



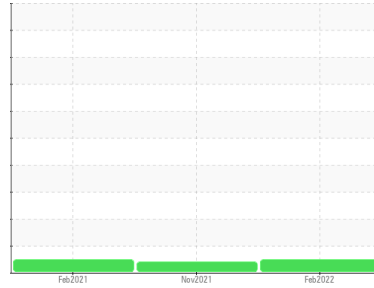
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



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

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.

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		WC0539366	WC0539372	RP0014750
Sample Date	Client Info		28 Feb 2022	02 Nov 2021	16 Feb 2021
Machine Age	hrs	Client Info	26280	26280	0
Oil Age	hrs	Client Info	28440	1460	0
Oil Changed	Client Info		Filtered	Not Changd	N/A
Sample Status			NORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	8	5	8
Chromium	ppm	ASTM D5185m	<1	<1	2
Nickel	ppm	ASTM D5185m	0	0	<1
Titanium	ppm	ASTM D5185m	3	3	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m	1	0	<1
Lead	ppm	ASTM D5185m	4	2	7
Copper	ppm	ASTM D5185m	7	1	<1
Tin	ppm	ASTM D5185m	76	72	277
Antimony	ppm	ASTM D5185m	0	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	4	1
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	0	0
Calcium	ppm	ASTM D5185m	87	84	1
Phosphorus	ppm	ASTM D5185m	516	472	135
Zinc	ppm	ASTM D5185m	66	30	124
Sulfur	ppm	ASTM D5185m	4142	4067	527

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1	<1	3
Sodium	ppm	ASTM D5185m	4	0	3
Potassium	ppm	ASTM D5185m >20	0	<1	<1

FLUID DEGRADATION

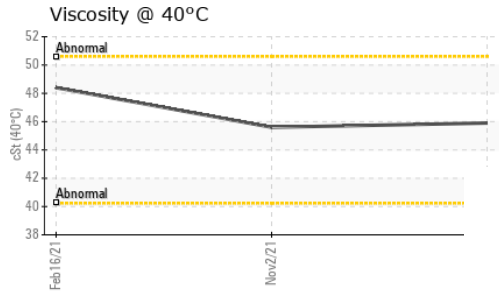
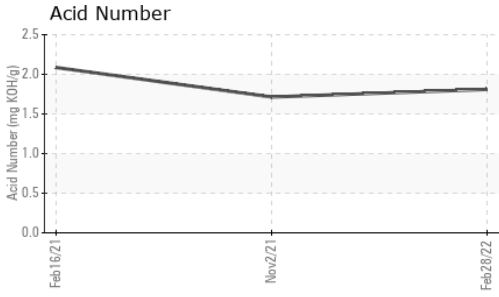
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.81	1.714	2.086

VISUAL

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



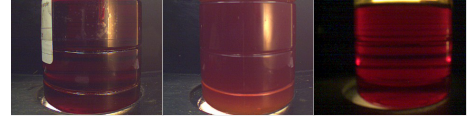
OIL ANALYSIS REPORT



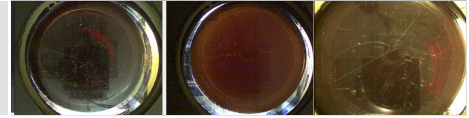
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45.9	45.6	48.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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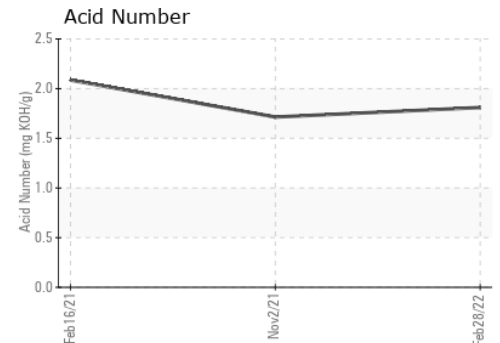
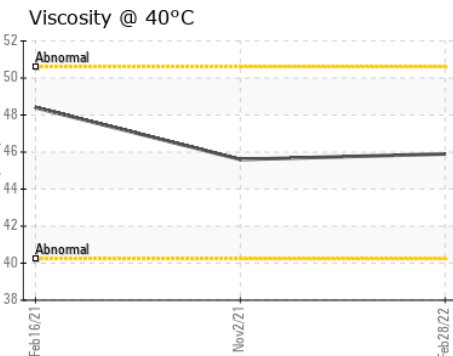
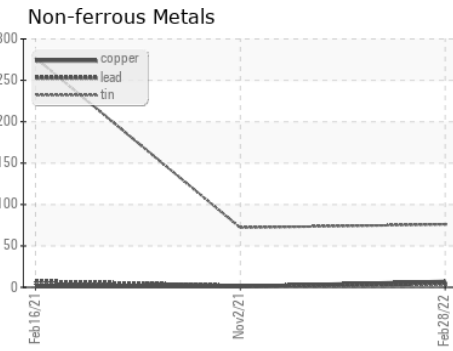
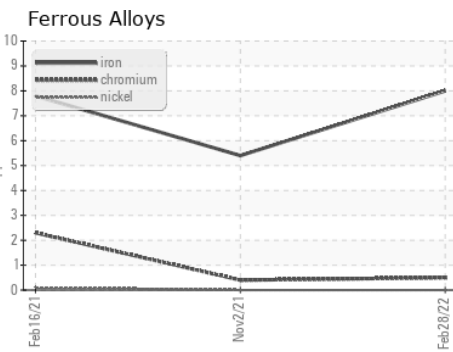
Color



Bottom



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0539366 **Received** : 02 Mar 2022
Lab Number : 05481813 **Diagnosed** : 04 Mar 2022
Unique Number : 9876032 **Diagnostician** : Don Baldrige
Test Package : IND 2

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: