



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
3093
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 10W30 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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		WC0650478	---	---
Sample Date		Client Info		01 Feb 2024	---	---
Machine Age	mls	Client Info		277744	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	90	---	---
Chromium	ppm	ASTM D5185m	>20	1	---	---
Nickel	ppm	ASTM D5185m	>4	1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	▲ 22	---	---
Lead	ppm	ASTM D5185m	>40	1	---	---
Copper	ppm	ASTM D5185m	>330	9	---	---
Tin	ppm	ASTM D5185m	>15	3	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

There is no indication of any contamination in the oil.

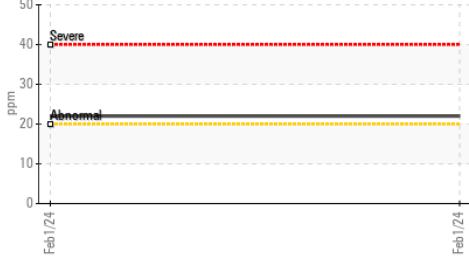
Silicon	ppm	ASTM D5185m	>25	16	---	---
Potassium	ppm	ASTM D5185m	>20	26	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	1.4	---	---
Nitration	Abs/cm	*ASTM D7624	>20	15.8	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	34.9	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

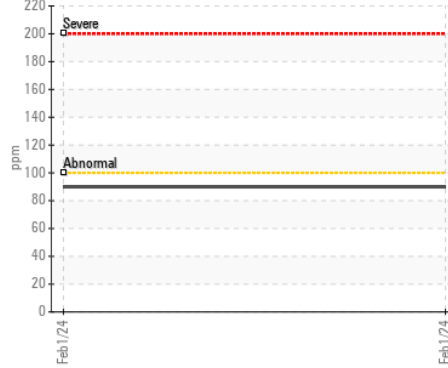
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	---	---
Boron	ppm	ASTM D5185m		33	---	---
Barium	ppm	ASTM D5185m		13	---	---
Molybdenum	ppm	ASTM D5185m		4	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m		713	---	---
Calcium	ppm	ASTM D5185m	2900	1643	---	---
Phosphorus	ppm	ASTM D5185m	1100	899	---	---
Zinc	ppm	ASTM D5185m	1200	965	---	---
Sulfur	ppm	ASTM D5185m	4000	3455	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	36.1	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	3.5	---	---
Visc @ 100°C	cSt	ASTM D445	11.9	14.1	---	---

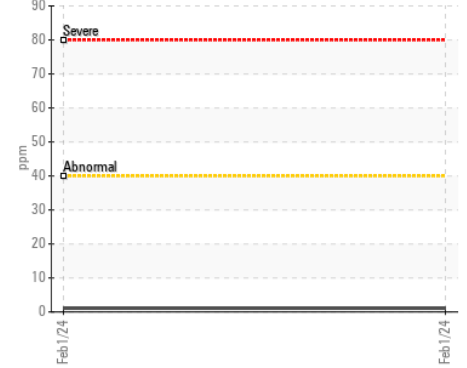
▲ Aluminum (ppm)



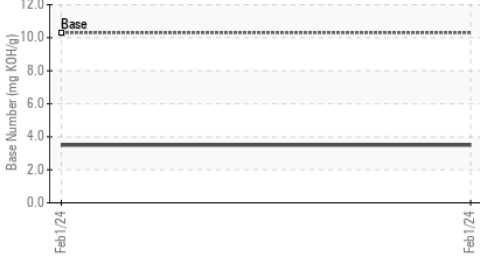
Iron (ppm)



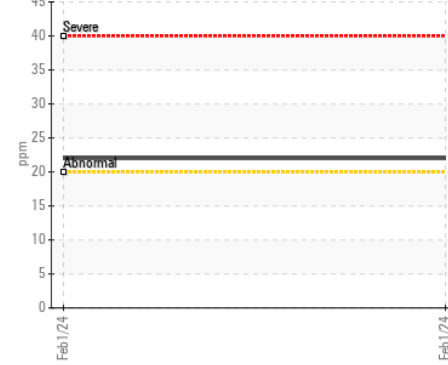
Lead (ppm)



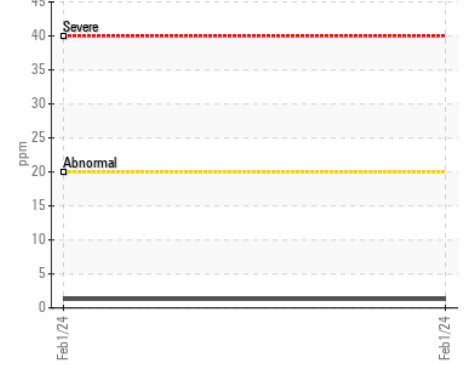
Base Number



▲ Aluminum (ppm)



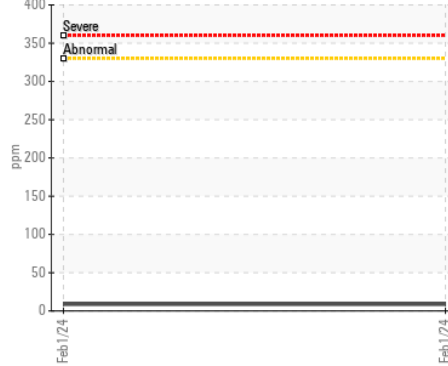
Chromium (ppm)



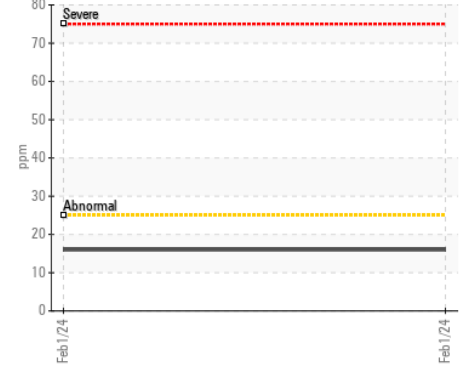
Viscosity @ 100°C



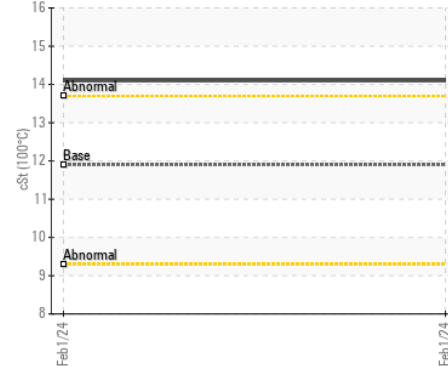
Copper (ppm)



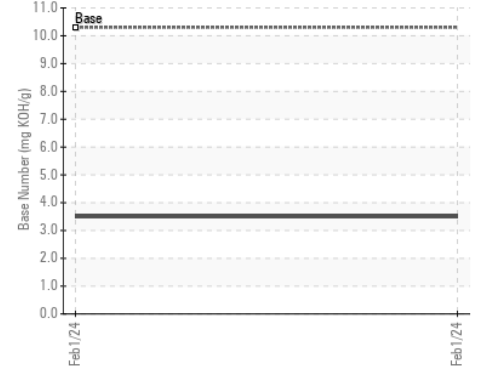
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : WC0650478

Lab Number : 06085665

Unique Number : 10873110

Test Package : MOB1+

Received : 12 Feb 2024

Tested : 12 Feb 2024

Diagnosed : 13 Feb 2024 - Sean Felton

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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)