



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Area
[STRATEGIC MATERIAL]

Machine Id
VOLVO L90H 625283

Component
Hydraulic System

Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011341	VCP385528	VCP340902
Sample Date		Client Info		22 May 2024	12 May 2023	22 Mar 2022
Machine Age	hrs	Client Info		3976	2438	1495
Oil Age	hrs	Client Info		3976	0	0
Filter Age	hrs	Client Info		1976	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	5	2	5
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>20	0	0	<1
Lead	ppm	ASTM D5185m	>20	<1	0	2
Copper	ppm	ASTM D5185m	>20	2	<1	2
Tin	ppm	ASTM D5185m	>20	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

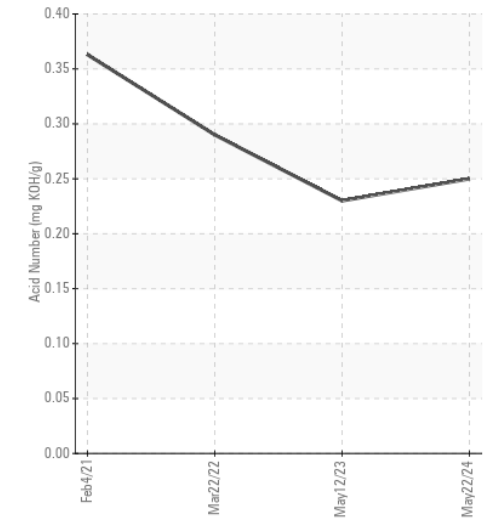
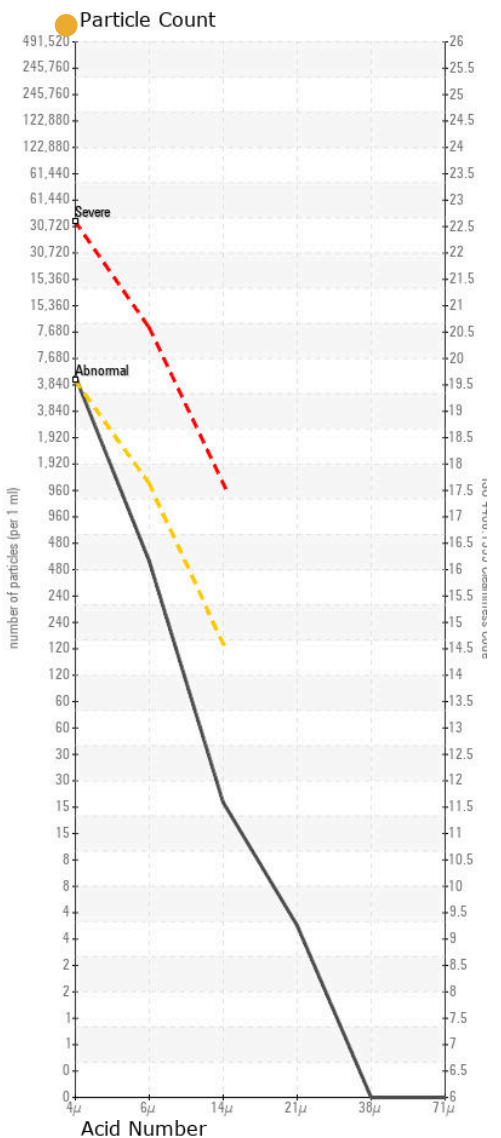
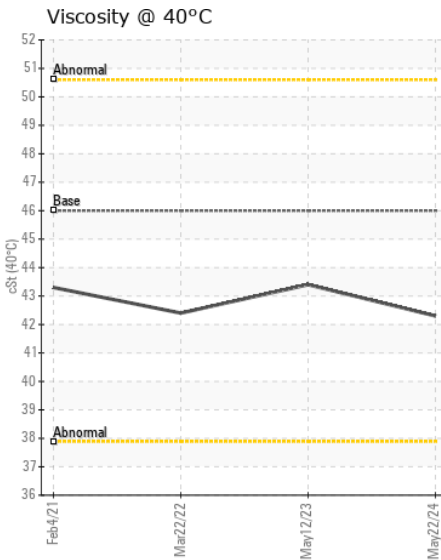
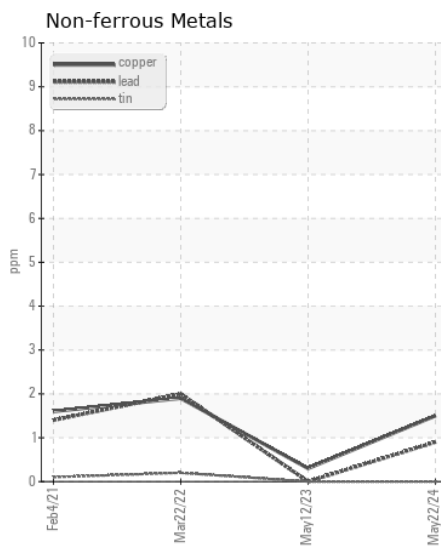
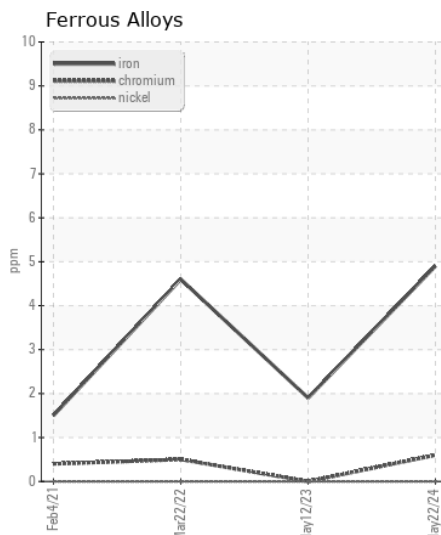
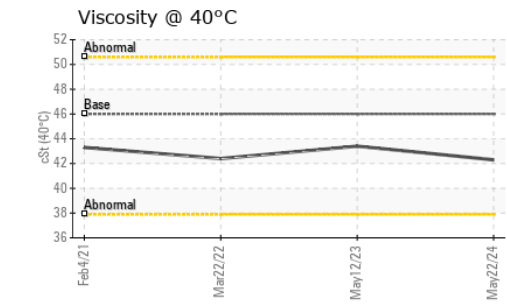
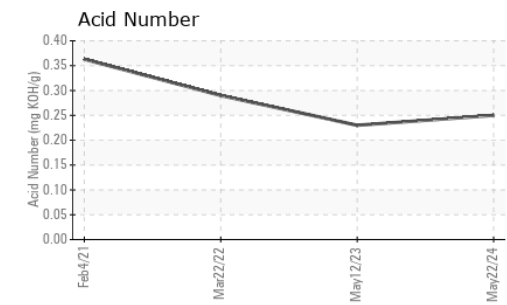
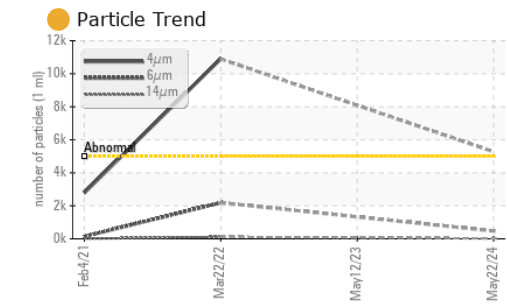
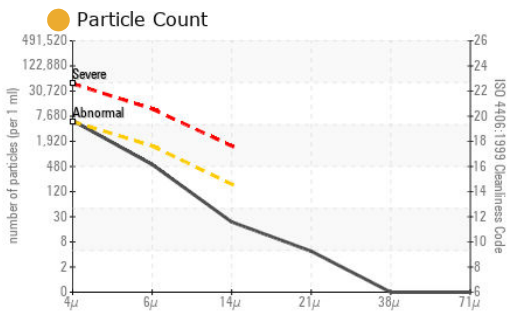
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	3	<1	4
Potassium	ppm	ASTM D5185m	>20	1	0	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	5275	---	10894
Particles >6µm		ASTM D7647	>1300	471	---	2187
Particles >14µm		ASTM D7647	>160	20	---	116
Particles >21µm		ASTM D7647	>40	4	---	24
Particles >38µm		ASTM D7647	>10	0	---	1
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/16/11	---	21/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	MODER	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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	0	0
Boron	ppm	ASTM D5185m	14	0	0	<1
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0.0	0	0	<1
Manganese	ppm	ASTM D5185m	0.0	0	0	0
Magnesium	ppm	ASTM D5185m	2.6	<1	0	1
Calcium	ppm	ASTM D5185m	49	64	63	86
Phosphorus	ppm	ASTM D5185m	354	359	308	342
Zinc	ppm	ASTM D5185m	419	453	410	458
Sulfur	ppm	ASTM D5185m	3719	2004	1735	1891
Acid Number (AN)	mg KOH/g	ASTM D8045		0.25	0.23	0.29
Visc @ 40°C	cSt	ASTM D445	46	42.3	43.4	42.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011341
Lab Number : 06189123
Unique Number : 11045875
Test Package : CONST

Received : 23 May 2024
Tested : 24 May 2024
Diagnosed : 24 May 2024 - Wes Davis

113 - ASCENDUM MACHINERY INC - GARNER
 3561 JONES SAUSAGE ROAD
 GARNER, NC
 US 27529

Contact: TRENT BROADWELL
 trent.broadwell@ascendummachinery.com

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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