

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KENWORTH 397609
Component
Diesel Engine
Fluid
TULCO LUBSOIL CK-4 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		TO10003480	---	---
Sample Date	Client Info		09 Apr 2024	---	---
Machine Age	hrs	Client Info	7204	---	---
Oil Age	hrs	Client Info	1026	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	42	---	---
Chromium	ppm	ASTM D5185m >20	1	---	---
Nickel	ppm	ASTM D5185m >2	0	---	---
Titanium	ppm	ASTM D5185m >2	0	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >20	8	---	---
Lead	ppm	ASTM D5185m >40	4	---	---
Copper	ppm	ASTM D5185m >330	2	---	---
Tin	ppm	ASTM D5185m >15	1	---	---
Vanadium	ppm	ASTM D5185m	<1	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	14	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m 65	75	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 1060	671	---	---
Calcium	ppm	ASTM D5185m 1140	1792	---	---
Phosphorus	ppm	ASTM D5185m 1170	1099	---	---
Zinc	ppm	ASTM D5185m 1230	1287	---	---
Sulfur	ppm	ASTM D5185m 3130	4351	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	---	---
Sodium	ppm	ASTM D5185m	6	---	---
Potassium	ppm	ASTM D5185m >20	2	---	---

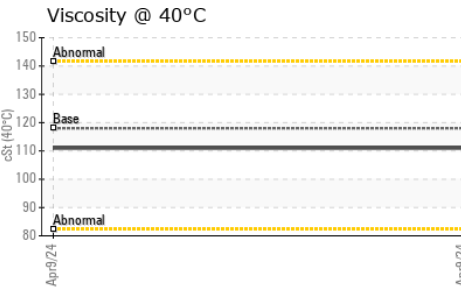
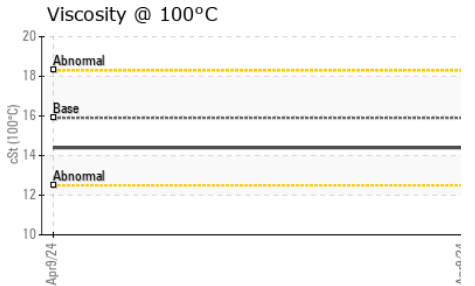
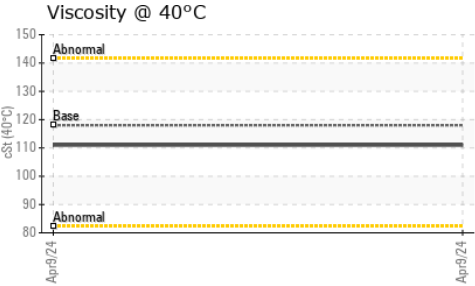
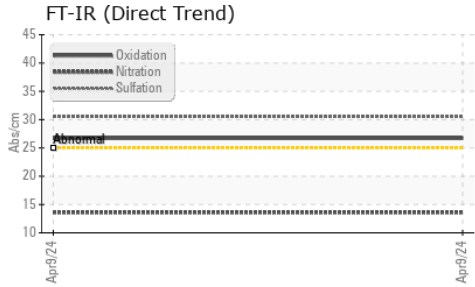
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	0.7	---	---
Nitration	Abs/cm	*ASTM D7624 >20	13.6	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	30.5	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	26.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.8	5.34	---	---

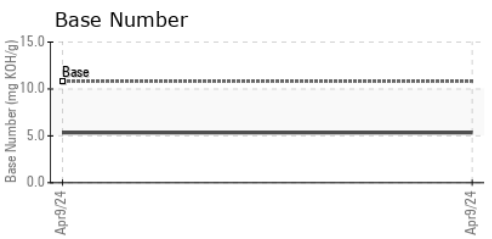
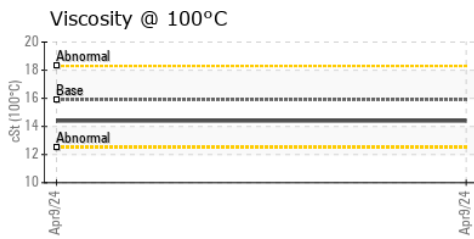
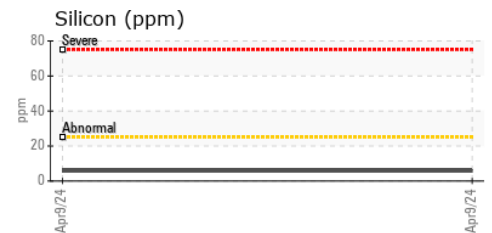
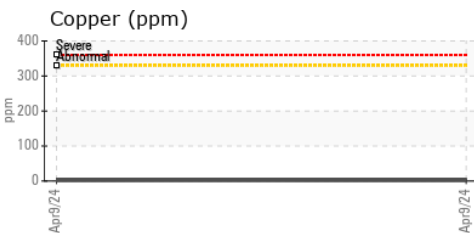
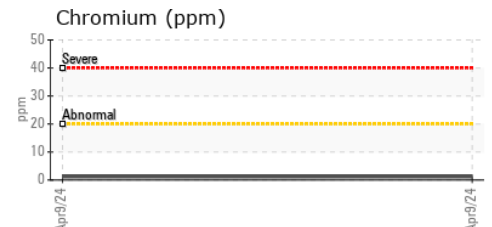
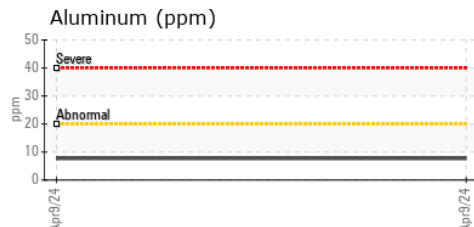
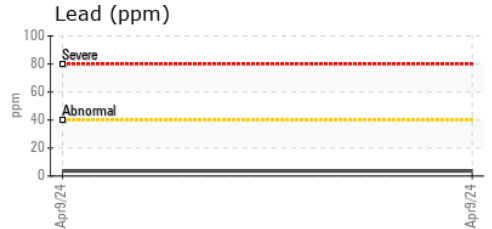
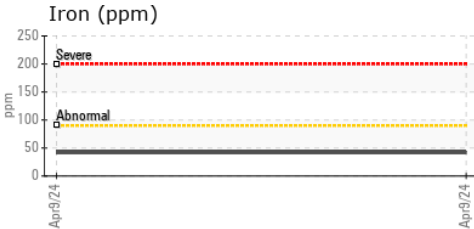
OIL ANALYSIS REPORT



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 @ 40°C	cSt	ASTM D445	118	111	---
Visc @ 100°C	cSt	ASTM D445	15.9	14.4	---
Viscosity Index (VI)	Scale	ASTM D2270	143	132	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10003480 **Received** : 19 Apr 2024
Lab Number : 06154665 **Tested** : 23 Apr 2024
Unique Number : 10990088 **Diagnosed** : 23 Apr 2024 - Don Baldrige
Test Package : MOB 2 (Additional Tests: KV40, VI)

KLX ENERGY SERVICES
 5104 ESTES PKWY
 LONGVIEW, TX
 US 75603
 Contact: DUSTIN TREST
 dustin.trest@klx.com

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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F: