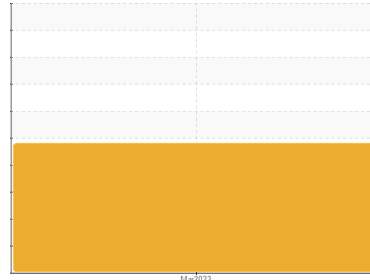




OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area
GUAY SON/OBREGON [CONHER]
 Machine Id
2007 KENWORTH T. SOSA Kenworth #62
 Component
Front Diesel Engine
 Fluid
Raloy Mbz C14 plus 15W40 (45 LTR)

DIAGNOSIS

▲ Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

▲ Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KL0011360	---	---
Sample Date	Client Info	03 Mar 2023	---	---
Machine Age	kms Client Info	1502567	---	---
Oil Age	kms Client Info	17000	---	---
Oil Changed	Client Info	Not Chngd	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	---	---
Water	WC Method >0.2	NEG	---	---
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	25	---	---
Chromium	ppm ASTM D5185m >20	2	---	---
Nickel	ppm ASTM D5185m >4	0	---	---
Titanium	ppm ASTM D5185m	<1	---	---
Silver	ppm ASTM D5185m >3	0	---	---
Aluminum	ppm ASTM D5185m >20	▲ 5	---	---
Lead	ppm ASTM D5185m >40	<1	---	---
Copper	ppm ASTM D5185m >330	3	---	---
Tin	ppm ASTM D5185m >15	<1	---	---
Vanadium	ppm ASTM D5185m	0	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	2	---	---
Barium	ppm ASTM D5185m	2	---	---
Molybdenum	ppm ASTM D5185m	<1	---	---
Manganese	ppm ASTM D5185m	<1	---	---
Magnesium	ppm ASTM D5185m	18	---	---
Calcium	ppm ASTM D5185m	3624	---	---
Phosphorus	ppm ASTM D5185m	952	---	---
Zinc	ppm ASTM D5185m	1138	---	---
Sulfur	ppm ASTM D5185m	3793	---	---

CONTAMINANTS

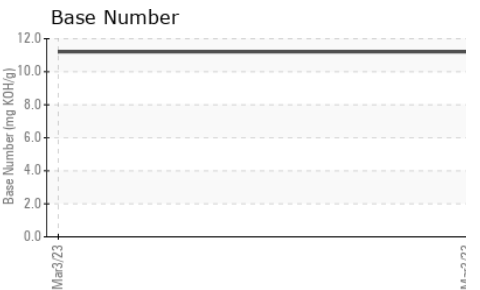
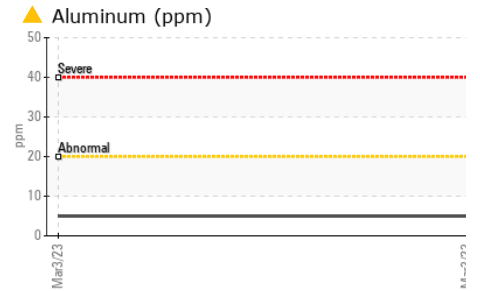
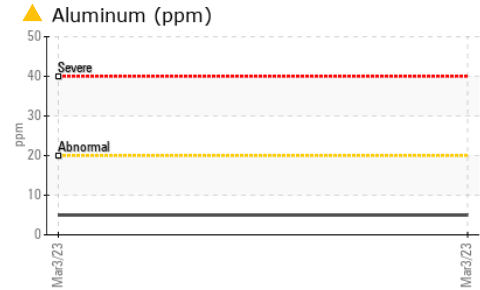
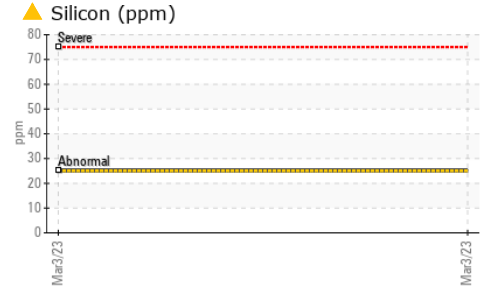
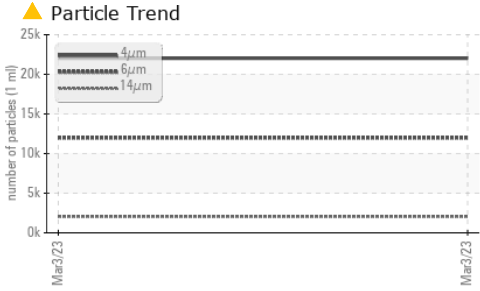
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	▲ 25	---	---
Sodium	ppm ASTM D5185m	7	---	---
Potassium	ppm ASTM D5185m >20	11	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.1	---	---
Nitration	Abs/cm *ASTM D7624 >20	6.3	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	17.1	---	---



OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		22019	---	---
Particles >6µm	ASTM D7647	>5000	▲ 11995	---	---
Particles >14µm	ASTM D7647	>640	▲ 2041	---	---
Particles >21µm	ASTM D7647	>160	▲ 688	---	---
Particles >38µm	ASTM D7647	>40	▲ 106	---	---
Particles >71µm	ASTM D7647	>10	▲ 11	---	---
Oil Cleanliness	ISO 4406 (c)	>19/16	▲ 21/18	---	---

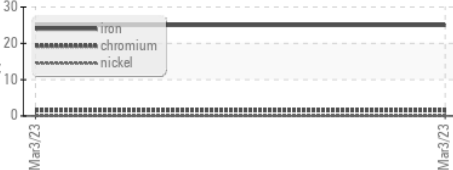
FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	9.5	---	---
Base Number (BN)	mg KOH/g ASTM D2896		11.21	---	---

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 @ 100°C	cSt ASTM D445		13.0	---	---

GRAPHS

Ferrous Alloys



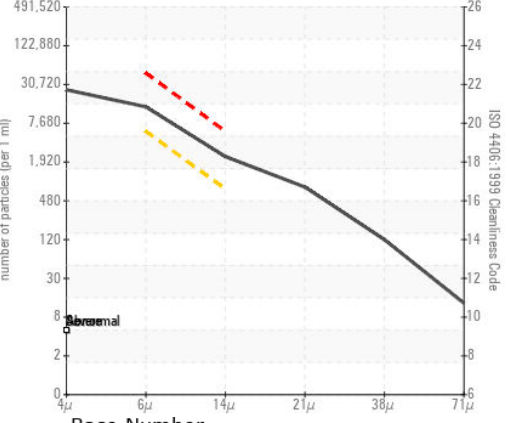
Non-ferrous Metals



Viscosity @ 100°C



Particle Count



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KL0011360 **Received** : 13 Mar 2023
Lab Number : **05789945** **Tested** : 15 Mar 2023
Unique Number : 10374616 **Diagnosed** : 15 Mar 2023 - Doug Bogart
Test Package : MOB 2 (Additional Tests: PrtCount)

CONOR
 JUAREZ 348
 HERMOSILLO,
 MX 83140
 Contact: EDUARDO GARCIA
 egarcia.comsa@gmail.com
 T: (526)622-1581 x:81
 F: x:

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)