



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**40502**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON 15W40 (--- QTS)**

## RECOMMENDATION

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>WC0924465</b>	WC0856871	WC0822778
Sample Date		Client Info		<b>27 Jun 2024</b>	08 Nov 2023	16 Aug 2023
Machine Age	hrs	Client Info		<b>35821</b>	34555	35182
Oil Age	hrs	Client Info		<b>250</b>	2000	5521
Filter Age	hrs	Client Info		<b>250</b>	2000	5521
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>7</b>	5	7
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	2	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	2	0
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

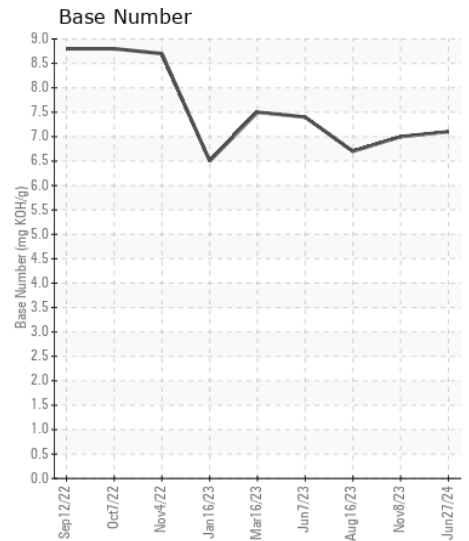
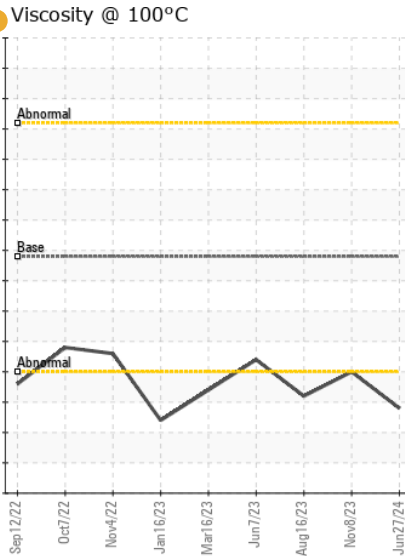
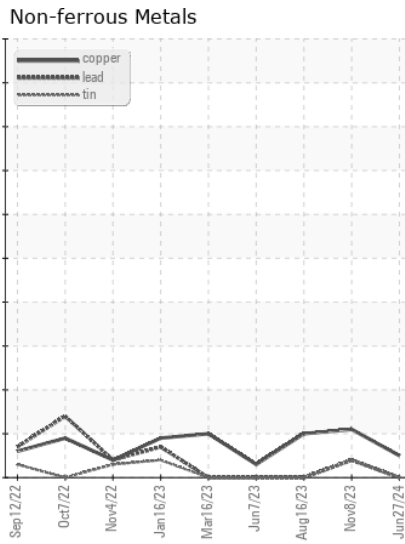
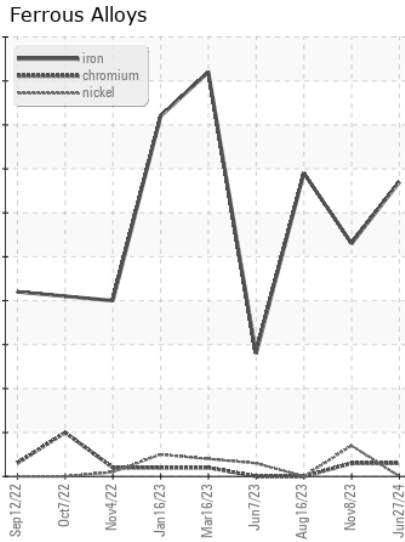
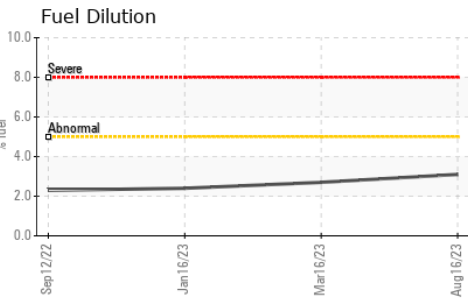
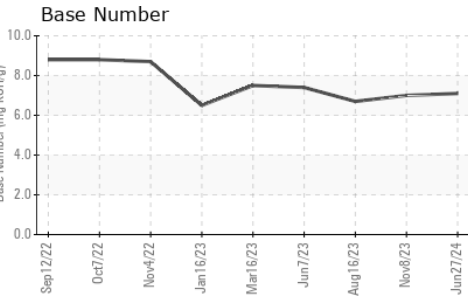
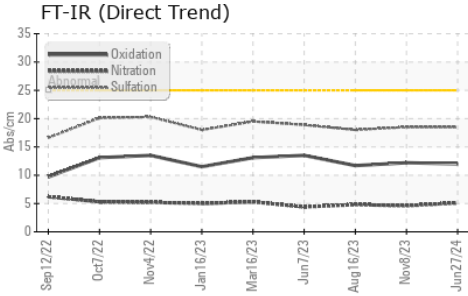
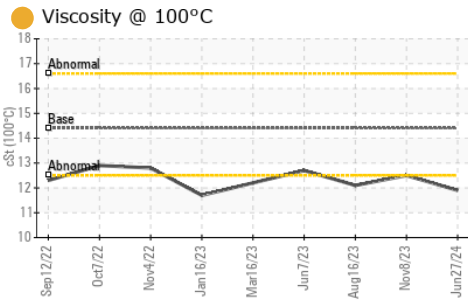
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	7	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	3	0
Fuel	%	ASTM D3524	>5	<b>&lt;1.0</b>	<1.0	▲ 3.1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.1	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.1</b>	4.6	4.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.5</b>	18.5	18.0
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

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>50	<b>&lt;1</b>	0	1
Boron	ppm	ASTM D5185m		<b>381</b>	609	422
Barium	ppm	ASTM D5185m		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185m		<b>83</b>	120	85
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>368</b>	484	377
Calcium	ppm	ASTM D5185m		<b>1288</b>	1793	1385
Phosphorus	ppm	ASTM D5185m		<b>982</b>	1369	992
Zinc	ppm	ASTM D5185m		<b>1143</b>	1597	1177
Sulfur	ppm	ASTM D5185m		<b>2884</b>	4589	3710
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.0</b>	12.2	11.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.1</b>	7.0	6.7
Visc @ 100°C	cSt	ASTM D445	14.4	● <b>11.9</b>	12.5	● 12.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0924465 **Received** : 03 Jul 2024  
**Lab Number** : 06227054 **Tested** : 08 Jul 2024  
**Unique Number** : 11110547 **Diagnosed** : 08 Jul 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

**SULLIVAN EASTERN INC**  
 2860 C SLATER RD  
 MORRISVILLE, NC  
 US 27560

Contact: SCOTT SULLIVAN  
 ssullivan@sullivaneastern.com

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)

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