

EXAMPLE of BREWERY SAMPLING PLAN

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#	Sample Location	Specific Sample	Frequency	2036-1	2039-2	2038-2	
1	Water source	Well or city process water	weekly	x			
2	Yeast Cellar	Pure yeast (propagation or commercial purchase)	each	x	x		
3		Crop yeast	each	x	x		
4	Yeast Storage Room	Ambient air sampling	monthly	x	x		
5	Fermenting Room	Pitching yeast (in storage tank/brink) before pitching	each	x	x		
6		Wort after pitching (forced ferment)	each	x			
7		Green beer before transfer	each tank	x			
8		CIP rinse water	each cycle	x			
9	Feed Tank	Feed wort/sugar used for bottle- or cask-conditioning	each tank	x			
10		Finished beer before filling	5 days prior	x			
11		CIP rinse water	each cycle	x			
12	Filtration	Beer after filter	each run	x			
13	Brite Beer Storage	Bright beer tank before filling kegs, bottles, or cans	4 days prior	x			
14		CIP rinse water	each cycle	x			
15	Bottle/Can Filling	Water supply to bottle/can rinser	each run	x			
16		Drip water collected from several rinsed bottles/cans	weekly	x			
17		Swab areas in proximity to open containers (spray shroud, conveyor track, bottle/can inspector, collection table, etc.)	weekly	x			S
18		Beer at filler entry	each tank	x			
19		Swab surfaces in the filler area (ring bowl, centring bell, protective panel); filling tubes; high pressure water injection (jetting); crown/lid (spot checks); crown/lid supply chute; crowner/seamer	weekly	x			S
20		Filled beer	pre and post filling or each type/tank change	x	x		
21		CIP rinse water	each cycle				
22		Ambient air sampling	monthly	x	x	x	P
23	Keg Filling	Beer at filler entry	each tank	x			
24		CIP rinse water	each cycle	x			
25		Swab filling area (filling valves, conveyor)	weekly	x			S
26		Ambient air sampling	monthly	x	x	x	P
27							
28							
29	Heat Exchanger	Wort before pitching (forced wort)	each cycle	x	x		
30	Brewery/Cellar	Transfer hoses / stainless fitting interface	per CIP			x	
31		Transfer hoses / main body	quarterly				
32		Gaskets on hoses	per CIP			x	
33		Gaskets on tanks	per CIP			x	
34		Wooden barrels (clean)	pre-filling	x	x	x	
35		Keg coupling valve	per CIP	x	(x)		
36		Oxygenation stones	per CIP	x	(x)		
37		Carbonation stones	per CIP				
38		Yeast storage brink (pre-fill)	per CIP			x	
39		Brew water after incoming water filter	monthly	x		x	
40	Pasteurizer	Same batch before and after pasteurization step	each cycle	(x)	(x)	x	

41	CO2 supply	Upstream of contact with finished beer	monthly	x			
42	Bottle/Can Archive	Sampling of bottles/cans after some days/weeks/months of cold/warm storage	per brewery routine	x	x		
43	Pub/Tasting Room	Draft beer faucets/lines	bi-monthly	x		x	
44	Dead Legs	Anywhere they exist	per CIP	x	x		

NOTES:

31. Brewery hose: routine testing implies monitoring CIP loop for cleanliness and integrity of hose lining; if routine tests are positive, do bacteria and wild yeast upstream for troubleshooting spoilers identified in product; if a particular hose is suspect: fill it with distilled water, cap the ends, allow one hour of contact time, then test sample of that water for spoilers.

38. Yeast brink (storage tank or keg): if positive for general yeast test, test again for wild yeast.

39. Brew water after incoming water filter: if positive, test upstream of filter to determine if filter itself is the source of contamination.

40. Pasteurizer: routine testing determines whether pasteurizer is functioning properly; if positive, check for bacteria + wild yeast. if positive for bacteria or wild yeast, dump; if positive only for brewers yeast, monitor w/ sensory.

44. Dead legs : highly recommended to eliminate dead legs wherever possible; if not possible, it is imperative to inspect and test them regularly. The orientation of pipe branch must allow self-draining of liquids and should not allow air bubbles to accumulate during cleaning. As a general rule in food production facilities where CIP systems are used to clean and sanitize piping, follow the L < D rule, where the length of the leg (L) should be less than the diameter of the pipe (D), in accordance with the European Hygienic Engineering and Design Group (EHEDG) criteria. View illustrations of acceptable and unacceptable dead legs: <https://forcetechnology.com/en/articles/dead-legs-piping-systems-hygenic-design>