



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id  
**349605/152249**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON SUPREME MOTOR OIL 10W40 (--- 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>RY0123435</b>	RY0123226	RY0123160
Sample Date		Client Info		<b>21 Mar 2024</b>	09 Feb 2023	15 Aug 2022
Machine Age	mls	Client Info		<b>6000</b>	0	0
Oil Age	mls	Client Info		<b>0</b>	1000	2000
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>ATTENTION</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>21</b>	7	14
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	5	12
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	1
Copper	ppm	ASTM D5185m	>330	<b>2</b>	<1	1
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	<1
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

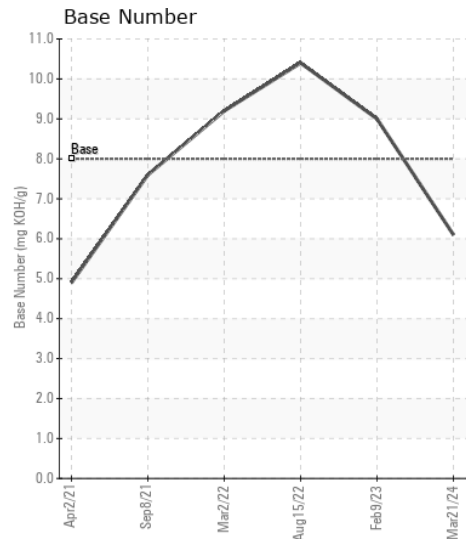
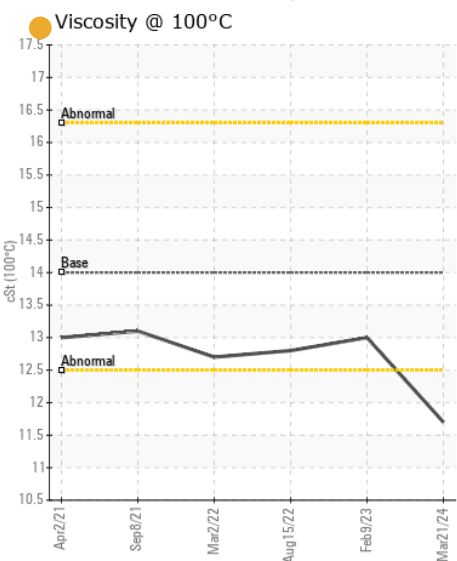
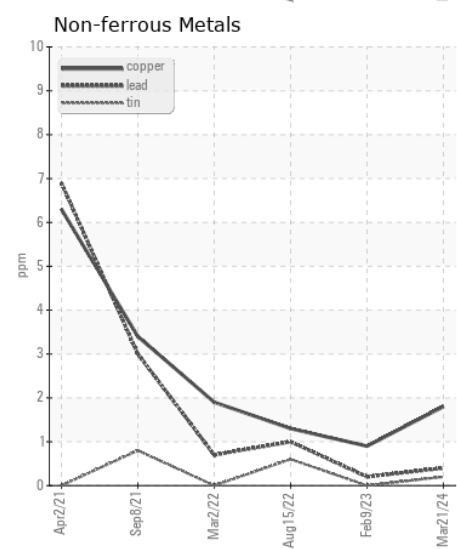
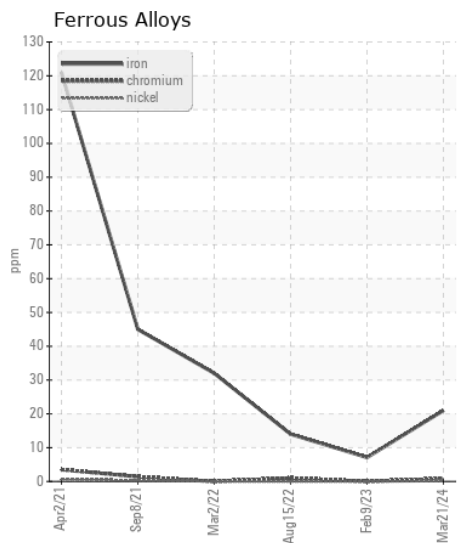
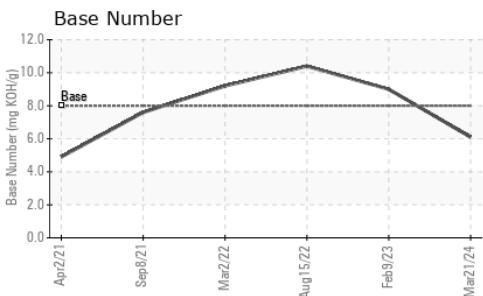
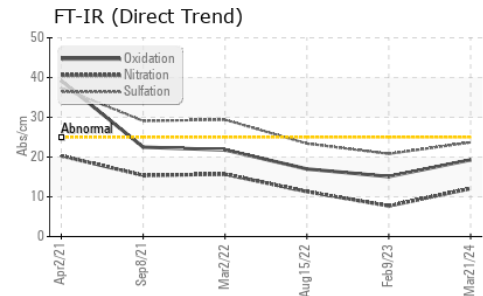
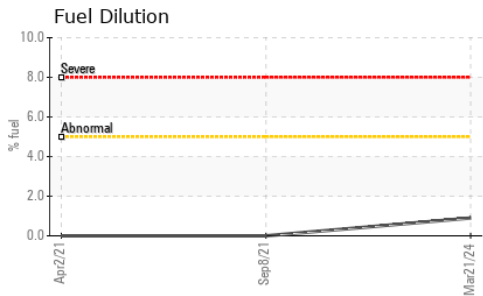
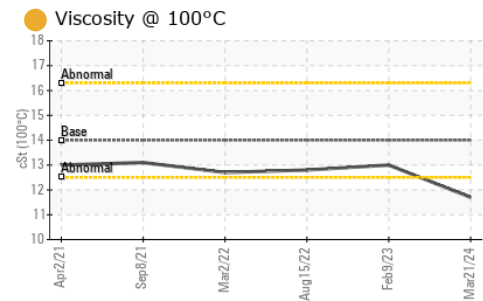
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	5	6
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	5
Fuel	%	ASTM D3524	>5	<b>0.9</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>	0.4	1
Nitration	Abs/cm	*ASTM D7624	>20	<b>12.1</b>	7.7	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.7</b>	20.8	23.4
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 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		<b>2</b>	2	6
Boron	ppm	ASTM D5185m		<b>39</b>	330	151
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>17</b>	90	69
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>668</b>	556	597
Calcium	ppm	ASTM D5185m		<b>1247</b>	1584	1370
Phosphorus	ppm	ASTM D5185m	990	<b>693</b>	988	664
Zinc	ppm	ASTM D5185m	1100	<b>810</b>	1261	817
Sulfur	ppm	ASTM D5185m		<b>3168</b>	3801	2886
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.3</b>	15.1	17.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.0	<b>6.1</b>	9.0	10.4
Visc @ 100°C	cSt	ASTM D445	14.0	<b>11.7</b>	13.0	12.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : RY0123435 **Received** : 22 May 2024  
**Lab Number** : 06187316 **Tested** : 28 May 2024  
**Unique Number** : 11044068 **Diagnosed** : 28 May 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FuelDilution, PercentFuel )

**Ryder Transportation Services**  
 240 NE 71 ST  
 MIAMI, FL  
 US 33138  
 Contact: ANTHONY INGRAM  
 anthonyingram@creamoland.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)