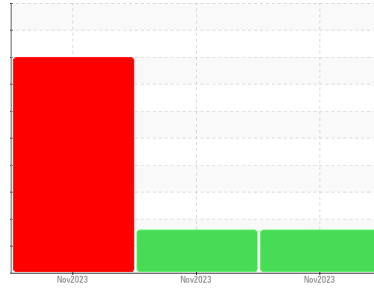




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area
RIG 244
 Machine Id
R244-MP-03
 Component
Gearbox
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check for the source of water entry. Resample at the next service interval to monitor. There is too much water present in this sample to perform a particle count.

Wear

All component wear rates are normal.

▲ Contamination

There is a moderate concentration of water present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KL0013026	KL0013135	KL0013153
Sample Date	Client Info		14 Nov 2023	09 Nov 2023	01 Nov 2023
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	ABNORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	75	76	▲ 122
Chromium	ppm	ASTM D5185m >10	<1	<1	<1
Nickel	ppm	ASTM D5185m >10	<1	1	<1
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	10	11	▲ 17
Lead	ppm	ASTM D5185m >50	0	0	0
Copper	ppm	ASTM D5185m >200	10	8	8
Tin	ppm	ASTM D5185m >10	0	<1	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	6	8	19
Barium	ppm	ASTM D5185m	23	37	48
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	14	16
Calcium	ppm	ASTM D5185m	65	79	97
Phosphorus	ppm	ASTM D5185m	124	151	163
Zinc	ppm	ASTM D5185m	7	11	44
Sulfur	ppm	ASTM D5185m	7643	8247	7586

CONTAMINANTS

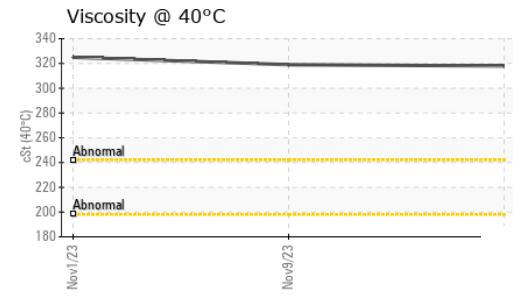
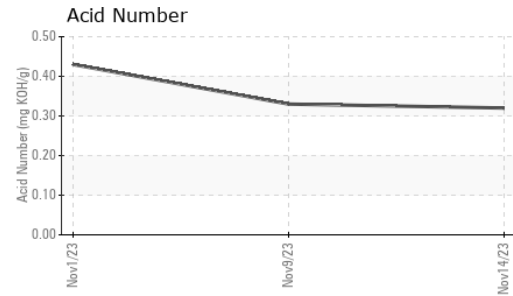
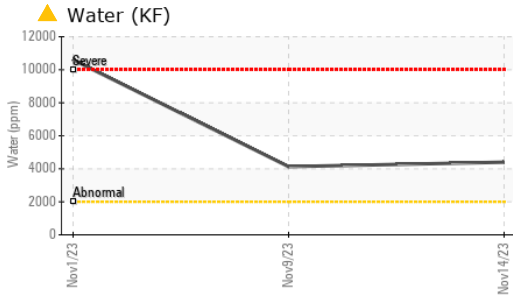
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	44	48	▲ 73
Sodium	ppm	ASTM D5185m	144	146	276
Potassium	ppm	ASTM D5185m >20	14	16	27
Water	%	ASTM D6304 >0.2	▲ 0.440	▲ 0.413	● 1.06
ppm Water	ppm	ASTM D6304 >2000	▲ 4400	▲ 4130	● 10600

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.32	0.33	0.43



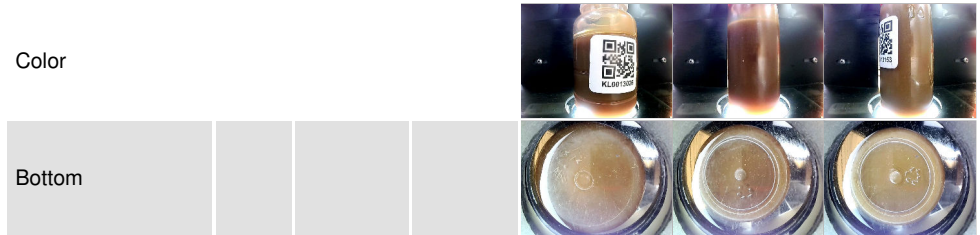
OIL ANALYSIS REPORT



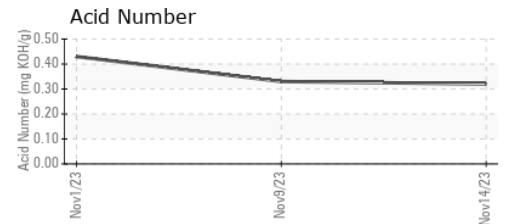
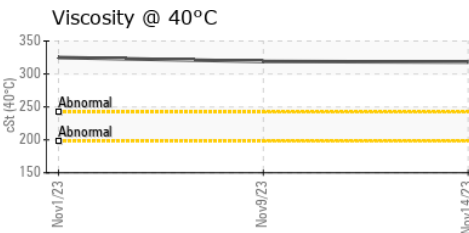
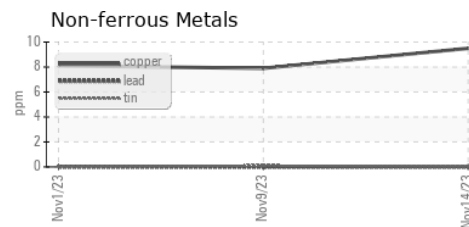
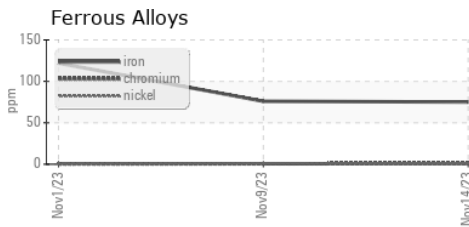
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	318	319	325

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0013026 **Received** : 20 Nov 2023
Lab Number : 06012385 **Diagnosed** : 22 Nov 2023
Unique Number : 10751529 **Diagnostician** : Don Baldrige
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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