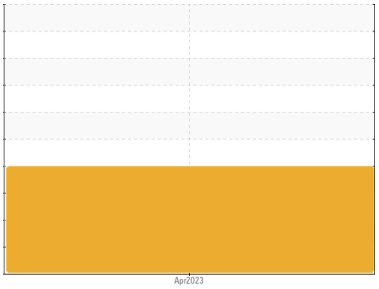
OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
LAND B LT2E2
Component
Hydraulic System
Fluid
PHILLIPS 66 SPINDLE OIL 10 (55 GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please submit a sample of the new (unused) QUAKERAL 350 oil to establish a baseline.

Wear

The copper level is abnormal. All other component wear rates are normal.

Contamination

Appearance is unacceptable There is a high concentration of water present in the oil. There is a moderate amount of visible silt present in the sample.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**KFS0003404**	---	---
Sample Date		Client Info		**05 Apr 2023**	---	---
Machine Age	wks	Client Info		**0**	---	---
Oil Age	wks	Client Info		**1**	---	---
Oil Changed		Client Info		**Changed**	---	---
Sample Status				**ABNORMAL**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**13**	---	---
Chromium	ppm	ASTM D5185m	>20	**0**	---	---
Nickel	ppm	ASTM D5185m	>20	**1**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>20	**0**	---	---
Lead	ppm	ASTM D5185m	>20	**4**	---	---
Copper	ppm	ASTM D5185m	>20	▲ **52**	---	---
Tin	ppm	ASTM D5185m	>20	**1**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

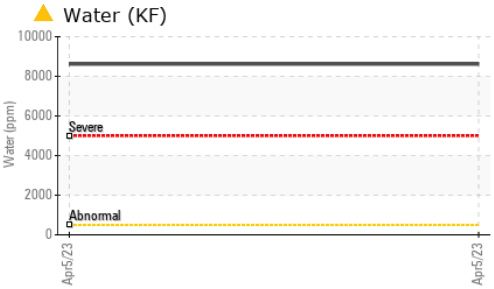
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**16**	---	---
Barium	ppm	ASTM D5185m		**1**	---	---
Molybdenum	ppm	ASTM D5185m		**0**	---	---
Manganese	ppm	ASTM D5185m		**4**	---	---
Magnesium	ppm	ASTM D5185m		**0**	---	---
Calcium	ppm	ASTM D5185m		**5**	---	---
Phosphorus	ppm	ASTM D5185m		**391**	---	---
Zinc	ppm	ASTM D5185m		**16**	---	---
Sulfur	ppm	ASTM D5185m		**74**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**2**	---	---
Sodium	ppm	ASTM D5185m		**14**	---	---
Potassium	ppm	ASTM D5185m	>20	**<1**	---	---
Water	%	ASTM D6304	>0.05	▲ **0.862**	---	---
ppm Water	ppm	ASTM D6304	>500	▲ **8620**	---	---

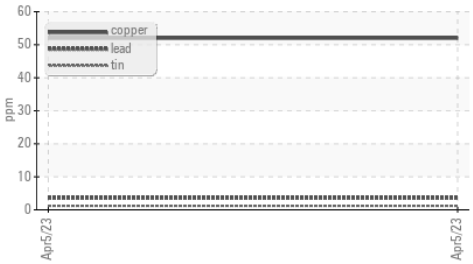
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.35**	---	---

OIL ANALYSIS REPORT

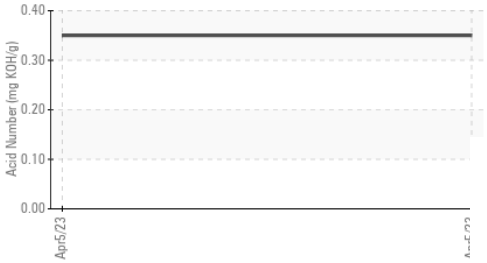
Water (KF)



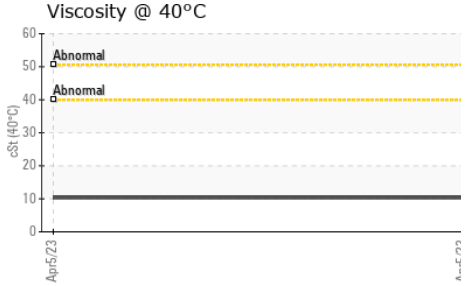
Non-ferrous Metals



Acid Number

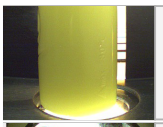
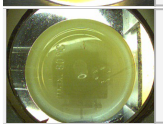


Viscosity @ 40°C



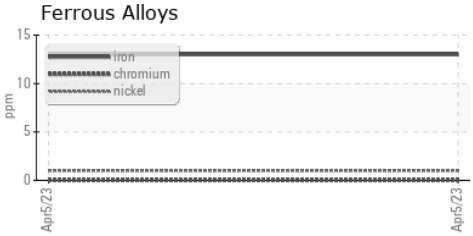
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	▲ **MODER**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	● **MILKY**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.05	▲ **0.2%**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**10.3**	---	---

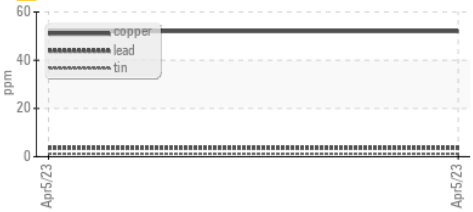
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

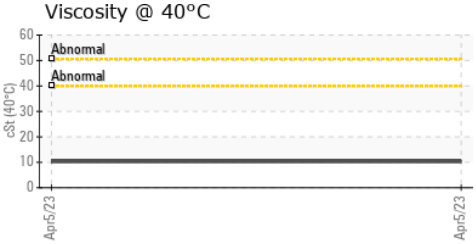
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0003404 **Received** : 10 Apr 2023
Lab Number : 05815323 **Tested** : 13 Apr 2023
Unique Number : 10418115 **Diagnosed** : 13 Apr 2023 - Angela Borella
Test Package : IND 2 (Additional Tests: KF)

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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