



# WEAR CHECK

## OIL ANALYSIS REPORT

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

Machine Id  
**INTERNATIONAL 46415**  
Component  
**Diesel Engine**  
Fluid  
**CHEVRON 15W40 (--- QTS)**

### RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### WEAR

All component wear rates are normal.

### CONTAMINATION

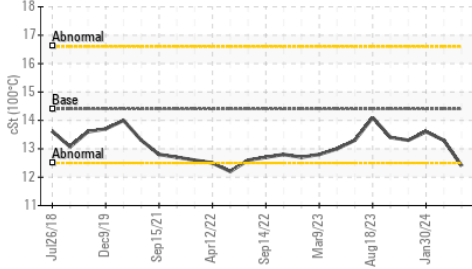
Fuel content negligible. There is no indication of any contamination in the oil.

### FLUID CONDITION

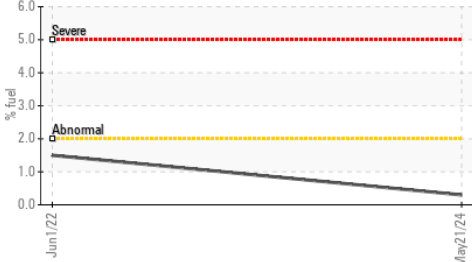
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0918482</b>	WC0882894	WC0900425
Sample Date		Client Info		<b>21 May 2024</b>	19 Mar 2024	30 Jan 2024
Machine Age	mls	Client Info		<b>274016</b>	262809	252931
Oil Age	mls	Client Info		<b>11207</b>	9878	18799
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>MARGINAL</b>	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	<b>8</b>	14	4
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>1</b>	4	6
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	5	4
Potassium	ppm	ASTM D5185m	>20	<b>11</b>	4	4
Fuel	%	ASTM D3524	>2.0	<b>0.3</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	%	*ASTM D2982		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.4</b>	9.6	8.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.0</b>	23.5	23.6
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
Sodium	ppm	ASTM D5185m	>50	<b>12</b>	1	0
Boron	ppm	ASTM D5185m		<b>29</b>	263	310
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>71</b>	84	88
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>965</b>	440	490
Calcium	ppm	ASTM D5185m		<b>1423</b>	1619	1413
Phosphorus	ppm	ASTM D5185m		<b>1218</b>	1060	1052
Zinc	ppm	ASTM D5185m		<b>1465</b>	1289	1315
Sulfur	ppm	ASTM D5185m		<b>4406</b>	3726	3033
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.1</b>	20.7	19.7
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.9</b>	6.4	6.6
Visc @ 100°C	cSt	ASTM D445	14.4	<b>▲ 12.4</b>	13.3	13.6

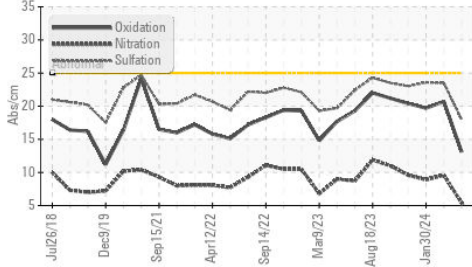
▲ Viscosity @ 100°C



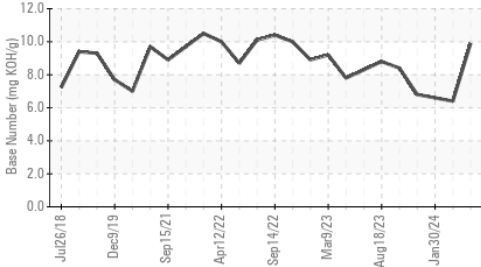
Fuel Dilution



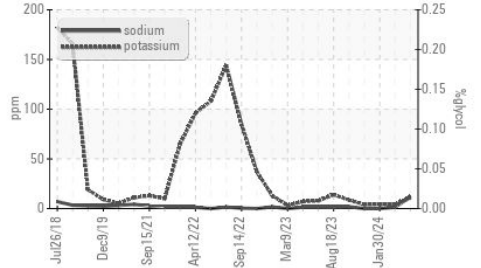
FT-IR (Direct Trend)



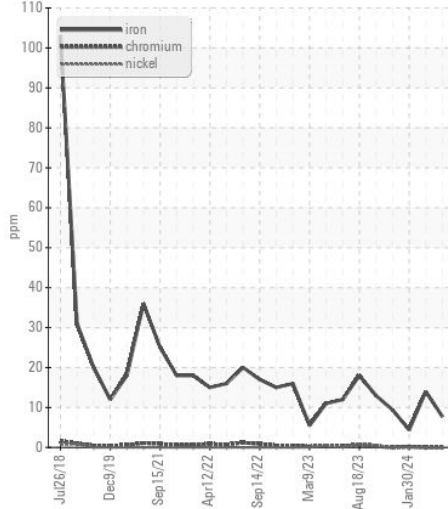
Base Number



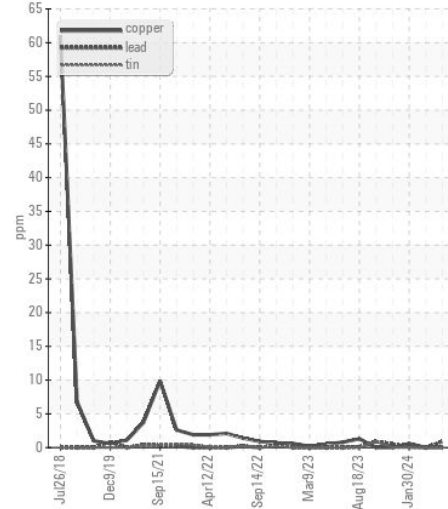
Glycol Contamination



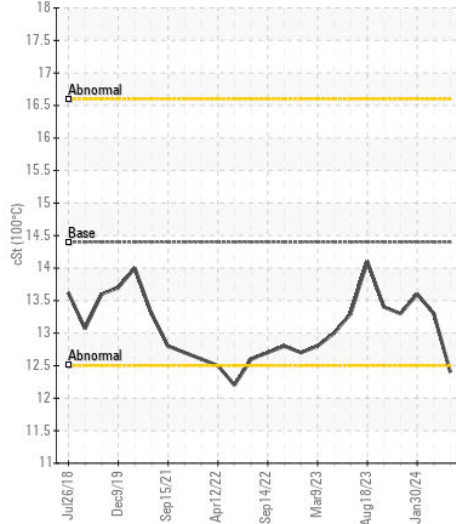
Ferrous Alloys



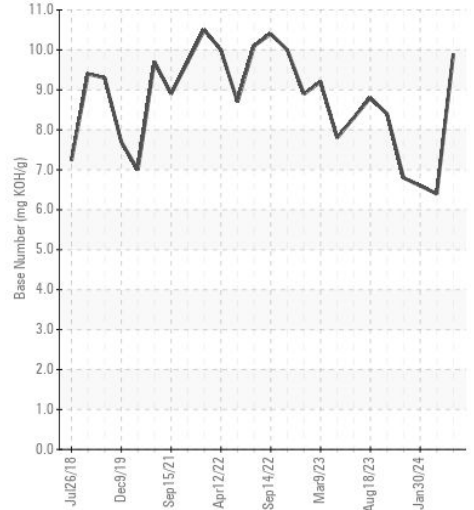
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0918482 **Received** : 28 May 2024  
**Lab Number** : 06193316 **Tested** : 31 May 2024  
**Unique Number** : 11050068 **Diagnosed** : 31 May 2024 - Jonathan Hester  
**Test Package** : FLEET ( Additional Tests: FuelDilution, Glycol, 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)