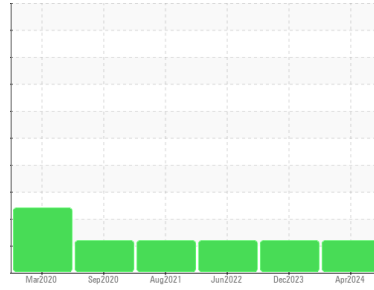


# OIL ANALYSIS REPORT

Sample Rating Trend



**FUEL**



Machine Id  
**VOLVO A30G 742003**  
 Component  
**Diesel Engine**  
 Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### ▲ Contamination

Light fuel dilution occurring.

### ▲ Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>ML0000695</b>	VCP411533	VCP347543
Sample Date	Client Info		<b>18 Apr 2024</b>	25 Dec 2023	02 Jun 2022
Machine Age	hrs	Client Info	<b>5001</b>	4127	2071
Oil Age	hrs	Client Info	<b>1000</b>	500	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	<b>5</b>	13	13
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>330	<b>0</b>	<1	6
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	2.5	<b>50</b>	38	45
Barium	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>43</b>	35	40
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	256	<b>527</b>	441	494
Calcium	ppm	ASTM D5185m	2057	<b>1736</b>	1545	1604
Phosphorus	ppm	ASTM D5185m	935	<b>938</b>	780	914
Zinc	ppm	ASTM D5185m	1223	<b>1114</b>	986	1102
Sulfur	ppm	ASTM D5185m	4079	<b>3411</b>	2522	3048

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	<b>3</b>	6	7
Sodium	ppm	ASTM D5185m		<b>2</b>	3	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	1
Fuel	%	ASTM D3524	>6.0	▲ <b>2.3</b>	▲ 4.2	▲ 4.8

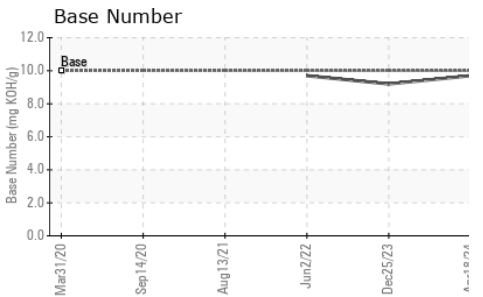
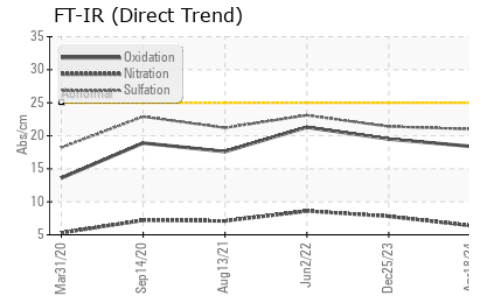
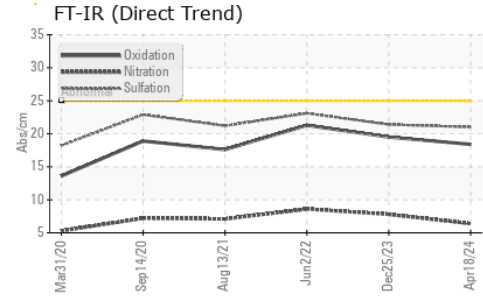
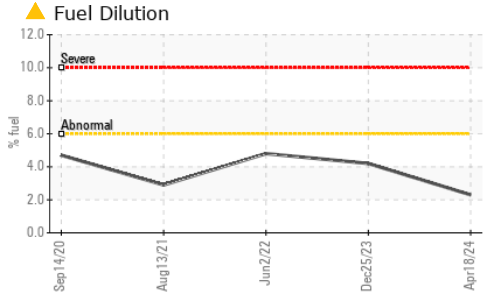
## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.4</b>	7.8	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.0</b>	21.4	23.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.4</b>	19.5	21.3
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>9.7</b>	9.2	9.7

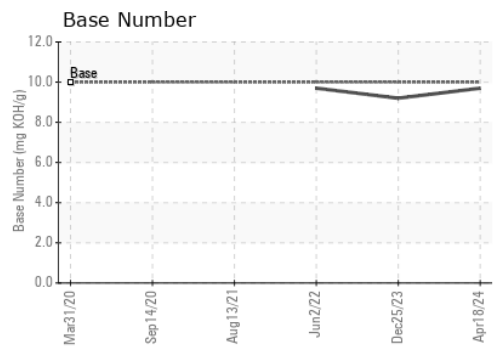
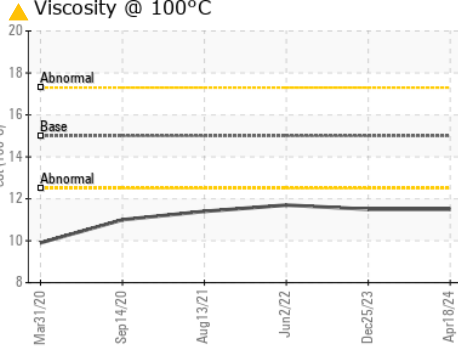
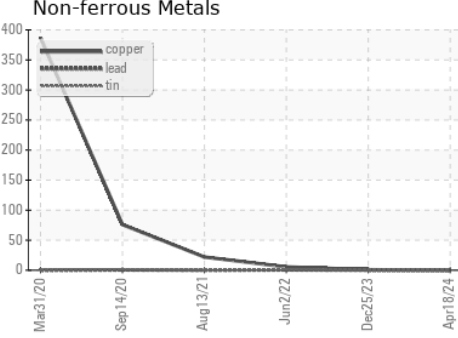
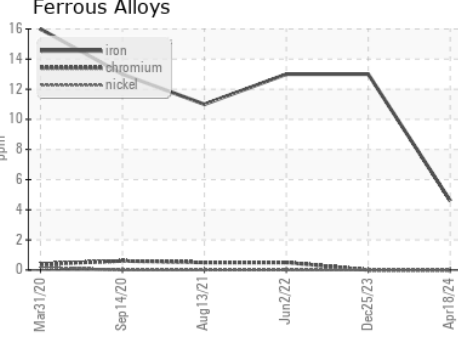
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
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 D445	15.0	▲ 11.5	▲ 11.5

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0000695 **Received** : 25 Apr 2024  
**Lab Number** : 06160053 **Tested** : 29 Apr 2024  
**Unique Number** : 10995476 **Diagnosed** : 29 Apr 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PercentFuel, TBN )

**MCCLUNG-LOGAN EQUIPMENT CO - WISE**  
 PO BOX 1158  
 WISE, VA  
 US 24293  
 Contact: DANNY BARRINGTON  
 dbarrington@mcclung-logan.com

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)