CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
KENWORTH T880 T-859 (S/N 1XK2D40X7KJ371027)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

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

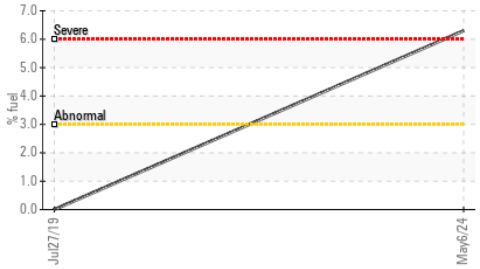
There is a high amount of fuel present in the oil.

FLUID CONDITION

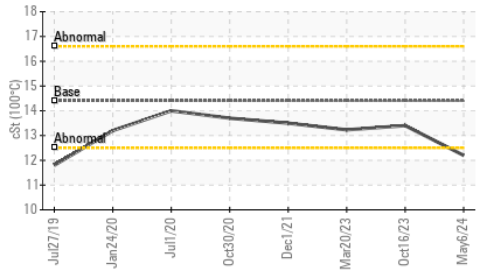
Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0934687	WC0865156	WC0546586
Sample Date		Client Info		06 May 2024	16 Oct 2023	20 Mar 2023
Machine Age	mls	Client Info		303419	279423	257688
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>165	64	33	32
Chromium	ppm	ASTM D5185m	>5	4	1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	1	0	0
Aluminum	ppm	ASTM D5185m	>20	9	5	2
Lead	ppm	ASTM D5185m	>150	5	4	5
Copper	ppm	ASTM D5185m	>90	3	2	2
Tin	ppm	ASTM D5185m	>5	2	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>35	10	6	6
Potassium	ppm	ASTM D5185m	>20	5	4	5
Fuel	%	ASTM D3524	>3.0	▲ 6.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	1.3	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	12.3	10.6	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.9	26.4	27.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>158	5	2	<1
Boron	ppm	ASTM D5185m	250	2	0	<1
Barium	ppm	ASTM D5185m	10	<1	0	0
Molybdenum	ppm	ASTM D5185m	100	4	2	3
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	450	50	54	45
Calcium	ppm	ASTM D5185m	3000	2292	2328	2694
Phosphorus	ppm	ASTM D5185m	1150	903	755	989
Zinc	ppm	ASTM D5185m	1350	1080	1021	1208
Sulfur	ppm	ASTM D5185m	4250	3558	3605	3905
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.8	17.9	18.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	4.5	4.7	4.1
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.2	13.4	13.23

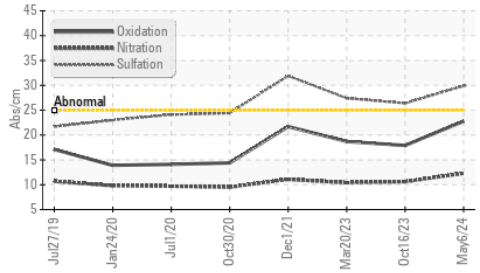
Fuel Dilution



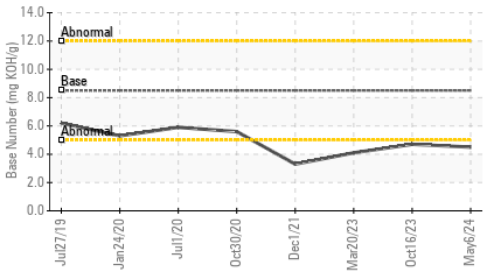
Viscosity @ 100°C



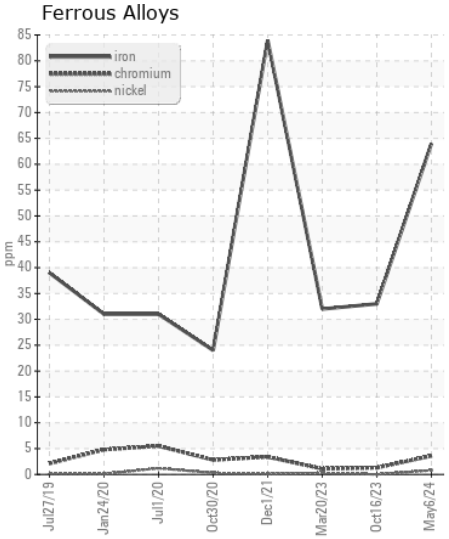
FT-IR (Direct Trend)



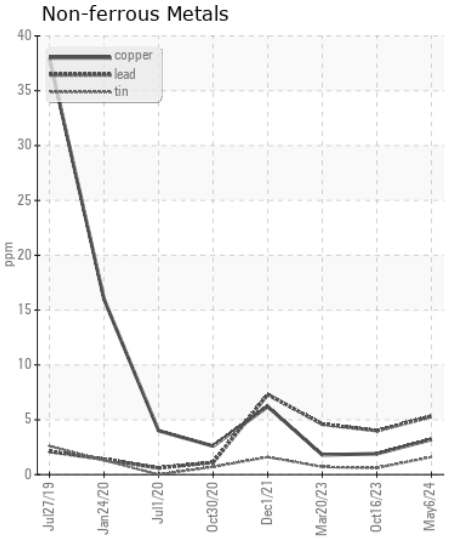
Base Number



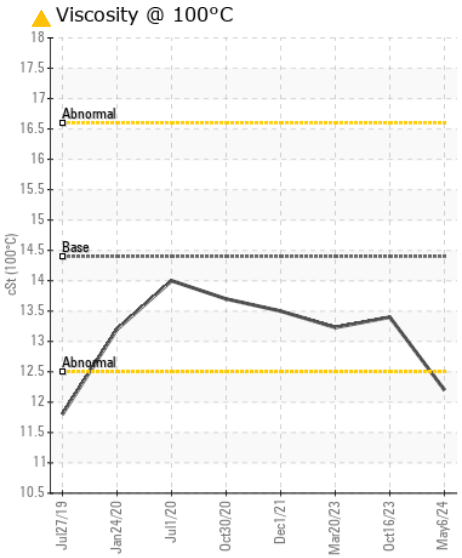
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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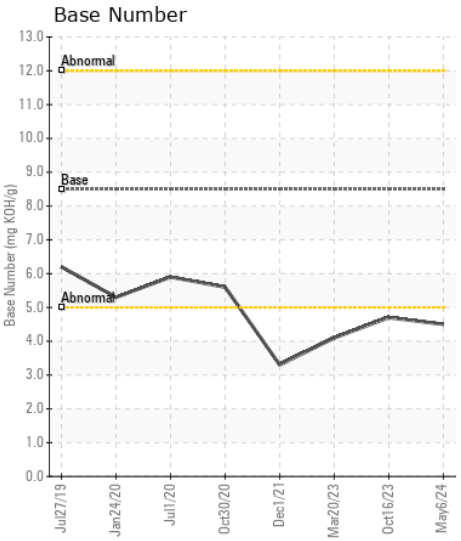

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934687
Lab Number : 06192037
Unique Number : 11048789
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 28 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Sean Felton

EAI EQUIPMENT A DIIV OF PLEASANT CONSTRUCTION INC
24024 FREDERICK ROAD
CLARKSBURG, MD
US 20871
Contact: Service Manager

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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