

# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**1500 PRESS**  
 Machine Id  
**1500-HYD**  
 Component  
**Hydraulic System**  
 Fluid  
**PHILLIPS 66 Powerflow NZ AW46 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. ( Customer Sample Comment: Should be AW 46 )

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates present in the oil.

### 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	<b>PCA0071544</b>	---	---
Sample Date	Client Info	<b>17 Mar 2024</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	<b>3</b>	---	---
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185m >20	<b>0</b>	---	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Aluminum	ppm ASTM D5185m >20	<b>2</b>	---	---
Lead	ppm ASTM D5185m >20	<b>7</b>	---	---
Copper	ppm ASTM D5185m >20	<b>2</b>	---	---
Tin	ppm ASTM D5185m >20	<b>&lt;1</b>	---	---
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium	ppm ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>0</b>	---	---
Barium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Molybdenum	ppm ASTM D5185m	<b>0</b>	---	---
Manganese	ppm ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Calcium	ppm ASTM D5185m	<b>48</b>	---	---
Phosphorus	ppm ASTM D5185m	<b>67</b>	---	---
Zinc	ppm ASTM D5185m	<b>30</b>	---	---
Sulfur	ppm ASTM D5185m	<b>185</b>	---	---

## CONTAMINANTS

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

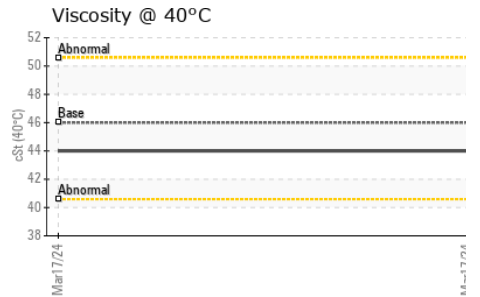
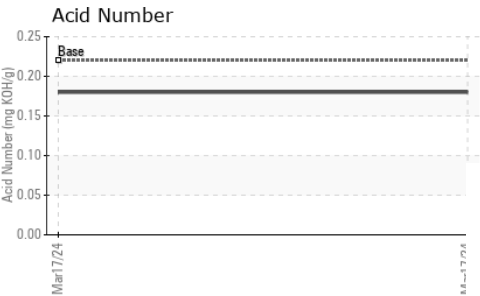
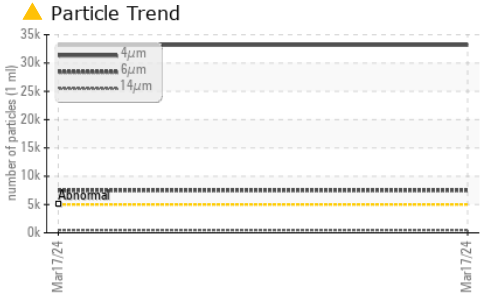
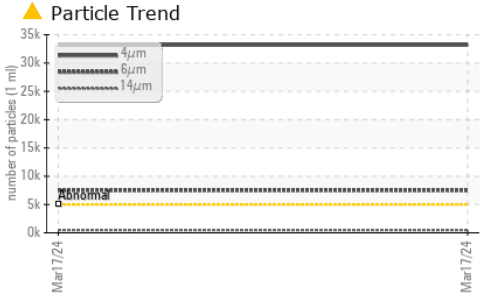
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 33169</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 7507</b>	---	---
Particles >14µm	ASTM D7647 >160	<b>▲ 474</b>	---	---
Particles >21µm	ASTM D7647 >40	<b>▲ 104</b>	---	---
Particles >38µm	ASTM D7647 >10	<b>4</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 22/20/16</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.22	<b>0.18</b>	---	---

# OIL ANALYSIS REPORT



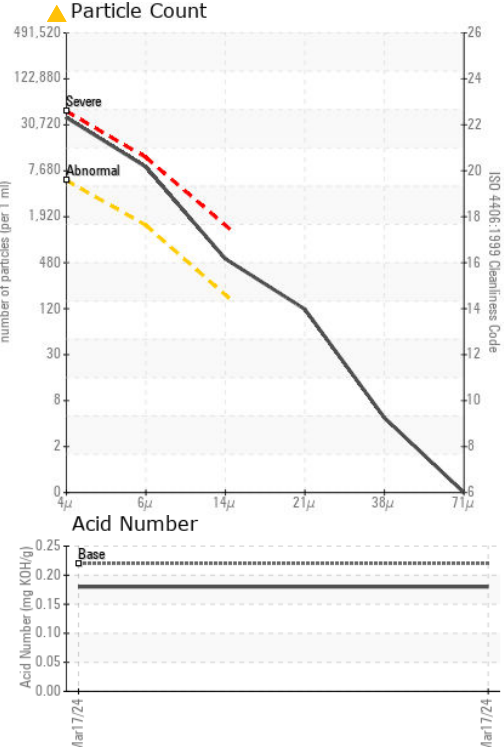
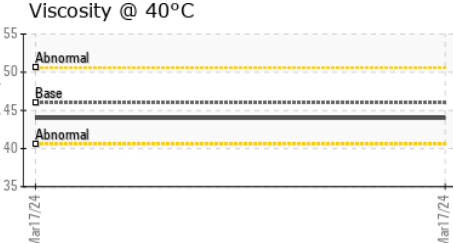
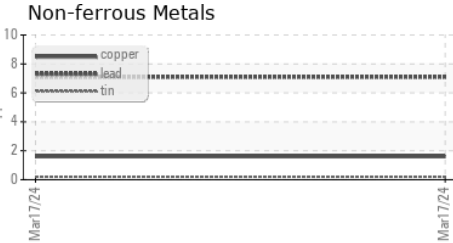
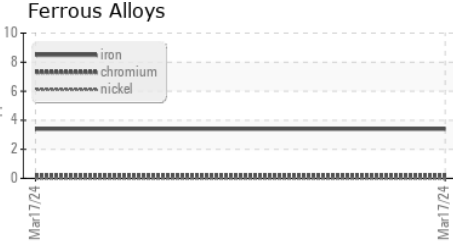
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	44.0	---	---

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

## GRAPHS



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)

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0071544      **Received** : 03 Apr 2024  
**Lab Number** : 06137359      **Tested** : 09 Apr 2024  
**Unique Number** : 10956824      **Diagnosed** : 09 Apr 2024 - Jonathan Hester  
**Test Package** : IND 2

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