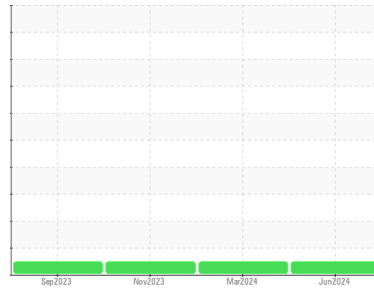


OIL ANALYSIS REPORT



Machine Id
CATERPILLAR RH BEYMER
Component
Starboard Gearbox
Fluid
KENDALL D3 40WT (--- GAL)

Sample Rating Trend



NORMAL

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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			HRE0000256	WC0843956	WC0843973
Sample Date	Client Info			07 Jun 2024	07 Mar 2024	15 Nov 2023
Machine Age	hrs	Client Info		38018	35852	33233
Oil Age	hrs	Client Info		1000	1000	1000
Oil Changed	Client Info			Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	NEG

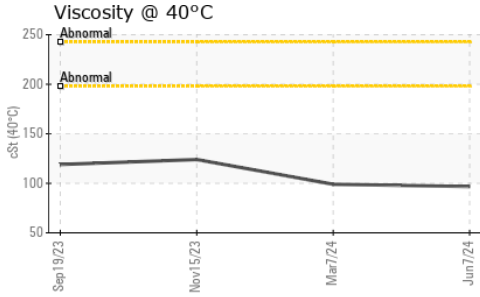
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	2	2	5
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		69	47	8
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	1	1	0
Lead	ppm	ASTM D5185m	>50	0	<1	0
Copper	ppm	ASTM D5185m	>200	0	0	0
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		132	105	41
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		4	17	10
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		349	269	75
Calcium	ppm	ASTM D5185m		1973	2297	2945
Phosphorus	ppm	ASTM D5185m		1090	955	1007
Zinc	ppm	ASTM D5185m		1200	1091	1096
Sulfur	ppm	ASTM D5185m		4837	4927	4017

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	13	6	4
Sodium	ppm	ASTM D5185m		3	2	<1
Potassium	ppm	ASTM D5185m	>20	5	3	0

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

OIL ANALYSIS REPORT



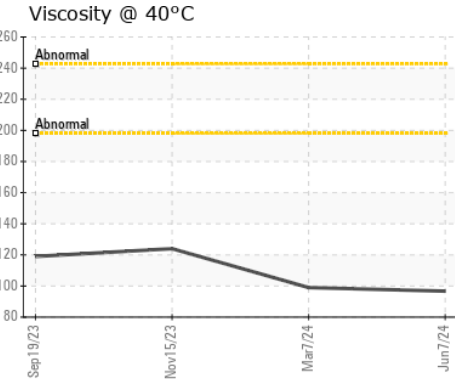
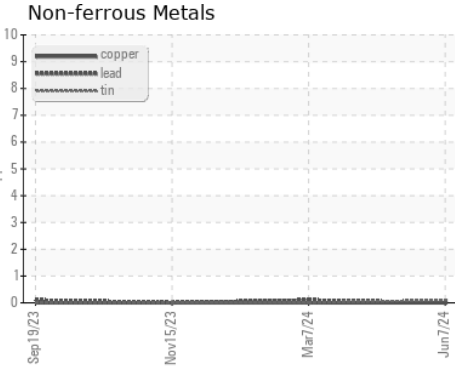
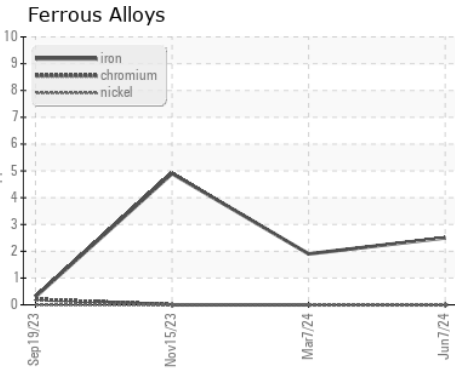
FLUID PROPERTIES	method	limit/base	current	history1	history2
------------------	--------	------------	---------	----------	----------

Visc @ 40°C	cSt	ASTM D445	96.7	99.0	124
-------------	-----	-----------	-------------	------	-----

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

Color				no image	no image	no image
Bottom				no image	no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HRE0000256
Lab Number : 06216381
Unique Number : 11089245
Test Package : FLEET

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 23 Jun 2024 - Don Baldrige

SUPERIOR MARINE
 201 KELLY LANE
 CHESAPEAKE, OH
 US 45619

Contact: DARRELL KEARNS
 darrellkearns@superiormarineinc.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: