SHELLFISH HEALTH LABORATORY REPORT

Appendix A

August 19, 2022 **Pacific oyster broodstock** **AQ22-78**
Histology (n=60) & PCR - OsHV-1 (n=60) **Page 1/2**

Business address:
Molluscan Broodstock Program
Hatfield Marine Science Center
2030 SE Marine Science Dr.
Newport, Oregon 97365

Specimen description:
Sample collection date: August 1, 2022
Species/stage examined: ***Crassostrea gigas*, Pacific oyster broodstock**

Appendix A of this report contains additional histological findings not related to reportable diseases.

Histology: The condition of the digestive gland is shown in the following table.

Digestive gland condition (epithelial cell height)		
Condition	Number	Percent
High	37	62%
Medium	20	33%
Low	2	3%
Very low	1	2%

Digestive Gland Key: The height of the digestive gland epithelium is rated as (1) high (indicating normal active metabolism and ingestion), (2) medium (indicating a condition at the lower end of the normal range and an animal at risk from insufficient nutrition), (3) low (a pathological condition indicating insufficient nutrition or a toxic dietary effect, but a recoverable condition) and (4) very low (a distinctly pathological condition indicating insufficient nutritional intake or a toxic dietary effect, that may be unrecoverable in some cases).

The reproductive condition is shown in the following table:

Sex of Shellfish and Female Follicle or Male Tubule Developmental Stage		Number	Percent	Sex of Shellfish and Female Follicle or Male Tubule Developmental Stage		Number	Percent
indeterminate	0	2	3.2%	indeterminate	5	0	0.0%
indeterminate	1	1	1.6%	**Total Indeterm.:**		**3**	**4.8%**
Female	2-	3	4.8%	Male	2-	10	16.1%
Female	2	6	9.7%	Male	2	16	25.8%
Female	2+	8	12.9%	Male	2+	15	24.2%
Female	3	0	0.0%	Male	3	0	0.0%
Female	4	0	0.0%	Male	4	0	0.0%
Female	5	0	0.0%	Male	5	0	0.0%

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Sex of Shellfish and Female Follicle or Male Tubule Developmental Stage		Number	Percent	Sex of Shellfish and Female Follicle or Male Tubule Developmental Stage		Number	Percent
Female	2-3/5	0	0.0%	Male	2-3/5	0	0.0%
Total Females:		**17**	**27.4%**	**Total Males:**	5	**41**	**66.1%**
Hermaphrodite:		1	**1.6%**	**TOTAL:**		**62**	

Key to reproductive condition codes: ? = shellfish with inactive or very limited activity in reproductive follicles or tubules or indeterminate sex; M = male; F = female.
Stage 0: quiescent follicles of tubules of indeterminate sex.
Stage 1: very early development, often of indeterminate sex.
Stage 2: indicates developing follicles or tubules. - indicates early development, no mark indicates mid-stage development and + indicates nearly fully developed follicles or tubules.
Stage 3: indicates fully developed reproductive products.
Stage 4: partial or fully spawned reproductive follicle or tubule.
Stage 5: resorbing reproductive follicles or tubules, may or may not be of determinate sex.
Stage 2-3/5: indicates pre-release resorption of developing or fully developed follicle or tubule.

Comments: The reproductive analysis showed that 66% of the oysters were male, 27% were female and 1 of 60 was a hermaphrodite. The female and male oysters were in an active stage of reproductive development.

The digestive gland condition of the seed stock indicated that 95% of the oysters were in a high or medium digestive gland condition.

Individual responsible for examination:
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American Fisheries Society

Ralph Elston, PhD
August 19, 2022

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