



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery
Machine Id
VOLVO L90G 617360
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		ASC0007896	VCP0006536	VCP246120
Sample Date		Client Info		20 Feb 2024	25 Apr 2023	05 Sep 2019
Machine Age	hrs	Client Info		10670	10443	7988
Oil Age	hrs	Client Info		8215	2455	0
Filter Age	hrs	Client Info		8215	2455	0
Oil Changed		Client Info		Not Changed	Not Changed	Changed
Filter Changed		Client Info		Not Changed	Not Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

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

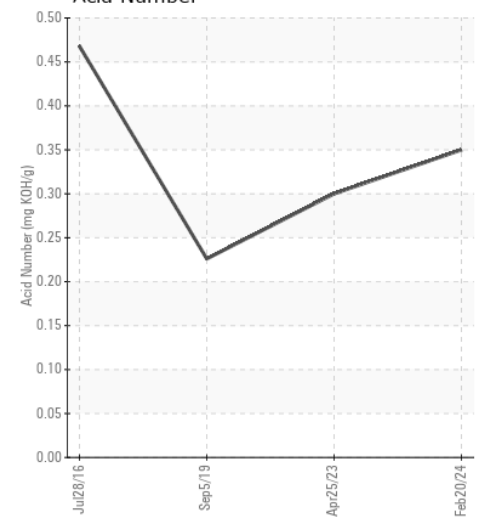
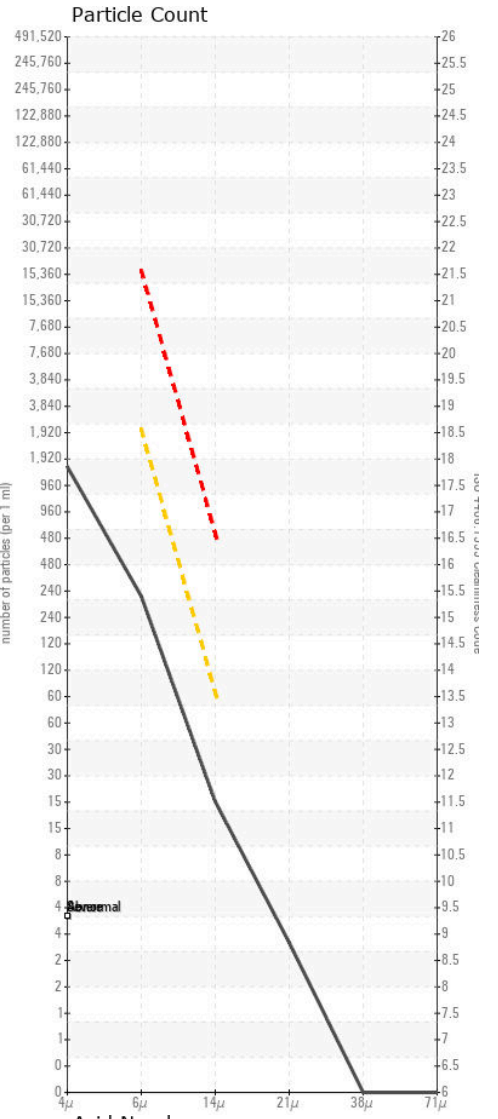
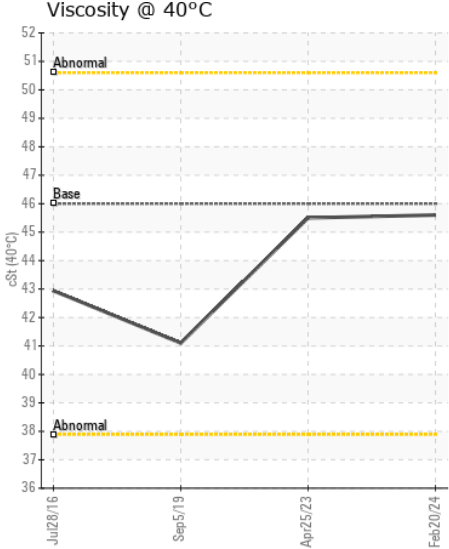
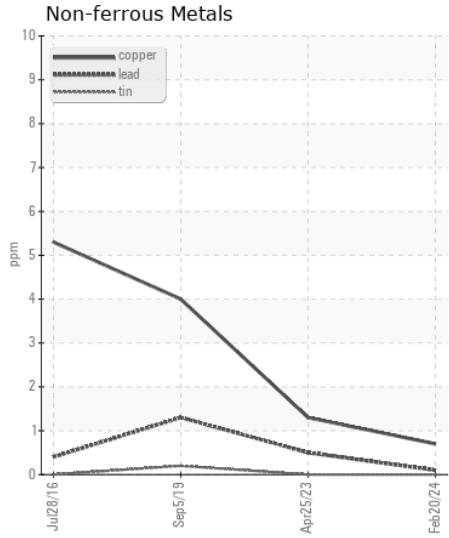
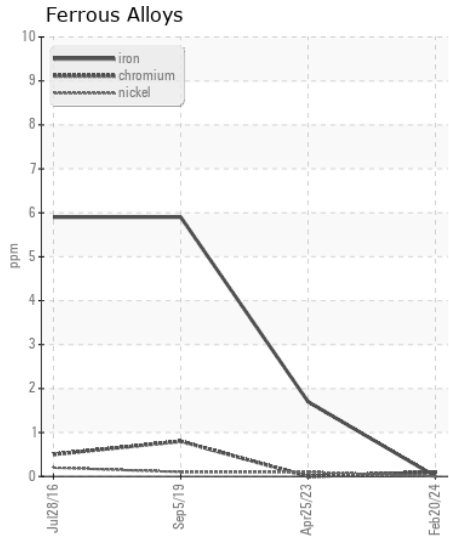
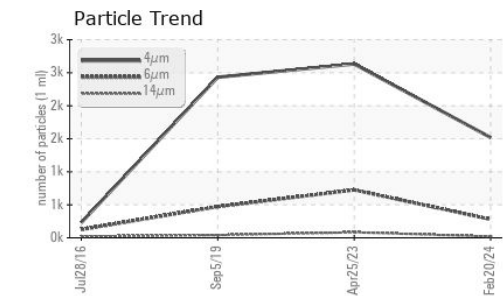
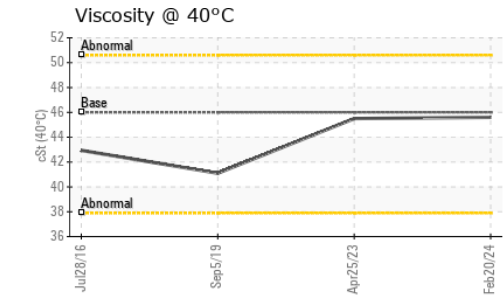
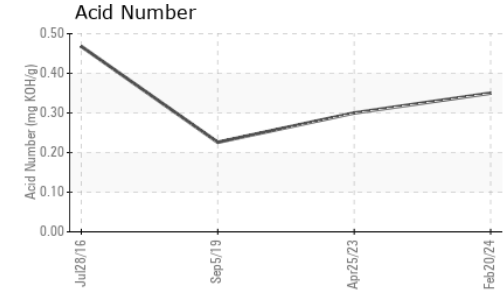
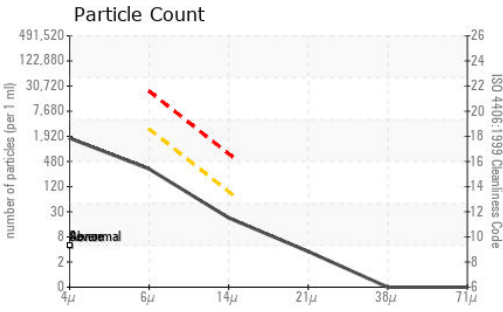
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	3	4	15
Potassium	ppm	ASTM D5185m	>20	0	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		1519	2632	2432
Particles >6µm		ASTM D7647	>2500	279	725	472
Particles >14µm		ASTM D7647	>80	19	▲ 83	41
Particles >21µm		ASTM D7647	>20	3	22	12
Particles >38µm		ASTM D7647	>4	0	1	3
Particles >71µm		ASTM D7647	>3	0	0	3
Oil Cleanliness		ISO 4406 (c)	>-/18/13	18/15/11	▲ 19/17/14	18/16/13
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		0	0	<1
Boron	ppm	ASTM D5185m	14	0	4	<1
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	2	3	<1
Manganese	ppm	ASTM D5185m	0.0	<1	0	<1
Magnesium	ppm	ASTM D5185m	2.6	25	23	5
Calcium	ppm	ASTM D5185m	49	107	113	75
Phosphorus	ppm	ASTM D5185m	354	332	339	344
Zinc	ppm	ASTM D5185m	419	454	453	460
Sulfur	ppm	ASTM D5185m	3719	1631	1697	3401
Acid Number (AN)	mg KOH/g	ASTM D8045		0.35	0.30	0.226
Visc @ 40°C	cSt	ASTM D445	46	45.6	45.5	41.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007896 **Received** : 27 Feb 2024
Lab Number : 06101545 **Tested** : 28 Feb 2024
Unique Number : 10899775 **Diagnosed** : 28 Feb 2024 - Wes Davis
Test Package : CONST

IAA - INSURANCE AUTO AUCTIONS - OAK BROOK
 701 HARGER RD, SUITE 201
 OAK BROOK, IL
 US 60523
 Contact: Service Manager

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)