



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**13028**  
Component  
**Diesel Engine**  
Fluid  
**CHEVRON DELO 400 XLE 10W30 (--- 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		<b>WC0663226</b>	WC0816606	WC0816691
Sample Date		Client Info		<b>07 Feb 2024</b>	29 Aug 2023	21 Jun 2023
Machine Age	mls	Client Info		<b>101762</b>	51024	25115
Oil Age	mls	Client Info		<b>51104</b>	25909	25115
Filter Age	mls	Client Info		<b>51104</b>	25909	25115
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>39</b>	20	27
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>27</b>	15	25
Lead	ppm	ASTM D5185m	>40	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	2	3
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

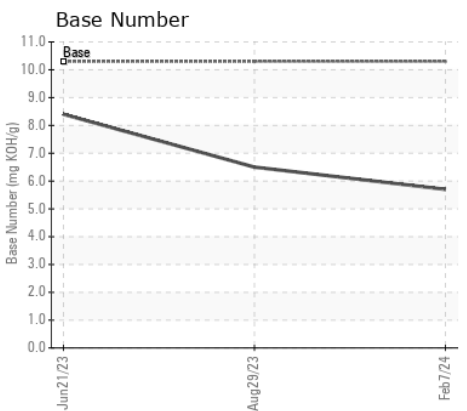
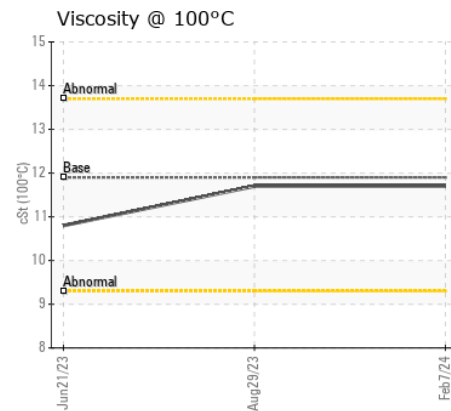
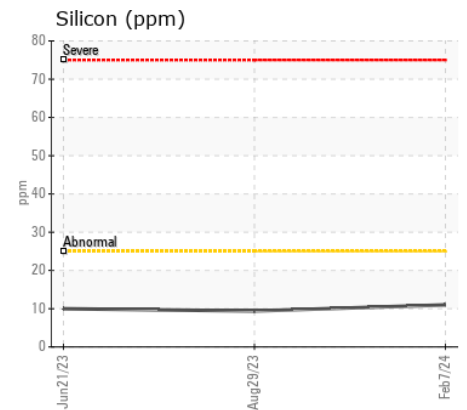
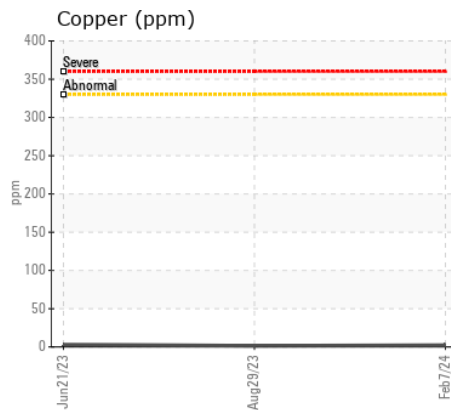
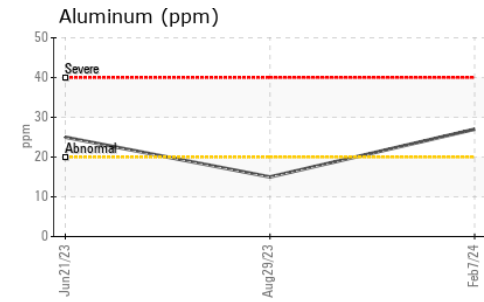
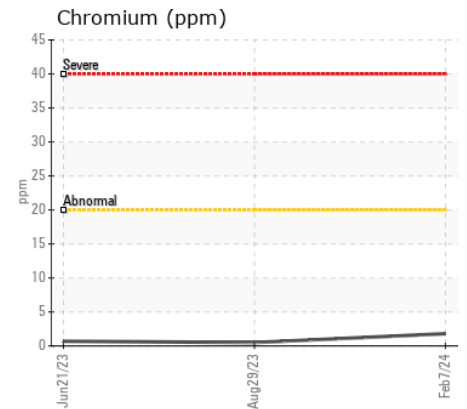
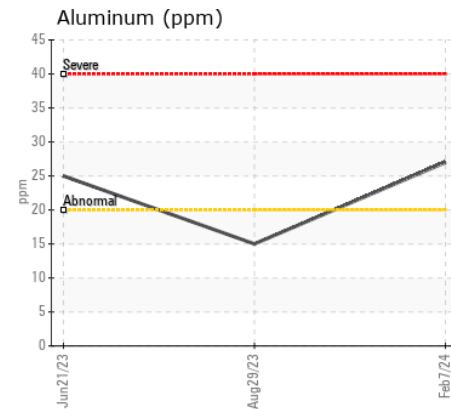
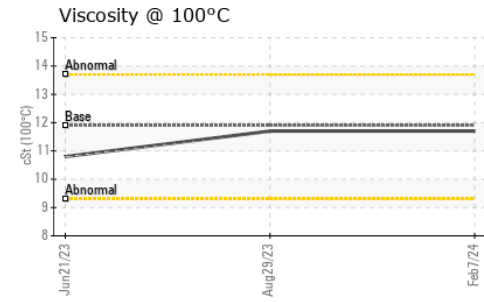
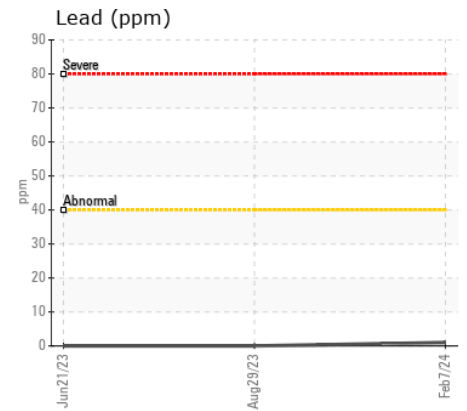
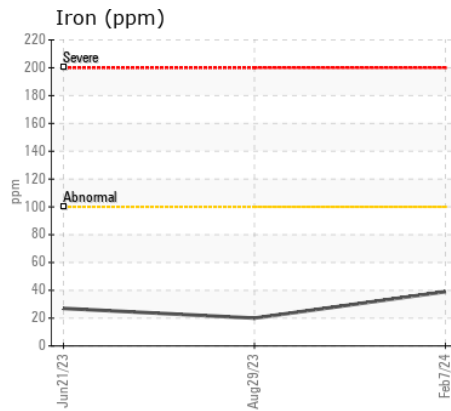
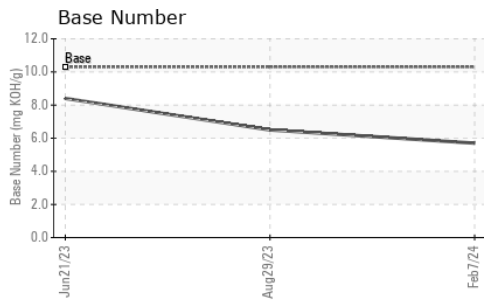
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>11</b>	9	10
Potassium	ppm	ASTM D5185m	>20	<b>84</b>	45	74
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.9</b>	0.5	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.4</b>	9.1	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.1</b>	20.0	22.3
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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		<b>0</b>	3	4
Boron	ppm	ASTM D5185m		<b>24</b>	41	34
Barium	ppm	ASTM D5185m		<b>14</b>	0	7
Molybdenum	ppm	ASTM D5185m		<b>3</b>	4	28
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>749</b>	912	534
Calcium	ppm	ASTM D5185m	2900	<b>1334</b>	1678	1388
Phosphorus	ppm	ASTM D5185m	1100	<b>728</b>	807	634
Zinc	ppm	ASTM D5185m	1200	<b>847</b>	945	788
Sulfur	ppm	ASTM D5185m	4000	<b>3200</b>	3928	2625
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.6</b>	14.8	20.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	<b>5.7</b>	6.5	8.4
Visc @ 100°C	cSt	ASTM D445	11.9	<b>11.7</b>	11.7	10.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0663226 **Received** : 12 Feb 2024  
**Lab Number** : 06086568 **Tested** : 13 Feb 2024  
**Unique Number** : 10874013 **Diagnosed** : 13 Feb 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**LTI/MILKY WAY - SUNNYSIDE**  
 333 MIDVALE RD  
 SUNNYSIDE, WA  
 US 98944  
 Contact: JERRY CRISP  
 jcrisp@ltii.lynden.com  
 T: (509)839-5844  
 F: (509)839-6556

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)