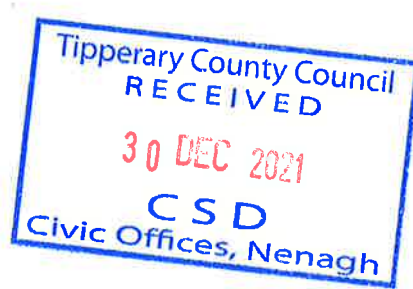


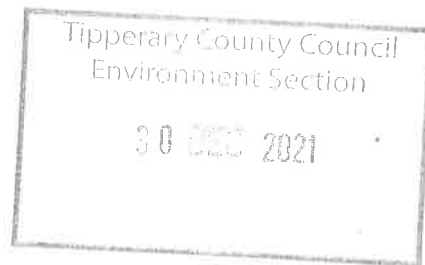


Energy for
generations

To: Environmental Section
Tipperary County Council
Civic Offices
Limerick Road
Nenagh
Co Tipperary



Date: 22nd December 2021



Dear Sir/Madam

Enclosed are monitoring results for August to November 2021, for ESB Salmon Hatchery at Parteen, Birdhill, Co Tipperary. These results are a requirement of our discharge licence Ref. No. WP/W056/91.

I hope this is in order.

Thomas O'Brien

ESB Fisheries Conservation

Parteen Salmon Hatchery

Birdhill

Co Tipperary

Ph: 061 350594



ENVIRONMENTAL MONITORING REPORT

Parteen Hatchery

November 2021

Date Tested	Required Test For:	Units	Intake	Outflow Fibreglass Tanks	Outflow Concrete Tanks	Compliant (Yes/No)
02/11/2021	BOD	4 mg/l	<1	<1	1	Yes
02/11/2021	Suspended Solids	5 mg/l	<2	<2	<2	Yes
02/11/2021	Turbidity	N/A.	0.6	0.3	0.4	Yes
02/11/2021	pH	0.5	8.5	8.4	8.3	Yes
02/11/2021	Nitrate as N	N/A	0.498	0.497	0.528	Yes
02/11/2021	Nitrite as N	N/A	<0.005	<0.005	<0.005	Yes
02/11/2021	Copper, total	0.05 ug/l	<0.01	0.02	0.08	Yes
02/11/2021	Ammonia as N	0.3 mg/l	0.009	0.015	0.05	Yes
02/11/2021	Temperature (field measurement)	1.0	11.4	11.6	12.3	Yes
02/11/2021	Formaldehyde in Water	0.05 mg/l	0.023	0.029	0.037	Yes
02/11/2021	Phosphate as P filtered (low level/saline)	0.05 mg/l	0.009	0.010	0.010	Yes
02/11/2021	Total Phosphorus as P	N/A	0.024	0.021	0.032	Yes
02/11/2021	Dissolved Oxygen mg/l	N/A	8.76	10.3	9.96	Yes
02/11/2021	Phenols	0.005 mg/l	<0.010	<0.010	<0.010	Yes

Approved by:

AnnMarie Nee

Environmental Services Administrator

Complete Laboratory Solutions

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Date: 17/11/2021



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ESB Parteen Salmon Hatchery Daily Flowmeter Readings

Date	Daily Flow Concrete Tanks	Daily Flow Fibreglass Tanks	Total flow for Day
	Parteen	Parteen	
01/11/2021	8240.79	1288.01	9528.80
02/11/2021	8615.42	1654.54	10269.96
03/11/2021	8308.78	1879.56	10188.34
04/11/2021	7391.24	1812.65	9203.89
05/11/2021	9074.21	1926.35	11000.56
06/11/2021	10169.55	1920.54	12090.09
07/11/2021	10188.35	1898.65	12087.00
08/11/2021	10058.78	1975.36	12034.14
09/11/2021	10709.24	2020.45	12729.69
10/11/2021	11711	2065.34	13776.34
11/11/2021	12026.97	1987.61	14014.58
12/11/2021	12294.5	1990.67	14285.17
13/11/2021	12739.98	2031.38	14771.36
14/11/2021	12763.01	2132.52	14895.53
15/11/2021	12395.6	2210.64	14606.24
16/11/2021	12175.59	2326.91	14502.50
17/11/2021	12533.8	2288.66	14822.46
18/11/2021	12660.99	2254.74	14915.73
19/11/2021	12718.24	2197.64	14915.88
20/11/2021	12629.13	2256.68	14885.81
21/11/2021	9177.15	2334.56	11511.71
22/11/2021	8929.1	2425.28	11354.38
23/11/2021	10817.23	2525.34	13342.57
24/11/2021	11294.82	2545.93	13840.75
25/11/2021	10712.44	2626.37	13338.81
26/11/2021	9840.71	2658.76	12499.47
27/11/2021	8689.42	2784.62	11474.04
28/11/2021	9581.77	2758.19	12339.96
29/11/2021	9660.39	2878.52	12538.91
30/11/2021	9927.9	2842.82	12770.72
Total Monthly flow (m3)			384535.39
Average Daily flow			12016.73
Maximum Daily Flow			14915.88
Minimum Daily Flow			9203.89

Monthly Environmental Data

Month: November 2021

Date	Water Temp ^o C	Oxygen (Mg/L)	Oxygen (% sat)	Ptl	Conductivity (m/cm)	Rainfall	Air Tempeture °C
1st	12.7	10.8	103%				9.5
2nd	12.2	10.5	104%				6.2
3rd	11.9	10.8	104%				6.8
4th	11.8	9.7	94%				5.4
5th	11.6	10.4	98%				7.3
6th	11.8	10.2	94%				11.6
7th	11.6	10.3	95%				10.2
8th	12.3	11.2	101%				8.7
9th	12.3	11.0	101%				13.1
10th	12.3	10.8	100%				9.6
11th	11.8	10.8	96%				11.4
12th	11.8	10.6	94%				11.1
13th	11.6	10.0	94%				10.3
14th	11.5	10.2	99%				9.2
15th	11.8	11.3	102%				8.0
16th	11.4	11.1	102%				10.5
17th	11.8	11.3	101%				10.1
18th	11.3	11.4	103%				12.3
19th	11.6	11.7	93%				12.0
20th	11.3	10.1	90%				5.1
21st	10.5	10.8	98%				3.2
22nd	10.1	10.6	99%				6.1
23rd	10.0	10.9	101%				2.4
24th	10.8	11.0	98%				5.3
25th	10.7	10.4	92%				4.1
26th	10.6	10.6	93%				5.8
27th	10.7	10.8	94%				4.7
28th	10.6	11.2	98%				6.1
29th	10.8	11.8	101%				6.5
30th	10.9	12.2	104%				8.3
31st							
Average							

Parteen Hatchery Feed Stock Control

Month: November 2021

Skretting Type Food

Fish Size (Grms)	Feed Size/ Type	Initial Stock (Kgs)	Stock Received (Kgs)	Final Stock (Kgs)	Quantity used
0.11 - 0.20	Nutra ST 0.3				
0.12 - 0.5	Nutra XP 0.5				
0.4 - 1.0	Nutra XP 0.7				
0.9 - 3.0	Nutra XP 1.0				
2.0 - 8.0	Nutra Olympic 2				
7.0 - 30	Nutra Olympic 7				
25 - 60	Nutra Olympic 25				
<0.2	Emerald fry 00				
0.2 - 1.5	Emerald fry 01				
1.0 - 8.0	Emerald fry 02				
7.0 - 30.0	Emerald Parr 7				
25.0 - 60.0	Emerald Parr 25				

Altech Coppens Food

Fish Size (Grms)	Feed Size/ Type	Initial Stock (Kgs)	Stock Received (Kgs)	Final Stock (Kgs)	Quantity used
< 0.2	Top 0.3mm to 0.5mm	Nil	Nil	Nil	Nil
0.2 to 0.5	Top 0.5mm to 0.8mm	Nil	Nil	Nil	Nil
0.5 to 2.0	Top 1.0 mm	Nil	Nil	Nil	Nil
2.0 to 12/0	Top 1.5mm	48 x 20 kgs	Nil	48 20 kgs	Nil
10.0 to 35.0	Crystal 2.0mm	134 x 25 kgs	Nil	90 x 25 kgs	44 x 25 kgs
35.0 to 100.0	Crystal 3.0mm	90 x 25 kgs	Nil	90 x 25 kgs	Nil
35.0 to 100.0	AC 3.0mm				
Comments:					

Note: Skretting based in Westport, Co Mayo (formally Trouw)

Parteen Hatchery Monthly Chemical Sheet

Month: November 2021

Chemicals	Initial Stock	Stock Received	Final Stock	Quantity Used
Formalin (Lts)	1.0 x 220 kgs	Nil	0.5 x 220 kgs	0.5 x 220 kgs
Chloromin T (Kgs)	Nil	Nil	Nil	Nil
Roccal 10X (Kgs)	Nil	Nil	Nil	Nil
Salt (Kgs)	Nil	Nil	Nil	Nil
Maracycline (Kgs)	Nil	Nil	Nil	Nil
Vaccine (Lts)	Nil	Nil	Nil	Nil
Vanodine (Lts)	Nil	Nil	Nil	Nil
Virkons Aquatic	15 kgs	Nil	14 kgs	1 kg
Buffodine (Lts)	Nil	Nil	Nil	Nil
Anti-Fouling Paint (Lts)	20 lts	Nil	20 lts	Nil
Actone (Lts)	6 lts	Nil	6 lts	Nil
Xylene (Lts)	Nil	Nil	Nil	Nil
Industrial Alcohol (Lts)	Nil	Nil	Nil	Nil
Bitumastic Paint (Lts)	Nil	Nil	Nil	Nil
Benzocain (Lts)	Nil	Nil	Nil	Nil
Tricaine Methanesulphonate (Kgs)	0.6 kgs	Nil	0.5 kgs	0.1 kgs
Roundup Weedkiller	Nil	Nil	Nil	Nil
Pyceze	Nil	Nil	Nil	Nil

Comment:



ENVIRONMENTAL MONITORING REPORT

Parteen Hatchery

October 2021

Date Tested	Required Test For:	Units	Intake	Outflow Fibreglass Tanks	Outflow Concrete Tanks	Compliant (Yes/No)
05/10/2021	BOD	4 mg/l	<1	1	1	Yes
05/10/2021	Suspended Solids	5 mg/l	<2	5	<2	Yes
05/10/2021	Turbidity	N/A.	0.5	5.2	1.7	Yes
05/10/2021	pH	0.5	8.4	8.4	8.3	Yes
05/10/2021	Nitrate as N	N/A	0.511	0.529	0.535	Yes
05/10/2021	Nitrite as N	N/A	<0.005	<0.005	<0.005	Yes
05/10/2021	Copper, total	0.05 ug/l	<0.04	0.02	0.09	Yes
05/10/2021	Ammonia as N	0.3 mg/l	<0.005	<0.005	0.041	Yes
05/10/2021	Temperature (field measurement)	1.0	13.4	13.4	14.2	Yes
05/10/2021	Formaldehyde in Water	0.05 mg/l	0.024	0.034	0.025	Yes
05/10/2021	Phosphate as P filtered (low level/saline)	0.05 mg/l	0.005	0.013	0.029	Yes
05/10/2021	Total Phosphorus as P	N/A	0.018	0.044	0.046	Yes
05/10/2021	Dissolved Oxygen mg/l	N/A	9.43	9.19	9.11	Yes
05/10/2021	Phenols	0.005 mg/l	<0.010	<0.010	<0.010	Yes

Approved by:

AnnMarie Nee

Environmental Services Administrator

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Date: 04/11/2021

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Saotharlann Chonamara Teo T/A Complete Laboratory Solutions | Company Registration No:209644



ESB Parteen Salmon Hatchery Daily Flowmeter Readings

Date	Daily Flow Concrete Tanks Parteen	Daily Flow Fibreglass Tanks Parteen	Total flow for Day
01/10/2021	6597.41	0	6597.41
02/10/2021	6612.52	0	6612.52
03/10/2021	6598.46	0	6598.46
04/10/2021	6585.72	0	6585.72
05/10/2021	6657.93	0	6657.93
06/10/2021	6675.64	0	6675.64
07/10/2021	6774.34	0	6774.34
08/10/2021	6787.16	0	6787.16
09/10/2021	6967.28	0	6967.28
10/10/2021	6872.54	0	6872.54
11/10/2021	6909.54	0	6909.54
12/10/2021	6832.51	0	6832.51
13/10/2021	6867.95	0	6867.95
14/10/2021	6987.58	0	6987.58
15/10/2021	6956.87	0	6956.87
16/10/2021	6998.23	0	6998.23
17/10/2021	7050.68	0	7050.68
18/10/2021	7158.69	0	7158.69
19/10/2021	7100.36	0	7100.36
20/10/2021	7095.25	0	7095.25
21/10/2021	7230.25	0	7230.25
22/10/2021	7131.13	0	7131.13
23/10/2021	7001.90	0	7001.90
24/10/2021	8465.53	0	8465.53
25/10/2021	8701.43	0	8701.43
26/10/2021	8780.52	0	8780.52
27/10/2021	8643.80	0	8643.80
28/10/2021	9017.95	0	9017.95
29/10/2021	8982.84	0	8982.84
30/10/2021	8518.50	0	8518.50
31/10/2021	8423.03	0	8423.03
Total Monthly flow (m3)			227983.54
Average Daily flow			6908.59
Maximum Daily Flow			9017.95
Minimum Daily Flow			6585.72

Parteen Hatchery Monthly Chemical Sheet

Month: October 2021

Chemicals	Initial Stock	Stock Received	Final Stock	Quantity Used
Formalin (Lts)	1.5 x 220 kgs	Nil	1.0 x 220 kgs	0.5 x 220 kgs
Chloromin T (Kgs)	Nil	Nil	Nil	Nil
Roccal 10X (Kgs)	Nil	Nil	Nil	Nil
Salt (Kgs)	Nil	Nil	Nil	Nil
Maracycline (Kgs)	Nil	Nil	Nil	Nil
Vaccine (Lts)	Nil	Nil	Nil	Nil
Vanodine (Lts)	Nil	Nil	Nil	Nil
Virkons Aquatic	16 kgs	Nil	15 kgs	1 kg
Buffodine (Lts)	Nil	Nil	Nil	Nil
Anti-Fouling Paint (Lts)	20 lts	Nil	20 lts	Nil
Actone (Lts)	6 lts	Nil	6 lts	Nil
Xylene (Lts)	Nil	Nil	Nil	Nil
Industrial Alcohol (Lts)	Nil	Nil	Nil	Nil
Bitumastic Paint (Lts)	Nil	Nil	Nil	Nil
Benzocain (Lts)	Nil	Nil	Nil	Nil
Tricaine Methanesulphonate (Kgs)	0.7 kgs	Nil	0.6 kgs	0.1 kgs
Roundup Weedkiller	Nil	Nil	Nil	Nil
Pyceze	Nil	Nil	Nil	Nil
Comment:				

Monthly Environmental Data

Month: October 2021

Date	Water Temp ^o C	Oxygen		Ptl	Conductivity (m/cm)	Rainfall	Air Tempeture °C
		(Mg/L)	(% sat)				
1st	16.6	9.0	93%				8.2
2nd	15.8	8.6	88%				6.3
3rd	15.0	9.4	92%				5.9
4th	16.0	9.4	96%				9.5
5th	15.2	9.6	97%				7.8
6th	16.8	9.7	99%				8.5
7th	16.8	9.6	98%				9.6
8th	17.2	9.5	98%				9.5
9th	16.8	9.6	98%				8.6
10th	16.4	9.5	95%				6.5
11th	16.0	9.4	93%				5.4
12th	15.8	9.6	99%				8.2
13th	14.6	9.4	92%				6.2
14th	14.3	9.2	89%				6.6
15th	14.6	9.8	98%				7.0
16th	14.9	9.6	98%				10.6
17th	14.5	9.5	97%				12.4
18th	15.1	10.2	101%				15.0
19th	15.2	10.5	101%				13.6
20th	15.6	9.5	100%				12.4
21st	15.0	10.7	94%				6.5
22nd	15.2	9.9	102%				11.2
23rd	14.6	9.7	100%				10.1
24th	14.5	9.8	96%				8.6
25th	14.9	9.5	97%				12.2
26th	15.1	9.5	95%				13.4
27th	15.6	9.3	96%				11.0
28th	15.8	8.9	93%				13.3
29th	15.8	9.4	93%				9.5
30th	13.2	9.1	91%				9.8
31st	12.5	9.0	87%				9.2
Average							

Parteen Hatchery Feed Stock Control

Month: October 2021

Skretting Type Food

Fish Size (Grms)	Feed Size/ Type	Initial Stock (Kgs)	Stock Received (Kgs)	Final Stock (Kgs)	Quantity used
0.11 - 0.20	Nutra ST 0.3	Nil	Nil	Nil	Nil
0.12 - 0.5	Nutra XP 0.5	Nil	Nil	Nil	Nil
0.4 - 1.0	Nutra XP 0.7	Nil	Nil	Nil	Nil
0.9 - 3.0	Nutra XP 1.0	Nil	Nil	Nil	Nil
2.0 - 8.0	Nutra Olympic 2	Nil	Nil	Nil	Nil
7.0 - 30	Nutra Olympic 10	Nil	Nil	Nil	Nil
25 - 60	Nutra Olympic 25	Nil	Nil	Nil	Nil
<0.2	Emerald fry 00	Nil	Nil	Nil	Nil
0.2 - 1.5	Emerald fry 01	Nil	Nil	Nil	Nil
1.0 - 8.0	Emerald fry 02	Nil	Nil	Nil	Nil
7.0 - 30.0	Emerald Parr 7	Nil	Nil	Nil	Nil
25.0 - 60.0	Emerald Parr 25	Nil	Nil	Nil	Nil

Altech Coppens Food

Fish Size (Grms)	Feed Size/ Type	Initial Stock (Kgs)	Stock Received (Kgs)	Final Stock (Kgs)	Quantity used
< 0.2	Top 0.3mm to 0.5mm	Nil	Nil	Nil	Nil
0.2 to 0.5	Top 0.5mm to 0.8mm	Nil	Nil	Nil	Nil
0.5 to 2.0	Top 1.0 mm	Nil	Nil	Nil	Nil
2.0 to 12/0	Top 1.5mm	50 x 20 kgs	Nil	48 x 20 kgs	2 x 20 kgs
10.0 to 35.0	Crystal 2.0mm	182 x 25 kgs	Nil	134 x 25 kgs	48 x 20 kgs
35.0 to 100.0	Crystal 3.0mm	90 x 25 kgs	Nil	90 x 25 kgs	Nil
35.0 to 100.0	AC 3.0mm				

Comments:

Note: Skretting based in Westport, Co Mayo (formally Trouw)



ENVIRONMENTAL MONITORING REPORT

Parteen Hatchery

September 2021

Date Tested	Required Test For:	Units	Intake	Outflow Fibreglass Tanks	Outflow Concrete Tanks	Compliant (Yes/No)
07/09/2021	BOD	4 mg/l	<1	2	<1	Yes
07/09/2021	Suspended Solids	5 mg/l	<2	<2	2	Yes
07/09/2021	Turbidity	N/A.	0.4	0.7	1.6	Yes
07/09/2021	pH	0.5	8.5	8.2	8.4	Yes
07/09/2021	Nitrate as N	N/A	0.498	0.583	0.543	Yes
07/09/2021	Nitrite as N	N/A	<0.005	0.005	<0.005	Yes
07/09/2021	Copper, total	0.05 ug/l	<2	<2	<2	Yes
07/09/2021	Ammonia as N	0.3 mg/l	0.018	0.17	0.029	Yes
07/09/2021	Temperature (field measurement)	1.0	19.1	18.9	19.2	Yes
07/09/2021	Formaldehyde in Water	0.05 mg/l	0.014	0.063	0.016	Yes
07/09/2021	Phosphate as P filtered (low level/saline)	0.05 mg/l	0.003	0.020	0.008	Yes
07/09/2021	Total Phosphorus as P	N/A	0.020	0.043	0.025	Yes
07/09/2021	Dissolved Oxygen mg/l	N/A	8.59	6.75	7.24	Yes
07/09/2021	Phenols	0.005 mg/l	<0.010	<0.010	<0.010	Yes

Approved by:

AnnMarie Nee

Environmental Services Administrator

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Saotharlann Chonamara Teo T/A Complete Laboratory Solutions | Company Registration No:209644



ESB Parteen Salmon Hatchery Daily Flowmeter Readings

Date	Daily Flow Concrete Tanks Parteen	Daily Flow Fibreglass Tanks Parteen	Total flow for Day
01/09/2021	6833.25	0	6833.25
02/09/2021	6652.32	0	6652.32
03/09/2021	6698.21	0	6698.21
04/09/2021	6532.01	0	6532.01
05/09/2021	6597.25	0	6597.25
06/09/2021	6558.47	0	6558.47
07/09/2021	6689.54	0	6689.54
08/09/2021	6673.28	0	6673.28
09/09/2021	6659.89	0	6659.89
10/09/2021	6599.97	0	6599.97
11/09/2021	6624.53	0	6624.53
12/09/2021	6638.19	0	6638.19
13/09/2021	6658.73	0	6658.73
14/09/2021	6647.61	0	6647.61
15/09/2021	6694.84	0	6694.84
16/09/2021	6725.14	0	6725.14
17/09/2021	6689.34	0	6689.34
18/09/2021	6705.43	0	6705.43
19/09/2021	6743.65	0	6743.65
20/09/2021	6683.69	0	6683.69
21/09/2021	6681.91	0	6681.91
22/09/2021	6715.31	0	6715.31
23/09/2021	6694.27	0	6694.27
24/09/2021	6716.52	0	6716.52
25/09/2021	6625.34	0	6625.34
26/09/2021	6637.51	0	6637.51
27/09/2021	6594.34	0	6594.34
28/09/2021	6587.61	0	6587.61
29/09/2021	6595.24	0	6595.24
30/09/2021	6606.42	0	6606.42
Total Monthly flow (m3)			199759.81
Average Daily flow			6242.49
Maximum Daily Flow			6833.25
Minimum Daily Flow			6532.01

Monthly Environmental Data

Month: September 2021

Date	Water Temp ^o C	Oxygen		Ptl	Conductivity (m/cm)	Rainfall	Air Temperature °C
		(Mg/L)	(% sat)				
1st	19.9	8.0	87%				18.0
2nd	20.5	7.6	88%				17.2
3rd	19.3	7.5	77%				16.0
4th	19.2	8.1	87%				15.5
5th	19.0	7.5	88%				17.1
6th	19.3	7.5	81%				18.6
7th	19.6	7.2	78%				17.9
8th	20.5	7.4	82%				18.1
9th	19.8	7.1	78%				17.2
10th	19.6	7.0	75%				16.4
11th	18.7	7.8	83%				16.2
12th	18.7	7.5	82%				15.2
13th	18.7	7.8	84%				16.3
14th	18.7	7.2	76%				16.1
15th	18.8	7.3	74%				18.4
16th	18.5	7.0	73%				17.5
17th	18.7	7.2	77%				16.4
18th	18.4	7.6	78%				15.2
19th	18.3	7.8	79%				14.3
20th	18.1	7.5	78%				16.5
21st	18.4	7.3	78%				16.0
22nd	18.2	7.8	77%				12.6
23rd	18.0	7.1	78%				12.3
24th	17.9	8.2	80%				10.2
25th	17.7	8.0	82%				9.8
26th	17.6	8.2	84%				9.3
27th	17.9	8.0	78%				9.8
28th	17.6	7.4	75%				10.4
29th	17.5	7.8	79%				9.0
30th	17.0	8.8	91%				8.2
31st							
Average							

Parteen Hatchery Monthly Chemical Sheet

Month: September 2021

Chemicals	Initial Stock	Stock Received	Final Stock	Quantity Used
Formalin (Lts)	2.0 x 220 kgs	Nil	1.5 x 220 kgs	0.5 x 220 kgs
Chloromin T (Kgs)	Nil	Nil	Nil	Nil
Roccal 10X (Kgs)	Nil	Nil	Nil	Nil
Salt (Kgs)	Nil	Nil	Nil	Nil
Maracycline (Kgs)	Nil	Nil	Nil	Nil
Vaccine (Lts)	Nil	Nil	Nil	Nil
Vanodine (Lts)	Nil	Nil	Nil	Nil
Virkons Aquatic	17 kgs	Nil	16 kgs	1 kg
Buffodine (Lts)	Nil	Nil	Nil	Nil
Anti-Fouling Paint (Lts)	100 lts	Nil	20 lts	80 lts
Actone (Lts)	6 lts	Nil	6 lts	Nil
Xylene (Lts)	Nil	Nil	Nil	Nil
Industrial Alcohol (Lts)	Nil	Nil	Nil	Nil
Bitumastic Paint (Lts)	Nil	Nil	Nil	Nil
Benzocain (Lts)	Nil	Nil	Nil	Nil
Tricaine Methanesulphonate (Kgs)	0.7 kgs	Nil	0.7 kgs	Nil
Roundup Weedkiller	Nil	Nil	Nil	Nil
Pyceze	Nil	Nil	Nil	Nil
Comment:				

Parteen Hatchery Feed Stock Control

Month: September 2021

Skretting Type Food

Fish Size (Grms)	Feed Size/ Type	Initial Stock (Kgs)	Stock Received (Kgs)	Final Stock (Kgs)	Quantity used
0.11 - 0.20	Nutra ST 0.3				
0.12 - 0.5	Nutra XP 0.5				
0.4 - 1.0	Nutra XP 0.7				
0.9 - 3.0	Nutra XP 1.0				
2.0 - 8.0	Nutra Olympic 2				
7.0 - 30	Nutra Olympic 10				
25 - 60	Nutra Olympic 25				
<0.2	Emerald fry 00				
0.2 - 1.5	Emerald fry 01				
1.0 - 8.0	Emerald fry 02				
7.0 - 30.0	Emerald Parr 7				
25.0 - 60.0	Emerald Parr 25				

Altech Coppens Food

Fish Size (Grms)	Feed Size/ Type	Initial Stock (Kgs)	Stock Received (Kgs)	Final Stock (Kgs)	Quantity used
< 0.2	Top 0.3mm to 0.5mm	Nil	Nil	Nil	Nil
0.2 to 0.5	Top 0.5mm to 0.8mm	Nil	Nil	Nil	Nil
0.5 to 2.0	Top 1.0 mm	Nil	Nil	Nil	Nil
2.0 to 12/0	Top 1.5mm	25 x 20kgs	50 x 20 kgs	50 x 20 kgs	25 x 20 kgs
10.0 to 35.0	Crystal 2.0mm	150 x 25 kgs	40 x 25 kgs	182 x 25 kgs	8 x 25 kgs
35.0 to 100.0	Crystal 3.0mm	50 x 25 kgs	40 x 25 kgs	90 x 25 kgs	Nil
35.0 to 100.0	AC 3.0mm				

Comments:

Note: Skretting based in Westport, Co Mayo (formally Trouw)



ENVIRONMENTAL MONITORING REPORT

Parteen Hatchery

August 2021

Date Tested	Required Test For:	Units	Intake	Outflow Fibreglass Tanks	Outflow Concrete Tanks	Compliant (Yes/No)
10/08/2021	BOD	4 mg/l	<1	<1	1	Yes
10/08/2021	Suspended Solids	5 mg/l	<2	<2	<2	Yes
10/08/2021	Turbidity	N/A.	0.3	0.2	0.5	Yes
10/08/2021	pH	0.5	8.5	8.5	8.4	Yes
10/08/2021	Nitrate as N	N/A	0.602	0.653	0.625	Yes
10/08/2021	Nitrite as N	N/A	0.009	0.001	0.007	Yes
10/08/2021	Copper, total	0.05 ug/l	<1	2	9	Yes
10/08/2021	Ammonia as N	0.3 mg/l	0.011	0.011	0.081	Yes
10/08/2021	Temperature (field measurement)	1.0	18.2	17.7	17.7	Yes
10/08/2021	Formaldehyde in Water	0.05 mg/l	0.036	0.061	0.064	Yes
10/08/2021	Phosphate as P filtered (low level/saline)	0.05 mg/l	0.007	0.008	0.022	Yes
10/08/2021	Total Phosphorus as P	N/A	0.018	0.022	0.043	Yes
10/08/2021	Dissolved Oxygen mg/l	N/A	8.08	8.08	7.12	Yes
10/08/2021	Phenols	0.005 mg/l	<0.010	<0.010	<0.010	Yes

Approved by:

AnnMarie Nee

Environmental Services Administrator

Complete Laboratory Solutions

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Date: 20/08/2021

●●●
integrity without compromise

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Saotharlann Chonamara Teo T/A Complete Laboratory Solutions | Company Registration No:209644



ESB Parteen Salmon Hatchery Daily Flowmeter Readings

Date	Daily Flow Concrete Tanks Parteen	Daily Flow Fibreglass Tanks Parteen	Total flow for Day
01/08/2021	6384.58	1.78	6386.36
02/08/2021	6402.36	1.54	6403.90
03/08/2021	6485.32	3.5	6488.82
04/08/2021	6422.51	2.84	6425.35
05/08/2021	6398.54	1.81	6400.35
06/08/2021	6387.62	0.76	6388.38
07/08/2021	6423.57	1	6424.57
08/08/2021	6487.64	1.85	6489.49
09/08/2021	6543.58	1.72	6545.30
10/08/2021	6587.21	2.25	6589.46
11/08/2021	6632.24	3.13	6635.37
12/08/2021	6597.69	3.52	6601.21
13/08/2021	6601.58	3.76	6605.34
14/08/2021	6684.16	0.89	6685.05
15/08/2021	6625.87	1.56	6627.43
16/08/2021	6677.41	1.86	6679.27
17/08/2021	6772.43	0.84	6773.27
18/08/2021	6787.94	2.13	6790.07
19/08/2021	6722.19	3.28	6725.47
20/08/2021	6694.58	1.4	6695.98
21/08/2021	6682.43	3.72	6686.15
22/08/2021	6767.58	3.95	6771.53
23/08/2021	6789.51	4.24	6793.75
24/08/2021	6699.57	4.16	6703.73
25/08/2021	6794.27	4.45	6798.72
26/08/2021	6802.52	4.51	6807.03
27/08/2021	6796.58	3.39	6799.97
28/08/2021	6898.47	3.19	6901.66
29/08/2021	6854.87	1.07	6855.94
30/08/2021	6776.38	1.03	6777.41
31/08/2021	6808.74	1.25	6809.99
Total Monthly flow (m3)			206066.32
Average Daily flow			6244.43
Maximum Daily Flow			6901.66
Minimum Daily Flow			6386.36

Monthly Environmental Data

Month: August 2021

Date	Water Temp ^o C	Oxygen		Ptl	Conductivity (m/cm)	Rainfall	Air Temperature °C
		(Mg/L)	(% sat)				
1st	20.1	7.2	79%				12.6
2nd	19.6	7.3	80%				13.7
3rd	19.6	7.3	80%				13.7
4th	20.2	7.1	79%				14.1
5th	20.4	7.3	83%				13.1
6th	20.1	8.3	92%				12.0
7th	18.3	9.1	96%				16.6
8th	18.1	9.1	97%				13.2
9th	18.7	8.1	88%				13.1
10th	18.5	8.4	89%				13.0
11th	18.5	8.3	89%				11.6
12th	18.5	8.6	92%				11.1
13th	18.2	8.8	90%				12.8
14th	18.0	8.7	90%				15.2
15th	18.1	8.6	90%				12.6
16th	18.6	8.3	89%				11.6
17th	17.9	8.6	89%				11.0
18th	17.9	8.6	90%				10.4
19th	18.9	8.3	90%				10.0
20th	18.9	8.3	89%				11.2
21st	19.1	9.1	93%				12.4
22nd	19.3	8.9	93%				17.2
23rd	19.8	9.4	95%				19.8
24th	19.8	9.0	94%				18.6
25th	19.7	8.5	93%				20.3
26th	20.6	8.2	91%				21.0
27th	20.5	8.9	99%				19.4
28th	20.4	8.5	93%				16.6
29th	20.2	9.2	95%				15.2
30th	20.6	8.6	95%				19.1
31st	19.8	7.9	85%				18.6
Average							

Parteen Hatchery Monthly Chemical Sheet

Month: August 2021

Chemicals	Initial Stock	Stock Received	Final Stock	Quantity Used
Formalin (Lts)	2.5 x 220 kgs	Nil	2.0 x 220 kgs	0.5 x 220 kgs
Chloromin T (Kgs)	Nil	Nil	Nil	Nil
Roccal 10X (Kgs)	Nil	Nil	Nil	Nil
Salt (Kgs)	Nil	Nil	Nil	Nil
Maracycline (Kgs)	Nil	Nil	Nil	Nil
Vaccine (Lts)	Nil	Nil	Nil	Nil
Vanodine (Lts)	Nil	Nil	Nil	Nil
Virkons Aquatic	18 kgs	Nil	17 kgs	1 kg
Buffodine (Lts)	Nil	Nil	Nil	Nil
Anti-Fouling Paint (Lts)	100 lts	Nil	100 lts	Nil
Actone (Lts)	6 lts	Nil	6 lts	Nil
Xylene (Lts)	Nil	Nil	Nil	Nil
Industrial Alcohol (Lts)	Nil	Nil	Nil	Nil
Bitumastic Paint (Lts)	Nil	Nil	Nil	Nil
Benzocain (Lts)	Nil	Nil	Nil	Nil
2 Phenoxyethanol (Kgs)	0.7 kgs	Nil	0.7 kgs	Nil
Roundup Weedkiller	Nil	Nil	Nil	Nil
Pyceze	Nil	Nil	Nil	Nil
Comment:				

Parteen Hatchery Feed Stock Control

Month: August 2021

Skretting Type Food

Fish Size (Grms)	Feed Size/ Type	Initial Stock (Kgs)	Stock Received (Kgs)	Final Stock (Kgs)	Quantity used
0.11 - 0.20	Nutra ST 0.3				
0.12 - 0.5	Nutra XP 0.5				
0.4 - 1.0	Nutra XP 0.7				
0.9 - 3.0	Nutra XP 1.0				
2.0 - 8.0	Nutra Olympic 2				
7.0 - 30	Nutra Olympic 10				
25 - 60	Nutra Olympic 25				
<0.2	Emerald fry 00				
0.2 - 1.5	Emerald fry 01				
1.0 - 8.0	Emerald fry 02				
7.0 - 30.0	Emerald Parr 7				
25.0 - 60.0	Emerald Parr 25				

Altech Coppens Food

Fish Size (Grms)	Feed Size/ Type	Initial Stock (Kgs)	Stock Received (Kgs)	Final Stock (Kgs)	Quantity used
< 0.2	Top 0.3mm to 0.5mm	Nil	Nil	Nil	Nil
0.2 to 0.5	Top 0.5mm to 0.8mm	Nil	Nil	Nil	Nil
0.5 to 2.0	Top 1.0 mm	Nil	Nil	Nil	Nil
2.0 to 12/0	Top 1.5mm	78 x 20 kgs	Nil	25 x 20kgs	53 x 20 kgs
10.0 to 35.0	Crystal 2.0mm	150 x 25 kgs	Nil	150 x 25 kgs	Nil
35.0 to 100.0	Crystal 3.0mm	50 x 25 kgs	Nil	50 x 25 kgs	Nil
35.0 to 100.0	AC 3.0mm				
Comments:					

Note: Skretting based in Westport, Co Mayo (formally Trow)