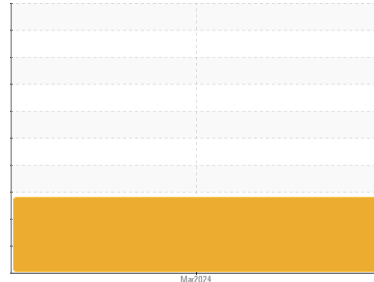


OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
FORD E20293

Component
Diesel Engine

Fluid
TULCO LUBSOIL CK-4 15W40 (13 QTS)

DIAGNOSIS

▲ Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

▲ Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		TO10003472	---	---
Sample Date	Client Info		15 Mar 2024	---	---
Machine Age	hrs	Client Info	3735	---	---
Oil Age	hrs	Client Info	479	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
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	1	---	---
Nickel	ppm	ASTM D5185m >2	0	---	---
Titanium	ppm	ASTM D5185m >2	0	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >25	<1	---	---
Lead	ppm	ASTM D5185m >40	0	---	---
Copper	ppm	ASTM D5185m >330	<1	---	---
Tin	ppm	ASTM D5185m >15	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	4	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m 65	54	---	---
Manganese	ppm	ASTM D5185m	0	---	---
Magnesium	ppm	ASTM D5185m 1060	711	---	---
Calcium	ppm	ASTM D5185m 1140	1139	---	---
Phosphorus	ppm	ASTM D5185m 1170	908	---	---
Zinc	ppm	ASTM D5185m 1230	1077	---	---
Sulfur	ppm	ASTM D5185m 3130	3511	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	---	---
Sodium	ppm	ASTM D5185m	0	---	---
Potassium	ppm	ASTM D5185m >20	0	---	---
Fuel	%	ASTM D3524 >5	▲ 13.8	---	---

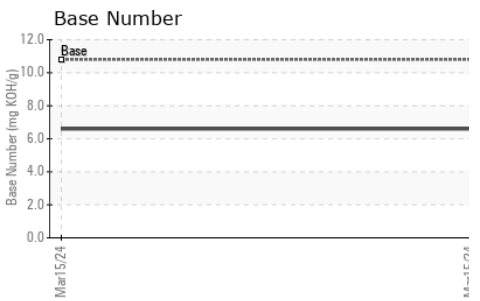
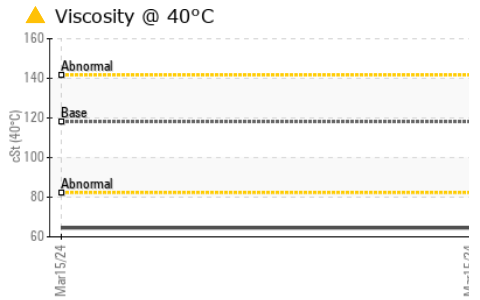
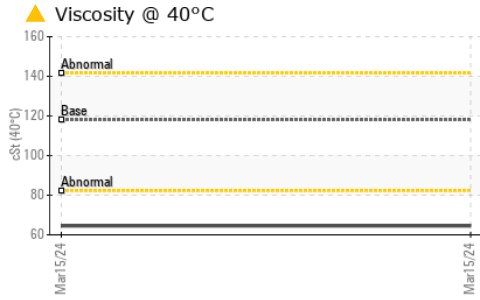
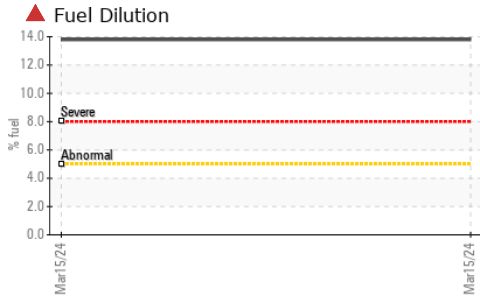
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624 >20	13.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	30.4	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	40.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.8	6.60	---	---

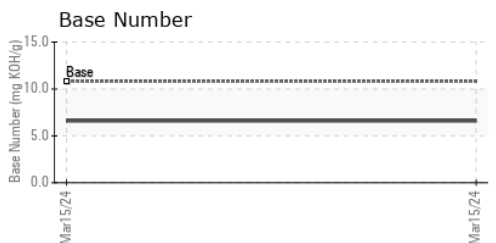
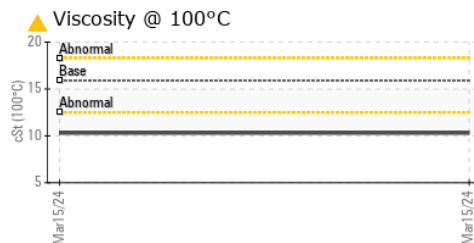
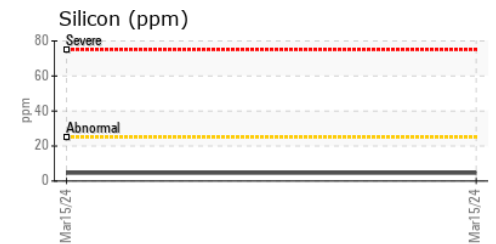
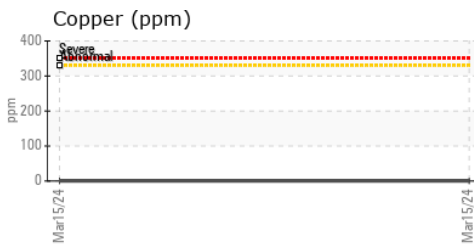
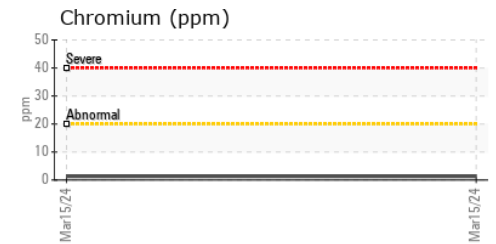
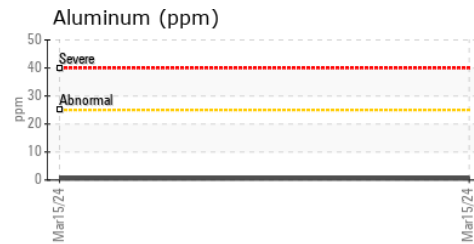
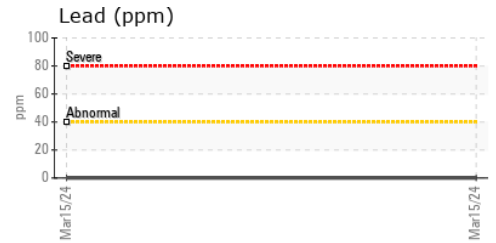
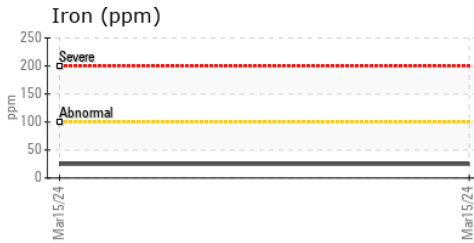
OIL ANALYSIS REPORT



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	▲ 64.52	---
Visc @ 100°C	cSt	ASTM D445	15.9	▲ 10.3	---
Viscosity Index (VI)	Scale	ASTM D2270	143	146	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO10003472 **Received** : 20 Mar 2024
Lab Number : 06124377 **Tested** : 27 Mar 2024
Unique Number : 10938528 **Diagnosed** : 27 Mar 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, KV40, PercentFuel, 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)

T:
F: