



ASCENDUM

OIL ANALYSIS REPORT



Area

Ascendum Machinery

Machine Id

VOLVO L180H 5319

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0005135	ASC0007302	ASC0000691
Sample Date		Client Info		06 May 2024	15 Feb 2024	01 Dec 2023
Machine Age	hrs	Client Info		11005	10435	9988
Oil Age	hrs	Client Info		8632	8509	8545
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				ATTENTION	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	3	3	0
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	0
Lead	ppm	ASTM D5185m	>20	0	0	0
Copper	ppm	ASTM D5185m	>150	4	<1	2
Tin	ppm	ASTM D5185m	>20	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

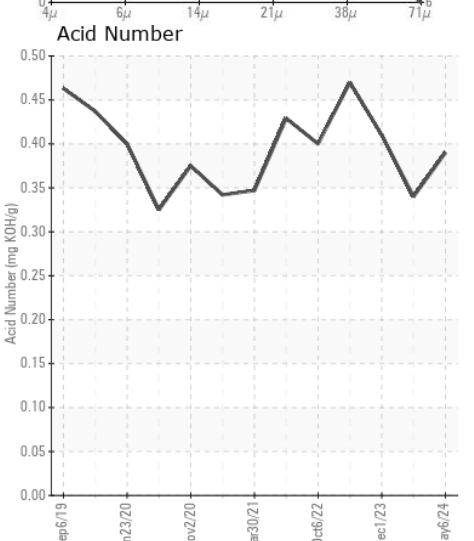
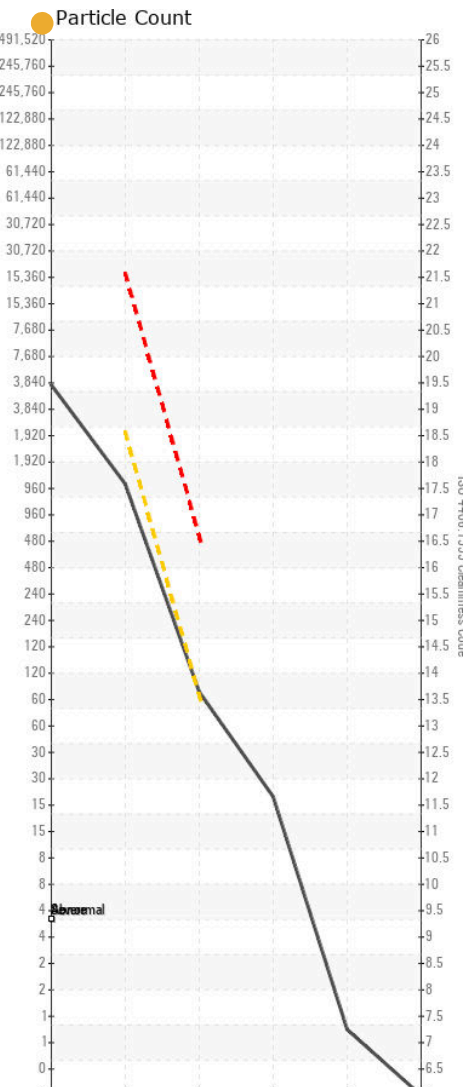
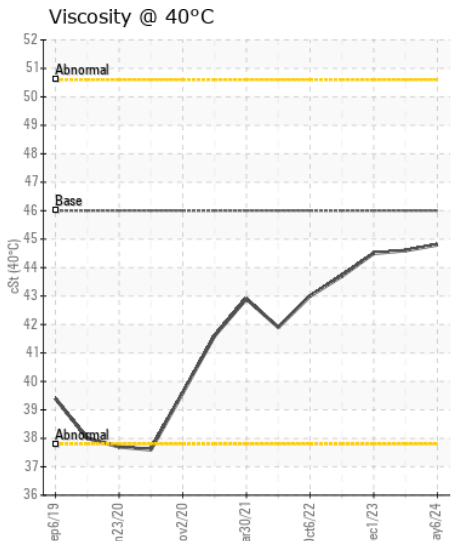
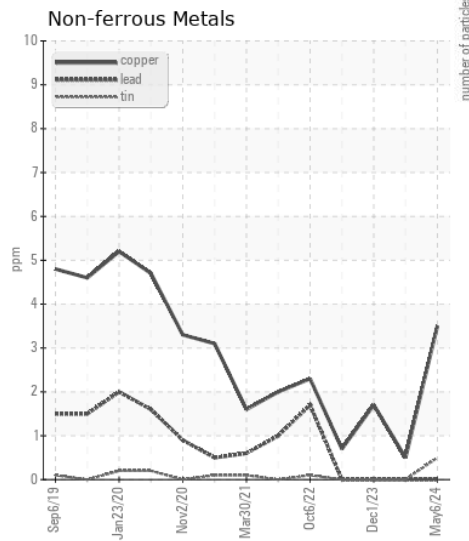
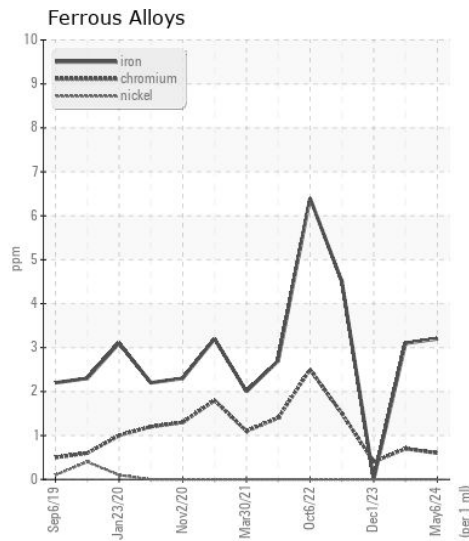
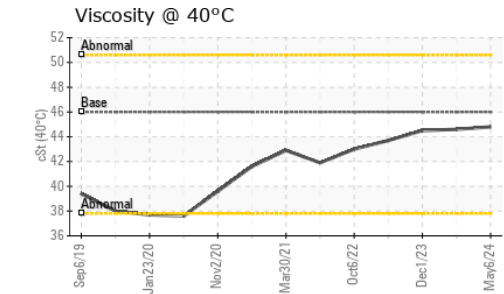
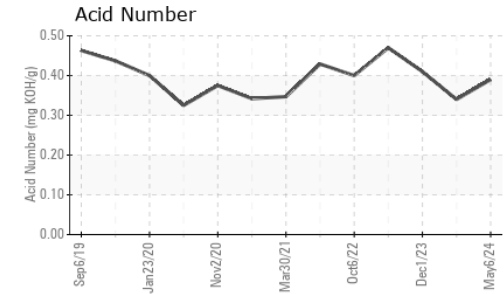
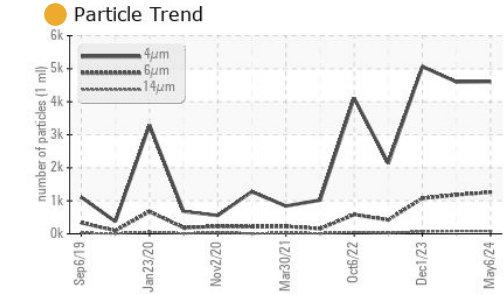
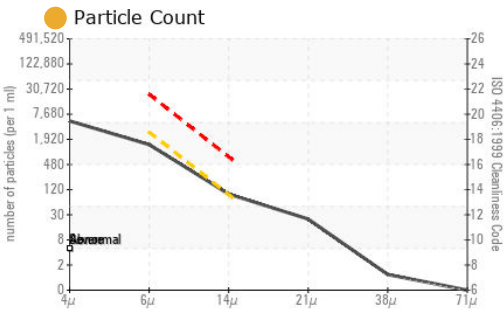
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	2	<1
Potassium	ppm	ASTM D5185m	>20	1	2	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		4609	4598	5065
Particles >6µm		ASTM D7647	>2500	1260	1179	1073
Particles >14µm		ASTM D7647	>80	83	87	68
Particles >21µm		ASTM D7647	>20	21	22	19
Particles >38µm		ASTM D7647	>4	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	19/17/14	19/17/14	20/17/13
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	2	3
Boron	ppm	ASTM D5185m	14	8	8	2
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	6	7	4
Manganese	ppm	ASTM D5185m	0.0	1	0	<1
Magnesium	ppm	ASTM D5185m	2.6	28	30	27
Calcium	ppm	ASTM D5185m	49	177	180	159
Phosphorus	ppm	ASTM D5185m	354	350	346	306
Zinc	ppm	ASTM D5185m	419	416	421	378
Sulfur	ppm	ASTM D5185m	3719	2242	2074	1766
Acid Number (AN)	mg KOH/g	ASTM D8045		0.39	0.34	0.41
Visc @ 40°C	cSt	ASTM D445	46	44.8	44.6	44.5



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0005135 **Received** : 13 May 2024
Lab Number : 06177061 **Tested** : 14 May 2024
Unique Number : 11023114 **Diagnosed** : 14 May 2024 - Wes Davis
Test Package : CONST

METAL RECYCLING SERVICES - MONROE
 P.O. BOX 812
 MONROE, NC
 US 28111
 Contact: RYAN BOWDEN

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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