



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
KENWORTH 3108
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 10W30 (40 QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0906878	WC0863336	WC0863309
Sample Date		Client Info		22 Jun 2024	30 Dec 2023	08 Dec 2023
Machine Age	mls	Client Info		498259	431939	421511
Oil Age	mls	Client Info		38675	421291	371825
Filter Age	mls	Client Info		38675	10648	49686
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	22	5	4
Chromium	ppm	ASTM D5185m	>20	1	<1	0
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	11	3	3
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	4	<1	0
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Sodium and/or potassium levels are high. Test for glycol is negative.

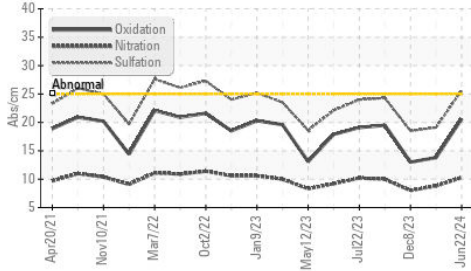
Silicon	ppm	ASTM D5185m	>25	8	4	5
Potassium	ppm	ASTM D5185m	>20	12	10	8
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.3	8.8	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.6	19.1	18.5
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

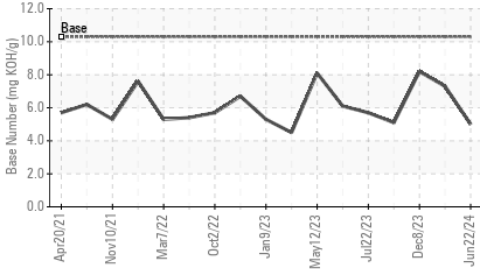
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		91	39	39
Boron	ppm	ASTM D5185m		20	55	79
Barium	ppm	ASTM D5185m		<1	10	0
Molybdenum	ppm	ASTM D5185m		17	6	6
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		763	676	757
Calcium	ppm	ASTM D5185m	2900	1519	1269	1306
Phosphorus	ppm	ASTM D5185m	1100	709	777	734
Zinc	ppm	ASTM D5185m	1200	877	768	829
Sulfur	ppm	ASTM D5185m	4000	2630	3512	3046
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6	13.8	13.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.0	7.3	8.2
Visc @ 100°C	cSt	ASTM D445	11.9	11.8	11.4	11.3

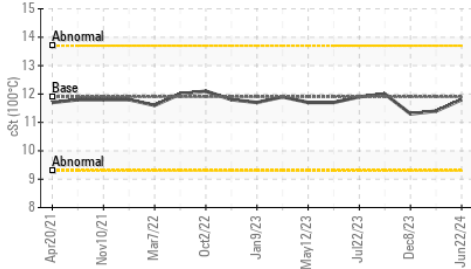
FT-IR (Direct Trend)



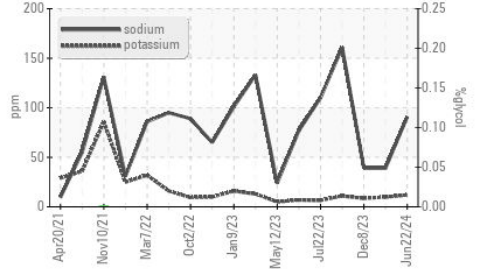
Base Number



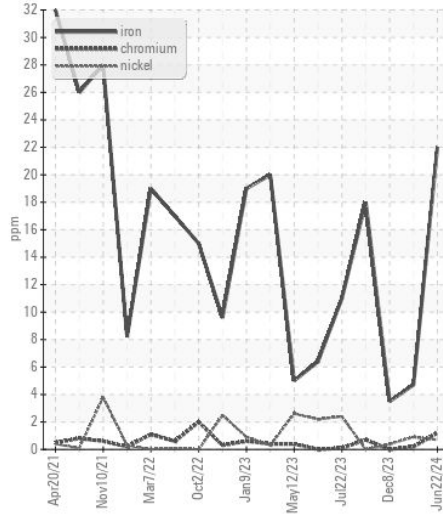
Viscosity @ 100°C



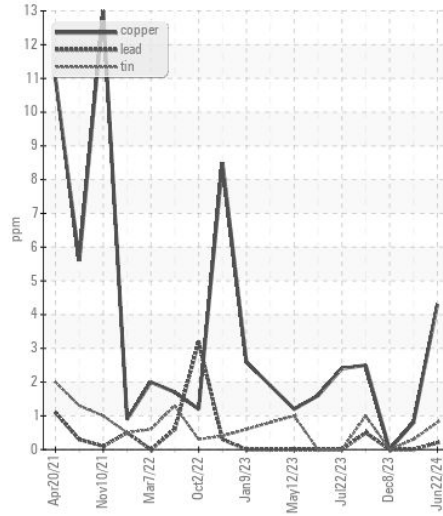
Glycol Contamination



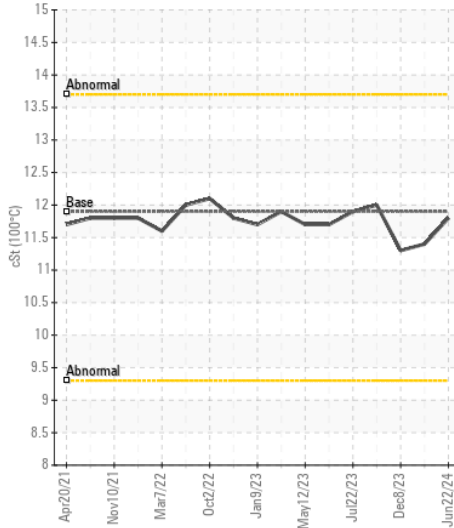
Ferrous Alloys



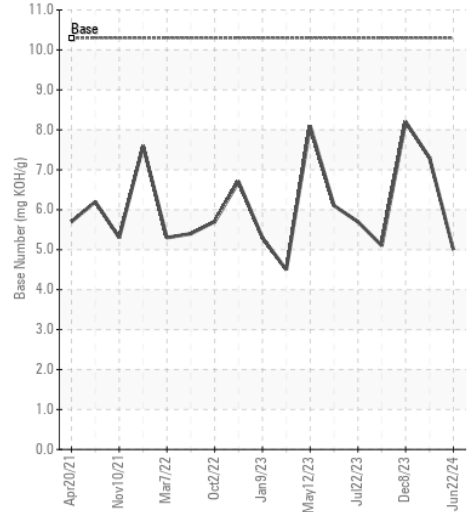
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0906878 **Received** : 01 Jul 2024
Lab Number : 06225676 **Tested** : 08 Jul 2024
Unique Number : 11103873 **Diagnosed** : 08 Jul 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

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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)