



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION



Machine Id
VOLVO L150H 6838
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0010435	ASC0010135	ASC0006321
Sample Date		Client Info		03 Apr 2024	02 Apr 2024	03 Jan 2024
Machine Age	hrs	Client Info		6892	8022	6892
Oil Age	hrs	Client Info		6892	8022	6892
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	88	15	0
Chromium	ppm	ASTM D5185m	>20	1	<1	0
Nickel	ppm	ASTM D5185m	>5	0	1	0
Titanium	ppm	ASTM D5185m		<1	1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>30	<1	4	0
Lead	ppm	ASTM D5185m	>40	0	3	<1
Copper	ppm	ASTM D5185m	>20	<1	5	<1
Tin	ppm	ASTM D5185m	>20	0	3	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

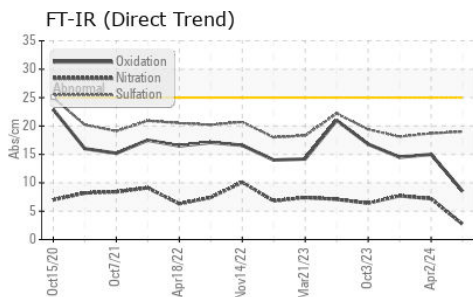
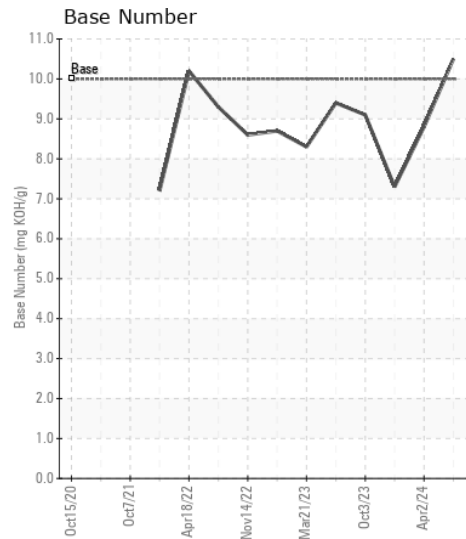
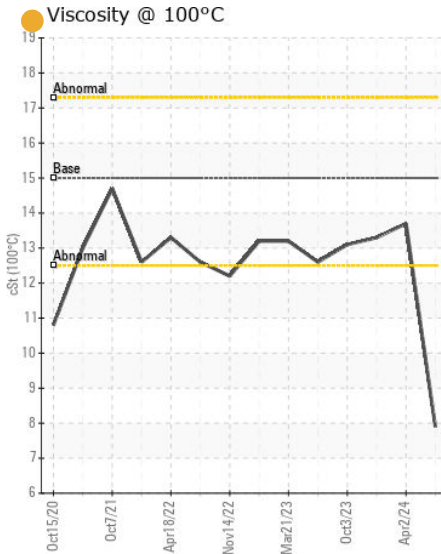
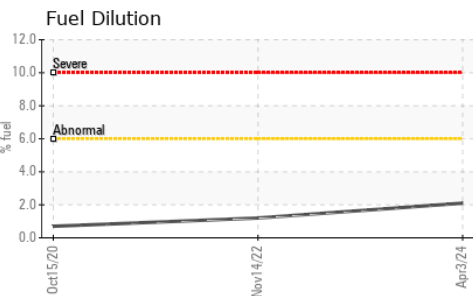
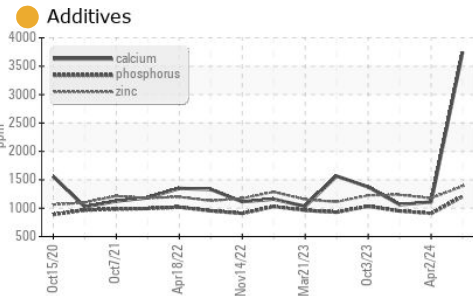
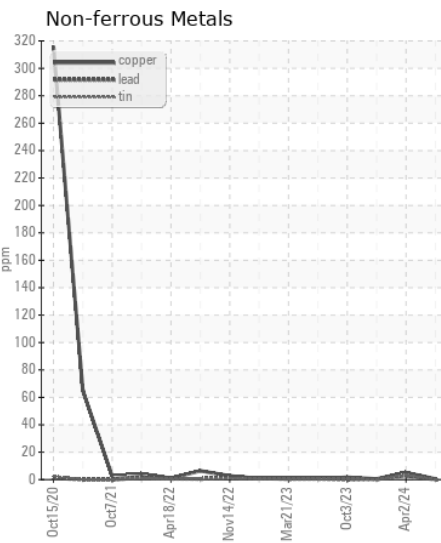
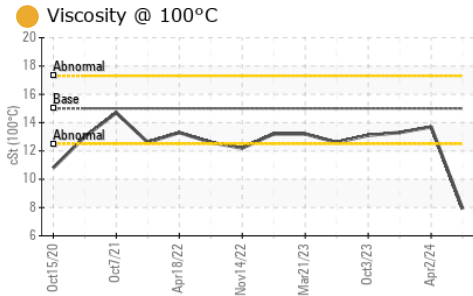
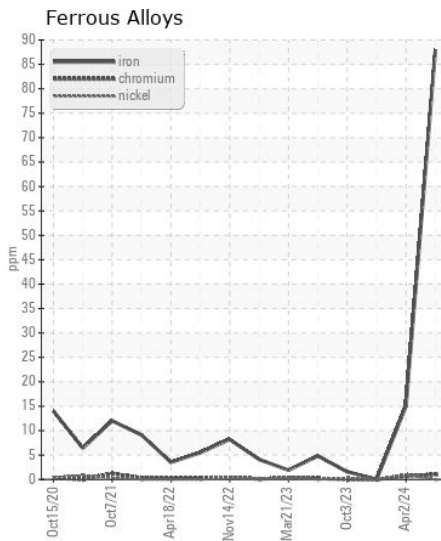
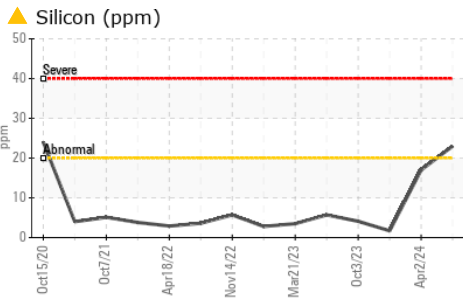
Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>20	▲ 23	17	2
Potassium	ppm	ASTM D5185m	>20	4	3	1
Fuel	%	ASTM D3524	>6.0	2.1	<1.0	<1.0
Water		WC Method	>0.2	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	2.7	7.2	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	18.7	18.1
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		4	0	<1
Boron	ppm	ASTM D5185m	2.5	● 133	3	15
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	12	63	56
Manganese	ppm	ASTM D5185m	0.0	5	1	0
Magnesium	ppm	ASTM D5185m	256	● 17	896	867
Calcium	ppm	ASTM D5185m	2057	● 3748	1109	1062
Phosphorus	ppm	ASTM D5185m	935	1207	907	949
Zinc	ppm	ASTM D5185m	1223	1388	1175	1234
Sulfur	ppm	ASTM D5185m	4079	3879	2923	2867
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.5	15.0	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	10.5	8.8	7.3
Visc @ 100°C	cSt	ASTM D445	15.0	● 7.9	13.7	13.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0010435 **Received** : 23 Apr 2024
Lab Number : 06157400 **Tested** : 26 Apr 2024
Unique Number : 10992823 **Diagnosed** : 29 Apr 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)
 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)

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