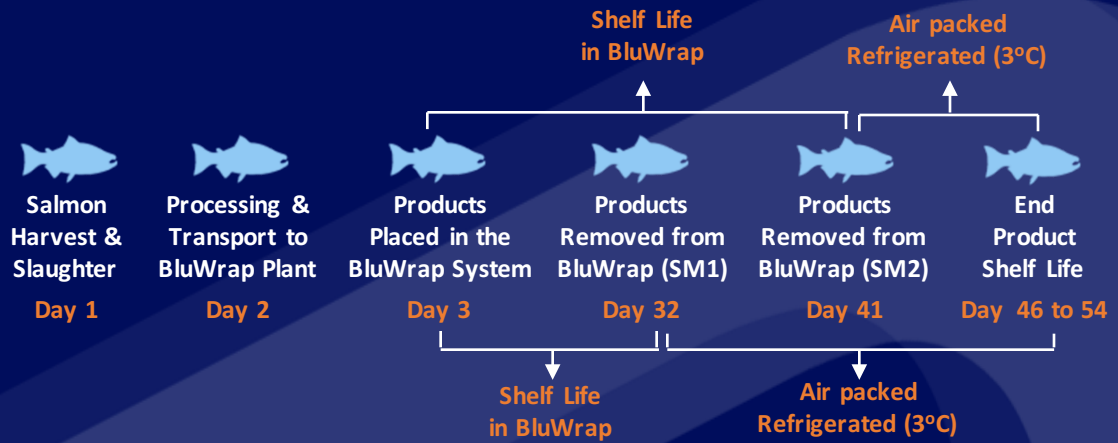


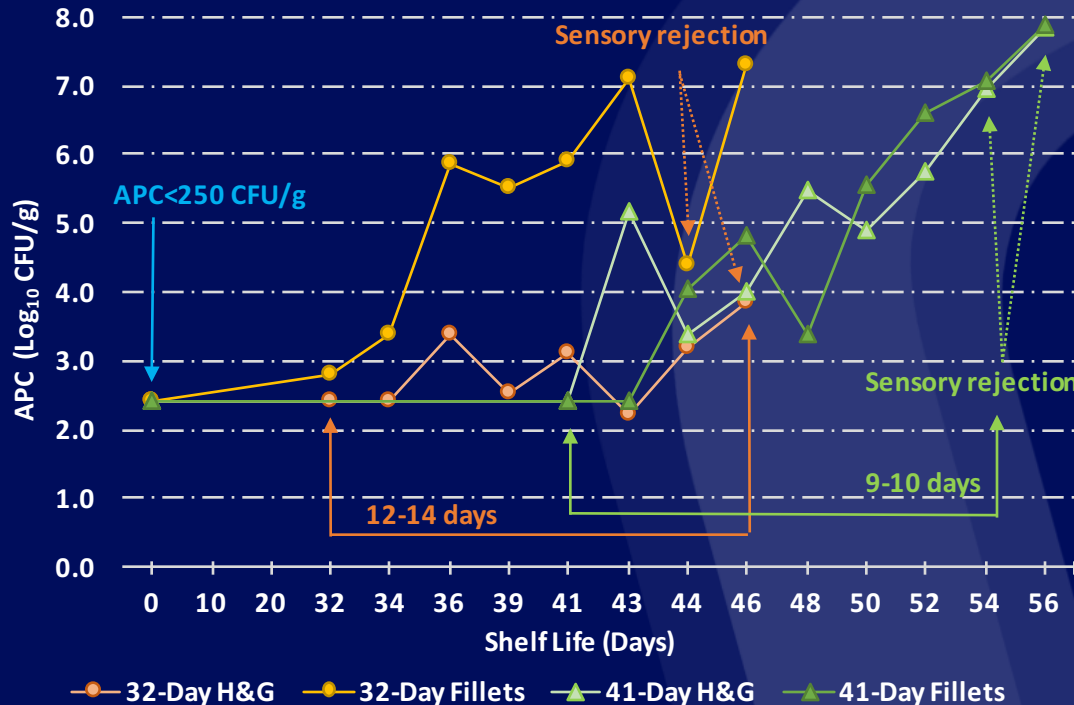
Fresh Atlantic Salmon: Pin Bone-Out Fillets and H&G

Salmo salar fillets were produced by a salmon supplier in Chile (total product wt. ~ 500 Kg). Processing started 15 hours after harvest, and head-on gutted salmon was subjected to a 6 h soak in 10% Ca(OH)₂ aqueous solution prior to production of headed and gutted (H&G) and PBO fillets. Products were transported, packaged in BluWrap boxes, by truck to the BluWrap facility (Talcahuano, Chile) and placed in the BluWrap patent low oxygen management system. Fillets were held superchilled in the system for 32 & 41 days using two separate BluWrap service modules (SM). A third-party accredited laboratory conducted microbial analysis on the next day fillets and headed and gutted (H&G) products were produced, and again when products were removed from the BluWrap system for determination of shelf life post-system. The laboratory used standard methods for microbial and sensory analysis. Microbial analysis included determination of counts for mesophilic and psychrophilic aerobes, anaerobes, and tests for *Listeria monocytogenes*, *Salmonella* spp., *Staphylococcus aureus*. Sensory analysis included evaluation of odor, color, texture using a 5-point demerit scale, where 3 indicated end of shelf life based on the sensorial attribute.



SHELF LIFE RESULTS

- ✓ 32-day H&G shelf life was 12 days based on texture score of 3; however, samples received odor scores of 1 up until day 14, and the aerobic bacteria counts never exceeded 4 Log₁₀ CFU/g.
- ✓ 32-day PBO fillets shelf life was 11 days based on aerobic bacteria counts of 7 Log₁₀ (CFU/g). Sensory rejection occurred only at day 12 with odor and texture values of 4.
- ✓ 41-day H&G shelf life was 9 days based on texture score of 3; however, aerobic bacteria counts were low (4 Log₁₀ CFU/g). Aerobic bacteria counts only reached 7 Log₁₀ CFU/g on day 14.
- ✓ 41-day POB fillets shelf life was 9 days based on odor score of 3; however only at day 10 samples received a score of 3 for both, texture and odor. Aerobic bacteria counts only reached 7 Log₁₀ CFU/g on day 12.



Products	Days	<i>Listeria Monocytogenes</i>	Anaerobic Counts (CFU/g)	Psychrophilic Counts (CFU/g)	<i>E. coli</i> (MPN/g)	<i>S. aureus</i> (CFU/g)	<i>Salmonella</i> spp. (25g)
H&G	0	Absent					
H&G	32	Absent	<250	<250	<0.3	<10	Absent
H&G	36	Absent		<250			
H&G	41	Absent		<250			
Fillet	0	Absent					
Fillet	32	Absent	<250	<250	<0.3	<10	Absent
Fillet	36	Absent		<250			
Fillet	41	Absent		<250			