



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Area
[404739]

Machine Id
27-4551

Component
Diesel Engine

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

RECOMMENDATION

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCE223455	VCP380094	VCP391845
Sample Date		Client Info		16 May 2024	28 Dec 2023	07 Nov 2023
Machine Age	hrs	Client Info		9553	9020	8791
Oil Age	hrs	Client Info		500	0	300
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	11	5	6
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>10	2	1	1
Lead	ppm	ASTM D5185(m)	>20	1	<1	<1
Copper	ppm	ASTM D5185(m)	>15	6	3	4
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

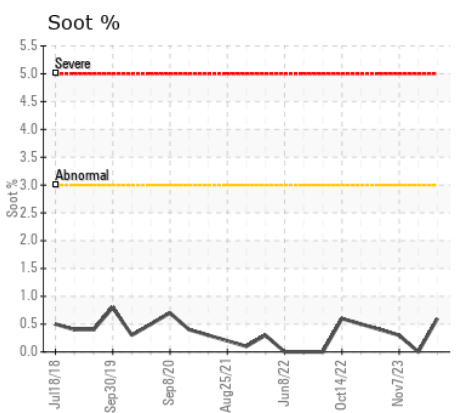
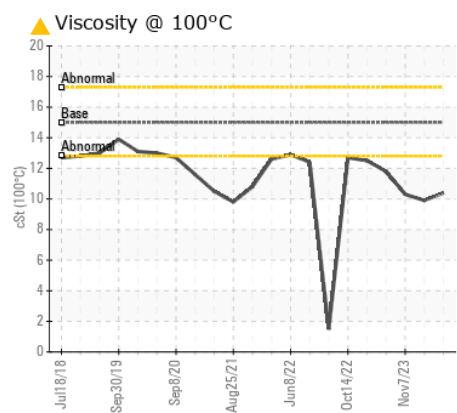
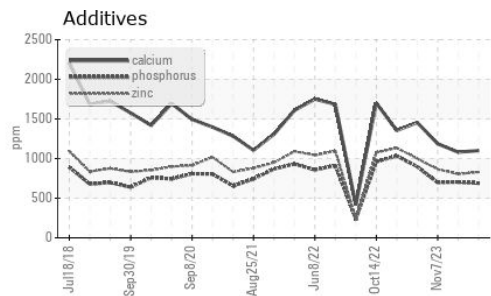
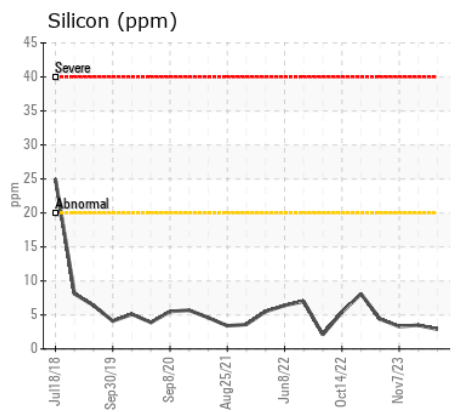
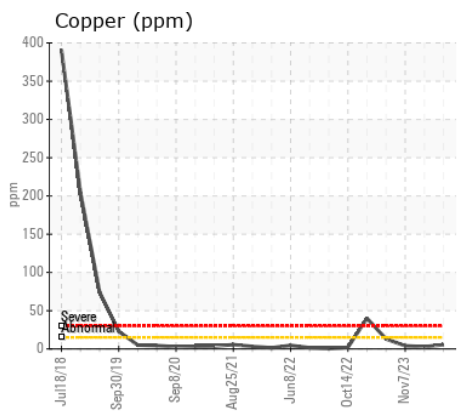
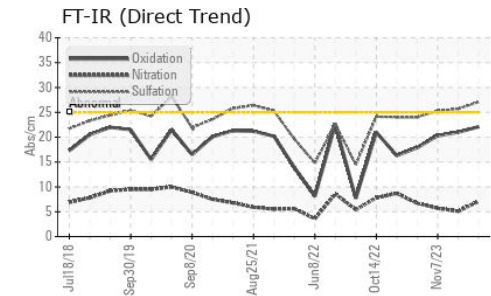
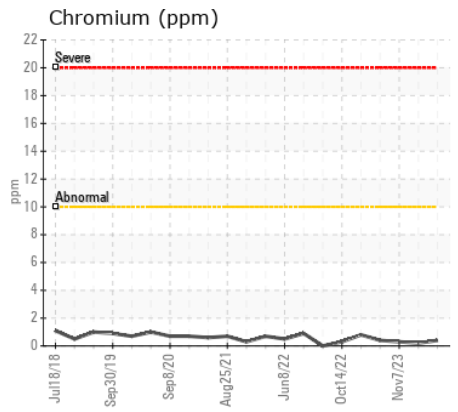
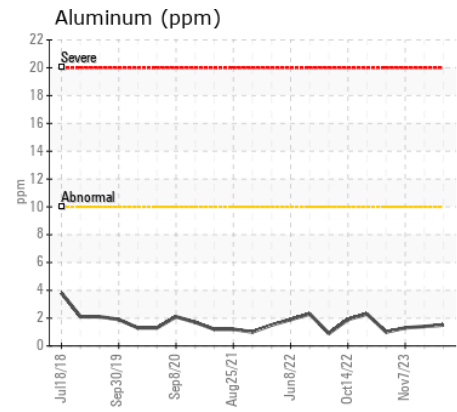
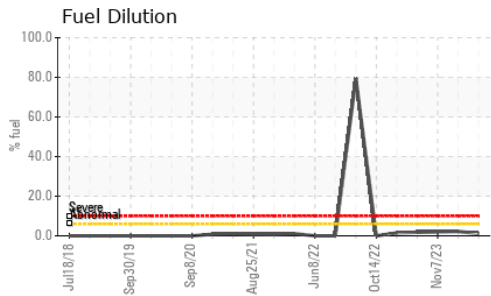
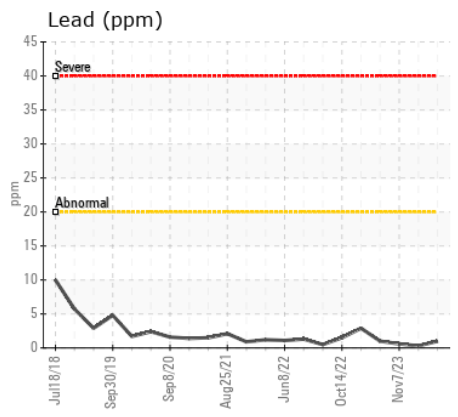
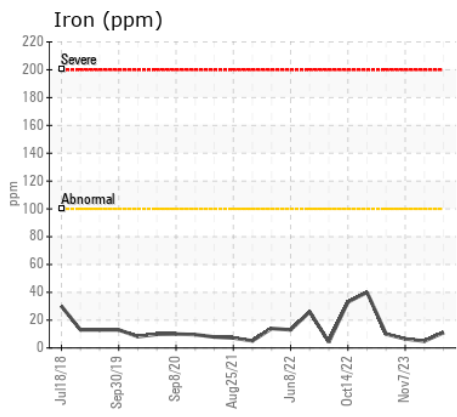
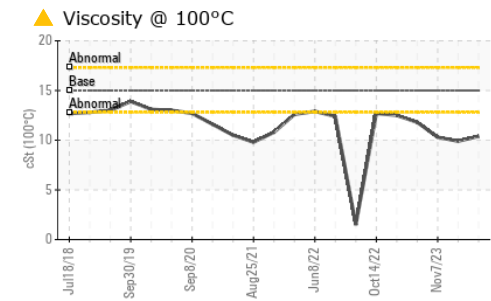
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185(m)	>20	3	4	3
Potassium	ppm	ASTM D5185(m)	>20	<1	2	0
Fuel	%	ASTM D7593*	>6.0	1.2	2.2	2
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.6	0	0.3
Nitration	Abs/cm	ASTM D7624*	>20	7.1	5.1	5.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.1	25.7	25.3
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	1	2
Boron	ppm	ASTM D5185(m)	2.5	17	28	21
Barium	ppm	ASTM D5185(m)	0.0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	0.7	24	26	27
Manganese	ppm	ASTM D5185(m)	0.0	0	0	0
Magnesium	ppm	ASTM D5185(m)	256	320	322	348
Calcium	ppm	ASTM D5185(m)	2057	1101	1081	1187
Phosphorus	ppm	ASTM D5185(m)	935	689	704	696
Zinc	ppm	ASTM D5185(m)	1223	829	804	865
Sulfur	ppm	ASTM D5185(m)	4079	2046	2257	2099
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.1	21.0	20.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.0	▲ 10.4	▲ 9.9	▲ 10.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : VGE223455 **Received** : 28 May 2024
Lab Number : 02637907 **Tested** : 29 May 2024
Unique Number : 5787069 **Diagnosed** : 29 May 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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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.