



OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Area
[62411]
 Machine Id
VOLVO VNL 4447

Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 30 (--- GAL)

DIAGNOSIS

▲ Recommendation

Check for low coolant level. The oil change at the time of sampling has been noted. 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 30. Please confirm.

▲ Wear

Iron and nickel ppm levels are abnormal. Cylinder, crank, or cam shaft wear is indicated. Exhaust valve wear is indicated.

▲ Contamination

Fuel content negligible. Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative.

▲ Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear. The condition of the oil is acceptable for the time in service (see recommendation).

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	WC0853672	---	---
Sample Date	Client Info	03 Oct 2023	---	---
Machine Age	kms Client Info	651737	---	---
Oil Age	kms Client Info	96111	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	---	---
Iron	ppm ASTM D5185(m) >100	▲ 116	---	---
Chromium	ppm ASTM D5185(m) >20	2	---	---
Nickel	ppm ASTM D5185(m) >2	▲ 6	---	---
Titanium	ppm ASTM D5185(m)	0	---	---
Silver	ppm ASTM D5185(m) >2	<1	---	---
Aluminum	ppm ASTM D5185(m) >25	14	---	---
Lead	ppm ASTM D5185(m) >40	2	---	---
Copper	ppm ASTM D5185(m) >330	17	---	---
Tin	ppm ASTM D5185(m) >15	<1	---	---
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	4	---	---
Barium	ppm ASTM D5185(m) 10	<1	---	---
Molybdenum	ppm ASTM D5185(m) 100	84	---	---
Manganese	ppm ASTM D5185(m)	2	---	---
Magnesium	ppm ASTM D5185(m) 450	937	---	---
Calcium	ppm ASTM D5185(m) 3000	1179	---	---
Phosphorus	ppm ASTM D5185(m) 1150	947	---	---
Zinc	ppm ASTM D5185(m) 1350	1203	---	---
Sulfur	ppm ASTM D5185(m) 4250	2124	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	8	---	---
Sodium	ppm ASTM D5185(m) >75	▲ 224	---	---
Potassium	ppm ASTM D5185(m) >20	▲ 187	---	---
Fuel	% ASTM D7593* >6.0	0.7	---	---
Glycol	% ASTM D7922*	0.0	---	---

INFRA-RED

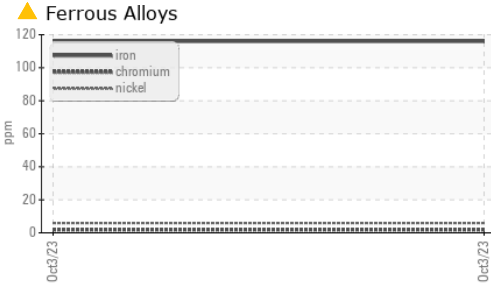
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	1	---	---
Nitration	Abs/cm ASTM D7624* >20	13.8	---	---
Sulfation	Abs/.1mm ASTM D7415* >30	28.1	---	---

FLUID DEGRADATION

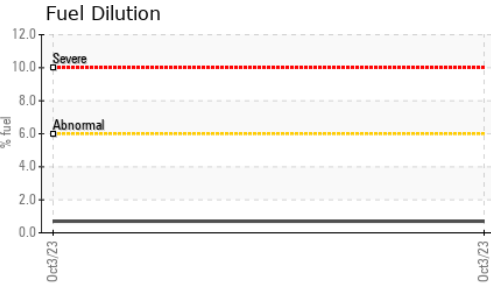
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	25.1	---	---



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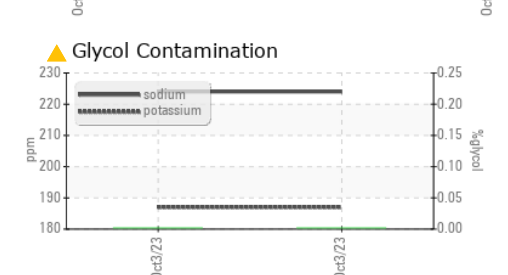
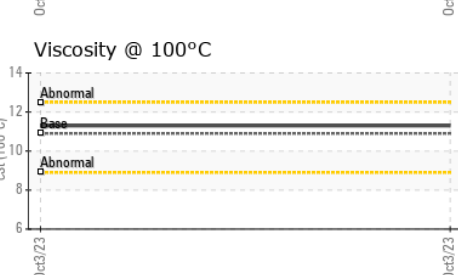
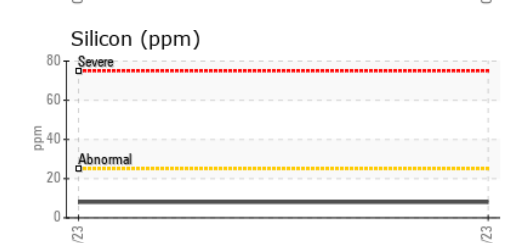
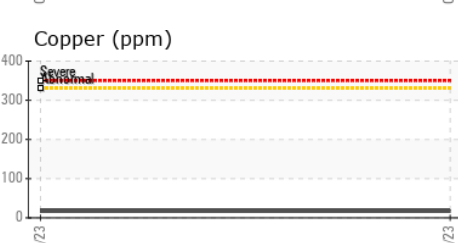
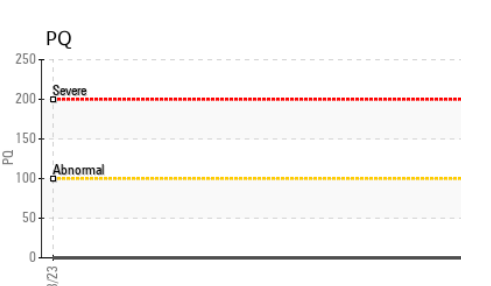
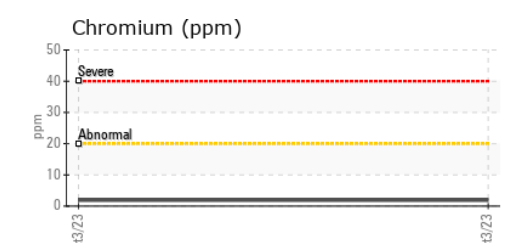
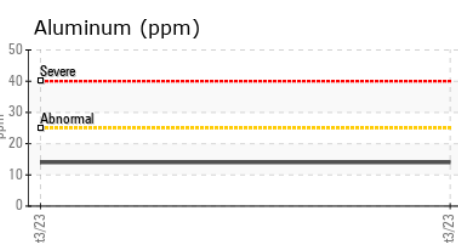
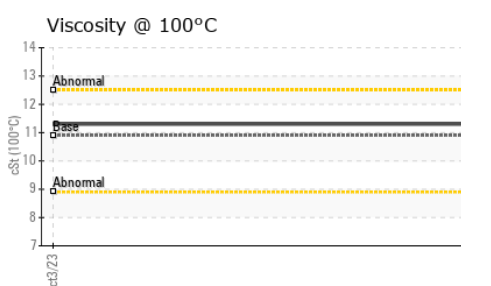
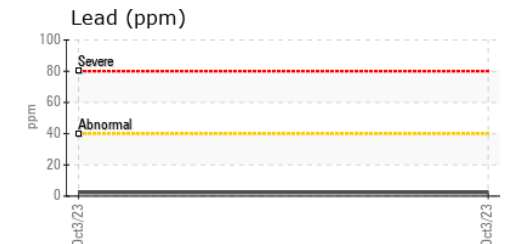
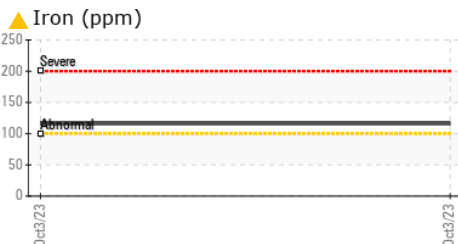
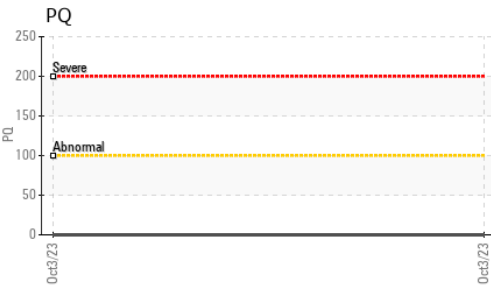


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	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 @ 100°C	cSt	ASTM D7279(m)	10.9	11.3	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 PERFORMANCE EQUIPMENT - VISION TRUCK
Sample No. : WC0853672 **Received** : 10 Oct 2023 **415 EVANS AVENUE**
Lab Number : 02587967 **Diagnosed** : 11 Oct 2023 **ETOBICOKE, ON**
Unique Number : 5657033 **Diagnostician** : Kevin Marson **CA M8W 0B3**
Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel, PQ, Visual) **Contact: Service**
 etobservice@visiontruckgroup.com
 To discuss this sample report, contact Customer Service at 1-800-268-2131. **T:**
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. **F:**
 Validity of results and interpretation are based on the sample and information as supplied.