

Silliker, JR Laboratories
 12-3871 North Fraser Way, Burnaby, BC V5J 5G6
 604/ 432 9311 Fax 604/ 432 7768

COA No:	BRN-38948226-0
Supersedes:	BRN-38716537-0
COA Date	4/26/16
Page 1 of 3	

TO:
 Ms. Shirley Zhu
 Quality Assurance Manager
 Seven Seas Fish Co., Ltd
 12411 Vulcan Way
 Richmond, BC V6V 1J7

Received From:	Richmond, BC
Received Date:	1/22/16

Location of Test: (except where noted) Burnaby, BC
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Analytical Results

Desc. 1:			Laboratory ID:	358460016	
	Albacore Tuna (WO-14576)		Condition Rec'd:	NORMAL	
			Temp Rec'd (°C):	-3.4	
<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Method Reference</u>	<u>Method</u>	<u>Test Date Loc.</u>
Fat by GC			AOAC 996.06	QA-9901-2056	4/26/16 MRK
Total Fat as Triglycerides by GC	5.70	g/100g			
Saturated Fatty Acids	1.64	g/100g			
cis-Monounsaturated Fatty Acids	1.36	g/100g			
cis-Polyunsaturated Fatty Acids	2.46	g/100g			
Omega-6 Fatty Acids	0.22	g/100g			
Omega-3 Fatty Acids	2.21	g/100g			
Trans Fatty Acids	<0.01	g/100g			
Conjugated Linoleic Acid	<0.01	g/100g			
Fatty Acid Profile			AOCS Ce 1b-89 (1999)	2056/SL-0250-4904	2/5/16 MRK
4:0 Butanoic (Butyric)	<0.01	% FA of Total FA			
6:0 Hexanoic (Caproic)	<0.01	% FA of Total FA			
8:0 Octanoic (Caprylic)	<0.01	% FA of Total FA			
10:0 Decanoic (Capric)	<0.01	% FA of Total FA			
12:0 Dodecanoic (Lauric)	0.05	% FA of Total FA			
14:0 Tetradecanoic (Myristic)	3.11	% FA of Total FA			
14:1 Tetradecenoic (Myristoleic)	<0.01	% FA of Total FA			
15:0 Pentadecanoic	0.78	% FA of Total FA			
15:1 Pentadecenoic	<0.01	% FA of Total FA			
16:0 Hexadecanoic (Palmitic)	18.87	% FA of Total FA			
16:1 n-9 Hexadecenoic	0.31	% FA of Total FA			
16:1 n-7 Hexadecenoic (Palmitoleic)	3.36	% FA of Total FA			
16:1 n-5 Hexadecenoic	0.14	% FA of Total FA			
16:2 n-6 Hexadecadienoic	0.02	% FA of Total FA			
16:2 n-4 Hexadecadienoic	0.12	% FA of Total FA			
16:3 n-4 Hexadecatrienoic	0.02	% FA of Total FA			
16:3 n-3 Hexadecatrienoic	<0.01	% FA of Total FA			
16:3 n-1 Hexadecatrienoic	0.20	% FA of Total FA			
16:4 n-3 Hexadecatetraenoic	0.03	% FA of Total FA			
16:4 n-1 Hexadecatetraenoic	0.05	% FA of Total FA			
17:0 Heptadecanoic (Margaric)	0.89	% FA of Total FA			
17:1 Heptadecenoic (Margaroleic)	0.58	% FA of Total FA			
18:0 Octadecanoic (Stearic)	5.89	% FA of Total FA			

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CERTIFICATE OF ANALYSIS

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18:1 n-9 Octadecenoic (Oleic)	12.84	% FA of Total FA				
18:1 n-7 Octadecenoic	2.32	% FA of Total FA				
18:1 n-5 Octadecenoic	0.17	% FA of Total FA				
18:2 n-9 Octadecadienoic	0.11	% FA of Total FA				
18:2 n-6 Octadecadienoic (Linoleic)	1.24	% FA of Total FA				
18:2 n-4 Octadecadienoic	0.08	% FA of Total FA				
18:3 n-6 Octadecatrienoic	0.09	% FA of Total FA				
18:3 n-4 Octadecatrienoic	<0.01	% FA of Total FA				
18:3 n-3 Octadecatrienoic (Linolenic)	0.58	% FA of Total FA				
18:3 n-1 Octadecatrienoic	<0.01	% FA of Total FA				
18:4 n-3 Octadecatetraenoic	1.21	% FA of Total FA				
18:4 n-1 Octadecatetraenoic	<0.01	% FA of Total FA				
20:0 Eicosanoic (Arachidic)	0.22	% FA of Total FA				
20:1 n-11+13 Eicosenoic	0.61	% FA of Total FA				
20:1 n-9 Eicosenoic	1.80	% FA of Total FA				
20:1 n-7 Eicosenoic	0.20	% FA of Total FA				
20:1 n-5 Eicosenoic	<0.01	% FA of Total FA				
20:2 n-6 Eicosadienoic	0.28	% FA of Total FA				
20:3 n-6 Eicosatrienoic	0.11	% FA of Total FA				
20:3 n-3 Eicosatrienoic	0.24	% FA of Total FA				
20:4 n-6 Eicosatetraenoic (Arachidic)	1.44	% FA of Total FA				
20:4 n-3 Eicosatetraenoic	0.57	% FA of Total FA				
20:5 n-3 Eicosapentaenoic (EPA)	8.42	% FA of Total FA				
21:5 n-3 Heneicosapentaenoic	0.24	% FA of Total FA				
22:0 Docosanoic (Behenic)	0.14	% FA of Total FA				
22:1 n-11+13 Docosaenoic	1.34	% FA of Total FA				
22:1 n-9 Docosaenoic	0.28	% FA of Total FA				
22:1 n-7 Docosaenoic	0.08	% FA of Total FA				
22:4 n-6 Docosatetraenoic	0.08	% FA of Total FA				
22:4 n-3 Docosatetraenoic	0.03	% FA of Total FA				
22:5 n-6 Docosapentaenoic	0.72	% FA of Total FA				
22:5 n-3 Docosapentaenoic	1.45	% FA of Total FA				
22:6 n-3 Docosahexaenoic (DHA)	27.67	% FA of Total FA				

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24:0 Tetracosanoic (Lignoceric)	0.09	% FA of Total FA				
24:1 Tetracosanoic (Nervonic)	0.89	% FA of Total FA				
Total Saturates	30.04	% FA of Total FA				
Total cis-Monounsaturated Fatty Aci	24.92	% FA of Total FA				
Total cis-Polyunsaturated Fatty Acid	45.00	% FA of Total FA				
Omega-6 Fatty Acids	3.98	% FA of Total FA				
Omega-3 Fatty Acids	40.44	% FA of Total FA				
Histamine	<1.0	mg/100g	AOAC 977.13	M-C286	2/4/16	
ICP-MS Sample Prep	Acid Digest	-	EPA 3050b		1/25/16	
Mercury	0.274	ppm (w/w)	EPA 3050/6020 USP730	M-C043	1/27/16	



 Cathy Shevchuk Laboratory Director

Noted Test Locations: MRK-Silliker, Canada Co., 90 Gough Road, Unit 4, Markham, Ontario L3R 5V5

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