



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Area
[495]
Machine Id
VOLVO L90H 624946
Component
Hydraulic System
Fluid
GULF TO-4 10W (--- GAL)

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		VCP391417	VCP263728	VCP281700
Sample Date		Client Info		08 Feb 2024	09 Mar 2021	22 Oct 2020
Machine Age	hrs	Client Info		4775	1528	2023
Oil Age	hrs	Client Info		781	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ATTENTION	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	11	5	6
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	0	1
Lead	ppm	ASTM D5185m	>20	1	1	2
Copper	ppm	ASTM D5185m	>20	2	2	3
Tin	ppm	ASTM D5185m	>20	<1	<1	<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

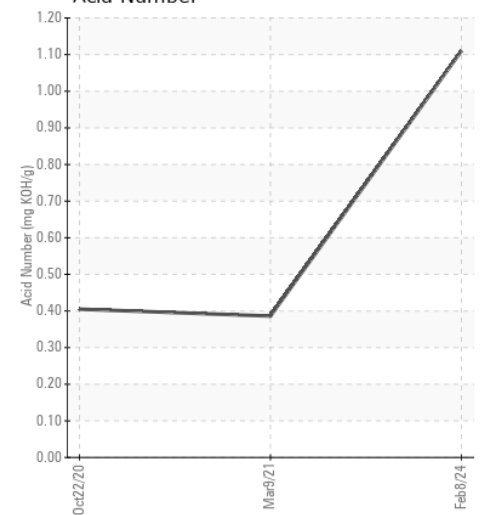
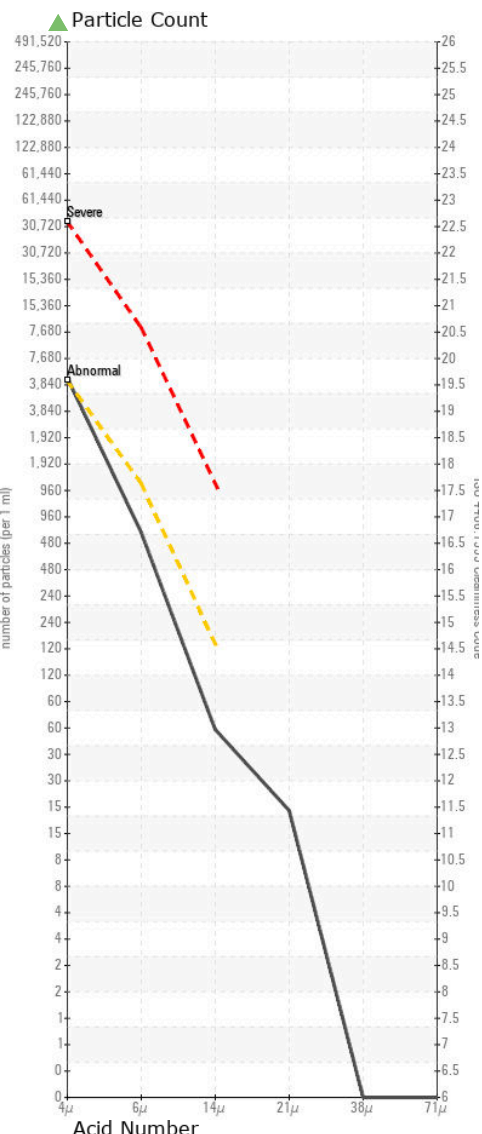
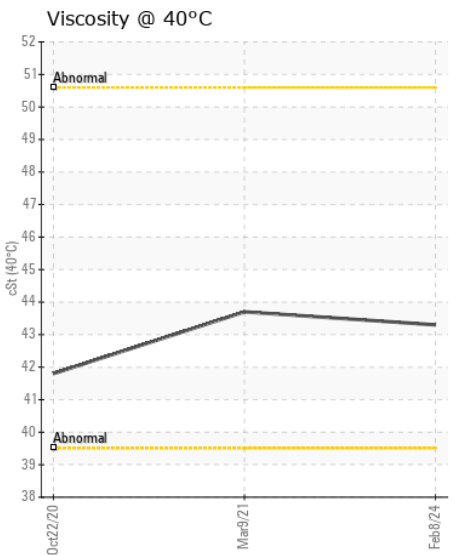
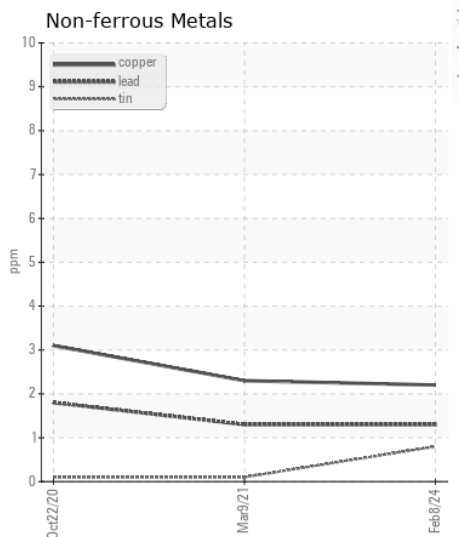
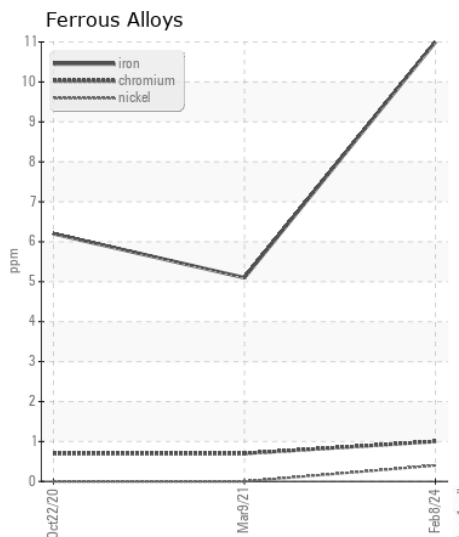
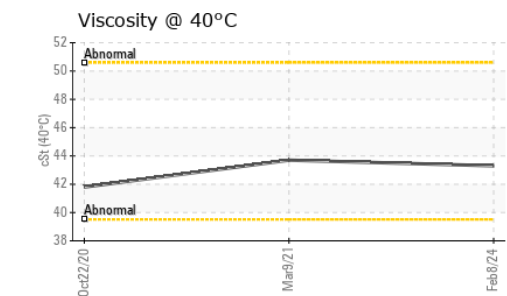
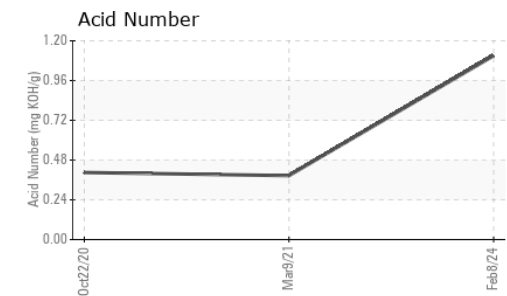
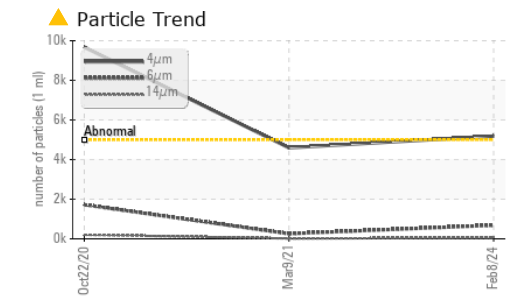
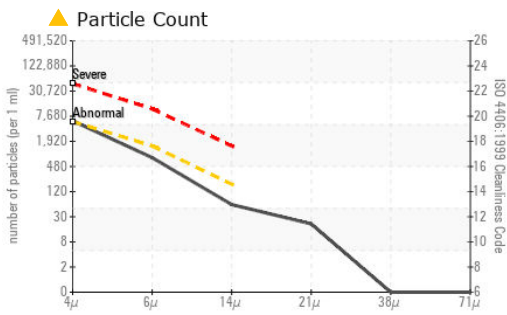
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	14	4	4
Potassium	ppm	ASTM D5185m	>20	3	<1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 5185	4595	▲ 9674
Particles >6µm		ASTM D7647	>1300	685	256	▲ 1720
Particles >14µm		ASTM D7647	>160	52	15	▲ 204
Particles >21µm		ASTM D7647	>40	18	4	▲ 54
Particles >38µm		ASTM D7647	>10	0	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 20/17/13	19/15/11	▲ 20/18/15
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	>0.2	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	2	3
Boron	ppm	ASTM D5185m		18	4	13
Barium	ppm	ASTM D5185m		5	0	0
Molybdenum	ppm	ASTM D5185m		15	1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		17	4	5
Calcium	ppm	ASTM D5185m		2087	523	445
Phosphorus	ppm	ASTM D5185m		718	398	419
Zinc	ppm	ASTM D5185m		933	510	531
Sulfur	ppm	ASTM D5185m		3806	2156	3965
Acid Number (AN)	mg KOH/g	ASTM D8045		1.11	0.386	0.405
Visc @ 40°C	cSt	ASTM D445		43.3	43.7	41.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP391417
Lab Number : 06098293
Unique Number : 10896523
Test Package : MOB 2
Received : 23 Feb 2024
Tested : 26 Feb 2024
Diagnosed : 26 Feb 2024 - Wes Davis

SODERBERG CONSTRUCTION
 460 YORK STREET
 CARIBOU, ME
 US 04736
 Contact: GREG LANDEEN
 glandeen@mf.xnet
 T: (207)498-6300
 F: (207)498-6535

Certificate L2367
 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)