



# OIL ANALYSIS REPORT

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

Machine Id  
**PIERCE 0303**  
Component  
**Diesel Engine**  
Fluid  
**CHEVRON DELO 400 XLE 15W40 (27 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0771931</b>	WC0701504	WC0646962
Sample Date		Client Info		<b>07 Feb 2023</b>	31 May 2022	14 Dec 2021
Machine Age	hrs	Client Info		<b>3987</b>	3407	3048
Oil Age	hrs	Client Info		<b>939</b>	359	480
Filter Age	hrs	Client Info		<b>580</b>	359	480
Oil Changed		Client Info		<b>Changed</b>	Not 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	>75	<b>51</b>	20	35
Chromium	ppm	ASTM D5185m	>5	<b>2</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>12</b>	11	12
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>15	<b>6</b>	2	6
Lead	ppm	ASTM D5185m	>25	<b>2</b>	1	2
Copper	ppm	ASTM D5185m	>100	<b>8</b>	5	17
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</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

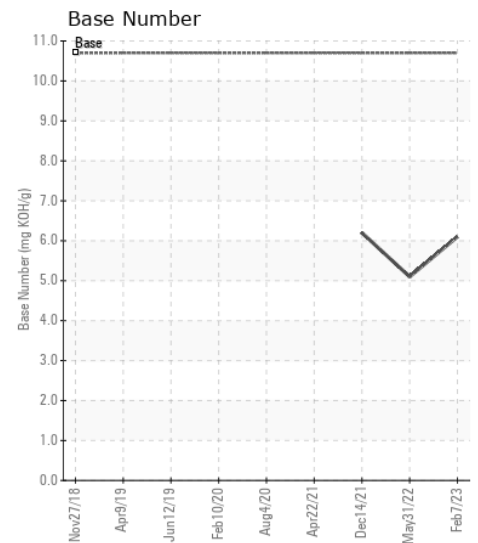
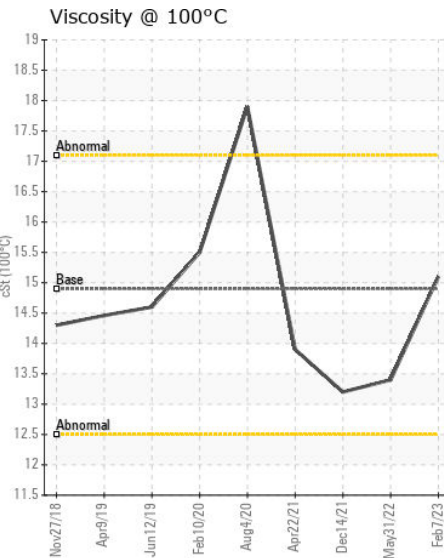
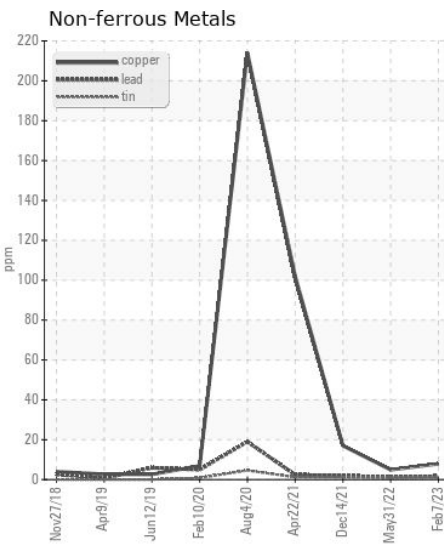
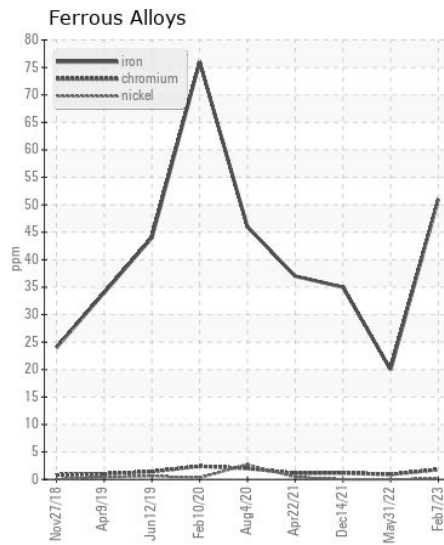
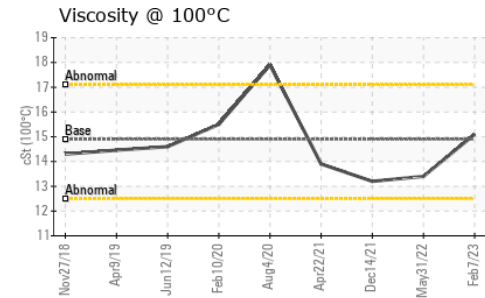
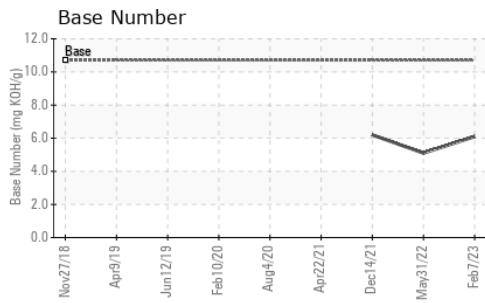
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>12</b>	6	9
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	6	17
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	>6	<b>1.5</b>	0.8	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>16.3</b>	12.9	13
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>31.2</b>	26.9	27.1
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>16</b>	13	29
Boron	ppm	ASTM D5185m		<b>36</b>	34	36
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>42</b>	46	42
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>717</b>	669	729
Calcium	ppm	ASTM D5185m		<b>1467</b>	1512	1622
Phosphorus	ppm	ASTM D5185m	760	<b>698</b>	701	748
Zinc	ppm	ASTM D5185m	830	<b>887</b>	861	892
Sulfur	ppm	ASTM D5185m	2770	<b>3449</b>	3576	2714
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>30.0</b>	23.4	22.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>6.1</b>	5.1	6.2
Visc @ 100°C	cSt	ASTM D445	14.9	<b>15.1</b>	13.4	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0771931 **Received** : 17 Feb 2023  
**Lab Number** : 05770647 **Tested** : 20 Feb 2023  
**Unique Number** : 10345264 **Diagnosed** : 20 Feb 2023 - Sean Felton  
**Test Package** : CONST ( 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)