

Brood Year 2019 Mark Characteristic Report



Prepared for:
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Tacoma Power
Saltwater Park Hatchery
Hoodsport, WA

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August 2020

Release Information

- Agency: Tacoma Power
- Facility: Saltwater Park Hatchery
- Species: Sockeye
- Brood Year: 2019
- Ambient water temp: 8°C
- Marking system: Chill 4°C

Release Information

SOCKEYE FRY

- Hatch code: H5-1
- Decimal code: H5.1-1
- Graphic code: H||||-I
 - variant mark: H1/1
 - release date: May 2020
 - release site: LK Cushman
 - release stage: early fry
 - 73,593 fish released
- Hatch code: H5-2n
- Decimal code: H5.2-2n
- Graphic code: H||||-II
 - variant mark: H1/2n
 - release date: Sept. 2020
 - release site: LK Cushman
 - release stage: late fry
 - 142,640 fish released

SOCKEYE SMOLT

- Hatch code: H5-2n
- Decimal code: H5.4.5-4n.3.4
- Graphic code: H||||-IIII
 - variant mark: H2-2n
 - release date: May 2021
 - release site: N. Fork Skokomish
 - Release stage: smolt
 - 25,555 fish released
- Hatch code: H5
- Decimal code: H5.3-3n
- Graphic mark: H||||-III
 - variant mark: H1
 - release date: May 2021
 - release site: LK Cushman
 - release stage: smolt
 - 25,645 fish released

Hatch Code: H5-1

Decimal Code: H5.1-1

Graphic Code: H| | | | |-

1st ring on 1st band is wider than other rings in band.

Tacoma Power
Saltwater Park Hatchery
Sockeye
Brood Year: 2019
Incubator: L3T4
Mark: H5-1
Ring width: 3.4um, 3.2um

3.2um

16.9um

72hr

50 μ m

H1/1

H5-1 variant mark

Tacoma Power
Saltwater Park Hatchery
Sockeye
Brood Year: 2019
Incubator: L3T2
Mark: H1/1
Comment: four 4hr micro-rings were added after the first 72hr ring. Micro-rings are visible with fine grinding. H1/1 is easily viewed under normal grinding.

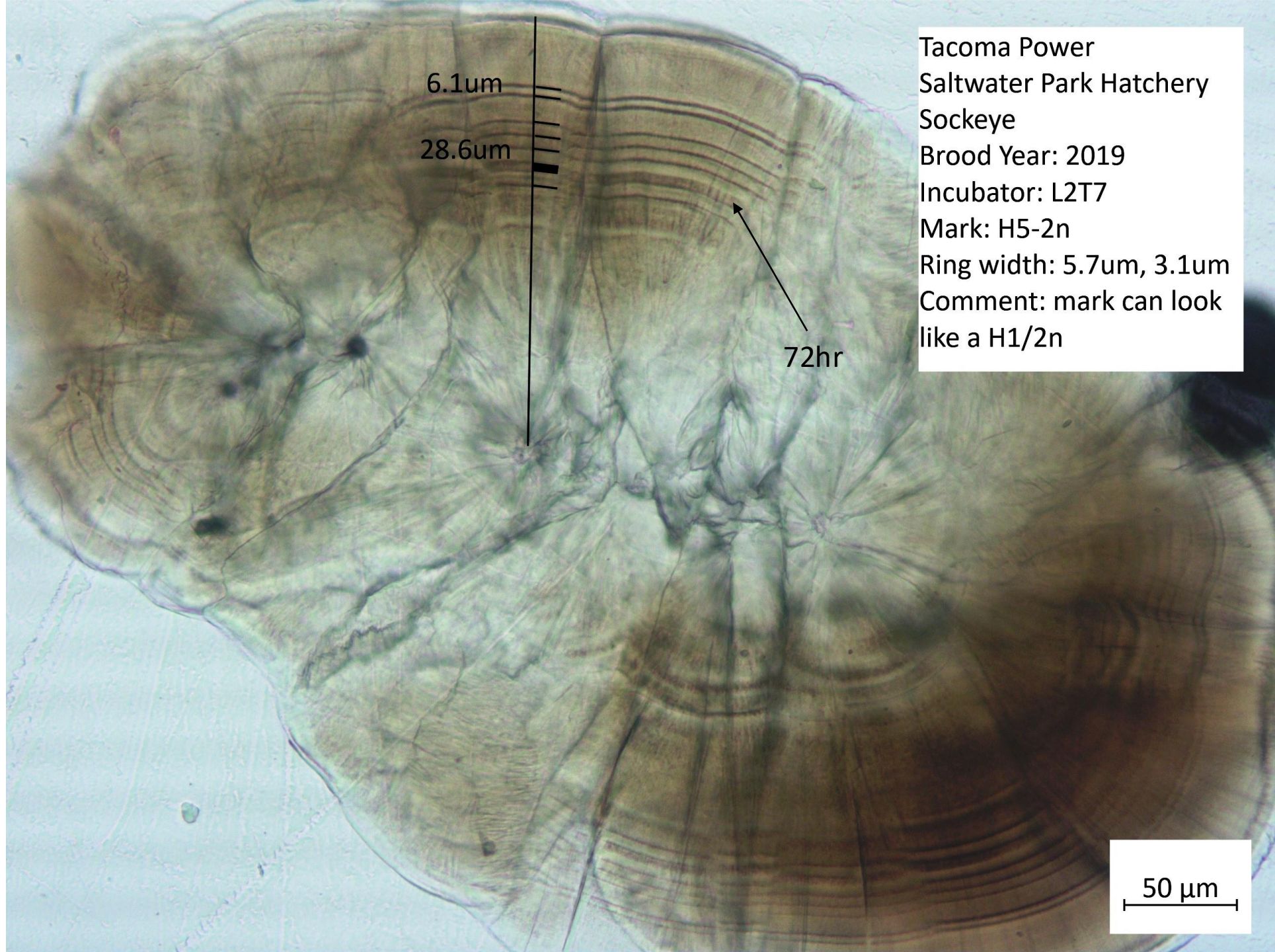
50 μm

Hatch Code: H5-2n

Decimal Code: H5.2-2n

Graphic Code: H I I I I -II

2nd ring on 1st band is wider than other rings in band.

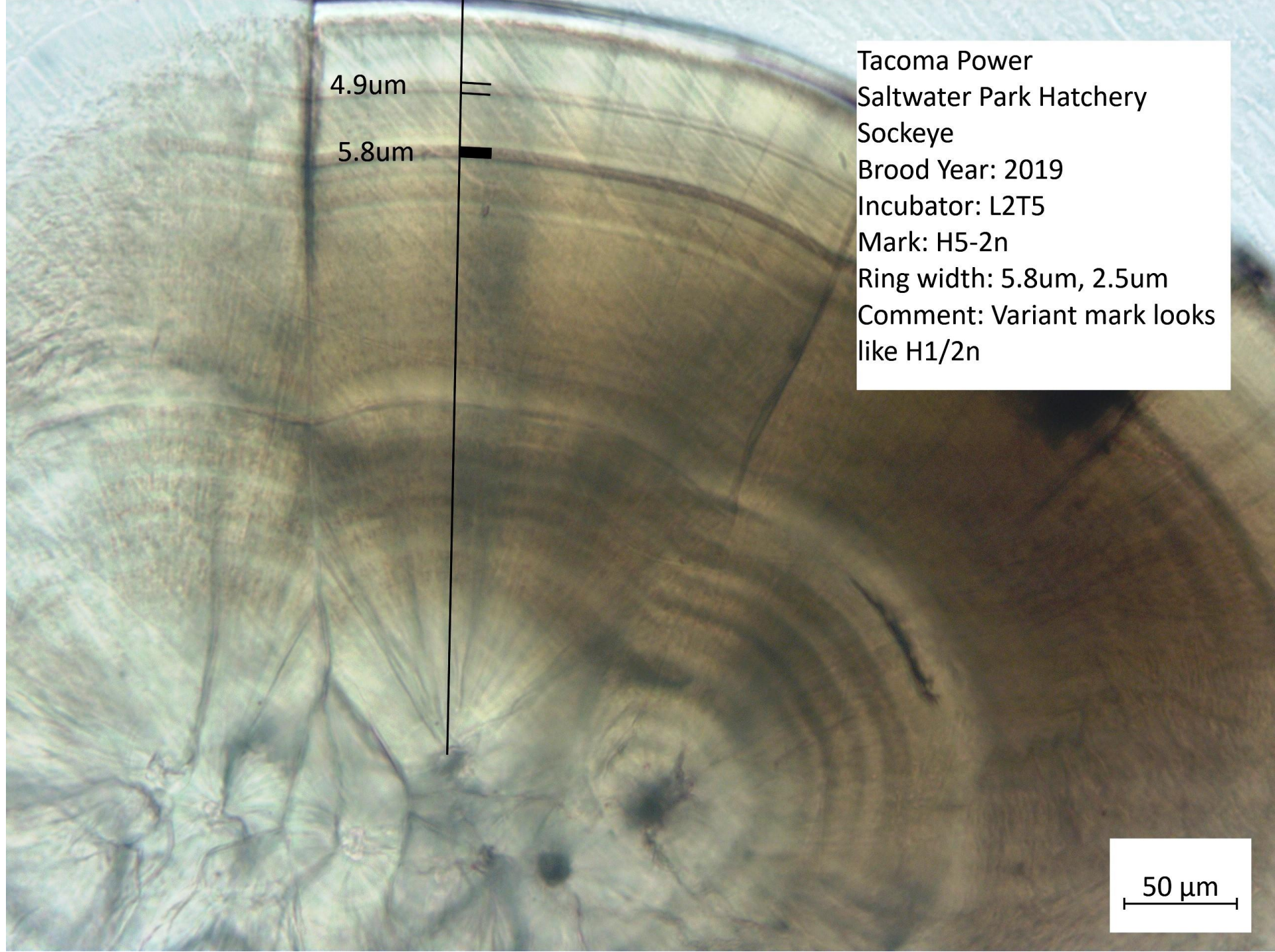


Tacoma Power
Saltwater Park Hatchery
Sockeye
Brood Year: 2019
Incubator: L2T7
Mark: H5-2n
Ring width: 5.7um, 3.1um
Comment: mark can look
like a H1/2n

50 μ m

H1/2n

H5-2n variant mark



Tacoma Power
Saltwater Park Hatchery
Sockeye
Brood Year: 2019
Incubator: L2T5
Mark: H5-2n
Ring width: 5.8um, 2.5um
Comment: Variant mark looks
like H1/2n

50 μm

Tacoma Power
Saltwater Park Hatchery
Sockeye
Brood Year: 2019
Inc: L1T1
Mark: H5-2n
Ring width: 3.0um, 1.8um
Comment: H1/2n variant
mark. Second band is
surprisingly narrow for a
24hr chill/24hr heat cycle.

3.5um =
3.0um —

50 μ m

Tacoma Power
Saltwater Park Hatchery
Sockeye
Brood Year: 2019
Inc: L1T3
Mark: H1/2n
Ring width: 3.0um, 1.6um
Comment: 24hr chill/24hr
ambient second band is
very faint in this incubator.

= 3.1um
— 3.0um

50 μ m

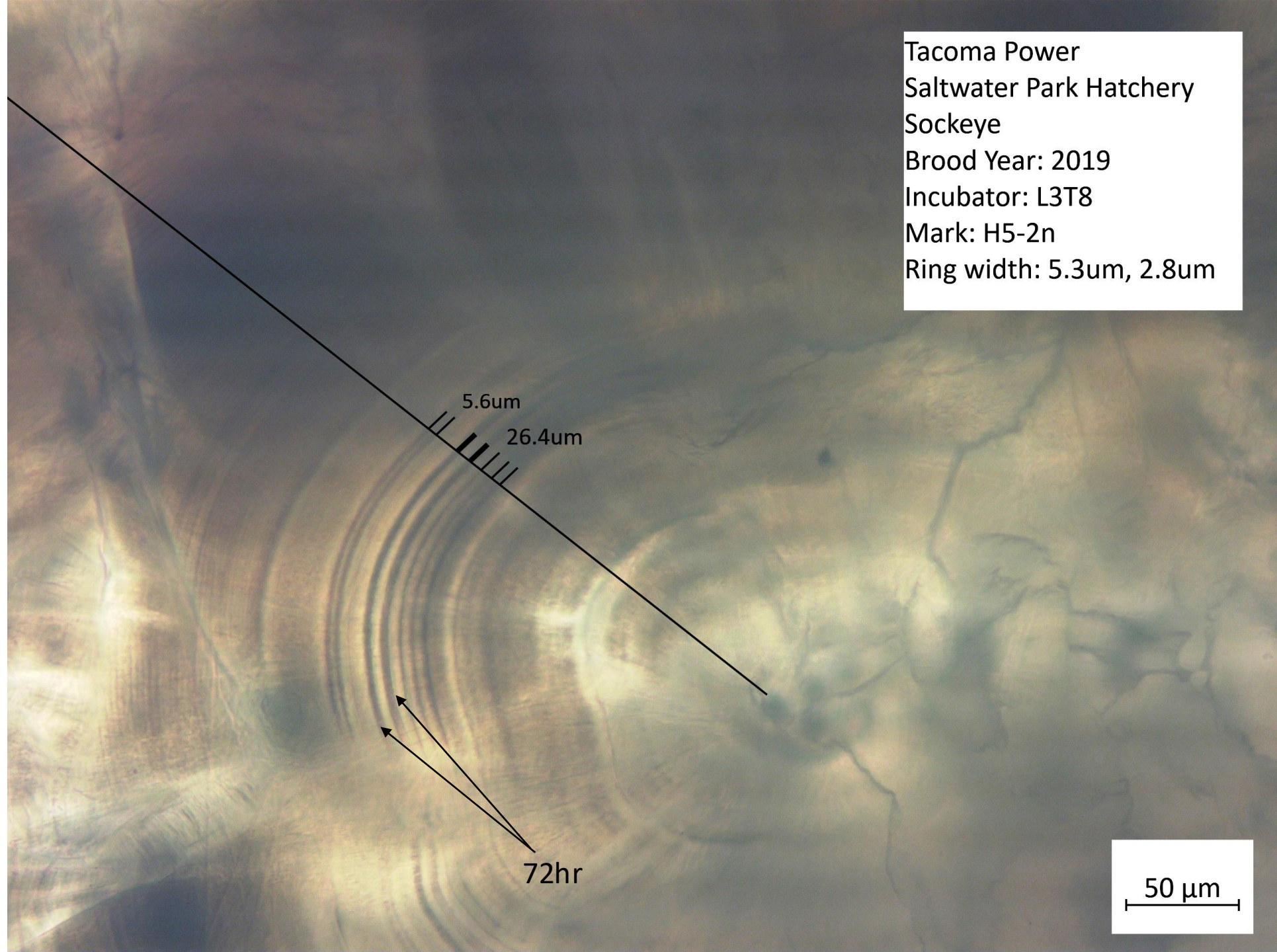
Hatch Code: H5-2n

Decimal Code: H5.4.5-2n

Graphic Code: HI | | | I-II

4th & 5th ring on 1st band is wider than other rings in band.

Tacoma Power
Saltwater Park Hatchery
Sockeye
Brood Year: 2019
Incubator: L3T8
Mark: H5-2n
Ring width: 5.3um, 2.8um



H2-2n

H5-2n variant mark

Tacoma Power
Saltwater Park Hatchery
Sockeye
Inc: L3T8
Mark: H2-2n
Ring width: 4.8um, 2.5um
Comment: all rings were
made with 72hr chill

5.0um
9.6um

50 μ m

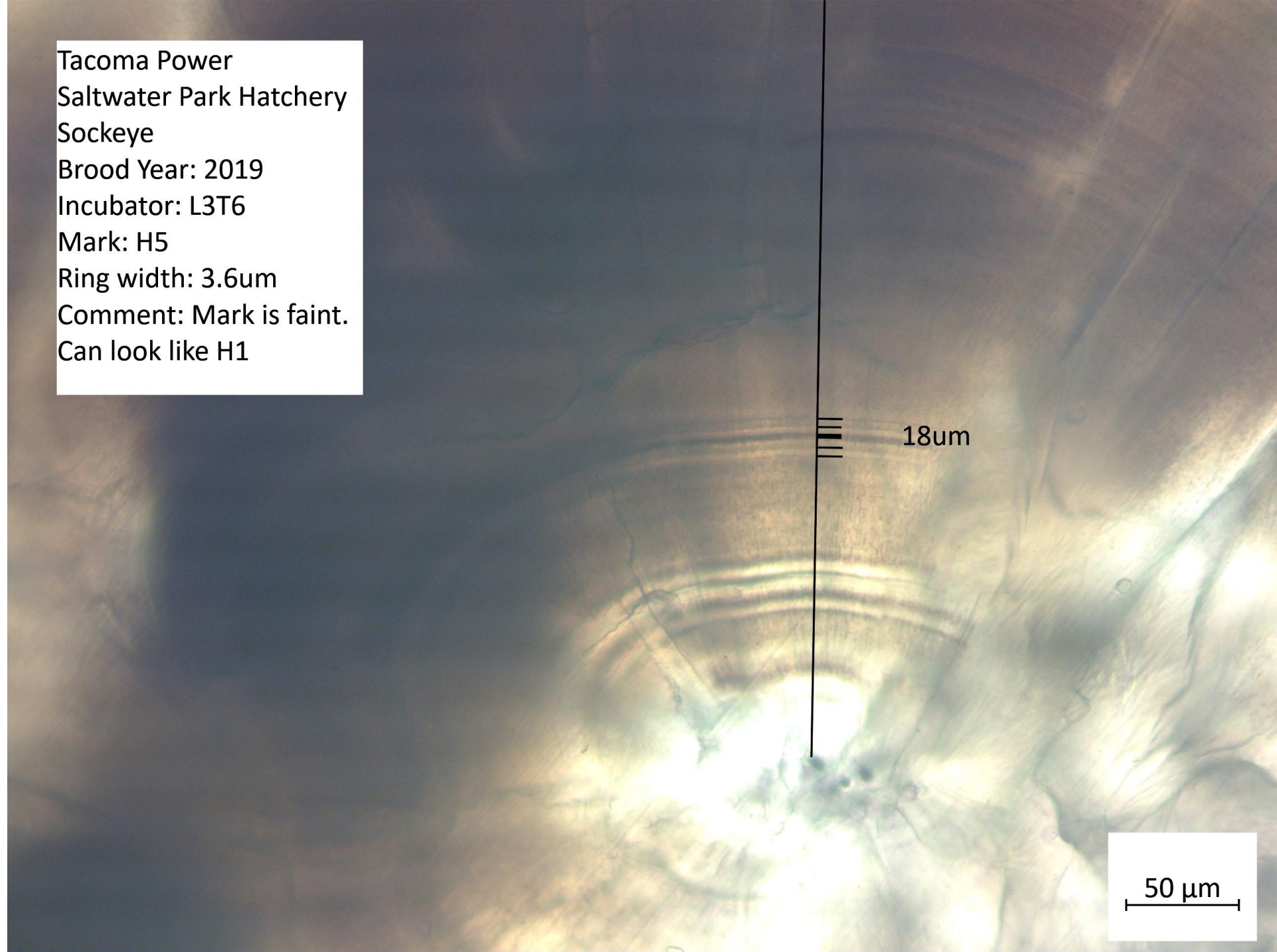
Hatch Code: H5

Decimal Code: H5.3

Graphic Code: H I I I I

3rd ring on 1st band is wider than other rings in band.

Tacoma Power
Saltwater Park Hatchery
Sockeye
Brood Year: 2019
Incubator: L3T6
Mark: H5
Ring width: 3.6um
Comment: Mark is faint.
Can look like H1



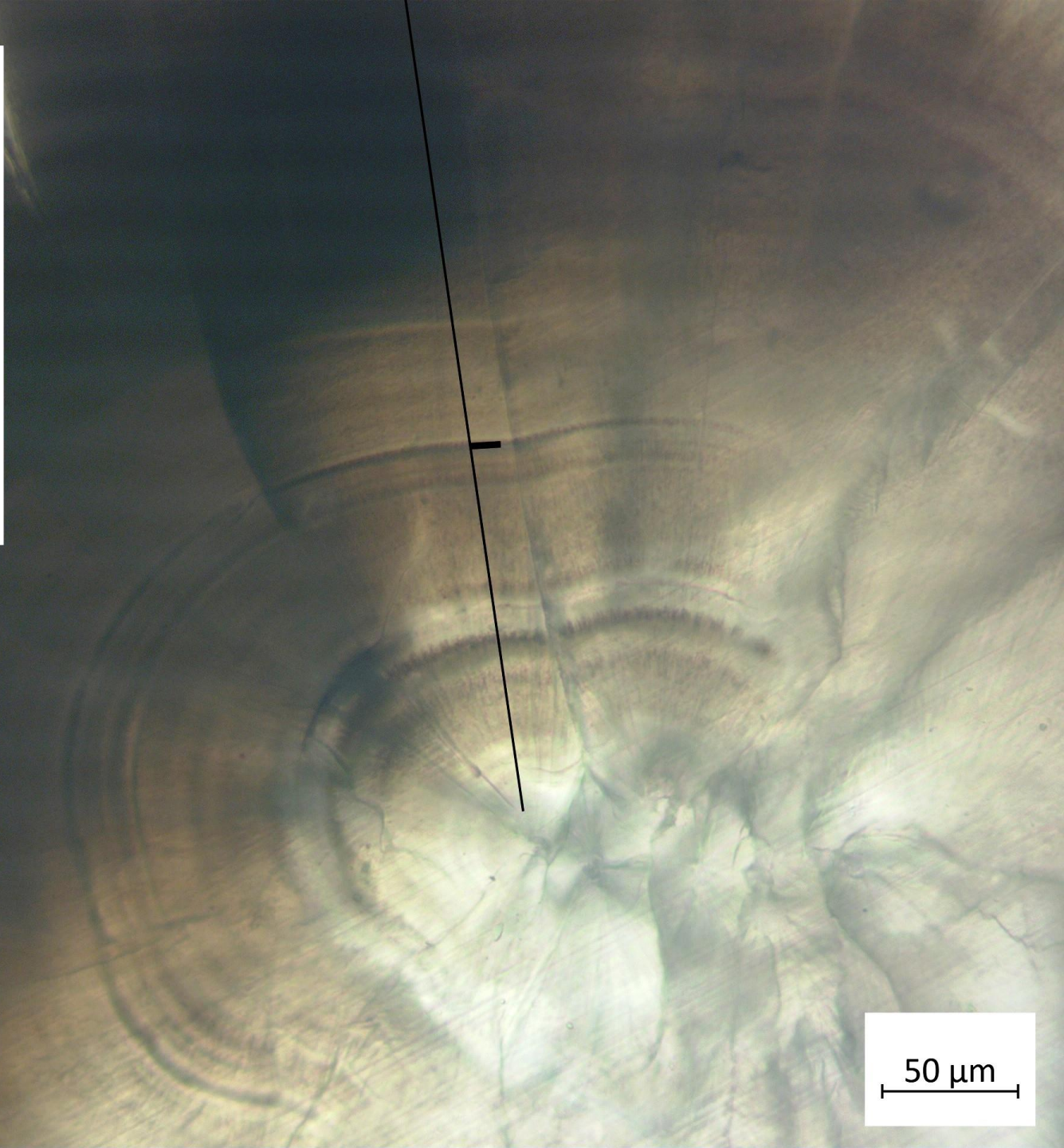
18um

50 μm

H1

H5 variant mark

Tacoma Power
Saltwater Park Hatchery
Sockeye
Brood Year: 2019
Inc: L3T6
Mark: H1
Comment: H5 variant mark
looks like H1. Noise before
mark can make a H1-1
mark. Noise won't be crisp
like a thermal mark.



50 μm