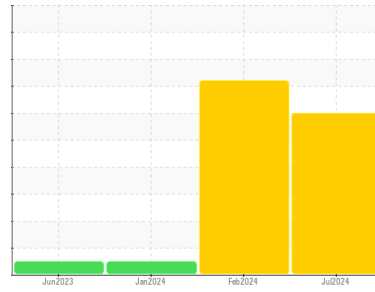




# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Area  
**[69677]**  
 Machine Id  
**VOLVO VNR660 4627**  
 Component  
**Diesel Engine**  
 Fluid  
 **DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time.

### Wear

All component wear rates are normal.

### Contamination

Test for glycol is positive. Light fuel dilution occurring. There is a light concentration of glycol present in the oil. There is a moderate concentration of water present in the oil. Free water present. No other contaminants were detected in the oil.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0948218</b>	WC0895328	WC0895323
Sample Date	Client Info		<b>12 Jul 2024</b>	03 Feb 2024	10 Jan 2024
Machine Age	mths	Client Info	<b>30</b>	323180	355466
Oil Age	mths	Client Info	<b>6</b>	20472	100018
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	SEVERE	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	<b>43</b>	77	56
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>4</b>	▲ 6	2
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>4</b>	8	8
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	3	3
Copper	ppm	ASTM D5185(m)	>330	<b>55</b>	15	13
Tin	ppm	ASTM D5185(m)	>15	<b>2</b>	2	2
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	250	<b>9</b>	8	<1
Barium	ppm	ASTM D5185(m)	10	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>45</b>	58	64
Manganese	ppm	ASTM D5185(m)		<b>2</b>	1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>687</b>	778	991
Calcium	ppm	ASTM D5185(m)	3000	<b>986</b>	1319	1173
Phosphorus	ppm	ASTM D5185(m)	1150	<b>947</b>	852	1016
Zinc	ppm	ASTM D5185(m)	1350	<b>932</b>	1089	1221
Sulfur	ppm	ASTM D5185(m)	4250	<b>2852</b>	2328	2323
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

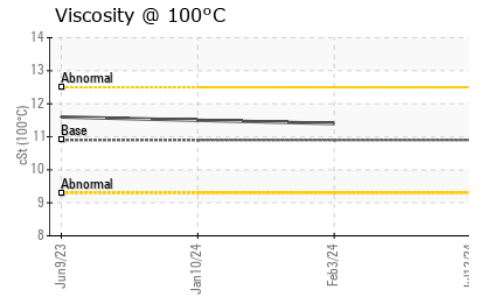
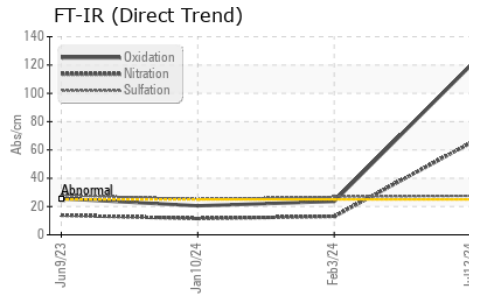
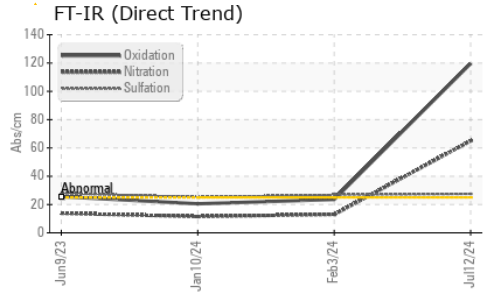
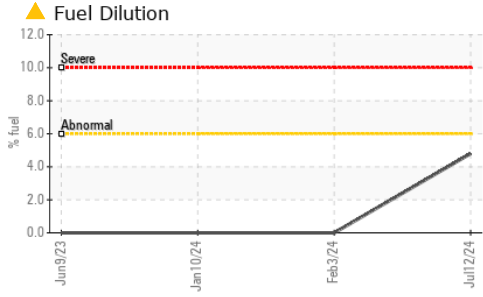
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>16</b>	10	10
Sodium	ppm	ASTM D5185(m)		<b>6</b>	43	3
Potassium	ppm	ASTM D5185(m)	>20	▲ <b>27</b>	▲ 344	10
Fuel	%	ASTM D7593*	>6.0	▲ <b>4.8</b>	<1.0	<1.0
Glycol	%	ASTM D7922*		▲ <b>0.017</b>	0.0	NEG

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>2.7</b>	0.5	0.9
Nitration	Abs/cm	ASTM D7624*	>20	<b>65.0</b>	13.0	11.5
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>27.5</b>	26.8	25.1



# OIL ANALYSIS REPORT

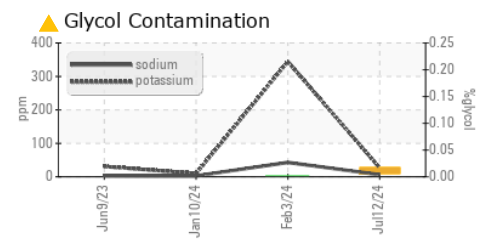
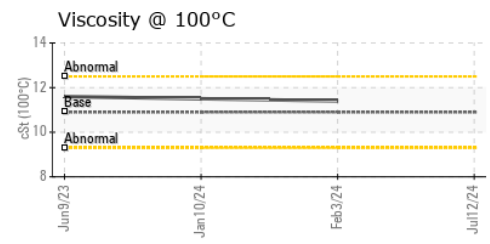
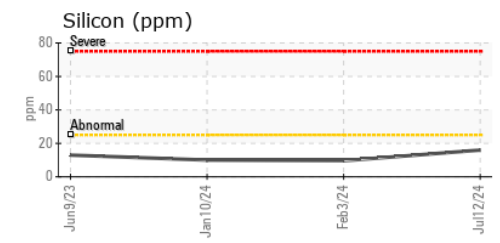
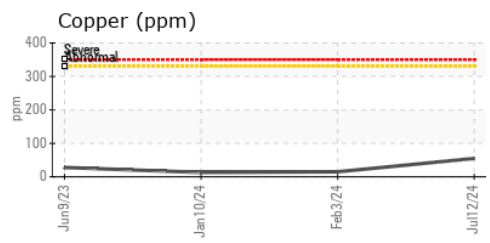
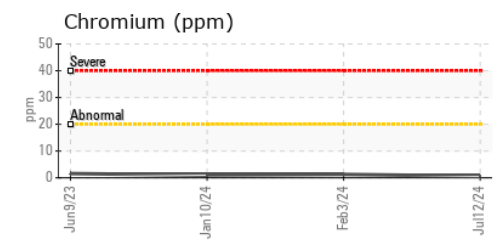
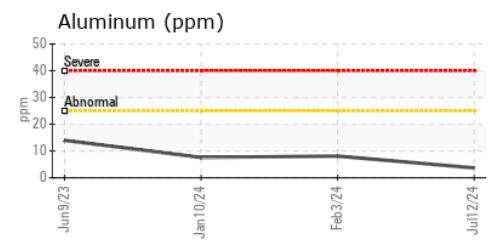
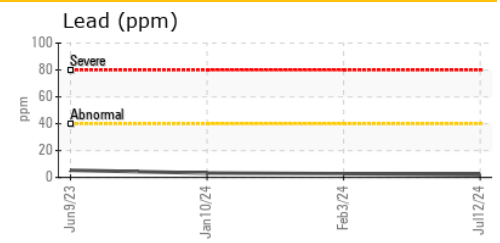
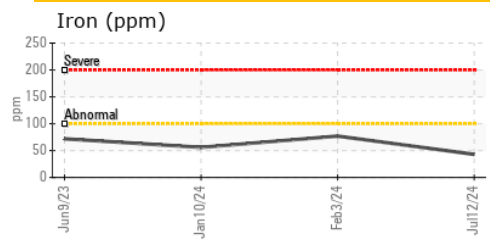


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>119.6</b>	23.6	20.5

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	<b>LIGHT</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>VLITE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>▲.5%</b>	NEG	NEG
Free Water	scalar	Visual*		<b>▲1%</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	---	11.4	11.5

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **PERFORMANCE EQUIPMENT - VISION TRUCK**  
**Sample No.** : WC0948218 **Received** : 16 Jul 2024 **415 EVANS AVENUE**  
**Lab Number** : **02648066** **Tested** : 17 Jul 2024 **ETOBICOKE, ON**  
**Unique Number** : 5813618 **Diagnosed** : 17 Jul 2024 - Kevin Marson **CA M8W 0B3**  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, Glycol, PercentFuel, 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.