OIL ANALYSIS REPORT

Sample Rating Trend

WATER

Area
RIG 274
Machine Id
R274-MP-03
Component
Gearbox
Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. Else, we recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. There is too much water present in this sample to perform a particle count.

Wear

Gear wear is indicated.

Contamination

Appearance is milky. There is a high concentration of water present in the oil. The high sodium (Na) level indicates the possible presence of salt water. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		KL0013160	---	---
Sample Date		Client Info		01 Dec 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	▲ 202	---	---
Chromium	ppm	ASTM D5185m	>10	1	---	---
Nickel	ppm	ASTM D5185m	>10	1	---	---
Titanium	ppm	ASTM D5185m		1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	▲ 36	---	---
Lead	ppm	ASTM D5185m	>50	0	---	---
Copper	ppm	ASTM D5185m	>200	24	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		<1	---	---

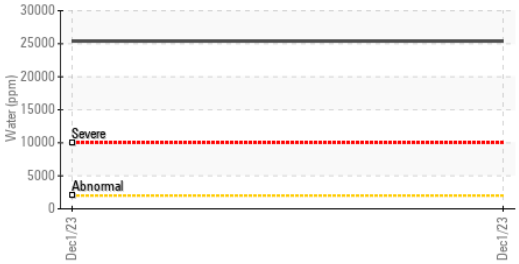
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		17	---	---
Barium	ppm	ASTM D5185m		12	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		29	---	---
Calcium	ppm	ASTM D5185m		249	---	---
Phosphorus	ppm	ASTM D5185m		169	---	---
Zinc	ppm	ASTM D5185m		30	---	---
Sulfur	ppm	ASTM D5185m		9536	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	▲ 120	---	---
Sodium	ppm	ASTM D5185m		▲ 1704	---	---
Potassium	ppm	ASTM D5185m	>20	18	---	---
Water	%	ASTM D6304	>0.2	⬢ 2.54	---	---
ppm Water	ppm	ASTM D6304	>2000	⬢ 25400	---	---

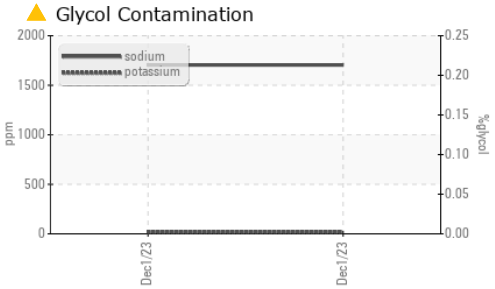
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.38	---	---

OIL ANALYSIS REPORT

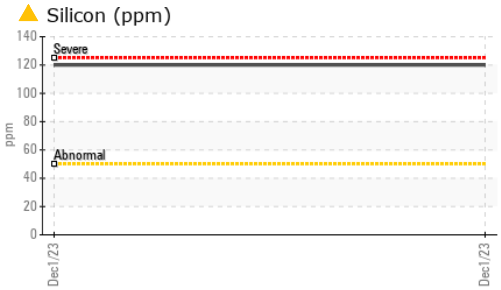
Water (KF)



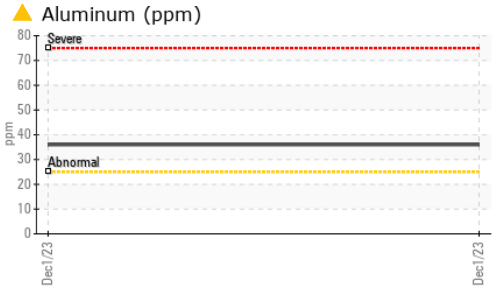
Glycol Contamination



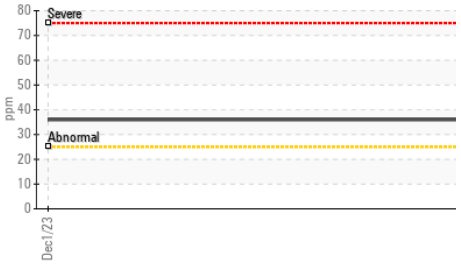
Silicon (ppm)



Aluminum (ppm)



Aluminum (ppm)



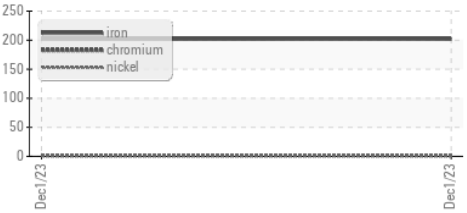
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**338**	---	---

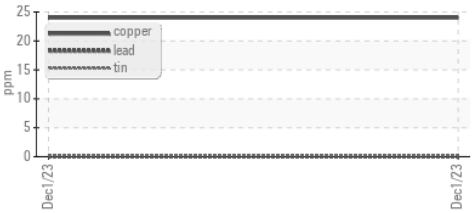
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

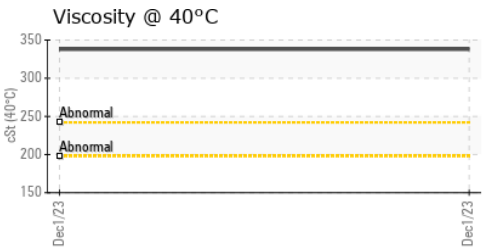
Ferrous Alloys



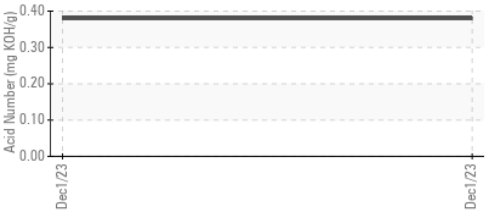
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013160 **Received** : 07 Dec 2023
Lab Number : 06027706 **Diagnosed** : 08 Dec 2023
Unique Number : 10777497 **Diagnostician** : Doug Bogart
Test Package : MOB 2 (Additional Tests: KF, PrtCount)

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)

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