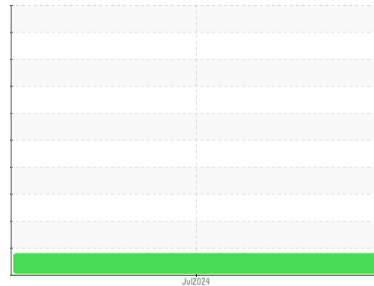




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

[69431]

Machine Id

NO UNIT WC0948241

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 10W30 (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 10W30. Please confirm.

Please specify the component make and model with your next sample.

▲ Wear

Nickel ppm levels are abnormal. Exhaust valve wear is indicated.

Contamination

Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0948241	---	---
Sample Date	Client Info		02 Jul 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	56	---
Chromium	ppm	ASTM D5185(m)	>20	1	---
Nickel	ppm	ASTM D5185(m)	>4	▲ 6	---
Titanium	ppm	ASTM D5185(m)		0	---
Silver	ppm	ASTM D5185(m)	>3	<1	---
Aluminum	ppm	ASTM D5185(m)	>20	9	---
Lead	ppm	ASTM D5185(m)	>40	2	---
Copper	ppm	ASTM D5185(m)	>330	21	---
Tin	ppm	ASTM D5185(m)	>15	2	---
Antimony	ppm	ASTM D5185(m)		0	---
Vanadium	ppm	ASTM D5185(m)		0	---
Beryllium	ppm	ASTM D5185(m)		0	---
Cadmium	ppm	ASTM D5185(m)		0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<1	---
Barium	ppm	ASTM D5185(m)	10	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	62	---
Manganese	ppm	ASTM D5185(m)		1	---
Magnesium	ppm	ASTM D5185(m)	450	991	---
Calcium	ppm	ASTM D5185(m)	3000	1134	---
Phosphorus	ppm	ASTM D5185(m)	1150	926	---
Zinc	ppm	ASTM D5185(m)	1350	1223	---
Sulfur	ppm	ASTM D5185(m)	4250	2200	---
Lithium	ppm	ASTM D5185(m)		<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	10	---
Sodium	ppm	ASTM D5185(m)		3	---
Potassium	ppm	ASTM D5185(m)	>20	5	---
Fuel	%	ASTM D7593*	>5	0.0	---
Glycol	%	ASTM D7922*		0.0	---

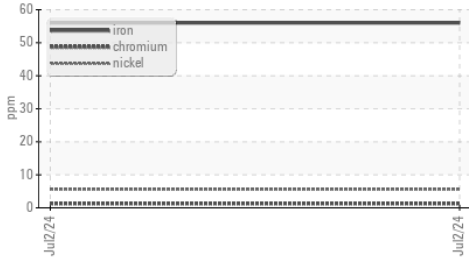
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.9	---
Nitration	Abs/cm	ASTM D7624*	>20	12.5	---
Sulfation	Abs./1mm	ASTM D7415*	>30	25.0	---

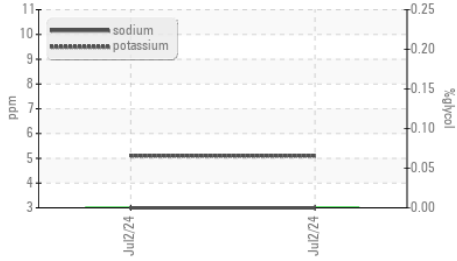


OIL ANALYSIS REPORT

▲ Ferrous Alloys



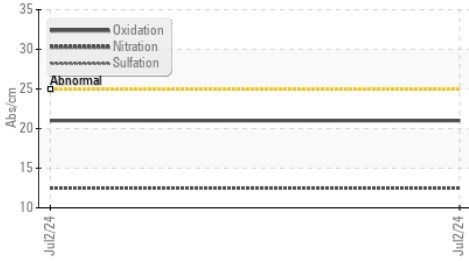
Glycol Contamination



Fuel Dilution



FT-IR (Direct Trend)



Viscosity @ 40°C



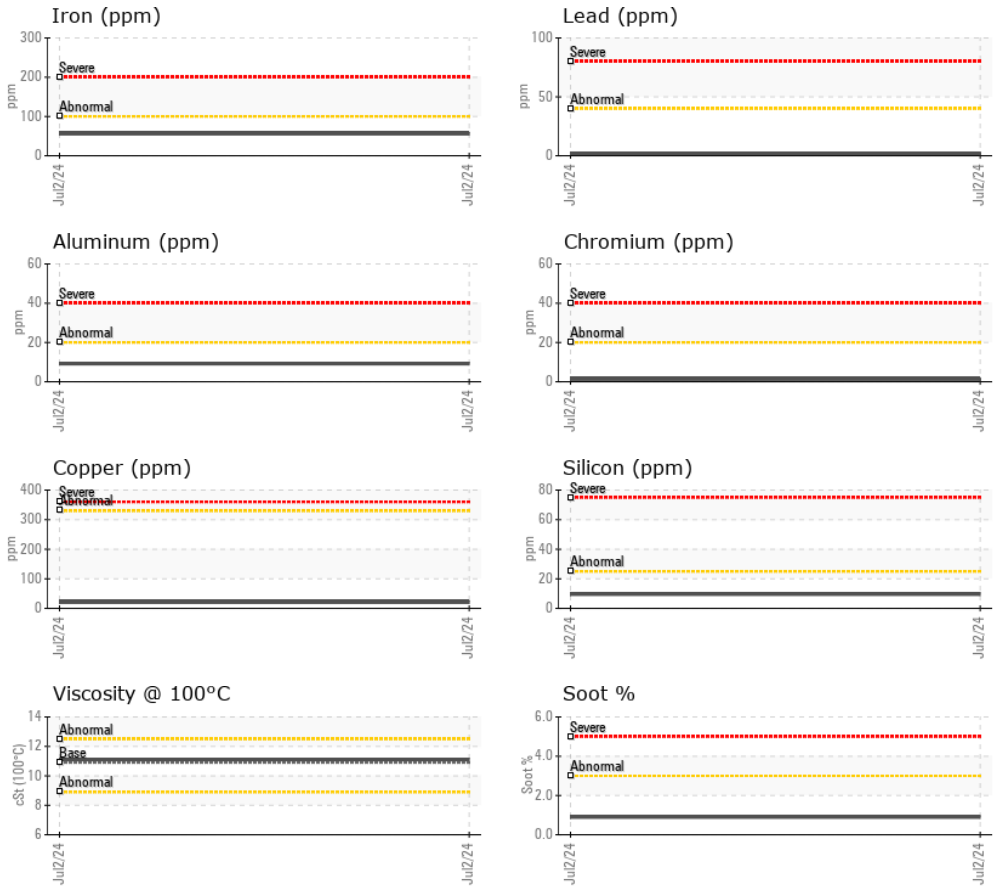
FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Oxidation	Abs./1mm ASTM D7414*	>25	21.0	---
White Metal	scalar Visual*	NONE	VLITE	---
Yellow Metal	scalar Visual*	NONE	NONE	---
Precipitate	scalar Visual*	NONE	NONE	---
Silt	scalar Visual*	NONE	NONE	---
Debris	scalar Visual*	NONE	NONE	---
Sand/Dirt	scalar Visual*	NONE	NONE	---
Appearance	scalar Visual*	NORML	NORML	---
Odor	scalar Visual*	NORML	NORML	---
Emulsified Water	scalar Visual*	>0.2	NEG	---
Free Water	scalar Visual*		NEG	---

FLUID PROPERTIES

Method	Limit/Base	Current	History1	History2
Visc @ 40°C	cSt ASTM D7279(m)	73	74.4	---
Visc @ 100°C	cSt ASTM D7279(m)	10.9	11.1	---
Viscosity Index (VI)	Scale ASTM D2270*	138	139	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **PERFORMANCE EQUIPMENT - VISION TRUCK**
Sample No. : WC0948241 **Received** : 03 Jul 2024 **415 EVANS AVENUE**
Lab Number : 02645218 **Tested** : 04 Jul 2024 **ETOBICOKE, ON**
Unique Number : 5802757 **Diagnosed** : 04 Jul 2024 - Kevin Marson **CA M8W 0B3**
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, KV40, PercentFuel, VI, Visual) **Contact: Service**
etobservice@visiontruckgroup.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.

T:
F: