

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

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

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