



# VOLVO

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Area  
**[402022]**  
 Machine Id

**16-8115**  
 Component  
**Diesel Engine**

Fluid  
**VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP392980</b>	VCP380101	VCP429745
Sample Date		Client Info		<b>24 Apr 2024</b>	29 Nov 2023	04 Sep 2023
Machine Age	hrs	Client Info		<b>5000</b>	4500	3978
Oil Age	hrs	Client Info		<b>500</b>	500	500
Filter Age	hrs	Client Info		<b>0</b>	500	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	<b>9</b>	11	8
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	▲ 2	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>5</b>	5	3
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

### CONTAMINATION

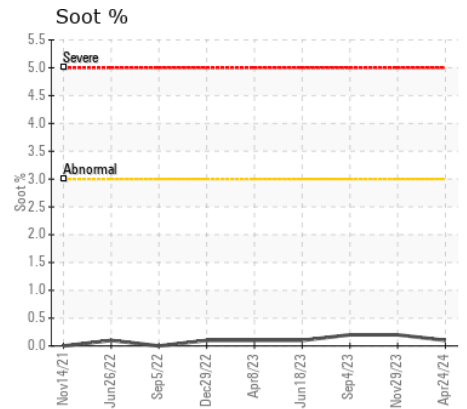
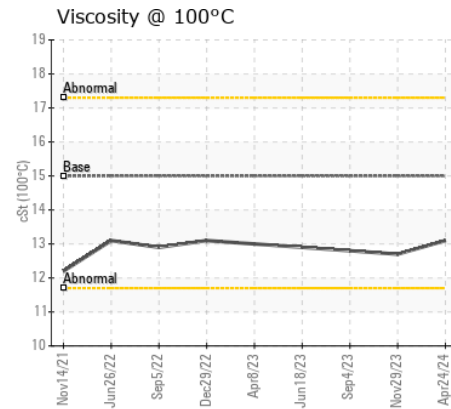
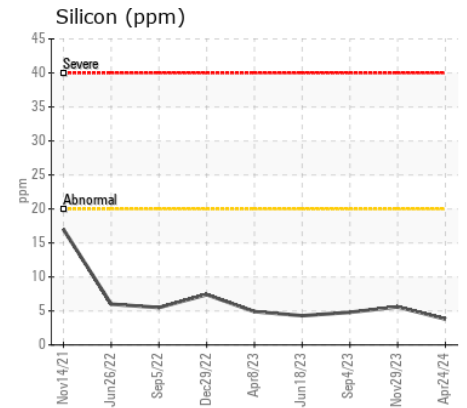
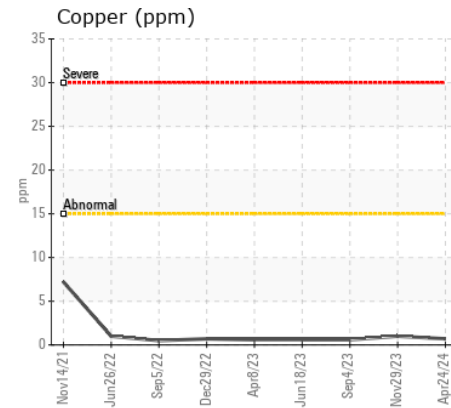
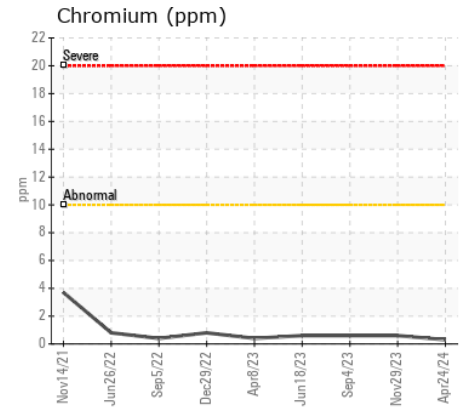
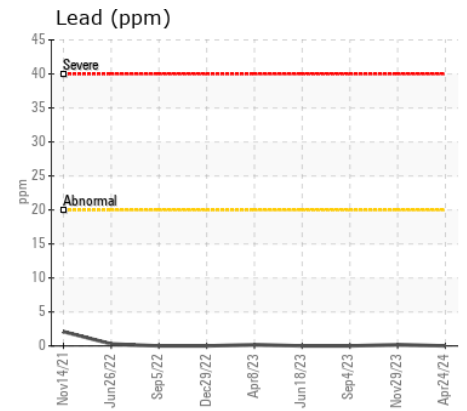
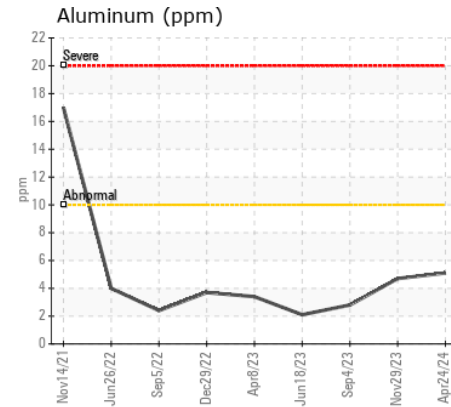
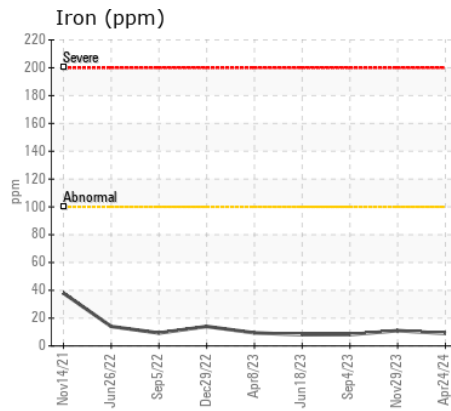
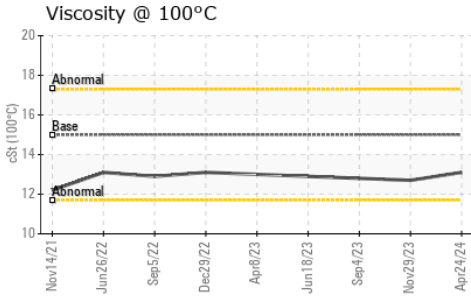
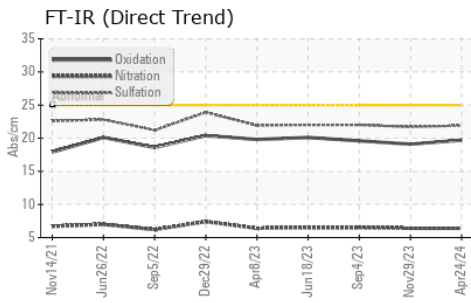
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>4</b>	6	5
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	<1	0
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.1</b>	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.4</b>	6.4	6.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.9</b>	21.7	22.0
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		<b>2</b>	3	2
Boron	ppm	ASTM D5185(m)	2.5	<b>46</b>	36	33
Barium	ppm	ASTM D5185(m)	0.0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	0.7	<b>38</b>	40	41
Manganese	ppm	ASTM D5185(m)	0.0	<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	256	<b>505</b>	504	508
Calcium	ppm	ASTM D5185(m)	2057	<b>1675</b>	1694	1645
Phosphorus	ppm	ASTM D5185(m)	935	<b>910</b>	897	982
Zinc	ppm	ASTM D5185(m)	1223	<b>1053</b>	1065	1068
Sulfur	ppm	ASTM D5185(m)	4079	<b>2372</b>	2333	2407
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>19.7</b>	19.1	19.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.0	<b>13.1</b>	12.7	12.8



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : VCP392980  
**Lab Number** : 02631314  
**Unique Number** : 5772467  
**Test Package** : MOB 1  
**Received** : 25 Apr 2024  
**Tested** : 25 Apr 2024  
**Diagnosed** : 25 Apr 2024 - Wes Davis

**CRH CANADA GROUP INC.**  
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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.