



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
[SPM703646 ALPINE DEM]
 Machine Id
VOLVO EC480EHR 691030
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP438289	VCP440609	VCP355045
Sample Date		Client Info		06 May 2024	15 Nov 2023	21 Jul 2022
Machine Age	hrs	Client Info		3348	2564	972
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	4	6	7
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	1	1	2
Lead	ppm	ASTM D5185m	>20	0	<1	4
Copper	ppm	ASTM D5185m	>15	<1	4	▲ 273
Tin	ppm	ASTM D5185m	>10	0	<1	3
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

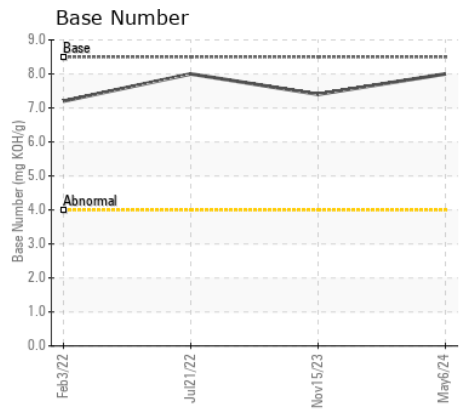
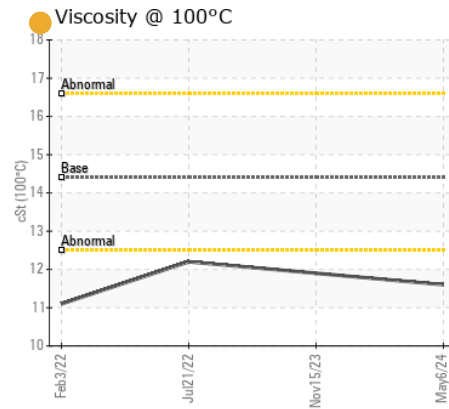
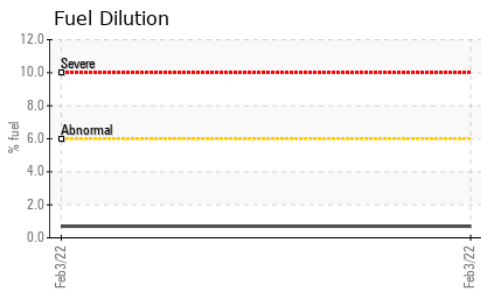
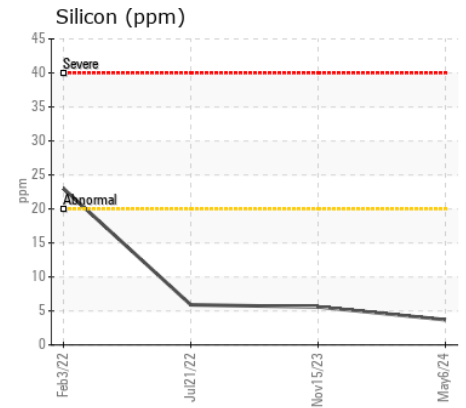
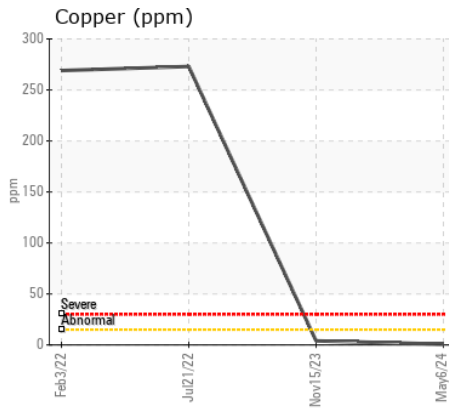
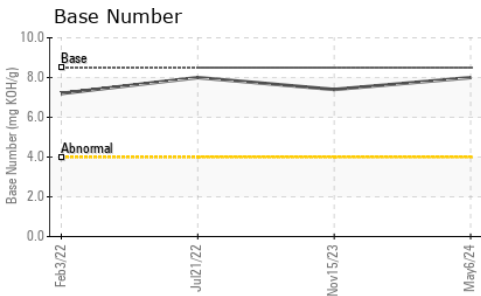
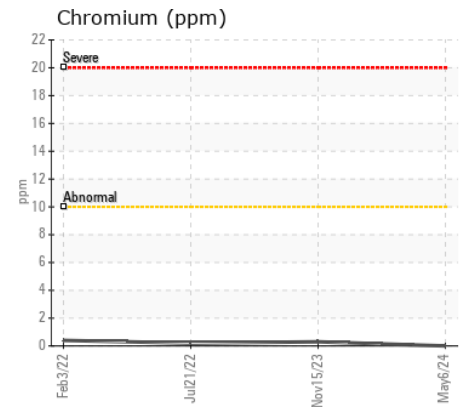
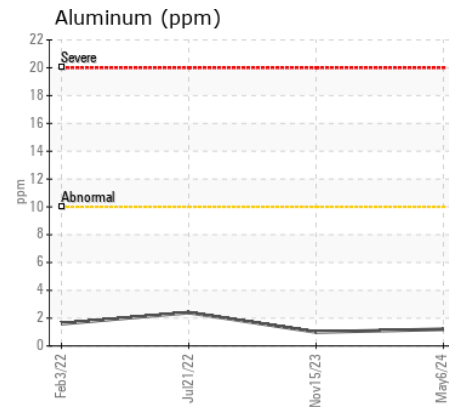
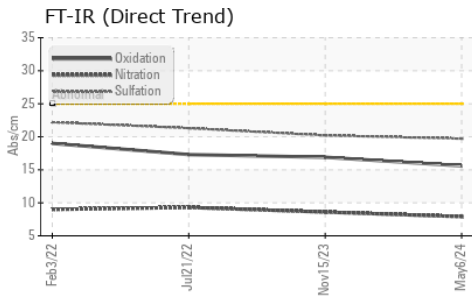
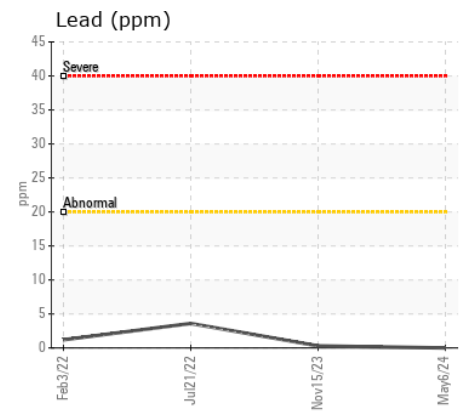
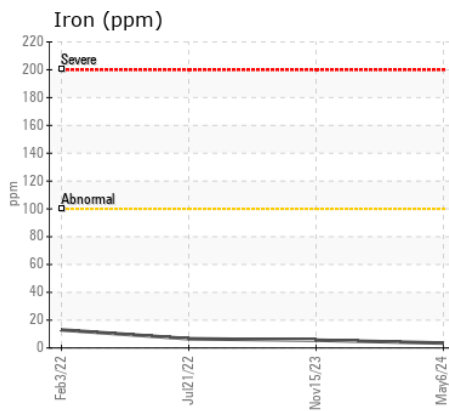
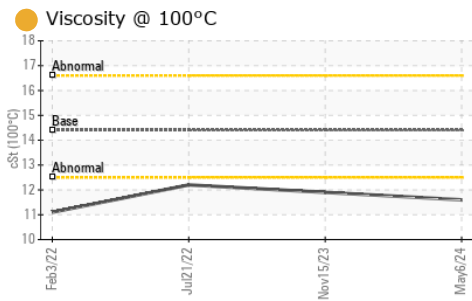
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	6	6
Potassium	ppm	ASTM D5185m	>20	<1	1	0
Fuel	%	ASTM D3524	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.9	8.6	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	20.2	21.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	1	<1	4
Boron	ppm	ASTM D5185m	250	1	0	11
Barium	ppm	ASTM D5185m	10	0	11	0
Molybdenum	ppm	ASTM D5185m	100	54	60	57
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	450	933	840	916
Calcium	ppm	ASTM D5185m	3000	1019	1060	1204
Phosphorus	ppm	ASTM D5185m	1150	1088	889	1004
Zinc	ppm	ASTM D5185m	1350	1277	1187	1222
Sulfur	ppm	ASTM D5185m	4250	3581	3008	3525
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	16.9	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.0	7.4	8.0
Visc @ 100°C	cSt	ASTM D445	14.4	● 11.6	● 11.9	● 12.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP438289 **Received** : 17 Jun 2024
Lab Number : 06211216 **Tested** : 19 Jun 2024
Unique Number : 11084080 **Diagnosed** : 19 Jun 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: FuelDilution, TBN)

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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)