



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 01C
 Component
Diesel Engine
 Fluid
TRC PRO-SPEC V SYN BLEND 15W40 (44 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR02639558	TR02513750	---
Sample Date		Client Info		19 Mar 2024	02 Sep 2022	---
Machine Age	hrs	Client Info		7209	5486	---
Oil Age	hrs	Client Info		1342	1000	---
Filter Age	hrs	Client Info		1342	0	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	39	29	---
Chromium	ppm	ASTM D5185(m)	>20	3	2	---
Nickel	ppm	ASTM D5185(m)	>4	0	0	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>3	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	7	9	---
Lead	ppm	ASTM D5185(m)	>40	5	6	---
Copper	ppm	ASTM D5185(m)	>330	2	2	---
Tin	ppm	ASTM D5185(m)	>15	<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

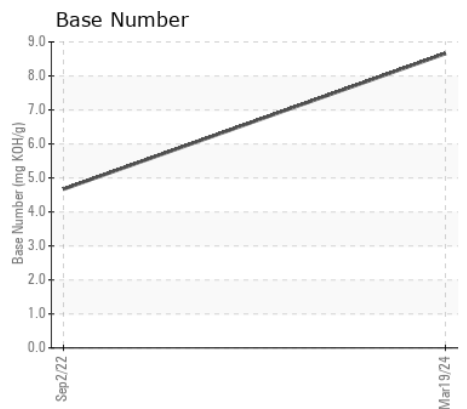
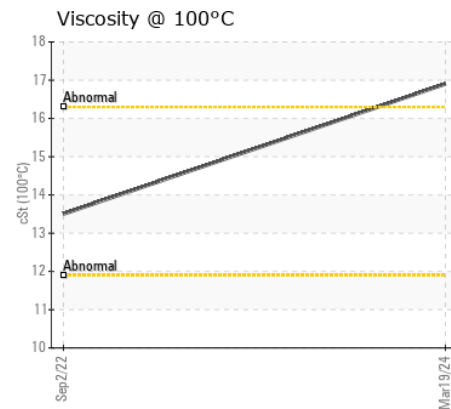
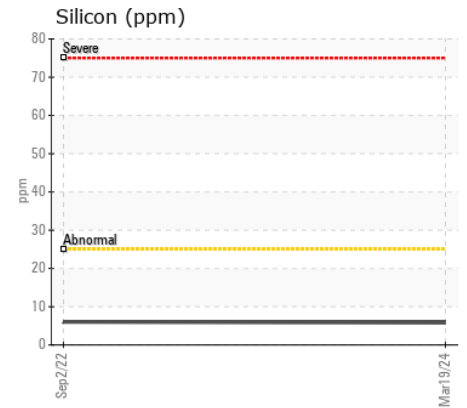
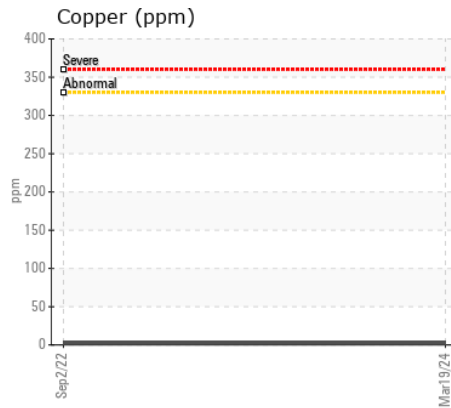
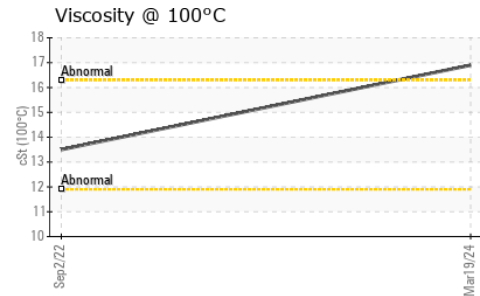
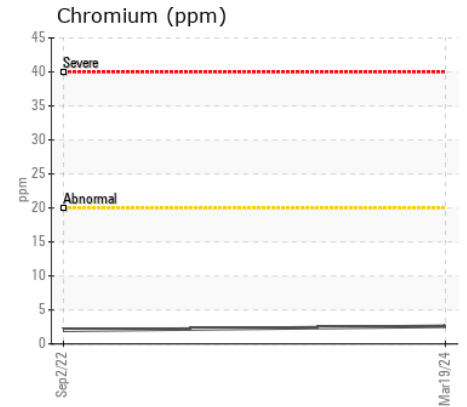
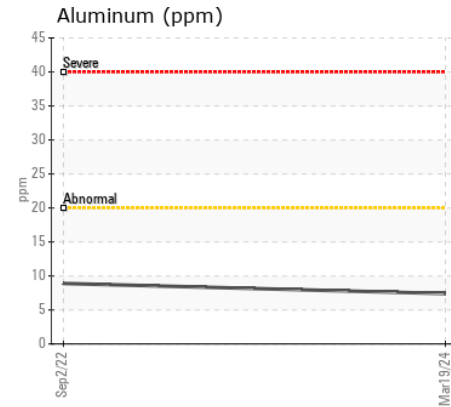
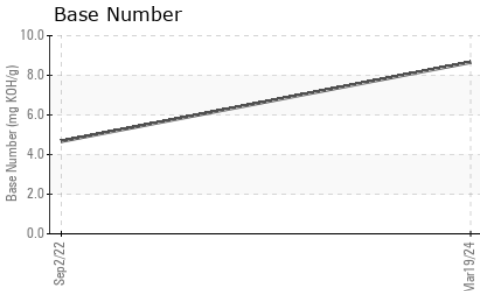
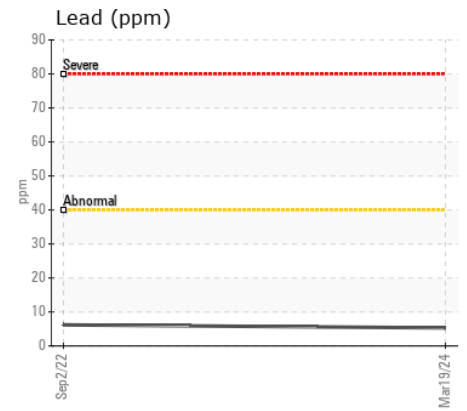
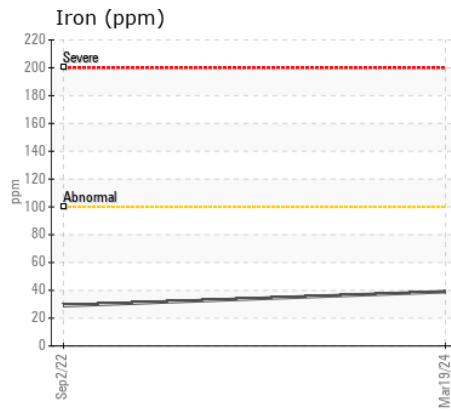
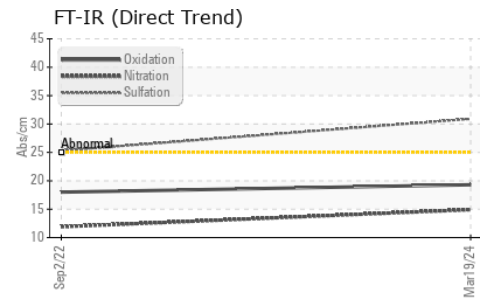
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	6	---
Potassium	ppm	ASTM D5185(m)	>20	18	20	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>3	0.5	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	14.9	11.9	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	30.9	25.3	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Viscosity of sample indicates oil is within SAE 50 range, advise investigate. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		4	7	---
Boron	ppm	ASTM D5185(m)		15	15	---
Barium	ppm	ASTM D5185(m)		0	0	---
Molybdenum	ppm	ASTM D5185(m)		11	76	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)		43	147	---
Calcium	ppm	ASTM D5185(m)		4129	2131	---
Phosphorus	ppm	ASTM D5185(m)		930	993	---
Zinc	ppm	ASTM D5185(m)		1079	1111	---
Sulfur	ppm	ASTM D5185(m)		3507	3087	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.3	18.0	---
Base Number (BN)	mg KOH/g	ASTM D2896*		8.66	4.67	---
Visc @ 100°C	cSt	ASTM D7279(m)		16.9	13.5	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : TR02639558 **Received** : 04 Jun 2024
Lab Number : 02639558 **Tested** : 05 Jun 2024
Unique Number : 5788720 **Diagnosed** : 06 Jun 2024 - Kevin Marson
Test Package : MOB 2

3-T LIFT
 217 LAKE DRIVE E
 KESWICK, ON
 CA L4P 3E9
 Contact: Travis

To discuss this sample report, contact Customer Service at 1-800-827-0711.

* - 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: