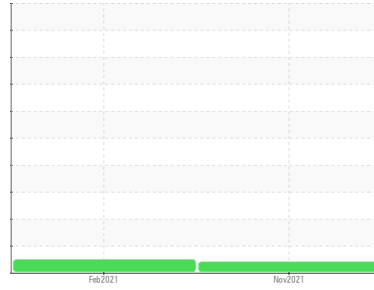




# PROBLEM SUMMARY

Area  
**Powerblock**  
 Machine Id  
**KAMENGO KAMENGO HPU (S/N PHS01233RER)**  
 Component  
**Bulk Fluid Tank**  
 Fluid  
**Royal Purple biomass EAL hydraulic oil 46 (--- GAL)**

Sample Rating Trend



**VIS DEBRIS**



## COMPONENT CONDITION SUMMARY

No relevant graphs to display

## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

## PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	---
Debris	scalar	*Visual	NONE	▲ MODER	NONE	---

**Customer Id:** VEOCAR  
**Sample No.:** WC0539372  
**Lab Number:** 05394483  
**Test Package:** IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	MISSED	Mar 04 2022	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

## HISTORICAL DIAGNOSIS

**16 Feb 2021 Diag: Jonathan Hester**

NORMAL



Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



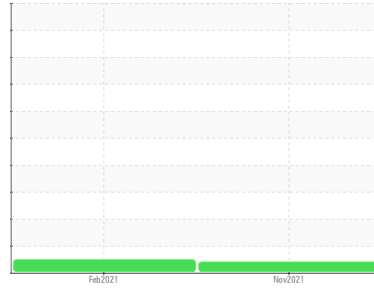


# OIL ANALYSIS REPORT

Sample Rating Trend

VIS DEBRIS

Area  
**Powerblock**  
 Machine Id  
**KAMENGO KAMENGO HPU (S/N PHS01233RER)**  
 Component  
**Bulk Fluid Tank**  
 Fluid  
**Royal Purple biomass EAL hydraulic oil 46 (--- GAL)**



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Wear

All component wear rates are normal.

### Contamination

Moderate concentration of visible dirt/debris 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>WC0539372</b>	RP0014750	---
Sample Date	Client Info		<b>02 Nov 2021</b>	16 Feb 2021	---
Machine Age	hrs	Client Info	<b>26280</b>	0	---
Oil Age	hrs	Client Info	<b>1460</b>	0	---
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	NORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	<b>5</b>	8	---
Chromium	ppm	ASTM D5185m	<b>&lt;1</b>	2	---
Nickel	ppm	ASTM D5185m	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185m	<b>3</b>	0	---
Silver	ppm	ASTM D5185m	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m	<b>2</b>	7	---
Copper	ppm	ASTM D5185m	<b>1</b>	<1	---
Tin	ppm	ASTM D5185m	<b>72</b>	277	---
Antimony	ppm	ASTM D5185m	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>4</b>	1	---
Barium	ppm	ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	---
Calcium	ppm	ASTM D5185m	<b>84</b>	1	---
Phosphorus	ppm	ASTM D5185m	<b>472</b>	135	---
Zinc	ppm	ASTM D5185m	<b>30</b>	124	---
Sulfur	ppm	ASTM D5185m	<b>4067</b>	527	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<b>&lt;1</b>	3	---
Sodium	ppm	ASTM D5185m	<b>0</b>	3	---
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	---

## FLUID DEGRADATION

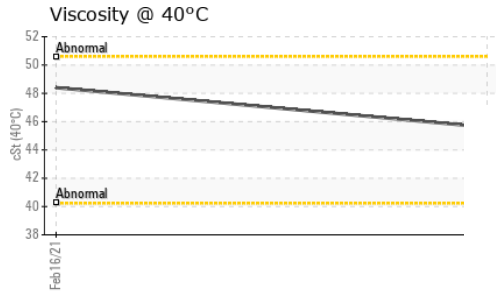
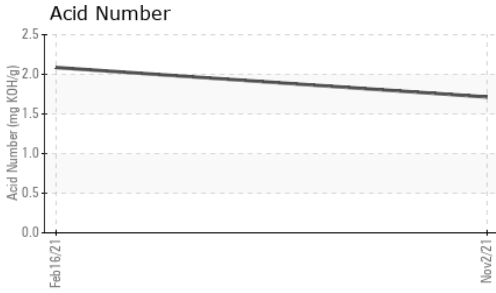
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.714</b>	2.086	---

## VISUAL

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



# OIL ANALYSIS REPORT

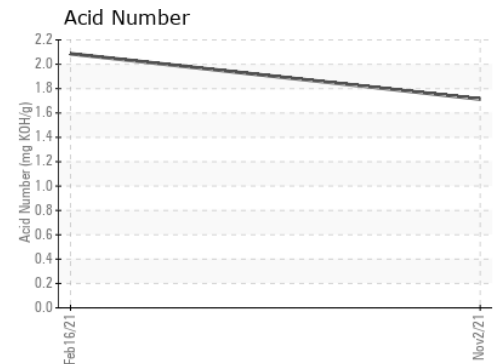
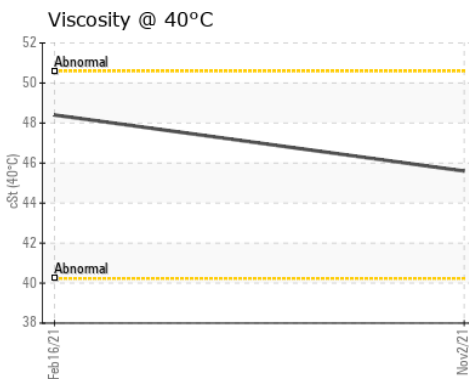
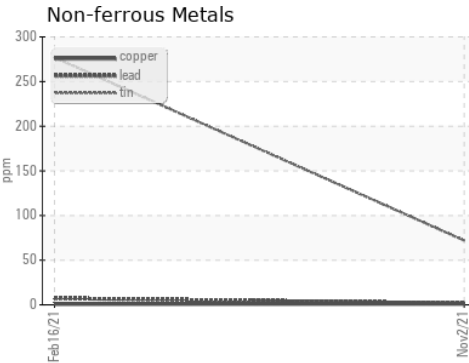
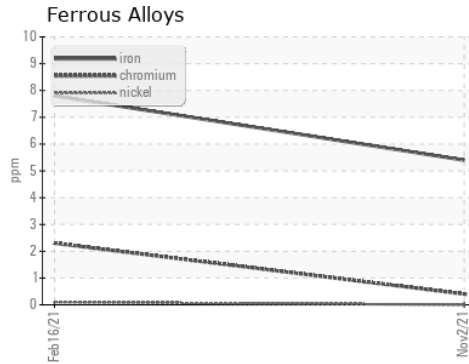


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>45.6</b>	48.4	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color						no image
Bottom						no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0539372      **Received** : 08 Nov 2021  
**Lab Number** : 05394483      **Diagnosed** : 09 Nov 2021  
**Unique Number** : 9733633      **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**VEOLIA ENERGY - FRANKLIN**  
 3465 HWY 198  
 CARNESVILLE, GA  
 US 30521  
 Contact: DERRICK HARVEY  
 derrick.harvey@veolia.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)

T:  
F: