



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Bronx Zoo
 Machine Id
ZOO CENTER LARGE UNIT
 Component
Hydraulic System
 Fluid
PHILLIPS 66 Powerflow NZ AW46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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			PH0003484	---	---
Sample Date	Client Info			06 Jun 2024	---	---
Machine Age	mths	Client Info		0	---	---
Oil Age	mths	Client Info		0	---	---
Oil Changed	Client Info			Changed	---	---
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	0	---	---
Chromium	ppm	ASTM D5185m	>20	0	---	---
Nickel	ppm	ASTM D5185m	>20	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>20	0	---	---
Lead	ppm	ASTM D5185m	>20	0	---	---
Copper	ppm	ASTM D5185m	>20	2	---	---
Tin	ppm	ASTM D5185m	>20	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		<1	---	---

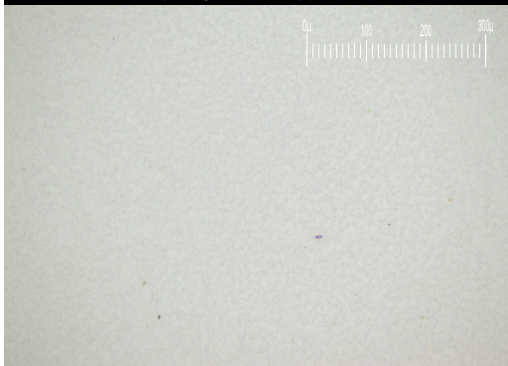
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		0	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		1	---	---
Calcium	ppm	ASTM D5185m		42	---	---
Phosphorus	ppm	ASTM D5185m		103	---	---
Zinc	ppm	ASTM D5185m		65	---	---
Sulfur	ppm	ASTM D5185m		1154	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<1	---	---
Sodium	ppm	ASTM D5185m		2	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	2149	---	---
Particles >6µm		ASTM D7647	>2500	361	---	---
Particles >14µm		ASTM D7647	>320	27	---	---
Particles >21µm		ASTM D7647	>80	8	---	---
Particles >38µm		ASTM D7647	>20	0	---	---
Particles >71µm		ASTM D7647	>4	0	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	18/16/12	---	---

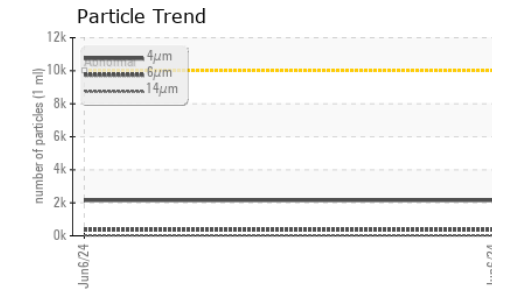
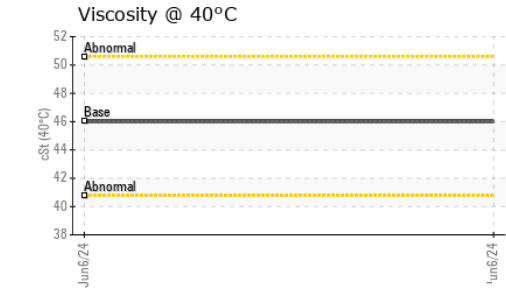
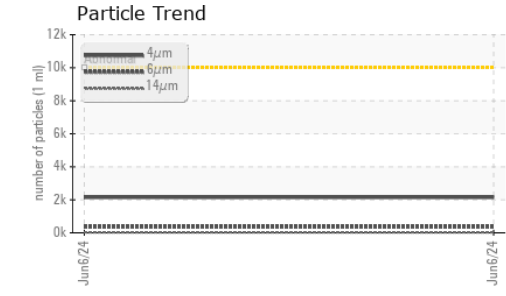
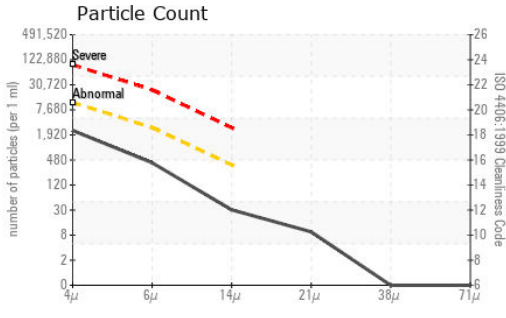
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.22	0.19	---	---

Particle Filter (Magn: 200 x)





OIL ANALYSIS REPORT



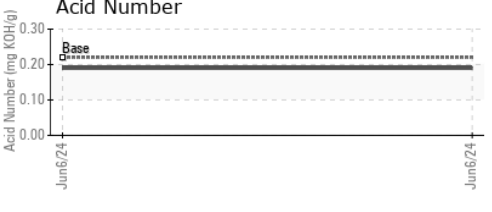
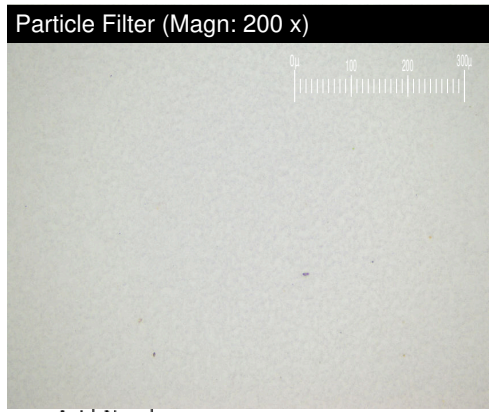
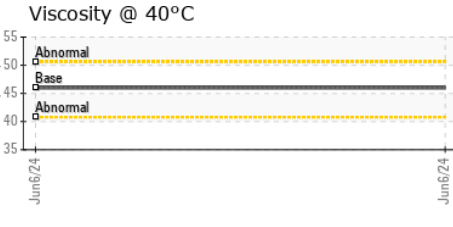
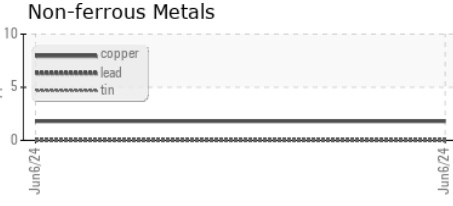
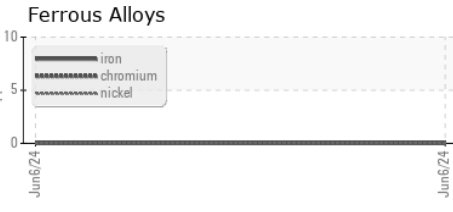
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	46	46.0	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image
PrtFilter				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH0003484 **Received** : 10 Jun 2024
Lab Number : 06204565 **Tested** : 13 Jun 2024
Unique Number : 11072026 **Diagnosed** : 13 Jun 2024 - Jonathan Hester
Test Package : PLANT (Additional Tests: PrtFilter)

PHI PROGRESSIVE HYDRAULICS INC
 22 AUDREY PLACE
 FAIRFIELD, NJ
 US 07004
 Contact: CUSTOMER SERVICE
 CUSTOMERSERVICE@PHIONLINE.COM

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)