



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery 500HR CSA/Candor, NC
Machine Id
VOLVO L150H 2197 (S/N 6957)
Component
Diesel Engine
Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0006406	VCP387761	VCP390227
Sample Date		Client Info		25 Jan 2024	19 Dec 2022	14 Oct 2022
Machine Age	hrs	Client Info		7473	4536	3655
Oil Age	hrs	Client Info		473	0	0
Filter Age	hrs	Client Info		473	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	2	15	5
Chromium	ppm	ASTM D5185m	>10	0	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	2	10	2
Lead	ppm	ASTM D5185m	>20	1	<1	<1
Copper	ppm	ASTM D5185m	>15	7	244	2
Tin	ppm	ASTM D5185m	>10	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

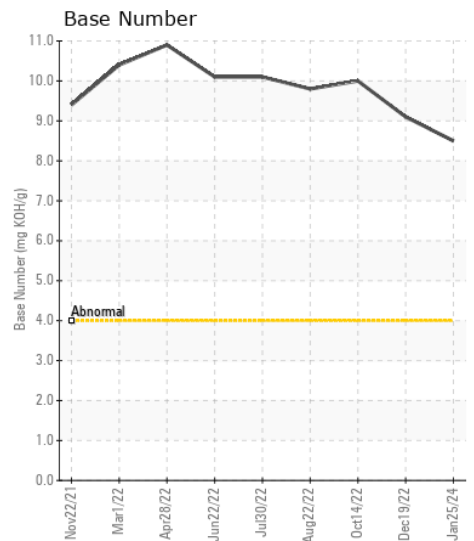
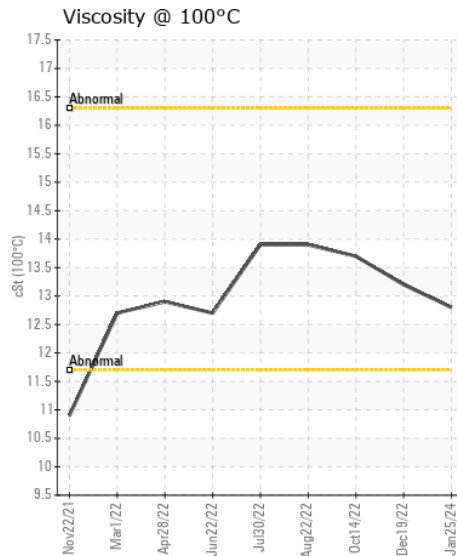
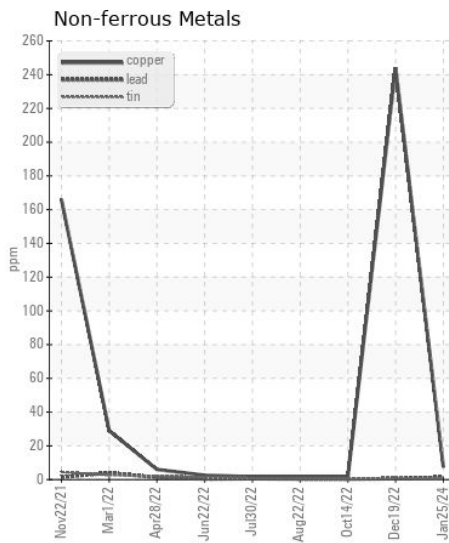
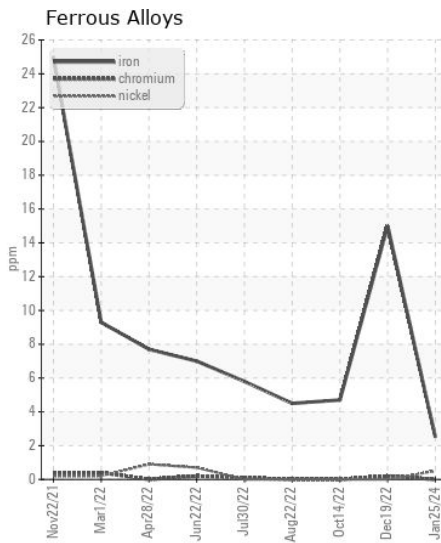
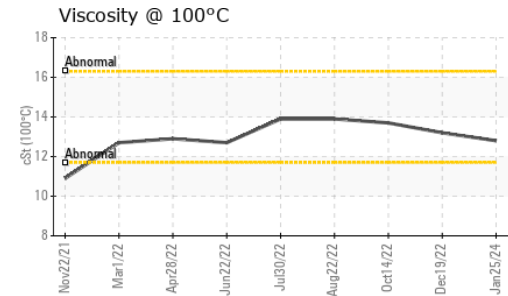
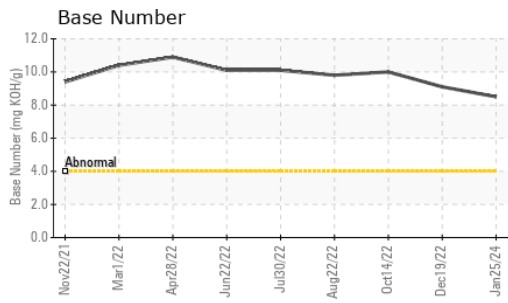
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	15	3
Potassium	ppm	ASTM D5185m	>20	4	2	2
Fuel		WC Method	>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	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.2	8.4	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	20.8	19.7
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		1	0	0
Boron	ppm	ASTM D5185m		11	6	9
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		58	54	59
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		878	788	844
Calcium	ppm	ASTM D5185m		977	1184	1134
Phosphorus	ppm	ASTM D5185m		1015	946	982
Zinc	ppm	ASTM D5185m		1206	1132	1195
Sulfur	ppm	ASTM D5185m		3070	3354	3447
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.1	17.2	15.3
Base Number (BN)	mg KOH/g	ASTM D2896		8.5	9.1	10.0
Visc @ 100°C	cSt	ASTM D445		12.8	13.2	13.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0006406 **Received** : 31 Jan 2024
Lab Number : 06075521 **Diagnosed** : 01 Feb 2024
Unique Number : 10857612 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: 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)