



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L90H 623836
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP440126	VCP395974	VCP357455
Sample Date		Client Info		18 Jun 2024	02 Feb 2023	29 Mar 2022
Machine Age	hrs	Client Info		7054	6023	4970
Oil Age	hrs	Client Info		0	2000	970
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	2	4	2
Chromium	ppm	ASTM D5185m	>20	2	3	2
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	0	<1
Lead	ppm	ASTM D5185m	>20	2	2	2
Copper	ppm	ASTM D5185m	>150	5	6	5
Tin	ppm	ASTM D5185m	>20	<1	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

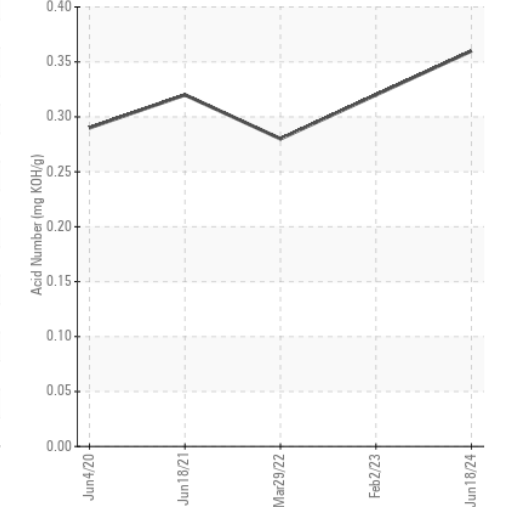
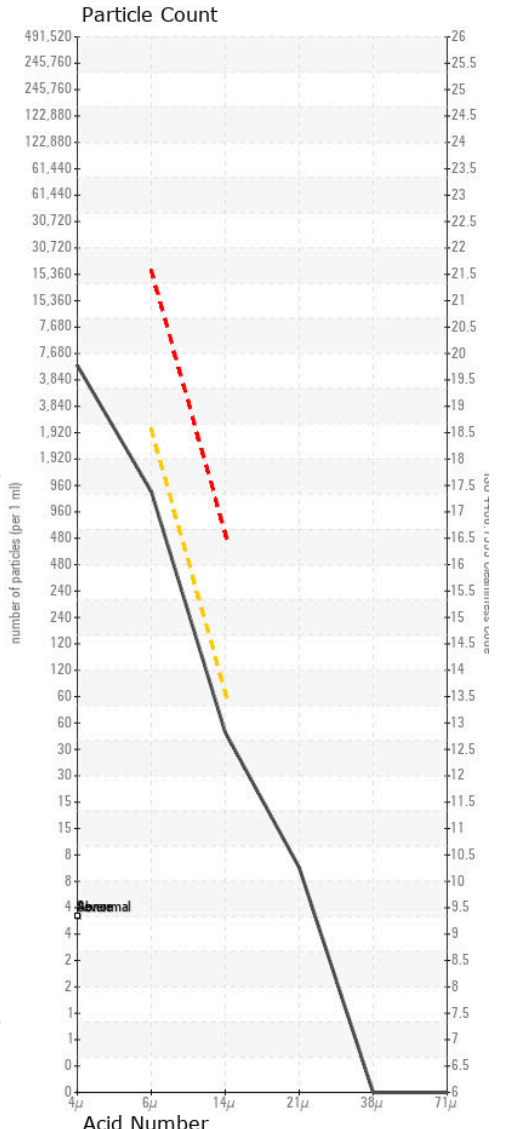
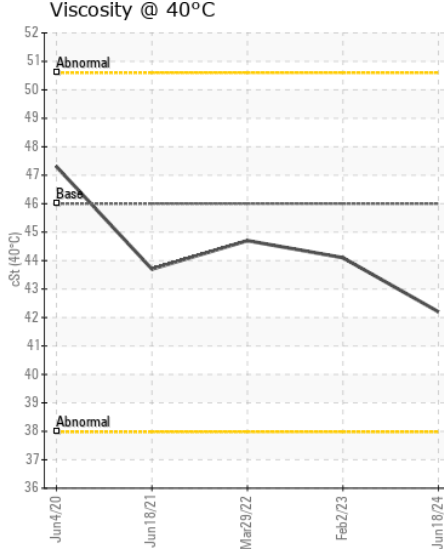
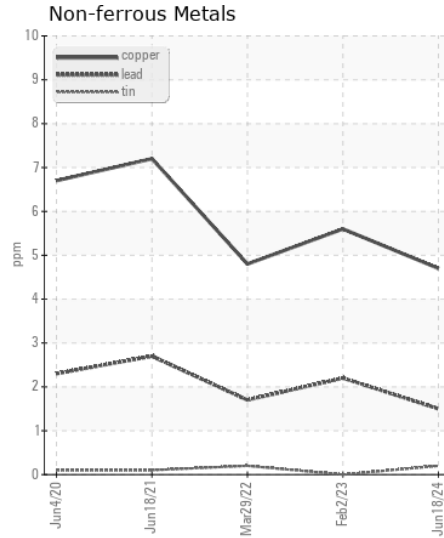
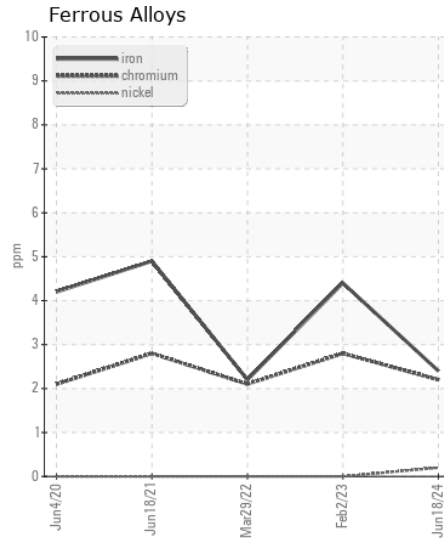
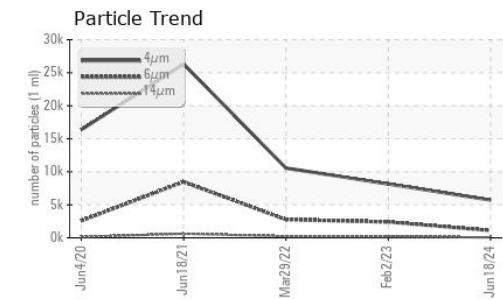
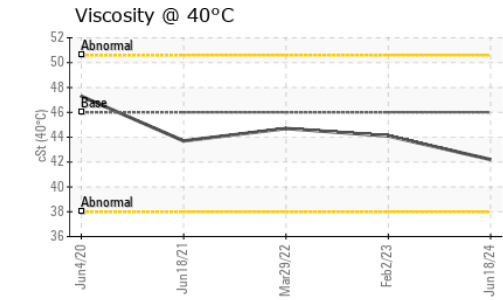
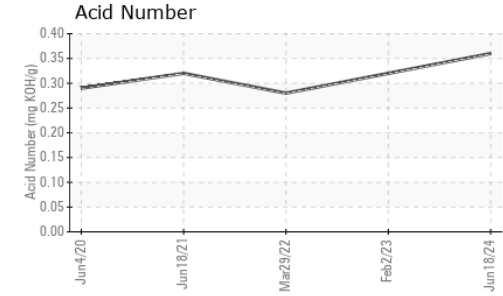
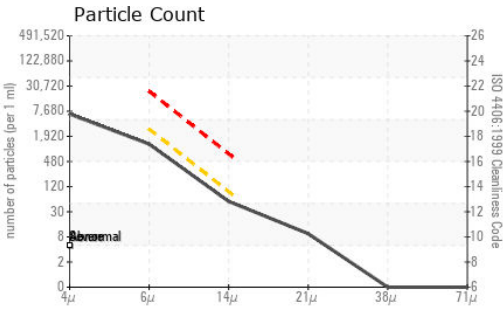
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	11	3	2
Potassium	ppm	ASTM D5185m	>20	2	<1	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		5718	8145	10561
Particles >6µm		ASTM D7647	>2500	1098	2402	2768
Particles >14µm		ASTM D7647	>80	47	▲ 199	▲ 224
Particles >21µm		ASTM D7647	>20	8	▲ 37	▲ 30
Particles >38µm		ASTM D7647	>4	0	2	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	20/17/13	▲ 20/18/15	▲ 21/19/15
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		4	0	0
Boron	ppm	ASTM D5185m	14	4	0	2
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	2	2	2
Manganese	ppm	ASTM D5185m	0.0	<1	0	0
Magnesium	ppm	ASTM D5185m	2.6	18	12	13
Calcium	ppm	ASTM D5185m	49	134	88	104
Phosphorus	ppm	ASTM D5185m	354	381	331	353
Zinc	ppm	ASTM D5185m	419	468	445	473
Sulfur	ppm	ASTM D5185m	3719	3457	3244	2766
Acid Number (AN)	mg KOH/g	ASTM D8045		0.36	0.32	0.28
Visc @ 40°C	cSt	ASTM D445	46	42.2	44.1	44.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP440126 **Received** : 24 Jun 2024
Lab Number : 06218093 **Tested** : 25 Jun 2024
Unique Number : 11096290 **Diagnosed** : 25 Jun 2024 - Wes Davis
Test Package : MOB 2

RIPA AND ASSOCIATES
 10149 FISHER AVENUE
 TAMPA, FL
 US 33619
 Contact: PM Services
 PMServices@ripaconstruction.com
 T:
 F:

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)