



Allan Cooper

Allan is acting managing director of Marinasol, the aquaculture division of Camposol Foods Group, Peru's No. 1 shrimp producer. For the past seven years, he has led business units in both the aquaculture and agro-industrial sectors. Before being appointed to Marinasol, he was business development director for Camposol in the U.S. and business unit director for avocados in Peru. Camposol is one of the world's leading avocado producers.

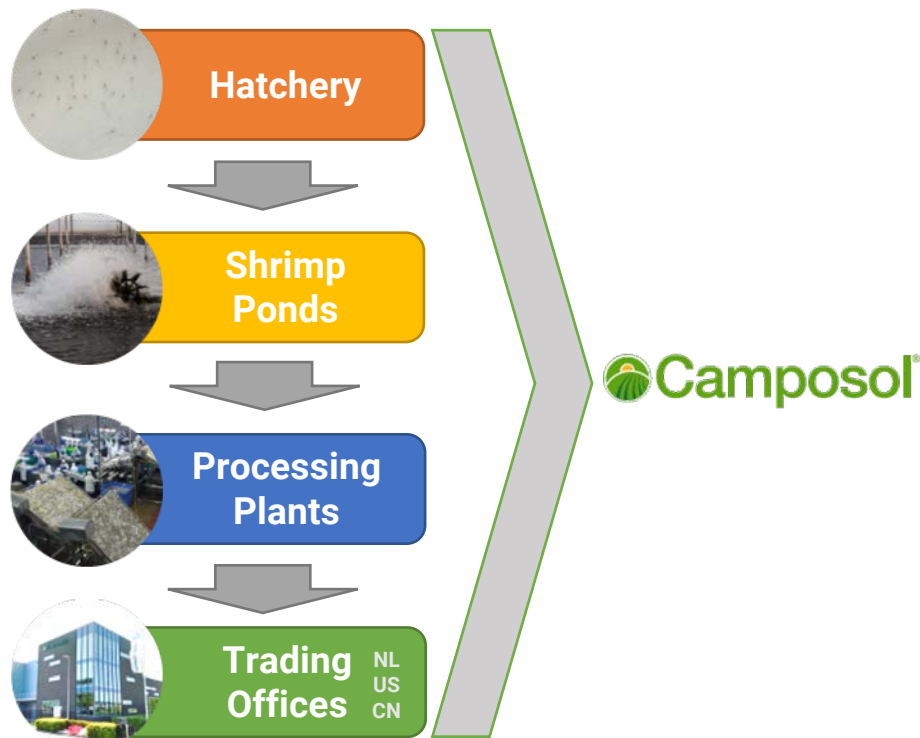
MANAGING
DIRECTOR
MARINASOL

Sustainable and Consistent: Intensive Shrimp Farming in Peru

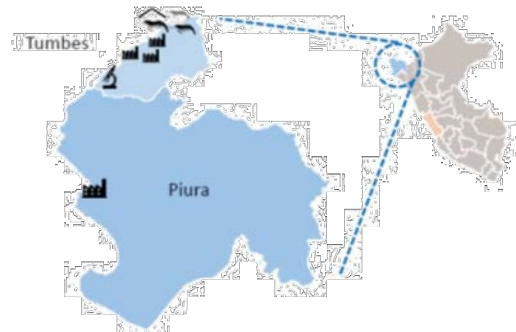
The Marinasol Intensive Shrimp Model

Marinasol is a vertically integrated Peruvian shrimp producer and exporter

Fully Integrated Operation



Location and main infrastructure



Hatchery:
290 million larvae per month



Intensive ponds:
110 hectares



Semi-intensive ponds:
1,194 hectares



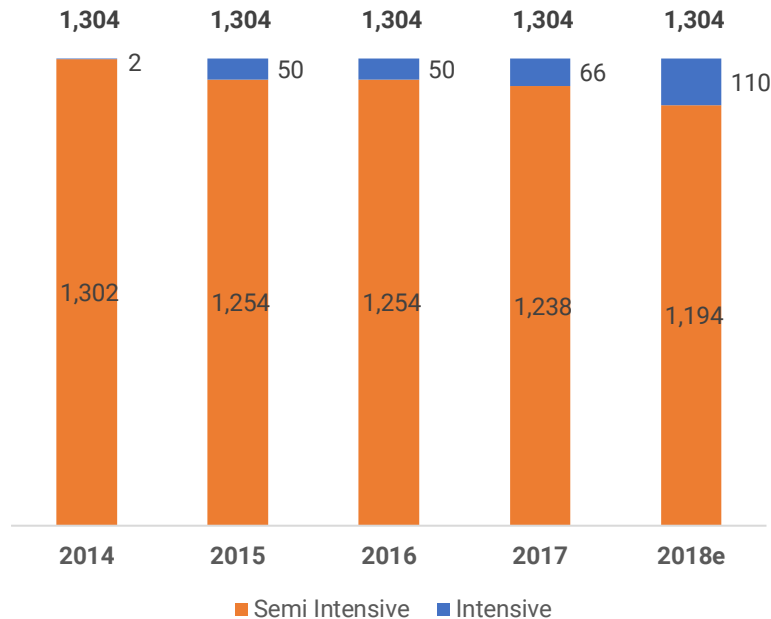
Processing facilities:
Processing capacity: 103 MT/day
Cold storage capacity: 3,460 MT

We have been converting traditional farms to intensive farming technology





We have been converting traditional farms to intensive farming technology

Hectare evolution

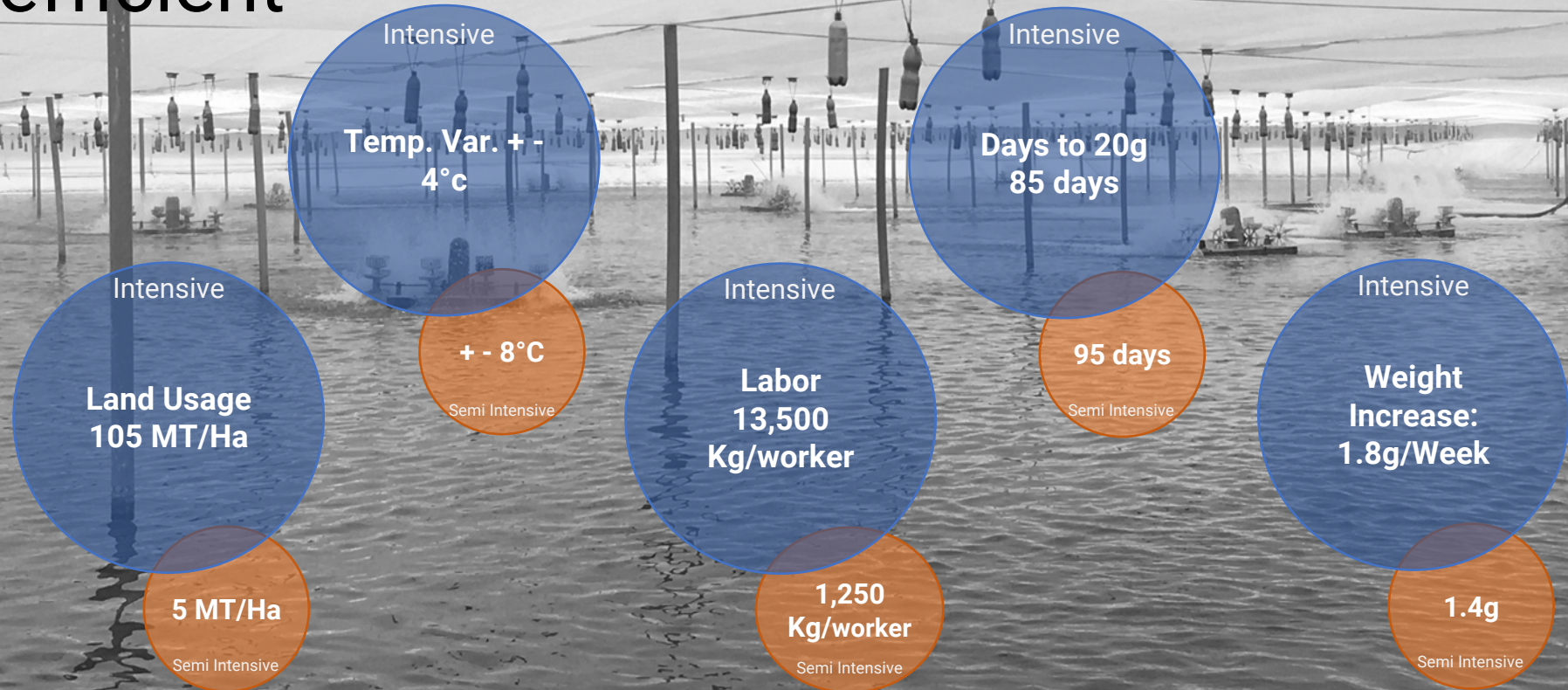


Farming technology characteristics

	Semi-intensive	Intensive
		
Indicator		
Density	14 – 20 shrimp/m ²	300 shrimp/m ²
Yield	2 MT/Cycle	34 – 36 MT/Cycle
Cycles/yr	2.5	3
Yield/yr	5 MT	+100 MT

10x more investment for 20x more production

Intensive farms are not only more productive but more consistent and efficient



We have had to learn new techniques and adapt theoretical know-how to our reality

Water Exchange & Pumping



Water Treatment & Circulation



Water Cleaning Systems



Aeration



Feeding Techniques



Temperature Control



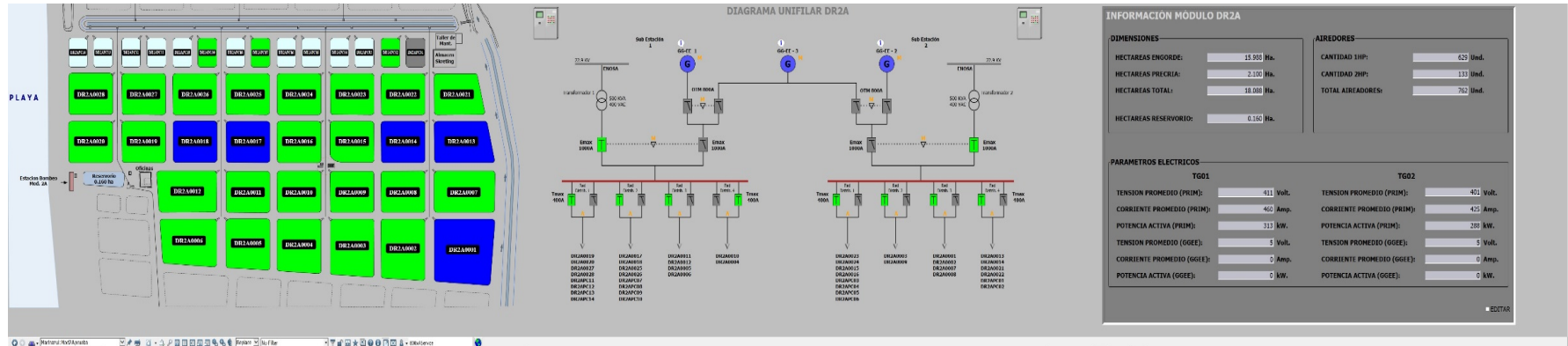
Management control systems are key in order to scale our model efficiently

Action	Planning Management	Pond Management	Farming Management
Leadership	Preparation and seeding KPI weekly review	Pond Achievements KPI weekly review	Hectare achievements KPI weekly review (managing level)
Improvement Discipline	Planning versus results Time for pond preparation	KPI comparison versus BU and LY	KPI comparison versus BU and LY
Sustainability Discipline	Weekly planning meeting 5 min Daily preparation meeting	Daily pond meeting	Once a week management meeting
Alignment & Motivation	<ul style="list-style-type: none">Accountable designation and incentive definitionActivity based organization	<ul style="list-style-type: none">Accountable: SupervisorsIncentive program for achieving critical KPIs	<ul style="list-style-type: none">Accountable: Farm chiefIncentive program for achieving critical KPIs
Operational Discipline	Cleaning, maintenance, disinfection and seeding protocols	Pond management protocol (feeding, quality parameters, etc.)	Sampling and pond management protocols
Operational Strategy	KPIs are revised on boards at the meeting	KPIs generate actions Quality process KPI	Sampling and pond to module KPIs

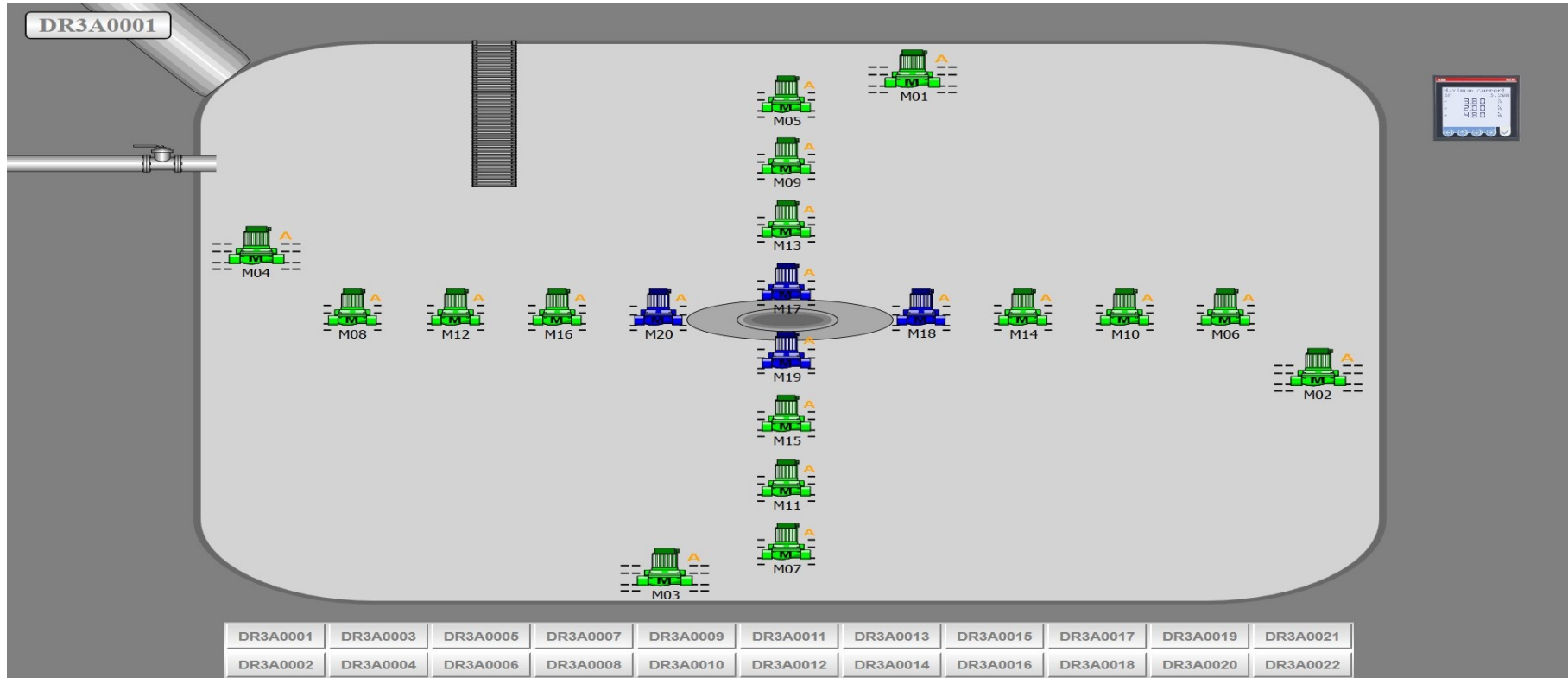
Automatization is a **MUST** to control power and aeration from our OCC



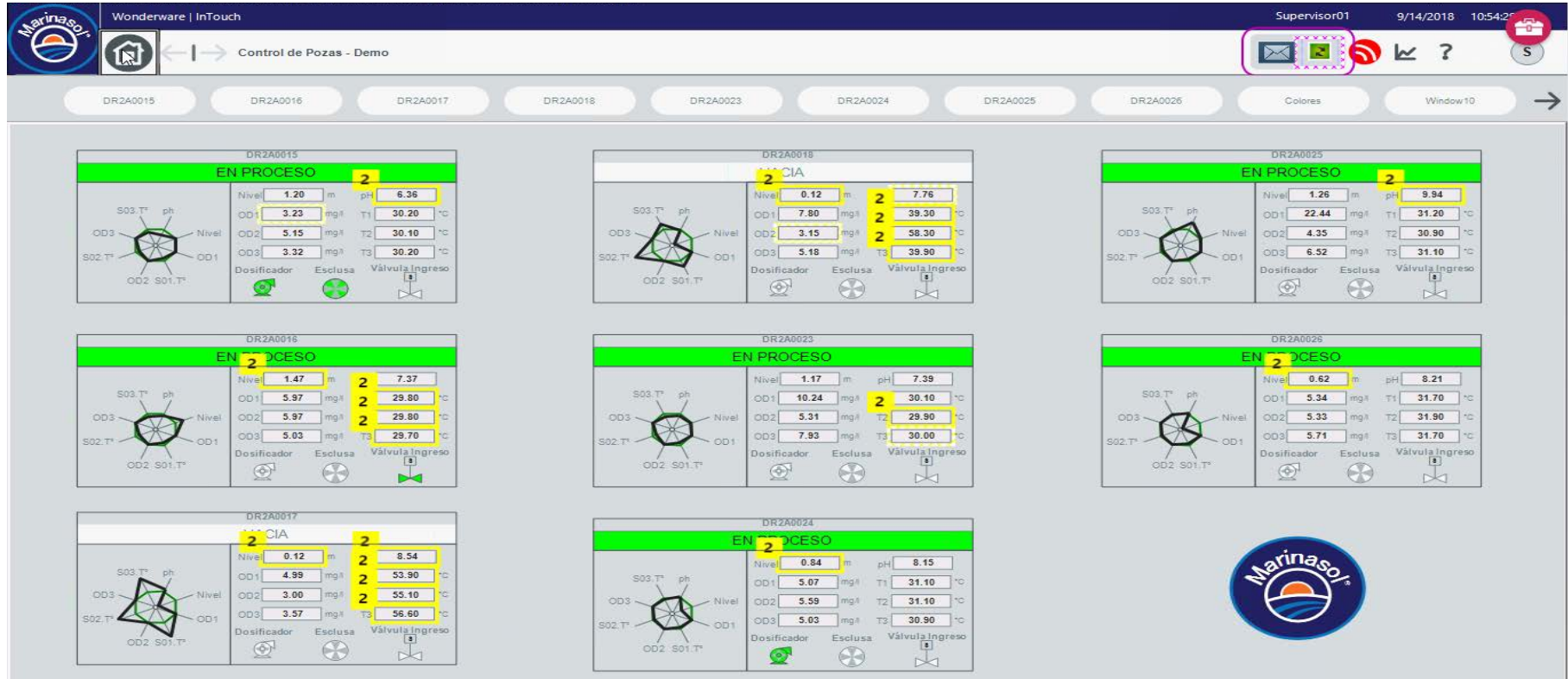
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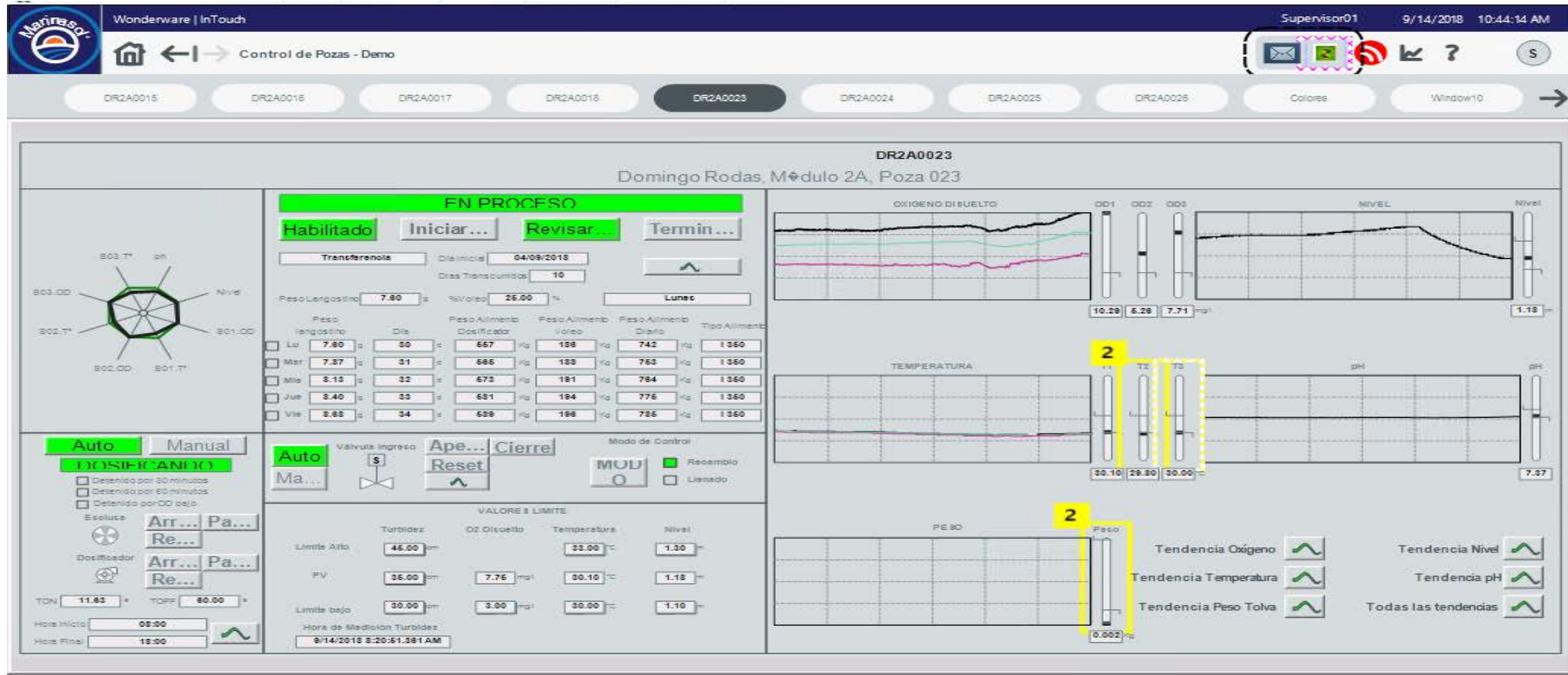
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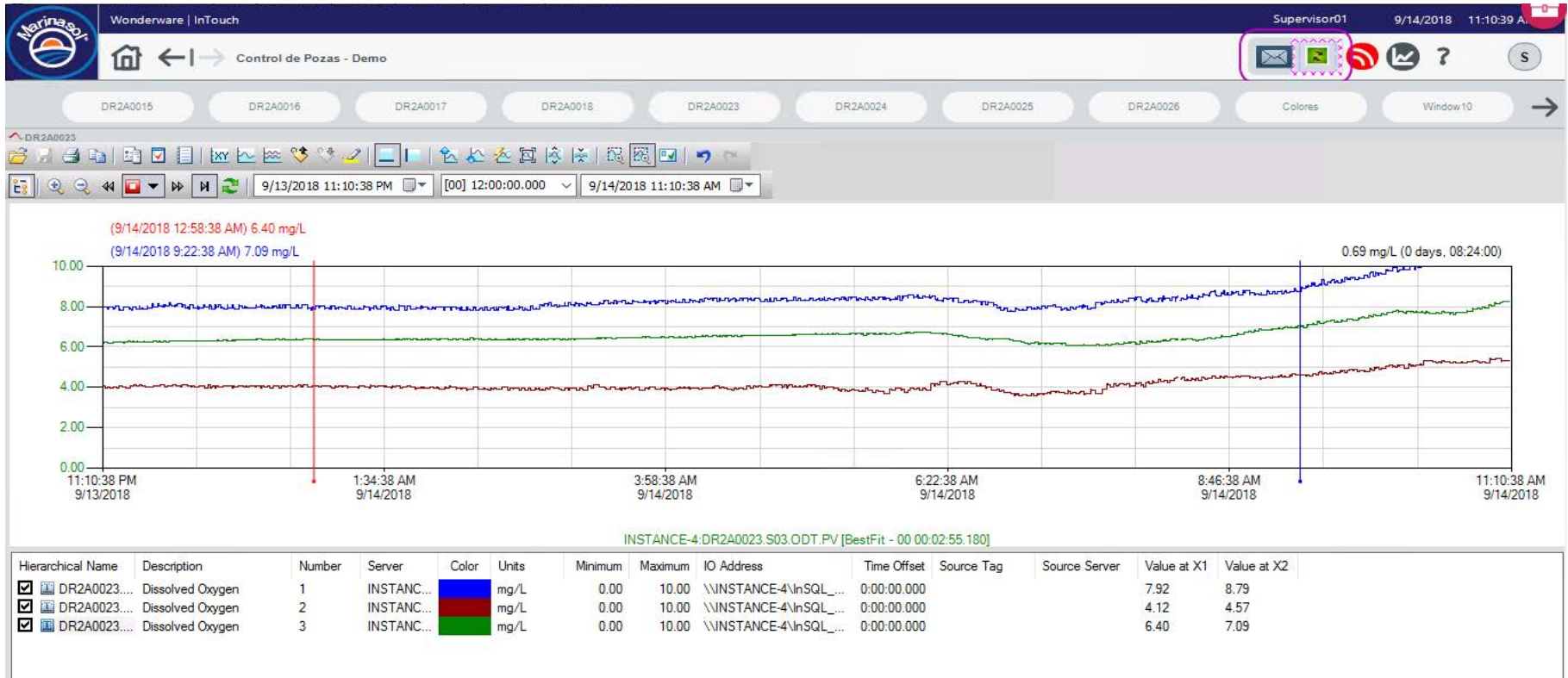
And also to control our key production variables



And also to control our key production variables



And also to control our key production variables



This is just the beginning...the journey has just started...

Clean Energy Initiatives



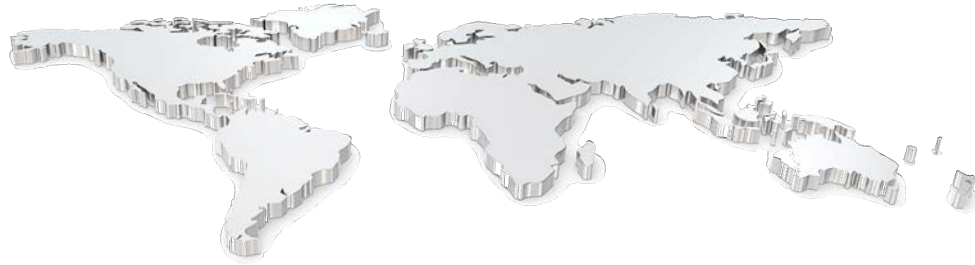
Water Reutilization



Improved Breeding & Genetics



Expand Intensive Shrimp Farming in Peru and Internationally



Thank you!



a company by

