



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
72230
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0920968	WC0681107	WC0681026
Sample Date		Client Info		30 Apr 2024	01 Mar 2024	04 Feb 2024
Machine Age	hrs	Client Info		3347	2229	1730
Oil Age	hrs	Client Info		1118	499	1236
Filter Age	hrs	Client Info		1118	499	1236
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	39	50	40
Chromium	ppm	ASTM D5185m	>20	4	2	2
Nickel	ppm	ASTM D5185m	>4	0	0	1
Titanium	ppm	ASTM D5185m		19	17	19
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	25	8	10
Lead	ppm	ASTM D5185m	>40	<1	0	2
Copper	ppm	ASTM D5185m	>330	19	33	78
Tin	ppm	ASTM D5185m	>15	<1	0	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
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.

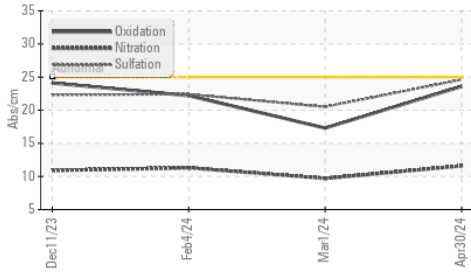
Silicon	ppm	ASTM D5185m	>25	10	16	8
Potassium	ppm	ASTM D5185m	>20	52	9	12
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.2	0.4
Nitration	Abs/cm	*ASTM D7624	>20	11.6	9.7	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	20.5	22.4
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

FLUID CONDITION

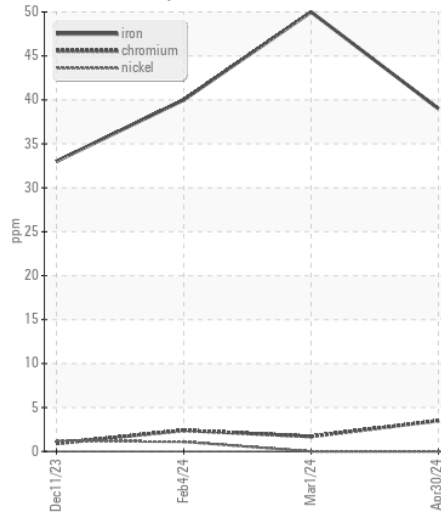
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	3	0
Boron	ppm	ASTM D5185m		40	49	32
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		36	30	36
Manganese	ppm	ASTM D5185m		2	1	2
Magnesium	ppm	ASTM D5185m		854	738	813
Calcium	ppm	ASTM D5185m		1787	1609	1725
Phosphorus	ppm	ASTM D5185m	760	820	717	730
Zinc	ppm	ASTM D5185m	830	952	804	937
Sulfur	ppm	ASTM D5185m	2770	3347	3817	2993
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.6	17.3	22.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	5.7	7.0	6.7
Visc @ 100°C	cSt	ASTM D445	14.9	14.6	13.9	13.9

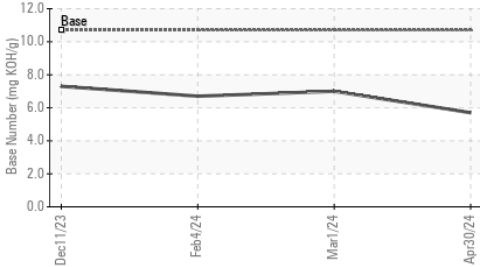
FT-IR (Direct Trend)



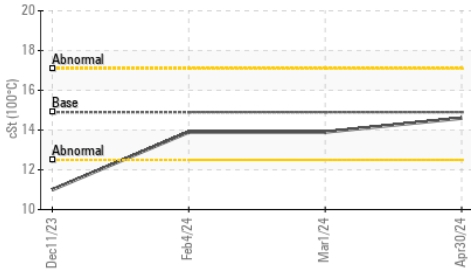
Ferrous Alloys



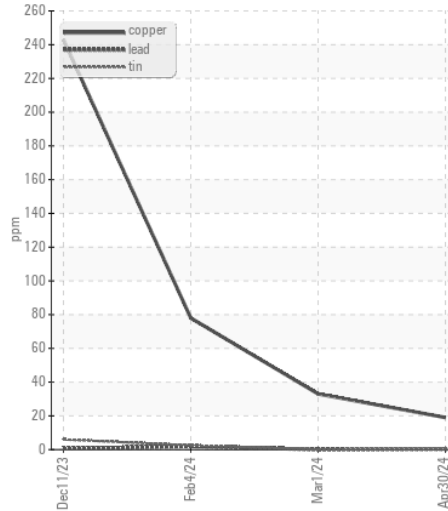
Base Number



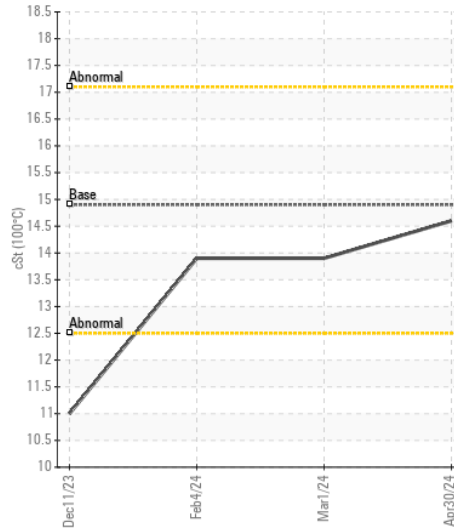
Viscosity @ 100°C



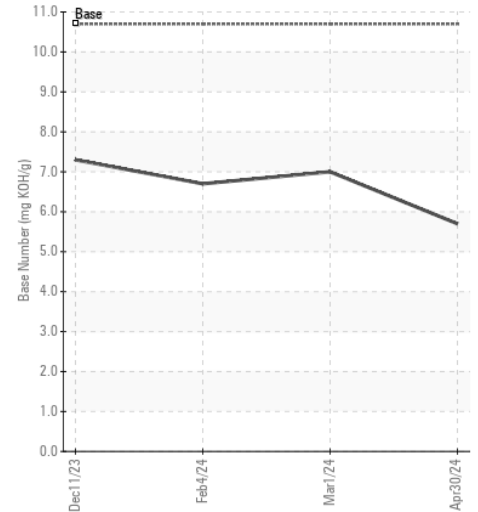
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0920968
Lab Number : 06191728
Unique Number : 11048480
Test Package : FLEET

Received : 24 May 2024
Tested : 29 May 2024
Diagnosed : 29 May 2024 - Angela Borella

NANA LYNDEN LOGISTICS

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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)