TRAAP
Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH T880 61 (S/N 1YKZP4TX6J5203445)
Component
Diesel Engine
Fluid
TRC MOLY XL PRO-SPEC IV XP 15W40 (11 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

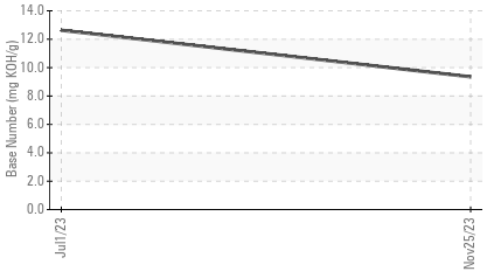
There is no indication of any contamination in the oil.

FLUID CONDITION

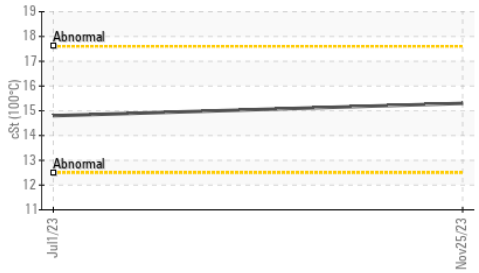
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06038758	TR05893941	---
Sample Date		Client Info		25 Nov 2023	01 Jul 2023	---
Machine Age	mls	Client Info		260472	250472	---
Oil Age	mls	Client Info		20000	10000	---
Filter Age	mls	Client Info		10000	10000	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>100	26	12	---
Chromium	ppm	ASTM D5185m	>20	1	<1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	3	1	---
Lead	ppm	ASTM D5185m	>40	7	<1	---
Copper	ppm	ASTM D5185m	>330	<1	<1	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	6	6	---
Potassium	ppm	ASTM D5185m	>20	<1	4	---
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	13.8	10.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.3	22.5	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m		5	0	---
Boron	ppm	ASTM D5185m		12	12	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		132	136	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		104	99	---
Calcium	ppm	ASTM D5185m		3938	3936	---
Phosphorus	ppm	ASTM D5185m		790	823	---
Zinc	ppm	ASTM D5185m		1039	994	---
Sulfur	ppm	ASTM D5185m		3928	3590	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	15.1	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.35	12.63	---
Visc @ 100°C	cSt	ASTM D445		15.3	14.8	---

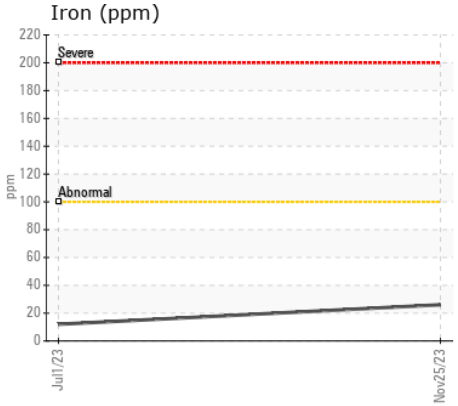
Base Number



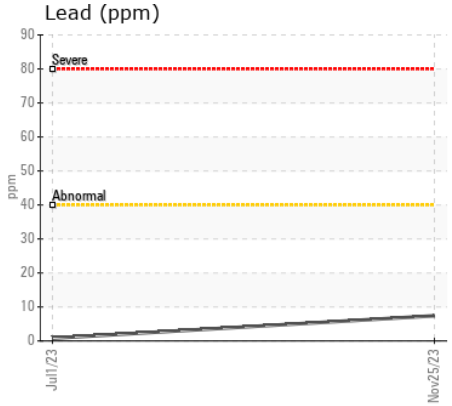
Viscosity @ 100°C



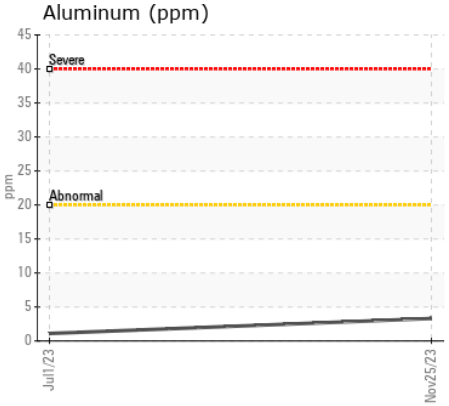
Iron (ppm)



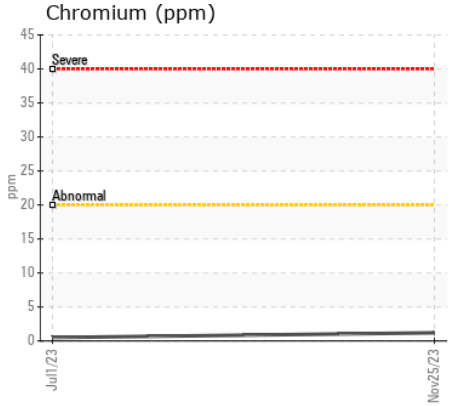
Lead (ppm)



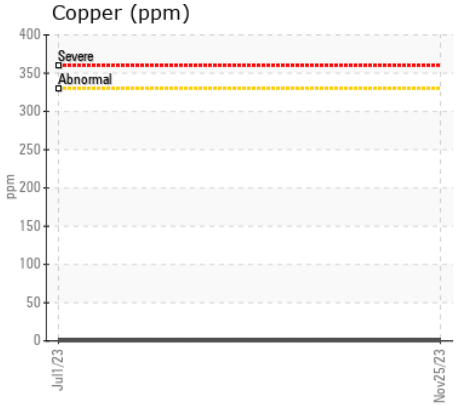
Aluminum (ppm)



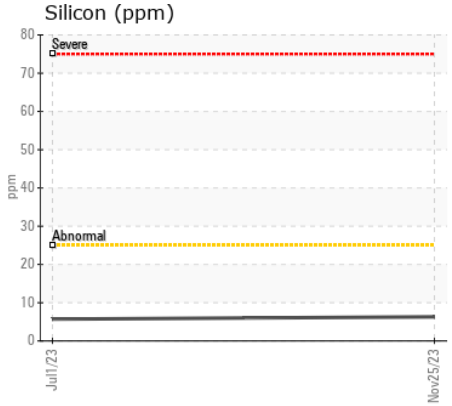
Chromium (ppm)



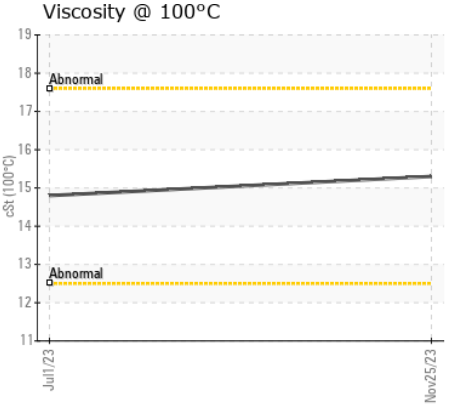
Copper (ppm)



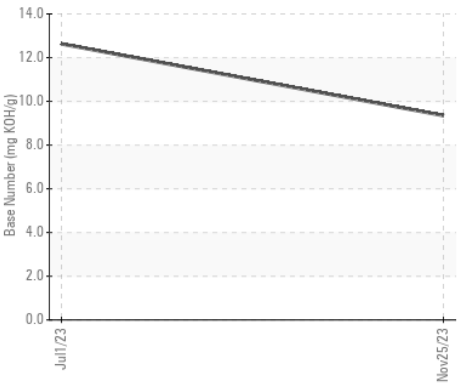
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06038758
Lab Number : 06038758
Unique Number : 10793987
Test Package : MOB 2

Received : 18 Dec 2023
Tested : 20 Dec 2023
Diagnosed : 20 Dec 2023 - Wes Davis

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)

RUNDELL INC
2465 STATE HWY 38
DRAIN, OR
US 97435
Contact: BOB RUNDELL
bobrundell@rundellinc.com
T:
F: