



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
KENWORTH 3012
Component
Diesel Engine
Fluid
CHEVRON SUPREME MOTOR OIL 10W40 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0906939	WC0663157	WC0816612
Sample Date		Client Info		17 Feb 2024	02 Oct 2023	01 Sep 2023
Machine Age	mls	Client Info		384104	363286	352222
Oil Age	mls	Client Info		363285	46623	35569
Filter Age	mls	Client Info		20819	46623	35569
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	23	98	94
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	2	3
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	0	7
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	6	19	26
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

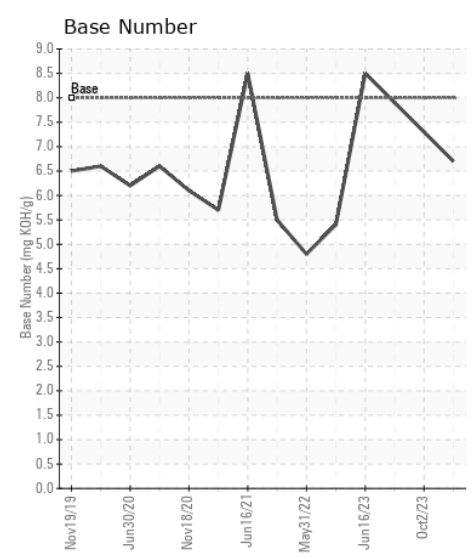
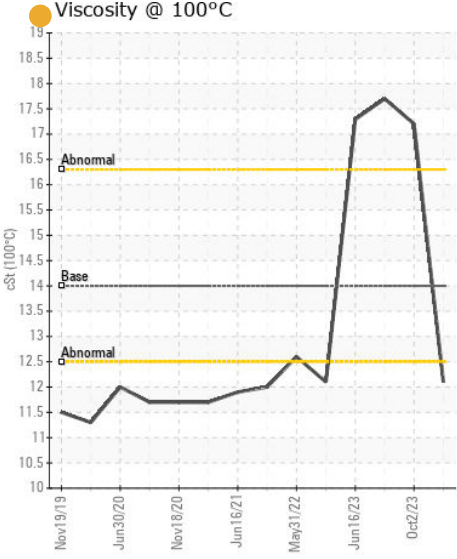
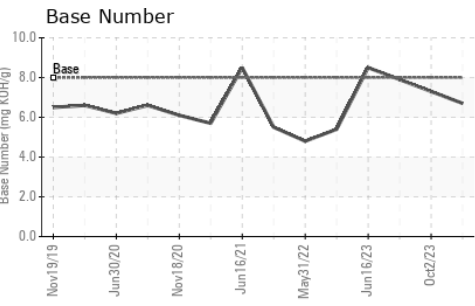
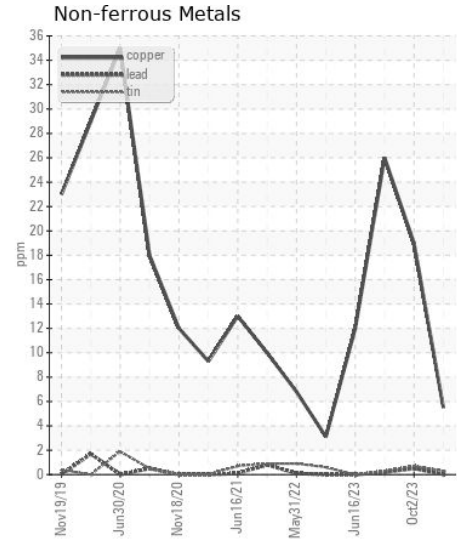
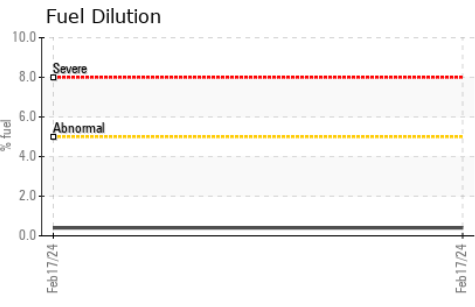
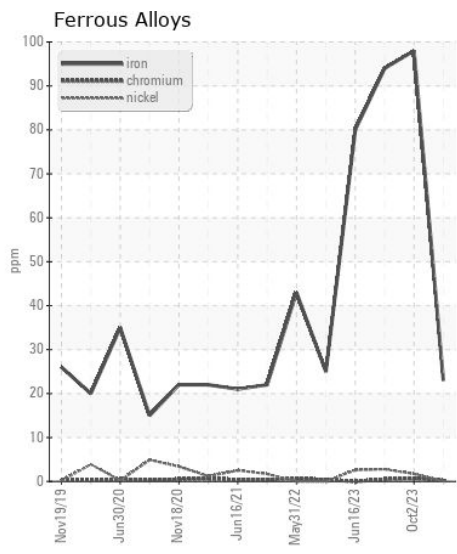
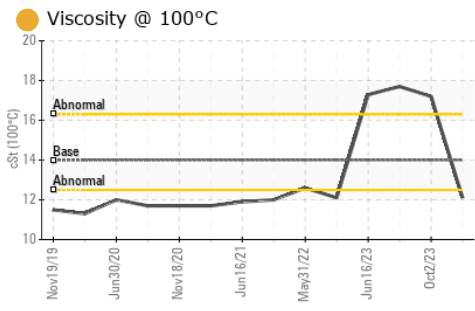
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	8	7
Potassium	ppm	ASTM D5185m	>20	6	5	5
Fuel	%	ASTM D3524	>5	0.4	<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	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.1	7.0	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	26.5	25.1
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		4	3	5
Boron	ppm	ASTM D5185m		39	20	20
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		4	2	1
Manganese	ppm	ASTM D5185m		<1	2	2
Magnesium	ppm	ASTM D5185m		666	● 347	● 335
Calcium	ppm	ASTM D5185m		1229	● 642	● 622
Phosphorus	ppm	ASTM D5185m	990	747	1048	1095
Zinc	ppm	ASTM D5185m	1100	692	● 428	● 396
Sulfur	ppm	ASTM D5185m		2792	3970	4852
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	17.4	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.0	6.7	7.3	7.9
Visc @ 100°C	cSt	ASTM D445	14.0	● 12.1	● 17.2	● 17.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0906939 **Received** : 26 Feb 2024
Lab Number : 06099571 **Tested** : 28 Feb 2024
Unique Number : 10897801 **Diagnosed** : 28 Feb 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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Certificate L2367
 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)