



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
3999
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 10W30 (46 QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0663201	WC0906921	WC0663238
Sample Date		Client Info		15 Mar 2024	14 Feb 2024	25 Sep 2023
Machine Age	mls	Client Info		64753	61219	79993
Oil Age	mls	Client Info		33500	0	67164
Filter Age	mls	Client Info		33500	61219	67164
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	48	35	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	18	14	8
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	8	9	8
Tin	ppm	ASTM D5185m	>15	2	2	1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

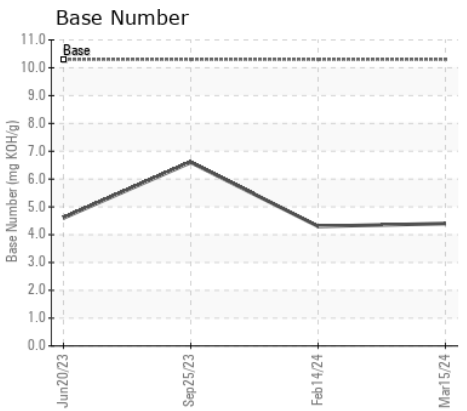
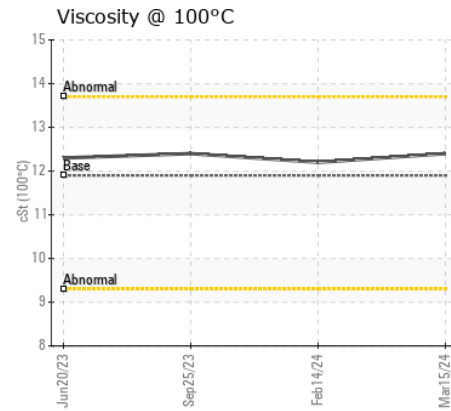
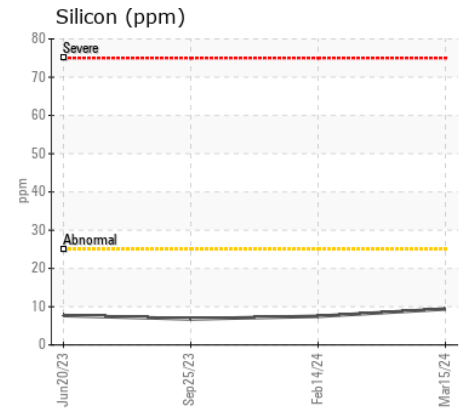
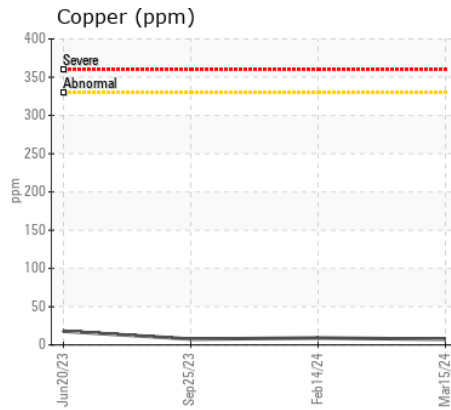
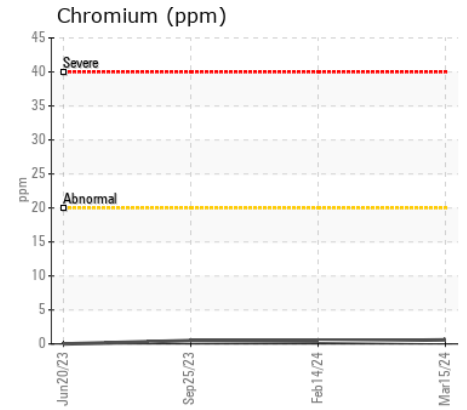
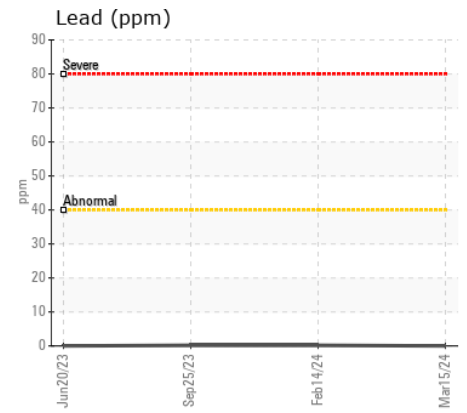
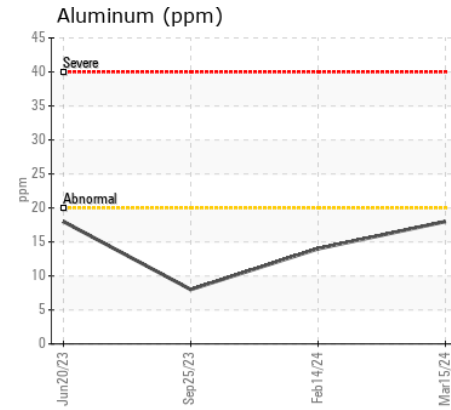
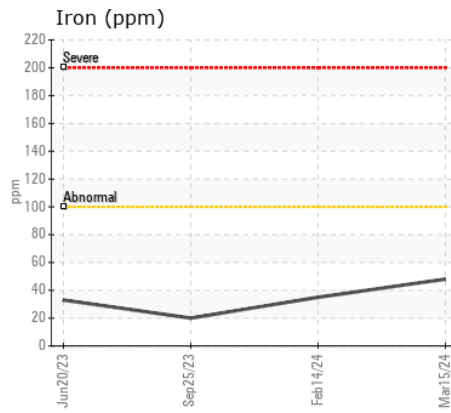
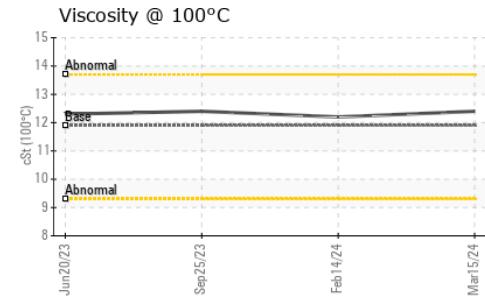
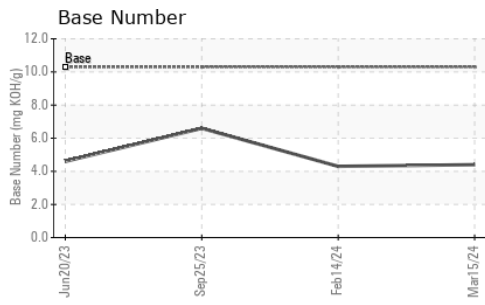
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	8	7
Potassium	ppm	ASTM D5185m	>20	49	38	24
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	0.9	0.8	0.4
Nitration	Abs/cm	*ASTM D7624	>20	13.0	12.4	9.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.0	27.2	22.0
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		<1	3	3
Boron	ppm	ASTM D5185m		26	20	44
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		6	<1	2
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m		783	759	786
Calcium	ppm	ASTM D5185m	2900	1498	1334	1383
Phosphorus	ppm	ASTM D5185m	1100	713	759	707
Zinc	ppm	ASTM D5185m	1200	895	870	884
Sulfur	ppm	ASTM D5185m	4000	3166	2887	2994
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.0	23.8	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	4.4	4.3	6.6
Visc @ 100°C	cSt	ASTM D445	11.9	12.4	12.2	12.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0663201 **Received** : 21 Mar 2024
Lab Number : 06125373 **Tested** : 25 Mar 2024
Unique Number : 10939524 **Diagnosed** : 25 Mar 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: TBN)

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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)