



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH 3888
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0882068	WC0515341	WC0515304
Sample Date		Client Info		11 Apr 2024	10 Jun 2021	11 Mar 2021
Machine Age	mls	Client Info		0	378313	359952
Oil Age	mls	Client Info		0	37856	19495
Filter Age	mls	Client Info		0	37856	19495
Oil Changed		Client Info		N/A	Changed	Not Changd
Filter Changed		Client Info		N/A	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	15	15	10
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	0	3
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	9	2	2
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

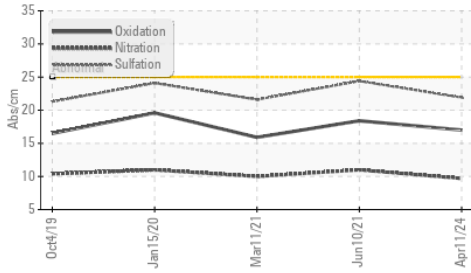
Silicon	ppm	ASTM D5185m	>25	7	14	13
Potassium	ppm	ASTM D5185m	>20	6	8	10
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.7	11	10
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	24.4	21.6
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

FLUID CONDITION

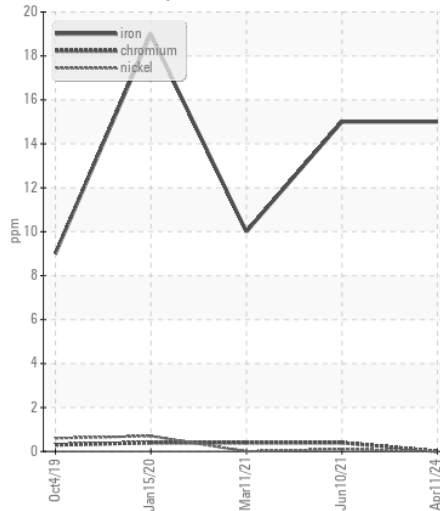
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	3	3
Boron	ppm	ASTM D5185m		27	26	40
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	6	5
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		725	622	668
Calcium	ppm	ASTM D5185m	2900	1333	1432	1462
Phosphorus	ppm	ASTM D5185m	1100	738	736	752
Zinc	ppm	ASTM D5185m	1200	802	828	790
Sulfur	ppm	ASTM D5185m	4000	3397	2572	2462
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	18.4	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.8	6.6	7.5
Visc @ 100°C	cSt	ASTM D445	11.9	11.6	11.8	11.8

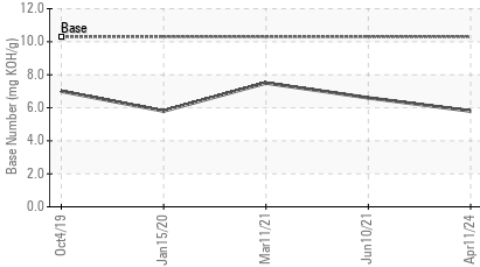
FT-IR (Direct Trend)



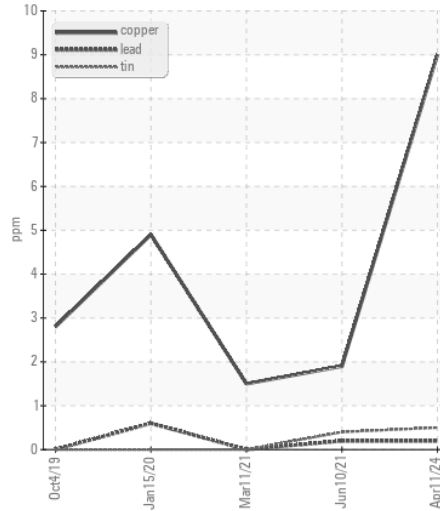
Ferrous Alloys



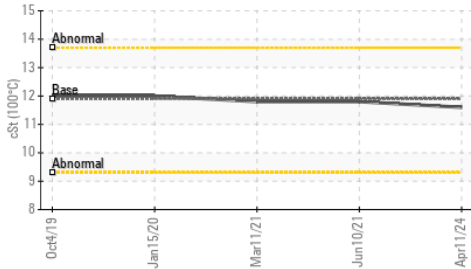
Base Number



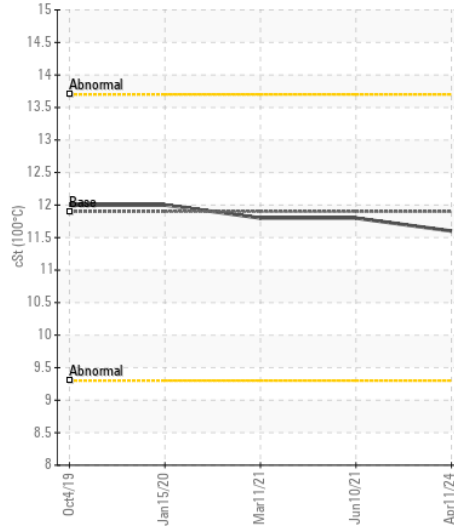
Non-ferrous Metals



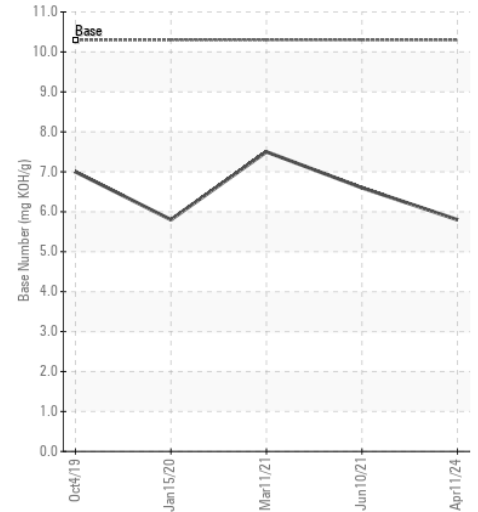
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0882068

Lab Number : 06153694

Unique Number : 10983772

Test Package : FLEET

Received : 18 Apr 2024

Tested : 19 Apr 2024

Diagnosed : 19 Apr 2024 - Wes Davis

LTI/MILKY WAY - SEATTLE

6110 WEST MARGINAL WAY SW

SEATTLE, WA

US 98106

Contact: TIM TURNBULL

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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)