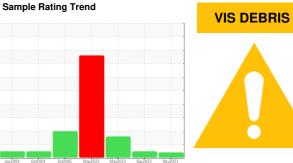


PROBLEM SUMMARY



SPIRAL #2

Component **Main Gearbox**

MOBIL SHC 634 (13 GAL)

COMPONENT CONDITION SUMMARY

No relevant graphs to display

RECOMMENDATION

We recommend you service the filters on this component if applicable. 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	ABNORMAL		
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE		

Customer Id: KRANEW Sample No.: PCA0103609 Lab Number: 06005532 Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:

Don Baldridge +1 don.b505@comcast.net

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

RECOMMENDED ACTIONS

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

HISTORICAL DIAGNOSIS

14 Sep 2023 Diag: Don Baldridge

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



01 May 2023 Diag: Don Baldridge

ISO



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



06 May 2022 Diag: Doug Bogart

ISO



We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid.





OIL ANALYSIS REPORT

Sample Rating Trend







SPIRAL #2

Component

Main Gearbox

MOBIL SHC 634 (13 GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. 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.

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.

SAMPLE INFORMATION method limit/base current history1 history1 history1 history1 Sample Number Client Info PCA0103609 PCA0099611 PCA00920 Sample Date Client Info 08 Nov 2023 14 Sep 2023 01 May 20 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info N/A N/A N/A Oil Changed Client Info N/A N/A N/A N/A Sample Status ABNORMAL NORMAL ABNORMAL ABNORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 1 <1
Sample Date Client Info 08 Nov 2023 14 Sep 2023 01 May 20 Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A N/A Sample Status ABNORMAL NORMAL ABNORMAL ABNORMAL ABNORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 1 <1 8 Chromium ppm ASTM D5185m >15 0 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0
Machine Age hrs Client Info 0 0 0 Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A Sample Status ABNORMAL NORMAL ABNORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 1 <1 8 Chromium ppm ASTM D5185m >15 0 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0
Oil Age hrs Client Info 0 0 0 Oil Changed Client Info N/A N/A N/A Sample Status ABNORMAL NORMAL ABNORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 1 <1
Oil Changed Client Info N/A N/A N/A N/A Sample Status ABNORMAL NORMAL ABNORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 1 <1
Sample Status ABNORMAL NORMAL ABNORMAL WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 1 <1 8 Chromium ppm ASTM D5185m >15 0 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0
WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 1 <1 8 Chromium ppm ASTM D5185m >15 0 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0
Iron ppm ASTM D5185m >200 1 <1
Chromium ppm ASTM D5185m >15 0 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0
Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0
Titanium ppm ASTM D5185m 0 0 0
Silver ppm ASTM D5185m 0 0 0
Aluminum ppm ASTM D5185m >25 0 6
Lead ppm ASTM D5185m >100 0 0
Copper ppm ASTM D5185m >200 1 0 9
Tin ppm ASTM D5185m >25 <1 <1 0
Vanadium ppm ASTM D5185m 0 0 0
Cadmium ppm ASTM D5185m 0 0 0
ADDITIVES method limit/base current history1 history
Boron ppm ASTM D5185m 0 0
Barium ppm ASTM D5185m 0 0 0
Molybdenum ppm ASTM D5185m 0 0 0
ManganeseppmASTM D5185m00
MagnesiumppmASTM D5185m0<14
Calcium ppm ASTM D5185m 0 2 34
Phosphorus ppm ASTM D5185m 452 432 463
Zinc ppm ASTM D5185m 0 <1 0
Sulfur ppm ASTM D5185m 0 114 0
CONTAMINANTS method limit/base current history1 history
Silicon ppm ASTM D5185m >50 18 20 22
Sodium ppm ASTM D5185m 0 0 0
Potassium ppm ASTM D5185m >20 1 <1 0
FLUID CLEANLINESS method limit/base current history1 history
Particles >4μm ASTM D7647 >5000 1400 ▲ 108897
Particles >6μm ASTM D7647 >1300 175 Δ 23233
Particles >14μm ASTM D7647 >320 19 ▲ 322
D :: 1 O1
Particles >21μm
Particles >21μm ASTM D/64/ >80 6 4/ Particles >38μm ASTM D7647 >20 0 2
Particles >38μm ASTM D7647 >20 0 2

0.54

Acid Number (AN)

mg KOH/g ASTM D8045

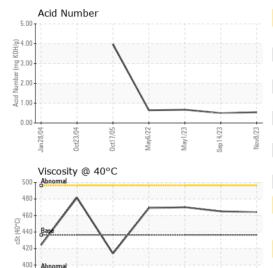
0.50

0.67



380

OIL ANALYSIS REPORT

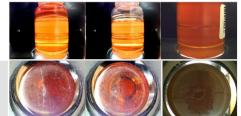


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE	NONE
Sand/Dirt	scalar	*Visual	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
FLUID PROPE	RTIES	method	limit/base	current	history1	history2

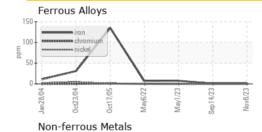
Visc @ 40°C cSt ASTM D445 436.4 464 465 470 **SAMPLE IMAGES** history1 history2 method limit/base current

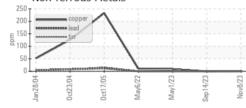
Color

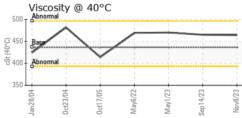
Bottom

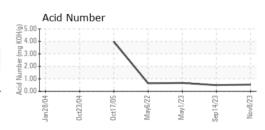


GRAPHS













Laboratory Sample No. Lab Number **Unique Number**

: 10739294

: PCA0103609 : 06005532

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received

: 13 Nov 2023 Diagnosed : 15 Nov 2023 Diagnostician : Don Baldridge

Test Package : IND 2 (Additional Tests: PrtCount) Certificate L2367 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.

ryan.schmid@kraftheinz.com T: (507)568-0338 F: (507)354-7927

KraftHeinz - New Ulm - Plant 8302

2525 S BRIDGE STREET

Contact: RYAN SCHMID

NEW ULM, MN

US 56073

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: RYAN SCHMID