



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area

Ascendum Machinery/500 Hour CSA

Machine Id

VOLVO L150H 2359 (S/N L150HV7301)

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011051	ASC0010452	ASC0008656
Sample Date		Client Info		27 Jun 2024	22 Apr 2024	15 Feb 2024
Machine Age	hrs	Client Info		1547	1050	516
Oil Age	hrs	Client Info		500	500	516
Filter Age	hrs	Client Info		500	500	516
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	5	13
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	3	0	2
Lead	ppm	ASTM D5185m	>20	<1	0	0
Copper	ppm	ASTM D5185m	>15	4	23	▲ 194
Tin	ppm	ASTM D5185m	>10	<1	0	1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

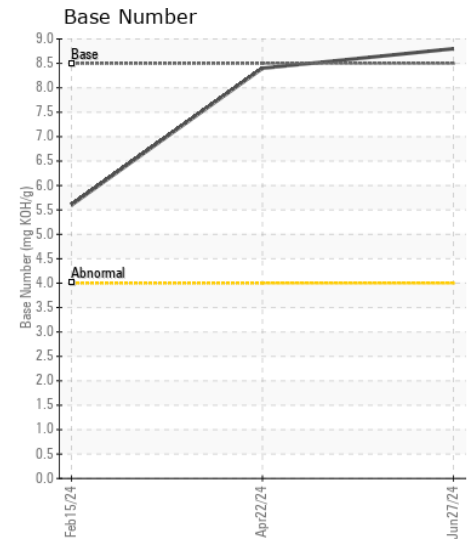
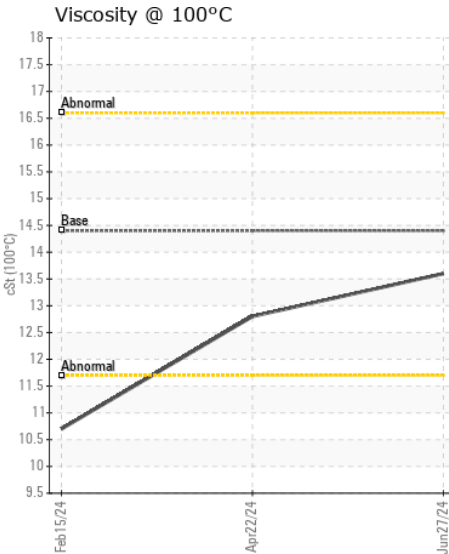
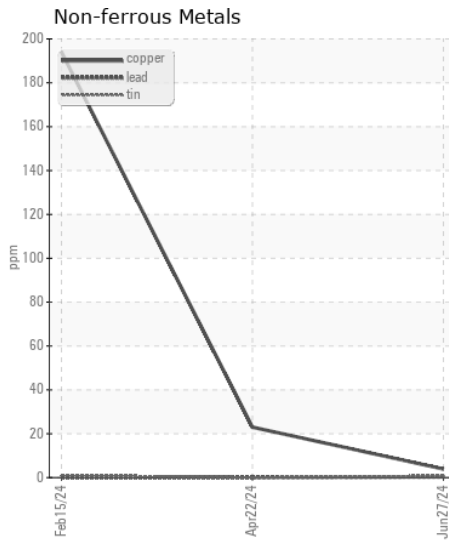
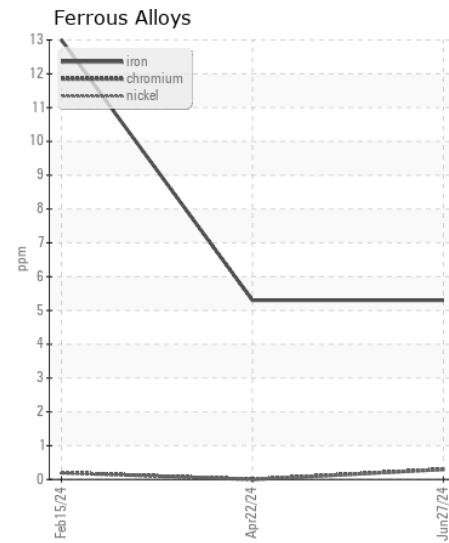
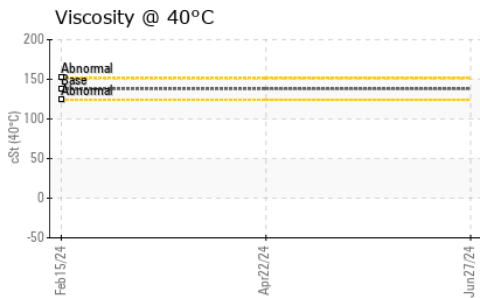
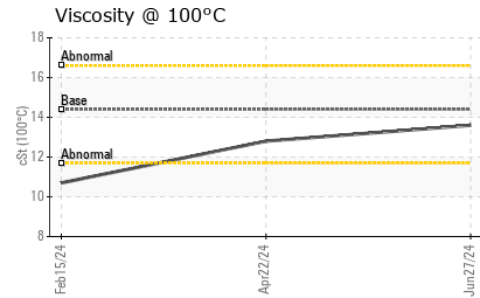
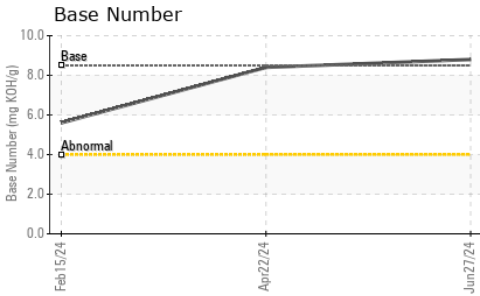
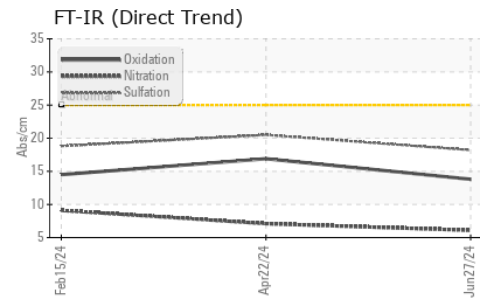
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	6	25
Potassium	ppm	ASTM D5185m	>20	2	0	5
Fuel		WC Method	>6.0	<1.0	<1.0	0.4
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	6.1	7.1	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	20.5	18.8
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	0	<1	0
Boron	ppm	ASTM D5185m	250	4	13	51
Barium	ppm	ASTM D5185m	10	<1	0	<1
Molybdenum	ppm	ASTM D5185m	100	62	53	83
Manganese	ppm	ASTM D5185m		<1	0	2
Magnesium	ppm	ASTM D5185m	450	898	701	24
Calcium	ppm	ASTM D5185m	3000	1130	1552	1912
Phosphorus	ppm	ASTM D5185m	1150	981	1028	854
Zinc	ppm	ASTM D5185m	1350	1197	1263	1094
Sulfur	ppm	ASTM D5185m	4250	2726	3661	3629
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	16.9	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.8	8.4	5.6
Visc @ 100°C	cSt	ASTM D445	14.4	13.6	12.8	10.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011051 **Received** : 02 Jul 2024
Lab Number : 06225977 **Tested** : 05 Jul 2024
Unique Number : 11109470 **Diagnosed** : 05 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: TBN, KV40)

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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)