

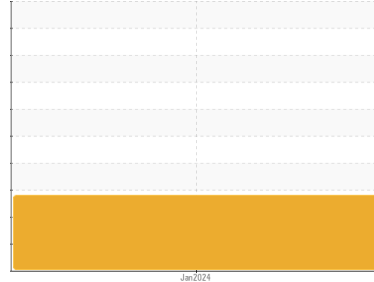


OIL ANALYSIS REPORT

Sample Rating Trend

WATER

Area
RIG 816
 Machine Id
R816-MP-02-AFT2
 Component
Gearbox
 Fluid
GEAR OIL ISO 320 (--- GAL)



DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. 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.

Wear

All component wear rates are normal.

Contamination

Appearance is unacceptable. There is a moderate concentration of water present in the oil. The high sodium (Na) level indicates the possible presence of salt water.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KL0011722	---	---
Sample Date	Client Info	07 Jan 2024	---	---
Machine Age	hrs Client Info	0	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>200	90	---	---
Chromium ppm ASTM D5185m	>10	<1	---	---
Nickel ppm ASTM D5185m	>10	0	---	---
Titanium ppm ASTM D5185m		0	---	---
Silver ppm ASTM D5185m		0	---	---
Aluminum ppm ASTM D5185m	>25	5	---	---
Lead ppm ASTM D5185m	>50	0	---	---
Copper ppm ASTM D5185m	>200	32	---	---
Tin ppm ASTM D5185m	>10	0	---	---
Vanadium ppm ASTM D5185m		0	---	---
Cadmium ppm ASTM D5185m		0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m	50	3	---	---
Barium ppm ASTM D5185m	15	0	---	---
Molybdenum ppm ASTM D5185m	15	0	---	---
Manganese ppm ASTM D5185m		0	---	---
Magnesium ppm ASTM D5185m	50	8	---	---
Calcium ppm ASTM D5185m	50	72	---	---
Phosphorus ppm ASTM D5185m	350	197	---	---
Zinc ppm ASTM D5185m	100	31	---	---
Sulfur ppm ASTM D5185m	12500	9214	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>50	31	---	---
Sodium ppm ASTM D5185m		▲ 1428	---	---
Potassium ppm ASTM D5185m	>20	11	---	---
Water % ASTM D6304	>0.2	▲ 0.677	---	---
ppm Water ppm ASTM D6304	>2000	▲ 6770	---	---

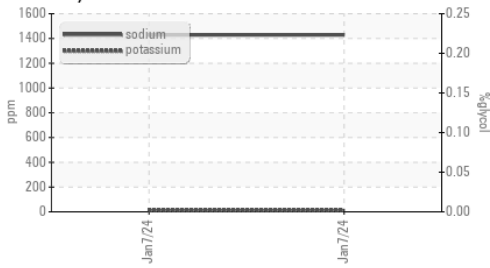
VISUAL

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	0.2%	---	---
Free Water scalar *Visual		NEG	---	---

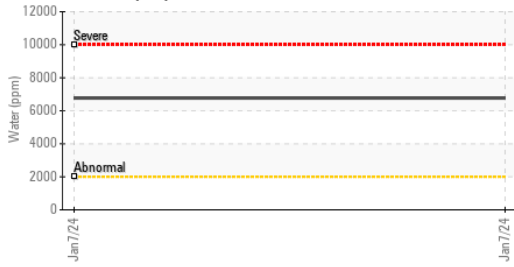


OIL ANALYSIS REPORT

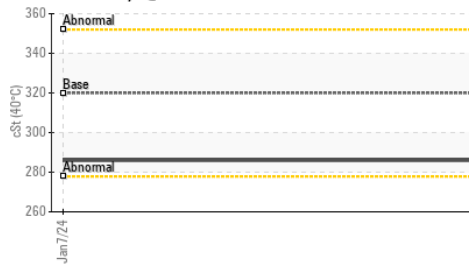
▲ Glycol Contamination



▲ Water (KF)



Viscosity @ 40°C



FLUID PROPERTIES

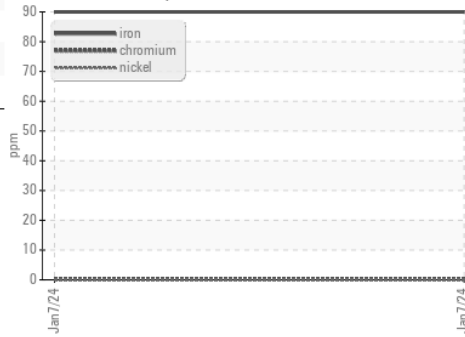
method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445 320	286	---	---

SAMPLE IMAGES

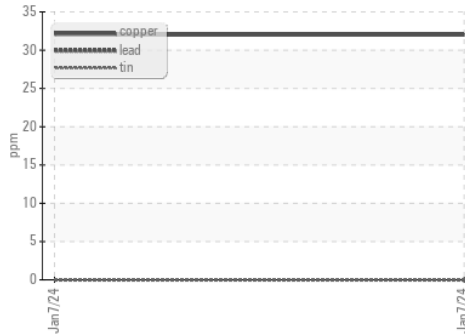
method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS

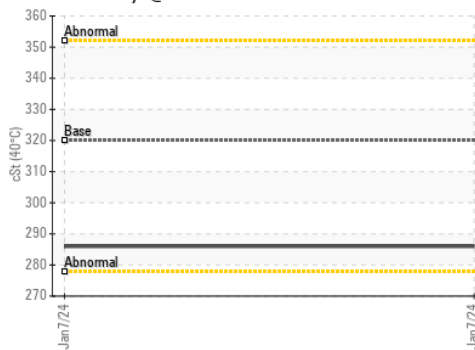
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0011722 **Recieved** : 10 Jan 2024
Lab Number : 06056983 **Diagnosed** : 11 Jan 2024
Unique Number : 10822932 **Diagnostician** : Doug Bogart
Test Package : FLEET (Additional Tests: KF)

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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)