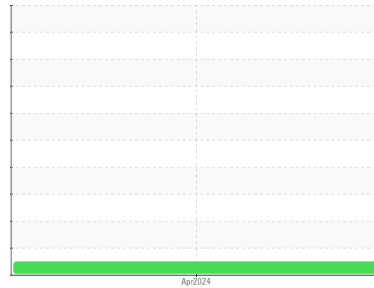




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
{UNASSIGNED}
 Machine Id
Quantum Marine
 Component
Port Hydraulic System
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PH0001488	---	---
Sample Date	Client Info			17 Apr 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Oil Changed	Client Info			N/A	---	---
Sample Status				NORMAL	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	NEG	---	---

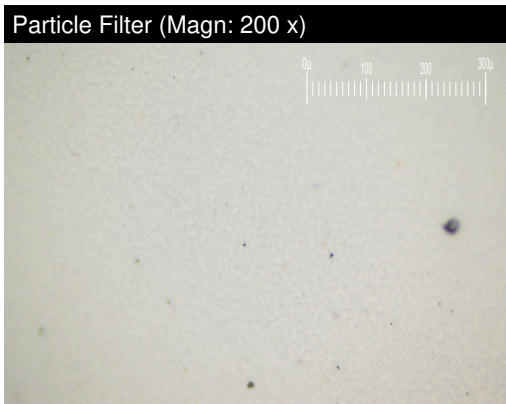
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<1	---	---
Chromium	ppm	ASTM D5185m	>20	0	---	---
Nickel	ppm	ASTM D5185m	>20	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>20	0	---	---
Lead	ppm	ASTM D5185m	>20	0	---	---
Copper	ppm	ASTM D5185m	>20	4	---	---
Tin	ppm	ASTM D5185m	>20	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		<1	---	---
Calcium	ppm	ASTM D5185m		23	---	---
Phosphorus	ppm	ASTM D5185m		295	---	---
Zinc	ppm	ASTM D5185m		310	---	---
Sulfur	ppm	ASTM D5185m		863	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	0	---	---
Sodium	ppm	ASTM D5185m		3	---	---
Potassium	ppm	ASTM D5185m	>20	1	---	---

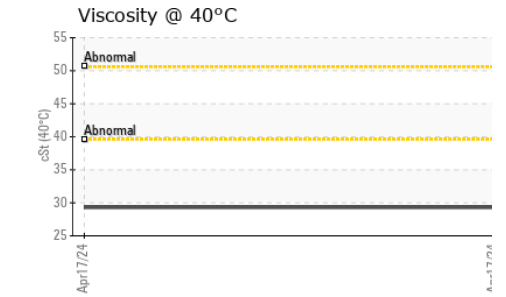
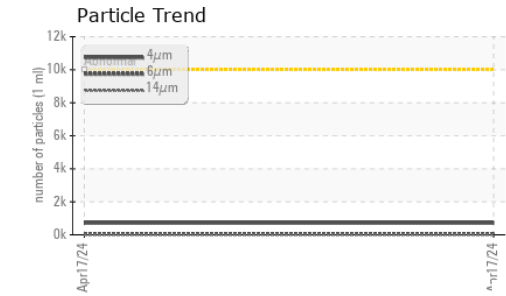
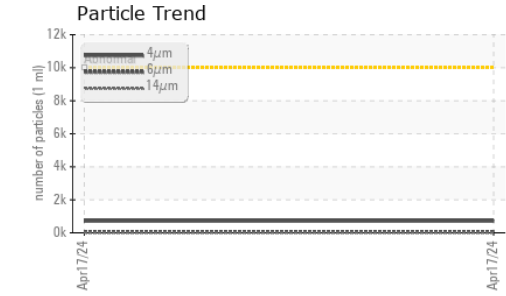
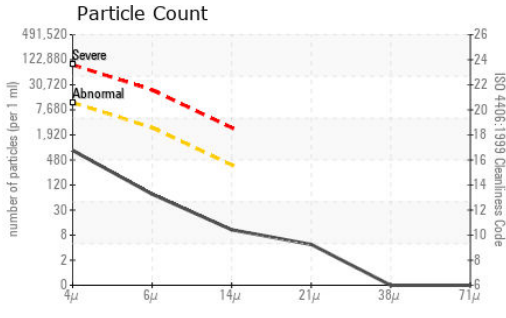
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	717	---	---	
Particles >6µm	ASTM D7647	>2500	64	---	---	
Particles >14µm	ASTM D7647	>320	9	---	---	
Particles >21µm	ASTM D7647	>80	4	---	---	
Particles >38µm	ASTM D7647	>20	0	---	---	
Particles >71µm	ASTM D7647	>4	0	---	---	
Oil Cleanliness	ISO 4406 (c)	>20/18/15	17/13/10	---	---	

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.35	---	---





OIL ANALYSIS REPORT



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH0001488 **Received** : 18 Apr 2024
Lab Number : **06153066** **Tested** : 23 Apr 2024
Unique Number : 10983144 **Diagnosed** : 23 Apr 2024 - Jonathan Hester
Test Package : PLANT (Additional Tests: PrtFilter)

HYDRODYNE LLC
 8501 NW 64TH ST
 MIAMI, FL
 US 33166

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact: MIGUEL VILLANUEVA
 mvillanueva@hydradynellc.com
 T: (305)592-8735
 F:

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	29.3	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter					

GRAPHS

