



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id

60 K

Component

Gearbox

Fluid

GEAR OIL ISO 320 (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL ISO 320. Please confirm.

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

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		WC0782198	---	---
Sample Date	Client Info		03 Nov 2023	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	46	---	---
Chromium	ppm	ASTM D5185m >15	<1	---	---
Nickel	ppm	ASTM D5185m >15	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >25	3	---	---
Lead	ppm	ASTM D5185m >100	22	---	---
Copper	ppm	ASTM D5185m >200	<1	---	---
Tin	ppm	ASTM D5185m >25	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	0	---	---
Barium	ppm	ASTM D5185m 15	0	---	---
Molybdenum	ppm	ASTM D5185m 15	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 50	0	---	---
Calcium	ppm	ASTM D5185m 50	6	---	---
Phosphorus	ppm	ASTM D5185m 350	356	---	---
Zinc	ppm	ASTM D5185m 100	45	---	---
Sulfur	ppm	ASTM D5185m 12500	10995	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	1	---	---
Sodium	ppm	ASTM D5185m	3	---	---
Potassium	ppm	ASTM D5185m >20	0	---	---

INFRA-RED

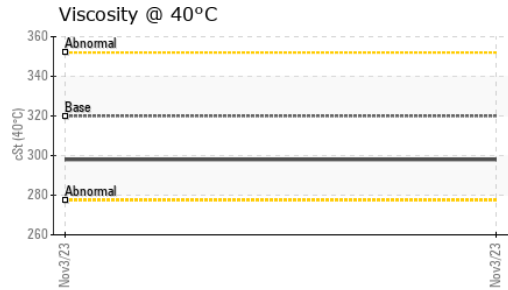
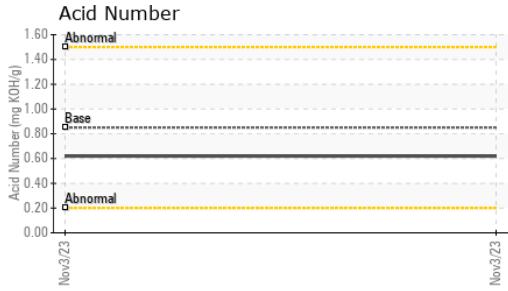
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	---	---
Nitration	Abs/cm	*ASTM D7624	3.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	12.8	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	4.1	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045 0.85	0.62	---	---





OIL ANALYSIS REPORT



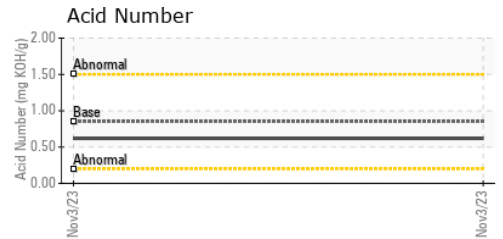
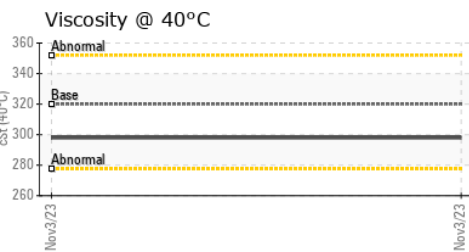
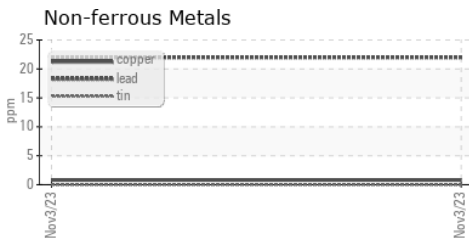
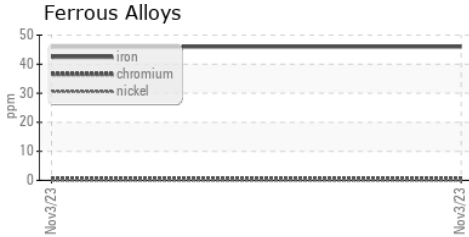
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	320	298	---	---

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

Color				no image	no image
Bottom				no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0782198 **Received** : 07 Nov 2023
Lab Number : 06001089 **Diagnosed** : 08 Nov 2023
Unique Number : 10729449 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: FT-IR)

KAISER ALUMINUM
 1901 REYMET RD
 NORTH CHESTERFIELD, VA
 US 23237
 Contact: Yong Quan
 Yong.Quan@kaiseraluminum.com
 T: (804)743-6485
 F:

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)