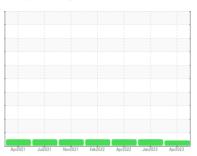


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



PRO RECOILER

Component

Gearbox

SHELL OMALA S2 GX 320 (76 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Moor

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION method limit/base current history1 history1 Sample Number Client Info WC0781312 WC0750426 WC06918 Sample Date Client Info 20 Apr 2023 22 Jan 2023 27 Apr 20 Machine Age mths Client Info 0 0 0 Oil Age mths Client Info 0 0 0 Oil Changed Client Info N/A N/A Not Chan Sample Status ATTENTION NORMAL NORMAL CONTAMINATION method limit/base current history1 history1 Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 12 6 21 Chromium ppm ASTM D5185m >15 <1 0 0 Nickel ppm ASTM D5185m 0
Sample Date Client Info 20 Apr 2023 22 Jan 2023 27 Apr 20 Machine Age mths Client Info 0 0 0 Oil Age mths Client Info 0 0 0 Oil Changed Client Info N/A N/A NORMAL Sample Status ATTENTION NORMAL NORMAL CONTAMINATION method limit/base current history1 histor Wear WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 histor Iron ppm ASTM D5185m >200 12 6 21 Chromium ppm ASTM D5185m >15 <1 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0
Machine Age mths Client Info 0 0 0 Oil Age mths Client Info 0 0 0 Oil Changed Client Info N/A N/A Not Chan Sample Status ATTENTION NORMAL NORMAL CONTAMINATION method limit/base current history1 history1 Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 12 6 21 Chromium ppm ASTM D5185m >15 <1 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0
Oil Age mths Client Info 0 0 0 Oil Changed Client Info N/A N/A NA Not Changed Sample Status ATTENTION NORMAL NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history1 Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 12 6 21 Chromium ppm ASTM D5185m >15 <1
Oil Changed Sample Status Client Info N/A N/A N/A Not Changed NORMAL CONTAMINATION method limit/base current history1 history2 history2 history2 history2 history3 history3 history3 history4 history4<
Sample Status ATTENTION NORMAL NORMAL CONTAMINATION method limit/base current history1 history1 Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history1 history1 Iron ppm ASTM D5185m >200 12 6 21 Chromium ppm ASTM D5185m >15 <1 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0
CONTAMINATION method limit/base current history1 history1 Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 12 6 21 Chromium ppm ASTM D5185m >15 <1
Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history1 Iron ppm ASTM D5185m >200 12 6 21 Chromium ppm ASTM D5185m >15 <1 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 12 6 21 Chromium ppm ASTM D5185m >15 <1 0 0 Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0
Iron ppm ASTM D5185m >200 12 6 21 Chromium ppm ASTM D5185m >15 <1
Chromium ppm ASTM D5185m >15 <1
Nickel ppm ASTM D5185m >15 0 0 0 Titanium ppm ASTM D5185m 0 0 0 0
Titanium ppm ASTM D5185m 0 0 0
Silver ppm ASTM D5185m 0 0 1
Aluminum ppm ASTM D5185m >25 0 0 <1
Lead ppm ASTM D5185m >100 0 0 <1
Copper ppm ASTM D5185m >200 0 0 <1
Tin ppm ASTM D5185m >25 0 0 0
Antimony ppm ASTM D5185m >5
Vanadium ppm ASTM D5185m 0 0 0
Cadmium ppm ASTM D5185m 0 0 <1
ADDITIVES method limit/base current history1 history
Boron ppm ASTM D5185m 6.2 3 <1 35
Barium ppm ASTM D5185m 0.0 0 0
Molybdenum ppm ASTM D5185m 0 <1 0 2
Manganese ppm ASTM D5185m <1 <1 <1
Magnesium ppm ASTM D5185m 0 1 0 1
Calcium ppm ASTM D5185m 0.0 17 16 4
Phosphorus ppm ASTM D5185m 290 272 290 250
Zinc ppm ASTM D5185m 3.8 10 7 <1
Sulfur ppm ASTM D5185m 8167 10603 12530 6261
CONTAMINANTS method limit/base current history1 history
Silicon ppm ASTM D5185m >50 7 4 8
Sodium ppm ASTM D5185m <1 0 0
Potassium ppm ASTM D5185m >20 1 0 4
FLUID DEGRADATION method limit/base current history1 histo

Acid Number (AN)

mg KOH/g ASTM D8045

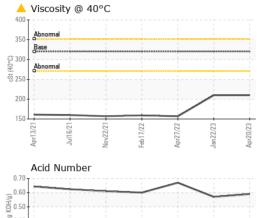
0.57

0.59

0.67



OIL ANALYSIS REPORT



VISUAL		method				history2
White Metal	scalar	*Visual	NONE	LIGHT	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	NONE	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 PROPERT	TIES	method	limit/base	current	history1	history2

Aciu	Numbe	ı				
0.70 T						
0.60		-			\	
공 0.50						
B 0.40						
Acid Mumber (mg KOH/g)						
N 20						
Acid						
0.10						
0.00	-	-17	2	2 -	53	52
pr13/	ul16/	v22/	2/110	pr27/2	122/2	r20/2
Ap	7	2	歪	Ap	- Jai	Αp

210 210 157 Visc @ 40°C cSt ASTM D445 320

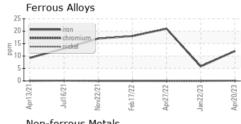
SAMPLE IMAGES

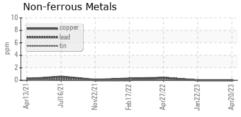
Color

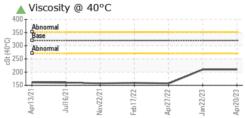
Bottom

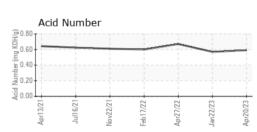
















Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10458152

: WC0781312 : 05839349

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Test Package : PLANT

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 05 May 2023 : 09 May 2023 Diagnosed Diagnostician : Don Baldridge

ALL METALS PROCESSING & LOGISTICS

100 ALL METALS DR CARTERSVILLE, GA US 30120

Contact: JASON WEISS

jasonweiss@allmetals.com T: (770)427-7379

* - 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)

Contact/Location: JASON WEISS - ALLCARGA

F: