



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**PIERCE 0198**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 XLE 15W40 (33 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0708753</b>	WC0657409	WC0589181
Sample Date		Client Info		<b>07 Sep 2022</b>	07 Feb 2022	02 Aug 2021
Machine Age	hrs	Client Info		<b>4381</b>	3948	3517
Oil Age	hrs	Client Info		<b>864</b>	431	918
Filter Age	hrs	Client Info		<b>433</b>	431	505
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>65	<b>21</b>	13	24
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>5	<b>13</b>	12	12
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>35	<b>13</b>	8	16
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>180	<b>9</b>	7	12
Tin	ppm	ASTM D5185m	>8	<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

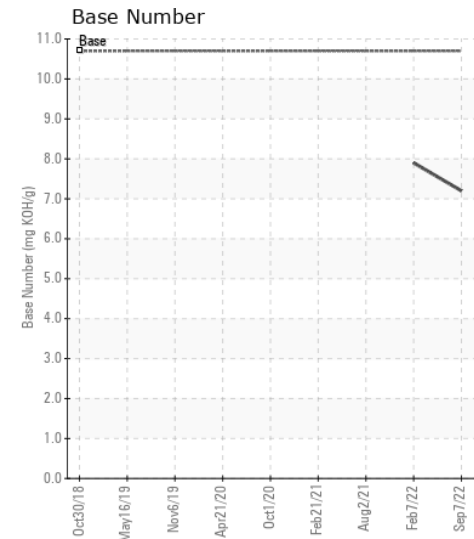
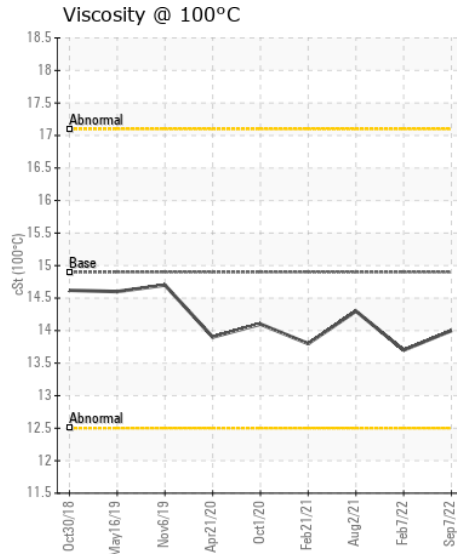
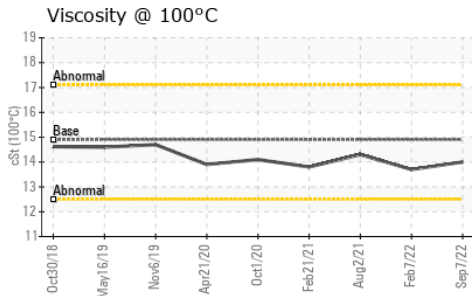
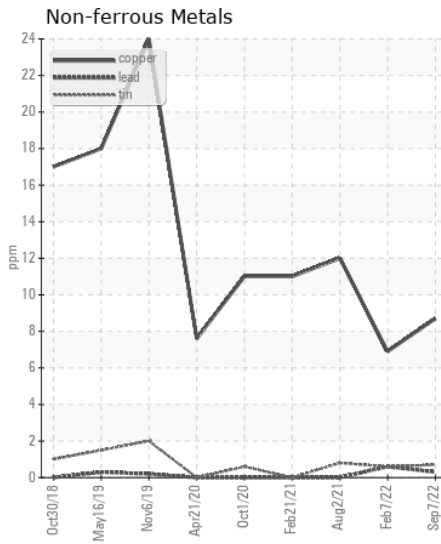
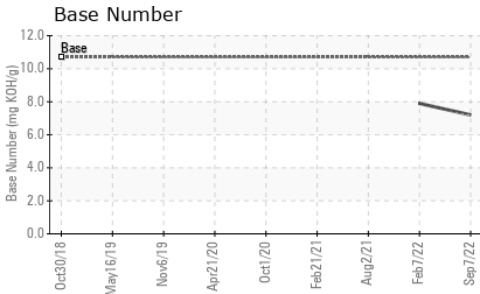
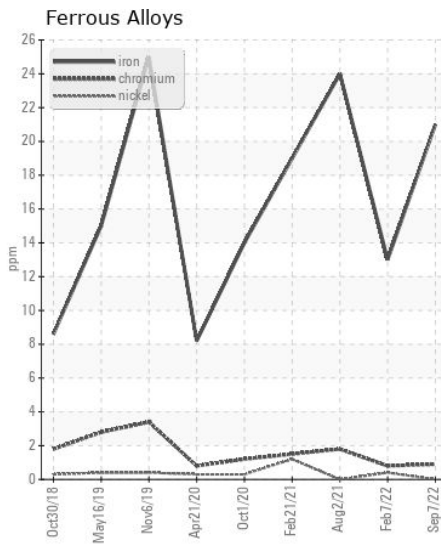
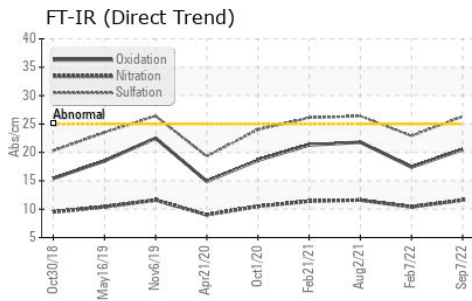
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>19</b>	13	28
Fuel		WC Method	>3.0	<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>1</b>	0.6	1.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>11.6</b>	10.4	11.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.3</b>	22.9	26.4
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>12</b>	8	14
Boron	ppm	ASTM D5185m		<b>33</b>	99	21
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>46</b>	43	43
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>636</b>	711	724
Calcium	ppm	ASTM D5185m		<b>1502</b>	1616	1507
Phosphorus	ppm	ASTM D5185m	760	<b>744</b>	813	700
Zinc	ppm	ASTM D5185m	830	<b>903</b>	914	838
Sulfur	ppm	ASTM D5185m	2770	<b>3013</b>	2656	2585
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.5</b>	17.4	21.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>7.2</b>	7.9	---
Visc @ 100°C	cSt	ASTM D445	14.9	<b>14.0</b>	13.7	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0708753  
**Lab Number** : 05636992  
**Unique Number** : 10126522  
**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)