 100,000 CFU.

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 A2LA Cert #: 4329.02 Chemical; 4329.03 Biological. Some tests listed on this COA may not be within our scope of A2LA accreditation. Please visit [A2LA for more details](#).



Cert #4329.02

1cb896fe6a70431aa249a7f07f88223a.1