



# WEAR CHECK

## OIL ANALYSIS REPORT

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

Machine Id  
**72227**  
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		<b>WC0681106</b>	WC0680961	WC0681091
Sample Date		Client Info		<b>23 Feb 2024</b>	08 Dec 2023	19 Sep 2023
Machine Age	hrs	Client Info		<b>7505</b>	5760	4943
Oil Age	hrs	Client Info		<b>593</b>	817	803
Filter Age	hrs	Client Info		<b>593</b>	817	803
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>30</b>	29	55
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	1	4
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	2
Titanium	ppm	ASTM D5185m		<b>16</b>	18	16
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>13</b>	7	26
Lead	ppm	ASTM D5185m	>40	<b>4</b>	4	5
Copper	ppm	ASTM D5185m	>330	<b>1</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

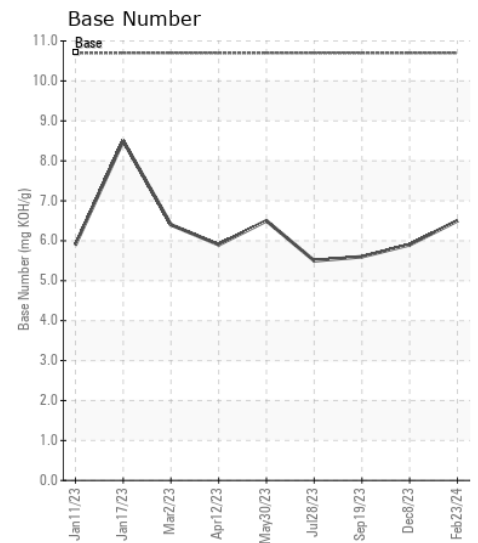
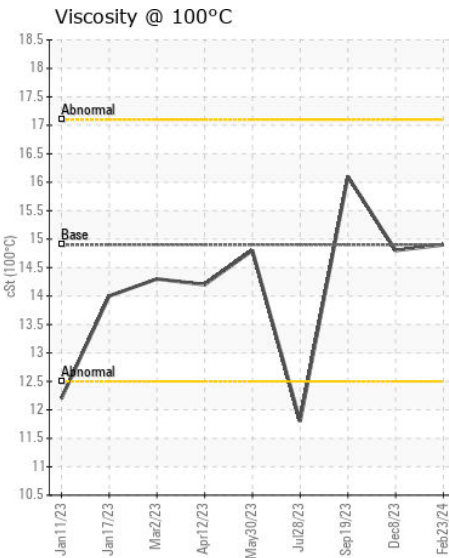
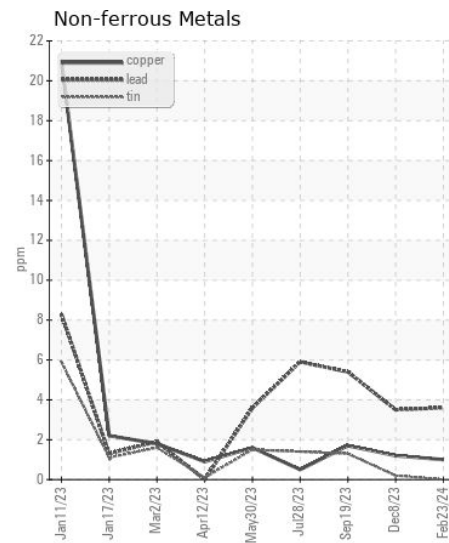
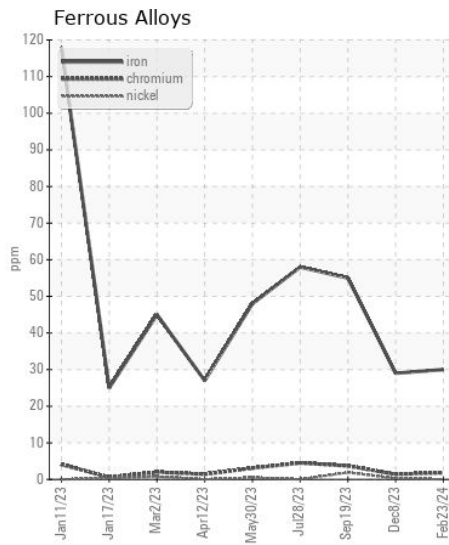
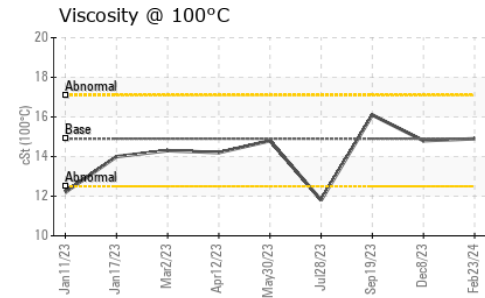
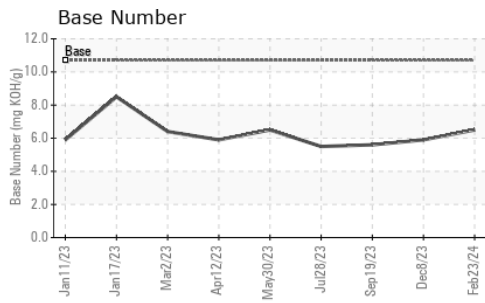
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	9	14
Potassium	ppm	ASTM D5185m	>20	<b>17</b>	14	59
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	1.3
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>1.2</b>	0.8	1.8
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.2</b>	10.7	13.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.5</b>	24.3	31.2
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>5</b>	7	24
Boron	ppm	ASTM D5185m		<b>31</b>	37	37
Barium	ppm	ASTM D5185m		<b>0</b>	<1	2
Molybdenum	ppm	ASTM D5185m		<b>29</b>	29	32
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m		<b>758</b>	779	712
Calcium	ppm	ASTM D5185m		<b>1587</b>	1582	1479
Phosphorus	ppm	ASTM D5185m	760	<b>711</b>	793	675
Zinc	ppm	ASTM D5185m	830	<b>812</b>	874	814
Sulfur	ppm	ASTM D5185m	2770	<b>3517</b>	2998	3017
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.6</b>	20.8	30.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>6.5</b>	5.9	5.6
Visc @ 100°C	cSt	ASTM D445	14.9	<b>14.9</b>	14.8	16.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0681106  
**Lab Number** : 06123003  
**Unique Number** : 10937154  
**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)