



# OIL ANALYSIS REPORT

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

Machine Id  
**12562**  
Component  
**Diesel Engine**  
Fluid  
**CHEVRON DELO 400 SDE SAE 15W40 (--- QTS)**

## RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0913838</b>	WC0635546	WC0696489
Sample Date		Client Info		<b>18 Mar 2024</b>	28 Jun 2022	10 May 2022
Machine Age	mls	Client Info		<b>381417</b>	0	254241
Oil Age	mls	Client Info		<b>9522</b>	0	0
Filter Age	mls	Client Info		<b>9522</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>62</b>	40	25
Chromium	ppm	ASTM D5185m	>20	<b>3</b>	1	<1
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>12</b>	13	6
Lead	ppm	ASTM D5185m	>40	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	<1
Tin	ppm	ASTM D5185m	>15	<b>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

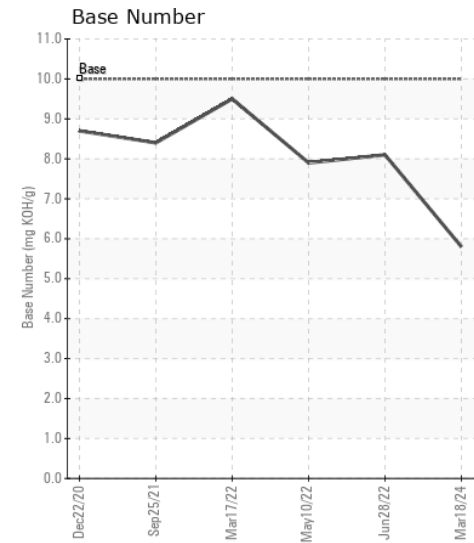
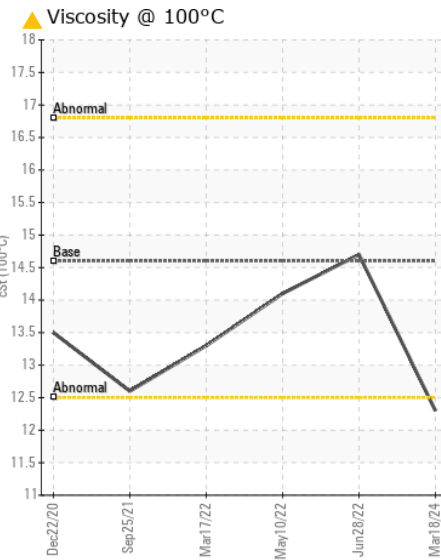
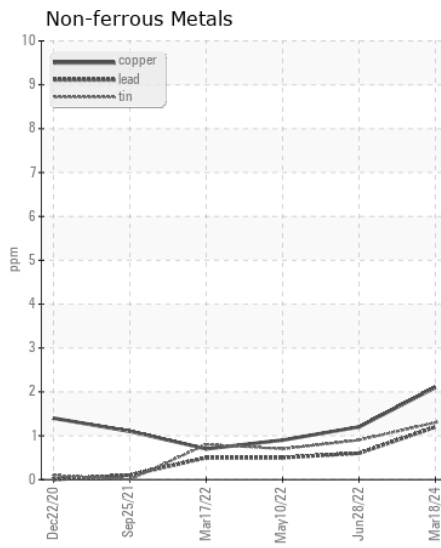
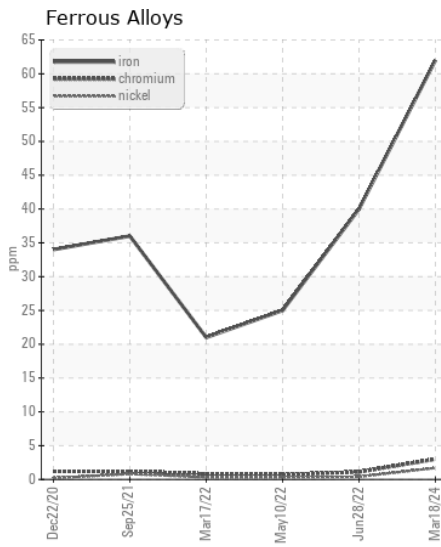
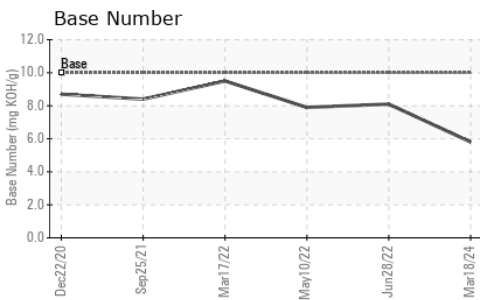
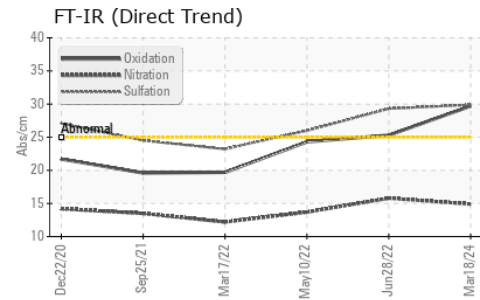
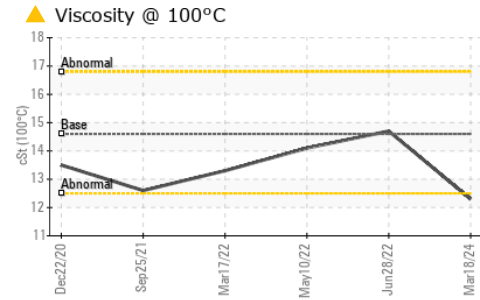
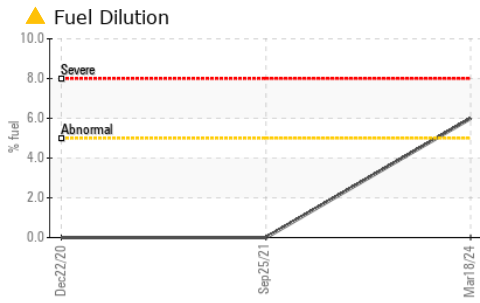
There is a moderate amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>10</b>	9	6
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	8	3
Fuel	%	ASTM D3524	>5	<b>▲ 6.0</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>0.8</b>	0.8	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>14.9</b>	15.8	13.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>29.9</b>	29.3	26.0
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

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	1
Boron	ppm	ASTM D5185m		<b>77</b>	14	6
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>126</b>	56	75
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>842</b>	1047	1136
Calcium	ppm	ASTM D5185m		<b>1604</b>	1419	1332
Phosphorus	ppm	ASTM D5185m	760	<b>995</b>	1122	1142
Zinc	ppm	ASTM D5185m	800	<b>1127</b>	1470	1514
Sulfur	ppm	ASTM D5185m	3000	<b>3223</b>	3247	3189
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>29.7</b>	25.3	24.3
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>5.8</b>	8.1	7.9
Visc @ 100°C	cSt	ASTM D445	14.6	<b>▲ 12.3</b>	14.7	14.1



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0913838 **Received** : 17 Apr 2024  
**Lab Number** : 06152547 **Tested** : 22 Apr 2024  
**Unique Number** : 10982625 **Diagnosed** : 22 Apr 2024 - Don Baldrige  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

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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)