

B	I	N	G	O
pH above 8	1 endospore	Denatures proteins	Spiral	Nonpathogenic
Anaerobic	Yellowstone hot springs	Rod shaped bacteria	121 degrees C at 15psi for 15 min	Thick cell walls
pH below 6	4 endospores	FREE	Pathogenic	High in heavy metals
Aerobic	Inner cell membrane	Steam sterilization	Na concentration above 7%	Soil
Survival in harsh conditions	Heat loving	Dormant structure	Oil wells	55-65 degrees C

B	I	N	G	O
Pathogenic	Nonpathogenic	4 endospores	Thick cell walls	55-65 degrees C
Steam sterilization	High in heavy metals	Inner cell membrane	Yellowstone hot springs	121 degrees C at 15psi for 15 min
pH below 6	Spiral	FREE	Oil wells	Anaerobic
Denatures proteins	Rod shaped bacteria	Survival in harsh conditions	Aerobic	Soil
1 endospore	pH above 8	pH of 6-8	Antarctica	Dormant structure

B	I	N	G	O
Pathogenic	Anaerobic	Soil	Antarctica	121 degrees C at 15psi for 15 min
1 endospore	pH of 6-8	Denatures proteins	pH below 6	Aerobic
Yellowstone hot springs	Survival in harsh conditions	FREE	Na concentration above 7%	Spiral
55-65 degrees C	Oil wells	Inner cell membrane	High in heavy metals	4 endospores
Thick cell walls	Nonpathogenic	Dormant structure	Rod shaped bacteria	pH above 8