



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		WC0681107	WC0681026	WC0681128
Sample Date		Client Info		01 Mar 2024	04 Feb 2024	11 Dec 2023
Machine Age	hrs	Client Info		2229	1730	495
Oil Age	hrs	Client Info		499	1236	495
Filter Age	hrs	Client Info		499	1236	495
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	50	40	33
Chromium	ppm	ASTM D5185m	>20	2	2	<1
Nickel	ppm	ASTM D5185m	>4	0	1	1
Titanium	ppm	ASTM D5185m		17	19	4
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	8	10	32
Lead	ppm	ASTM D5185m	>40	0	2	<1
Copper	ppm	ASTM D5185m	>330	33	78	243
Tin	ppm	ASTM D5185m	>15	0	2	6
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

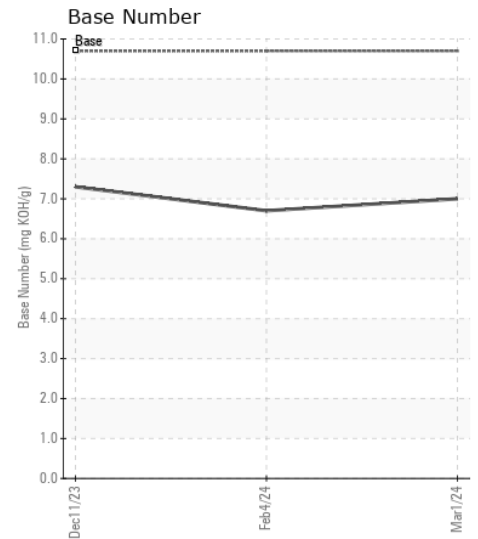
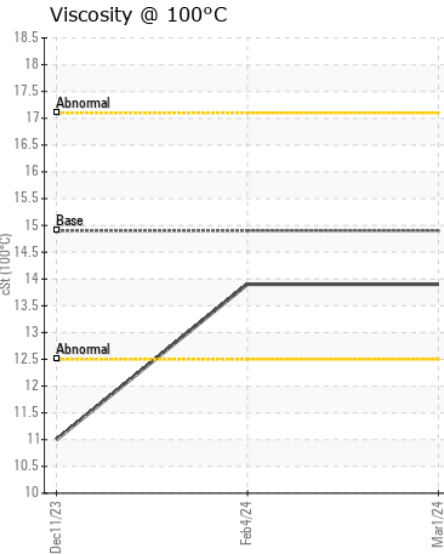
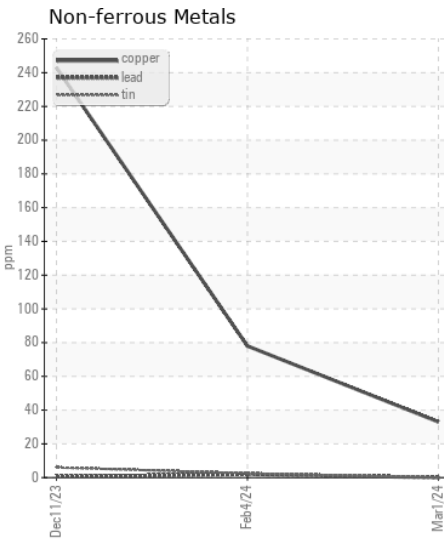
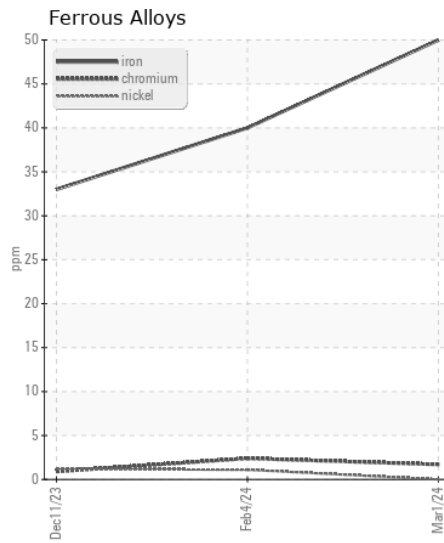
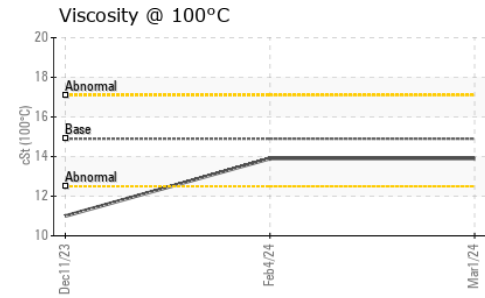
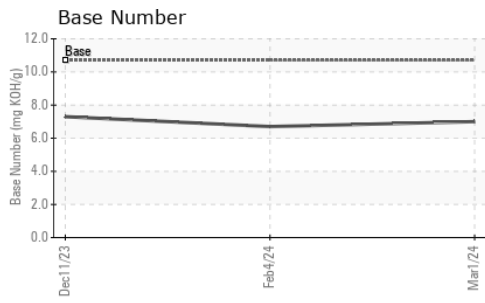
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	16	8	7
Potassium	ppm	ASTM D5185m	>20	9	12	25
Fuel		WC Method	>5	<1.0	<1.0	0.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.7	11.3	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	22.4	22.3
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	0	<1
Boron	ppm	ASTM D5185m		49	32	38
Barium	ppm	ASTM D5185m		0	0	11
Molybdenum	ppm	ASTM D5185m		30	36	41
Manganese	ppm	ASTM D5185m		1	2	2
Magnesium	ppm	ASTM D5185m		738	813	553
Calcium	ppm	ASTM D5185m		1609	1725	1679
Phosphorus	ppm	ASTM D5185m	760	717	730	756
Zinc	ppm	ASTM D5185m	830	804	937	820
Sulfur	ppm	ASTM D5185m	2770	3817	2993	2135
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	22.2	24.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	7.0	6.7	7.3
Visc @ 100°C	cSt	ASTM D445	14.9	13.9	13.9	11.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0681107
Lab Number : **06123001**
Unique Number : 10937152
Test Package : FLEET
Received : 19 Mar 2024
Tested : 20 Mar 2024
Diagnosed : 21 Mar 2024 - Don Baldrige

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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)