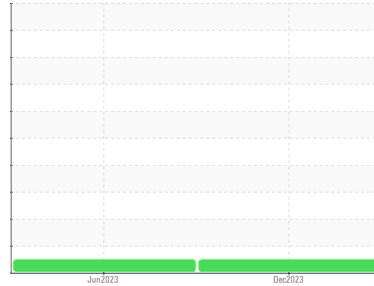




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[64342]
 Machine Id
VOLVO VNL660 4656
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0869679	WC0831159	---
Sample Date	Client Info		13 Dec 2023	23 Jun 2023	---
Machine Age	kms	Client Info	194348	94346	---
Oil Age	kms	Client Info	100002	94346	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>6.0	<1.0	<1.0	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	47	76	---
Chromium	ppm	ASTM D5185(m)	>20	1	1	---
Nickel	ppm	ASTM D5185(m)	>2	3	6	---
Titanium	ppm	ASTM D5185(m)		0	<1	---
Silver	ppm	ASTM D5185(m)	>2	1	<1	---
Aluminum	ppm	ASTM D5185(m)	>25	14	29	---
Lead	ppm	ASTM D5185(m)	>40	2	5	---
Copper	ppm	ASTM D5185(m)	>330	56	152	---
Tin	ppm	ASTM D5185(m)	>15	2	6	---
Antimony	ppm	ASTM D5185(m)		0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	250	7	22	---
Barium	ppm	ASTM D5185(m)	10	<1	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	66	104	---
Manganese	ppm	ASTM D5185(m)		1	5	---
Magnesium	ppm	ASTM D5185(m)	450	857	616	---
Calcium	ppm	ASTM D5185(m)	3000	1331	1670	---
Phosphorus	ppm	ASTM D5185(m)	1150	842	753	---
Zinc	ppm	ASTM D5185(m)	1350	1136	851	---
Sulfur	ppm	ASTM D5185(m)	4250	1998	2028	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

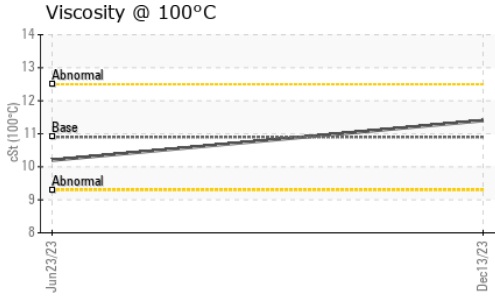
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	11	33	---
Sodium	ppm	ASTM D5185(m)		4	8	---
Potassium	ppm	ASTM D5185(m)	>20	31	73	---

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.7	0.5	---
Nitration	Abs/cm	ASTM D7624*	>20	12.1	12.9	---
Sulfation	Abs./1mm	ASTM D7415*	>30	24.9	26.6	---

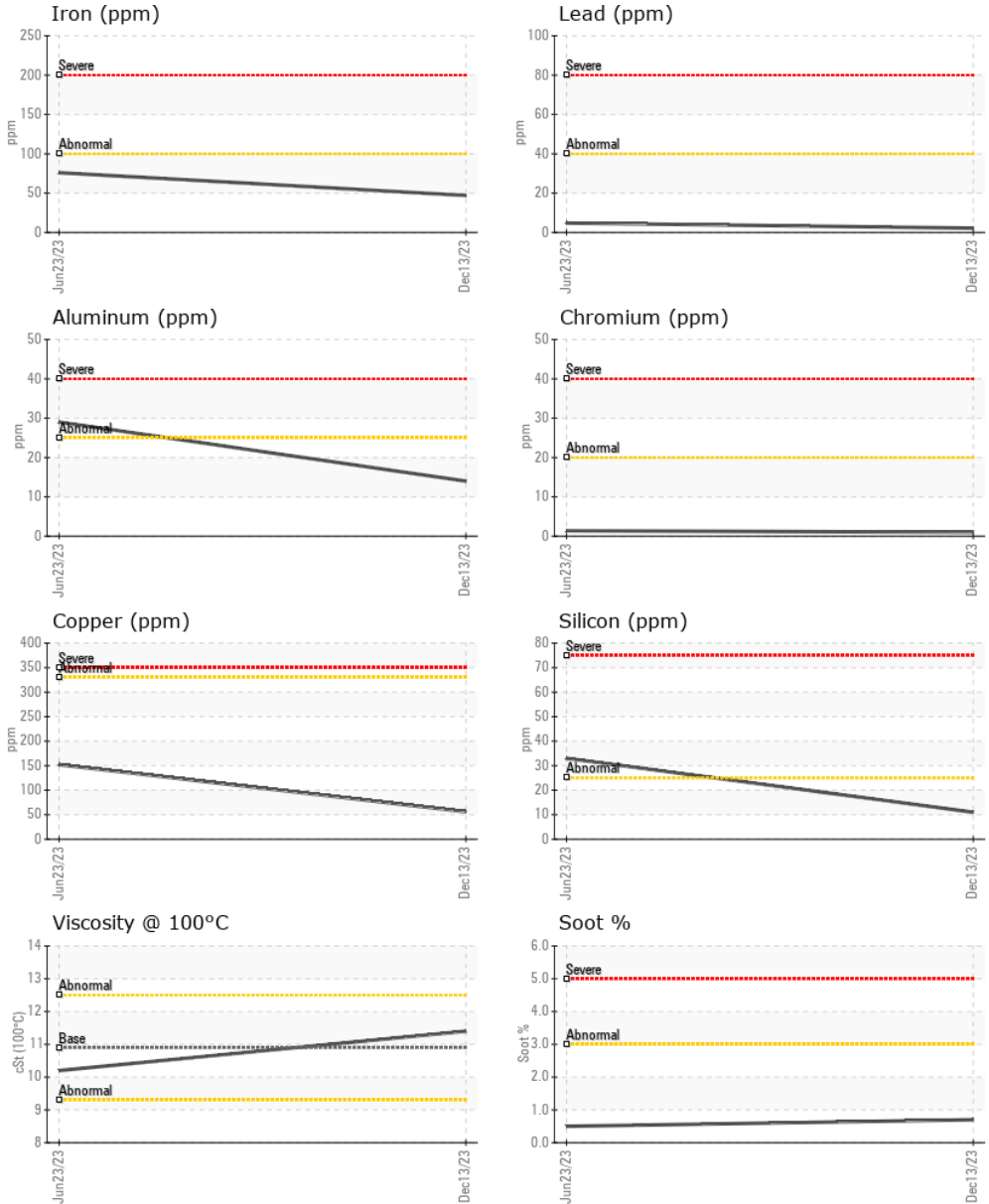


OIL ANALYSIS REPORT



FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	22.1	27.2	---
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Free Water	scalar	Visual*		NEG	NEG	---
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.4	10.2	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 PERFORMANCE EQUIPMENT - VISION TRUCK
Sample No. : WC0869679 **Received** : 18 Dec 2023 415 EVANS AVENUE
Lab Number : **02603725** **Diagnosed** : 18 Dec 2023 ETOBICOKE, ON
Unique Number : 5696810 **Diagnostician** : Wes Davis CA M8W 0B3
Test Package : MOB 1 **Contact:** Service

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. etobservice@visiontruckgroup.com