PUBLIC DISCLOSURE STATEMENT

HARVEST ROAD OCEANS PTY LTD

PRODUCT CERTIFICATION

FY2021–22

Australian Government

Climate Active
Public Disclosure Statement

HARVEST ROAD

An Australian Government Initiative

Climate Active

NAME OF CERTIFIED ENTITY	Harvest Road Oceans Pty Ltd
REPORTING PERIOD	1 July 2021 – 30 June 2022 True-up report
DECLARATION	*To the best of my knowledge, the information provided in this public disclosure statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard.* 
	Mark Wiedermann Chief Commercial Officer 03/08/23

Australian Government
Department of Climate Change, Energy, the Environment and Water

Version March 2022.

1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	750 t tCO2-e
THE OFFSETS BOUGHT	100% ACCUs
RENEWABLE ELECTRICITY	N/A
TECHNICAL ASSESSMENT	6 November 2020 Andrew D. Moore Life Cycle Logic Next technical assessment due: 31 October 2023

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2. CARBON NEUTRAL INFORMATION

Description of certification

This Public Disclosure Statement (PDS) outlines how shellfish produced by Harvest Road Oceans' (HRO) aquaculture operations has been certified carbon neutral according to the Climate Active Carbon Neutral Standard for Products and Services (2019).

HRO is a part of Harvest Road Group, one of Australia's largest and most diverse agri-food businesses. We grow and market a range of sustainable, high quality Western Australian products for consumers and wholesale partners in domestic and export markets. Shellfish production is carried out at three locations in Western Australia: Garden Island (Cockburn Sound), Albany (Oyster Harbour and King George Sound) and Carnarvon (Fascine and Massey Bay).

"Climate Active carbon neutral certification is a clear demonstration of our commitment to producing sustainable seafood."

Product/Service description

This PDS covers the certification of Rock Oysters and Akoya grown under the Leeuwin Coast brand (full coverage of products). We established Leeuwin Coast with the aim to bring the finest Western Australian seafood to the world. The swift flowing currents create prime shellfish growing conditions that are uniquely Western Australian. We have built our aquaculture business on a vision of exemplary environmental stewardship that goes beyond the marine environment and contributes innovatively to climate solutions and improves long term food security. We aim to care for both our local communities and ecosystems and we're proud to be supplying the world with premium shellfish grown and harvested responsibly from Western Australia.

The functional unit of our product certification is "1 dozen Rock Oysters / Akoya supplied to customers", and this covers all Rock Oyster and Akoya products. The certification covers cradle-to-grave for the Rock Oysters / Akoya and is based on a Life Cycle Assessment (LCA) covering all the shellfish grown and produced by HRO. The LCA has been carried out in accordance with the Greenhouse Gas Protocol Product Life Cycle Accounting and Reporting Standard, and includes the carbon emissions from a third-party hatchery, the fuel used in vessels, processing of packaging materials, product freight and disposal of shell waste. The detailed calculation for the LCA has been submitted to the Climate Active Carbon Neutral Program and the base year LCA (FY20) has been verified by Life Cycle Logic under the Climate Active validation requirements for carbon neutral certification.

3.EMISSIONS BOUNDARY

Inside the emissions boundary

All emission sources listed in the emissions boundary are part of the carbon neutral claim.

Quantified emissions have been assessed as 'attributable processes' that become the product, make the product and carry the product through its life cycle. These have been quantified in the carbon inventory.

Non-quantified emissions have been assessed as attributable and are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. All material emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

Outside the emissions boundary

Non-attributable emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). Further detail is available at Appendix D.

Inside emissions boundary

Quantified

Water

Waste

Electricity

Fuels used in vessels and company vehicles

Stationary energy

Refrigerants for our cool room

Ropes, floats and baskets

Freight of inputs

Freight of products to customers

Repair/Maintenance of vessels

Quality Assurance

Packaging materials

Hatchery electricity use

Disposal of empty shells to landfill

Non-quantified

Fuels used by hatcheries

Fuel used by 3rd party packer

Refrigerants used by 3rd party packer

Refrigerants used for refrigerated transport

Outside emission boundary

Non-attributable

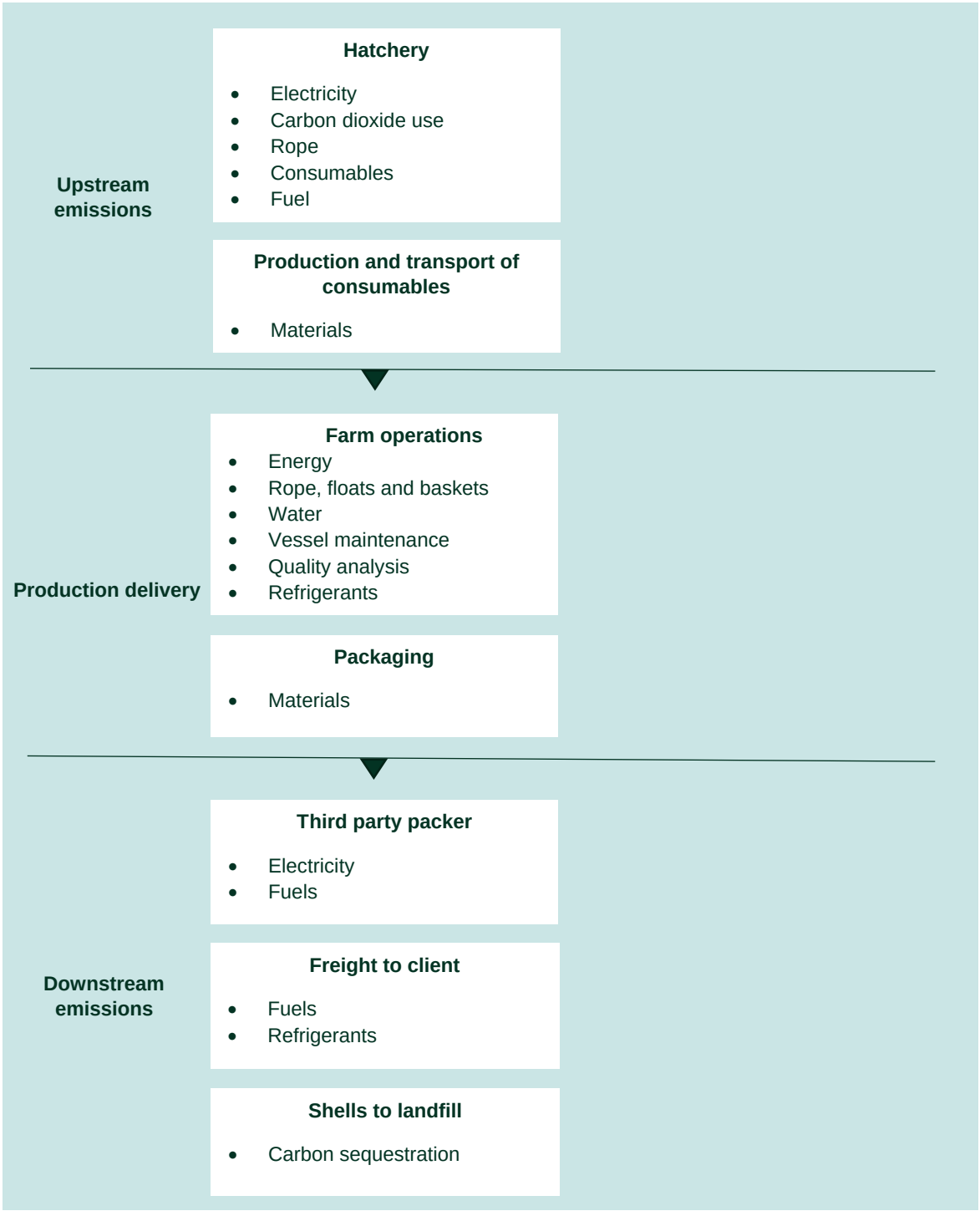
Organisational overhead

Downstream storage of product before food preparation and consumption

Food preparation and consumption

Product process diagram

The following diagram is cradle to grave.



Data management plan for non-quantified sources

The data management plan below outlines how more rigorous quantification can be achieved for material (greater than 1%) non-quantified emission sources.

- Water use at Garden Island land base: This item is not metered and will remain so for the foreseeable future as the investment costs for metering far outweigh the benefits. The emissions are small relative to electricity and stationary emissions, but an uplift factor is applied.

- Fuel use at the hatchery and third-party packer: We have not received any information regarding fuel use by these external parties. We do know their activities are high-demand for electricity but we are unable to collect data on third-party fuel use, nor can we extrapolate this or use proxy data to fill the data gap. We believe the third-party fuel use is not material, and therefore we have applied a 5% uplift factor to account for the missing electricity emission data.

- Refrigerant use at the hatchery and third-party packers: The use of uplift factors for refrigerant use and emissions associated with packing and refrigerated transport is considered appropriate for the foreseeable future. While we will seek data on refrigerant use from our third-party packer, this is unlikely to be available. For refrigerated transport, it would be a significant exercise to establish refrigerant use and attribute this to HRO. The impact is estimated to be negligible, so we will continue our current approach, applying a 5% uplift factor based on associated electricity emissions to account for the missing emission data.

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

The decision to have our shellfish products certified carbon neutral is demonstration of a firm corporate commitment to embedding sustainability into our business. Harvest Road is leading the way in trialing new methods of food production that pave the way for a better future – delivering premium products with minimal environmental impact.

We aim to increase the efficiency of our operation as far as possible, reduce our emissions as much as we can, and to fully offset remaining emissions in the most appropriate way. We monitor the creation of 'blue carbon' credit farming projects in Australia and invest in innovative technology and methods to constantly improve our sustainable farming practices.

HRO is a young business that is growing rapidly with a focus on continual improvement as our operations expand and develop. We demonstrate strong environmental stewardship in the marine environment that supports our business through the following initiatives:

- Completing routine beach clean-ups around its operational areas to remove rubbish from the natural environment.
- Using modern floating aquaculture infrastructure which has a smaller seabed footprint and reduces sea floor disturbance. The service life of modern gear is over ten years resulting in less waste.
- Investing in on-water Rock Oyster grading infrastructure to minimise vessel trips, which reduces fuel consumption.
- Achieving "Friend of the Sea" certification for "Sustainable Shellfish" and "Sustainable Chain of Custody" which involves meeting a range of key sustainability requirements.

Emissions reduction actions

During FY22 HRO implemented the following emissions reduction actions:

- Commissioning our Oyster barge to act as a staging platform to minimise vessel movements and fuel use.
- Improving efficiencies in data collection. This has resulted in an increase in reported emissions due to better data capture which facilitates more targeted actions for emissions reduction).

During the FY2021-22 reporting period, the emissions per functional unit decreased for Akoya due to increased efficiencies in production, and increased for Rock Oysters due to ongoing expansion of our floating basket infrastructure. The purchase of oyster baskets is a long-term investment and emissions are expected to decrease in the coming years as the size of our operation stabilises.

When looking at packaging options we assess the impact of these on the environment and ensure we are

using only materials that have minimal impact, ideally made from recycled materials and that are able to be recycled. We work with suppliers who share our ethos and who are challenging themselves to improve their sustainability credentials.

When evaluating packaging options, we consider the social and environmental impacts and choose products that align with our sustainability vision. Our packaging solutions must have a low environmental impact, and also offer protection to maintain quality and food safety. We work with suppliers who share our ethos and are challenging themselves to improve their sustainability credentials. Harvest Road Oceans is a member of the Australian Packaging Covenant Organization (APCO), committed to achieving the 2025 National Packaging Targets.

5.EMISSIONS SUMMARY

Emissions over time

Emissions since base year				
		Total tCO_2-e	**Emissions intensity of the functional unit (1 dozen Oysters)**	**Emissions intensity of the functional unit (1 dozen Akoya)**
Base year:	2020–21 (projected)	115 t CO_2-e	0.48 kg CO_2-e	0.67 kg CO_2-e
Year 1:	2020–21 (true-up)	281 t CO_2-e	6.45 kg CO_2-e	5.26 kg CO_2-e
Year 2:	2021–22 (arrears)	749.29 t CO_2-e	7.86 kg CO_2-e	4.25 kg CO_2-e

Significant changes in emissions

Emission source name	Current year (tCO_2-e)	Previous year (tCO_2-e)	Detailed reason for change
Oyster – Diesel	56.61	18.55	Diesel consumption increased in line with production expansion
Oyster – Petrol	59.16	35.84	Petrol consumption increased in line with production expansion
Oyster – Waste	86.32	5.26	Significantly increased waste consumption due to production expansion but have worked with our waste company for more accurate data
Oyster – Machinery and equipment R&M	49.57	10.81	Increased equipment repairs in line with increased production
Akoya – Hatchery electricity use	12.44	8.63	Increased production of akoya and spat purchased from the hatchery
Akoya – Third party packer electricity use	13.89	18.78	Workers at the facility have become more efficient with processing of akoya which now takes less time and energy
Akoya – Ropes and floats	59.18	0.59	New lease purchased so a large amount of rope was purchased to set it up
Akoya – Machinery and equipment R&M	12.23	10.81	Increased production requires more money spent to maintain vessels
Akoya – Diesel	10.52	13.36	Increased efficiency of diesel use
Akoya – Petrol	10.99	8.84	Increased transport associated with increased production

Akoya - Waste	19.75	20.96	Increased accuracy of data capture by working with waste company

Use of Climate Active carbon neutral products and services

Certified brand name	Product or Service used
Opal Australian Paper	Certified Paper Products

Product/Service emissions summary

Note emissions were previously allocated by percentage of aquaculture lease but are now allocated via weight of product sold. We have changed this method as weight is deemed to be a more accurate representation of product emissions.

Stage	Oyster Emissions tCO_2-e	Akoya Emissions tCO_2-e
Hatchery – electricity	27.78	12.44
Hatchery – liquid CO_2	0.10	0.04
Transport from hatcheries to farm	9.83	N/A
Rope, floats and baskets	267.37	59.18
Product packaging materials	8.47	0.03
Upstream freight	7.52	1.17
HRO Fuel use	117.57	21.85
HRO Land base electricity use (location-based approach)	17.79	3.31
HRO Land base waste	89.12	20.27
HRO Cold storage (refrigerants)	0.50	0.09
HRO Land base water supply	1.19	0.22
HRO Land base water supply - uplift	N/A	0.00
Vehicle repairs and maintenance	49.57	9.21

Quality analysis	8.16	1.52
3rd party packer – electricity	N/A	13.89
3rd party packer – uplift for fuel and refrigerants	N/A	0.69
Freight to customers	12.01	3.81
Empty shells transported to landfill	0.73	0.08
End-of life disposal (carbon in shells is sequestered in landfill)	-14.55	-1.67

i. Water use at Garden Island land base (provide total percentage of uplift added as this has not been noted in the PDS)
ii. Fuel use at the hatchery and third-party packer (5% uplift))
iii. Refrigerant use at the hatchery and third-party packers (5% uplift)

Emissions intensity per functional unit	7.86 kg CO_2-e/doz	4.25 kg CO_2-e per doz akoya
Number of functional units to be offset	76,748 doz Oysters	34,358 doz Akoya
Total emissions to be offset	603.16 tCO2-e	146.13 tCO_2e

6. CARBON OFFSETS

Offsets retirement approach

In arrears		
1.	Total number of eligible offsets banked from last year's report	0
2.	Total emissions footprint to offset for this report	750
3.	Total eligible offsets required for this report	750
4.	Total eligible offsets purchased and retired for this report	750
5.	Total eligible offsets banked to use toward next year's report	0

Eligible offsets retirement summary

Offsets cancelled for Climate Active Carbon Neutral Certification											
Project description	**Type of offset units**	**Registry**	**Date retired**	**Serial number (and hyperlink to registry transaction record)**	**Vintage**	**Stapled quantity**	**Eligible quantity (tCO_2-e)**	**Eligible quantity used for previous reporting periods**	**Eligible quantity banked for future reporting periods**	**Eligible quantity used for this reporting period**	**Percentage of total (%)**
Tallering Station Human Induced Regeneration, Mullewa, Western Australia	ACCU	ANREU	27 Oct 2021	8,332,306,567-8,332,307,406	2021-2022		840	166	0	618	82.4%
Western Australian Rangeland Conservation Initiative	ACCU	ANREU	02 Aug 2023	8,379,383,798-8,379,384,547	2023-24		750	0	618	132	17.6%
									Total offsets retired this report and used in this report	750	
									Total offsets retired this report and banked for future reports	618	

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Australian Carbon Credit Units (ACCUs)	750	100%

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

N/A

APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions are calculated using a location-based approach

Location-based method

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

Market-based method

The market-based method provides a picture of a business's electricity emissions in the context of its renewable energy investments. It reflects the emissions intensity of different electricity products, markets and investments. It uses a residual mix factor (RMF) to allow for unique claims on the zero emissions attribute of renewables without double-counting.

Market Based Approach Summary

Market Based Approach	Activity Data (kWh)	Emissions (kgCO2e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	0	0	0
Total non-grid electricity	**0**	**0**	**0**
LGC Purchased and retired (kWh) (including PPAs & Precinct LGCs)	0	0	0
GreenPower	0	0	0
Jurisdictional renewables (LGCs retired)	0	0	0
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0
Large Scale Renewable Energy Target (applied to grid electricity only)	5,766	0	19%
Residual Electricity	25,253	25,125	0%
Total grid electricity	**31,019**	**25,125**	**19%**
Total Electricity Consumed (grid + non grid)	**31,019**	**25,125**	**19%**
Electricity renewables	5,766	0	
Residual Electricity	25,253	25,125	
Exported on-site generated electricity	**0**	**0**	
Emissions (kgCO2e)	-	25,125	

Total renewables (grid and non-grid)	**18.59%**
Mandatory	**18.59%**
Voluntary	**0.00%**
Behind the meter	**0.00%**
Residual Electricity Emission Footprint (TCO2e)	**25**

Figures may not sum due to rounding. Renewable percentage can be above 100%

Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Scope 2 Emissions (kgCO2e)	Scope 3 Emissions (kgCO2e)
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
Vic	0	0	0
Qld	0	0	0
NT	0	0	0
WA	31,019	20,783	310
Tas	0	0	0
Grid electricity (scope 2 and 3)	**31,019**	**20,783**	**310**
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
Vic	0	0	0
Qld	0	0	0
NT	0	0	0
WA	0	0	0
Tas	0	0	0
Non-grid electricity (Behind the meter)	**0**	**0**	**0**
Total Electricity Consumed	**31,019**	**20,783**	**310**

Emission Footprint (TCO2e)	**21**
Scope 2 Emissions (TCO2e)	21
Scope 3 Emissions (TCO2e)	0

Climate Active Carbon Neutral Electricity summary

Carbon Neutral electricity offset by Climate Active Product	Activity Data (kWh)	Emissions (kgCO2e)
N/A	**0**	**0**

Climate Active carbon neutral electricity is not renewable electricity. The emissions have been offset by another Climate Active member through their Product certification.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following sources emissions have been assessed as attributable, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. These emissions are accounted for through an uplift factor. They have been non-quantified due to one of the following reasons:

1. **Immaterial** <1% for individual items and no more than 5% collectively
2. **Cost effective** Quantification is not cost effective relative to the size of the emission but uplift applied.
3. **Data unavailable** Data is unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant-non-quantified emission sources	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance
Fuel used by hatcheries	Yes	No	Yes (uplift applied & data plan in place)	No
Fuel used by 3rd party packer	Yes	No	Yes (uplift applied & data plan in place)	No
Refrigerants used by 3rd party packer	Yes	No	Yes (uplift applied & data plan in place)	No
Refrigerants used for refrigerated transport	Yes	Yes	No	No

Excluded emission sources

Attributable emissions sources can be excluded from the carbon inventory, but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected **(no actual data).**
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial**).

	No actual data	No projected data	Immaterial
N/A	N/A	N/A	N/A

APPENDIX D: OUTSIDE EMISSION BOUNDARY

Non-attributable emissions have been assessed as not attributable to a product or service (do not carry, make or become the product/service) and are therefore not part of the carbon neutral claim. To be deemed attributable, an emission must meet two of the five relevance criteria. Emissions which only meet one condition of the relevance test can be assessed as non-attributable and therefore are outside the carbon neutral claim. Non-attributable emissions are detailed below.

1. **Size** The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions

2. **Influence** The responsible entity has the potential to influence the reduction of emissions from a particular source.

3. **Risk** The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.

4. **Stakeholders** Key stakeholders deem the emissions from a particular source are relevant.

5. **Outsourcing** The emissions are from outsourced activities previously undertaken within the organisation's boundary, or from outsourced activities typically undertaken within the boundary for comparable organisations.

Emission sources tested for relevance	(1) Size	(2) Influence	(3) Risk	(4) Stakeholders	(5) Outsourcing
Organisational overhead	Not relevant for products	Yes	No	No	No
Storage by our customers	Possibly	No	No	No	No
Food preparation and consumption	Possibly	No	No	No	No

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