



THE G. W. VAN KEPPEL CO.
Construction Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L220H 33602 (S/N 3312)
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		VKC0001255	VKC0000667	---
Sample Date		Client Info		01 Jul 2024	16 May 2023	---
Machine Age	hrs	Client Info		6176	4056	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	5	6	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>20	1	0	---
Lead	ppm	ASTM D5185m	>20	<1	1	---
Copper	ppm	ASTM D5185m	>150	1	2	---
Tin	ppm	ASTM D5185m	>20	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

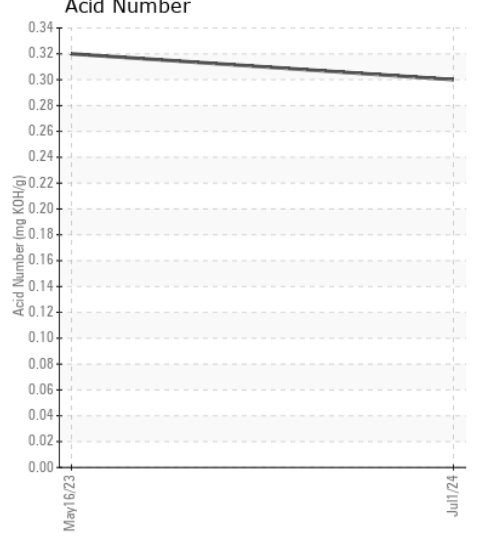
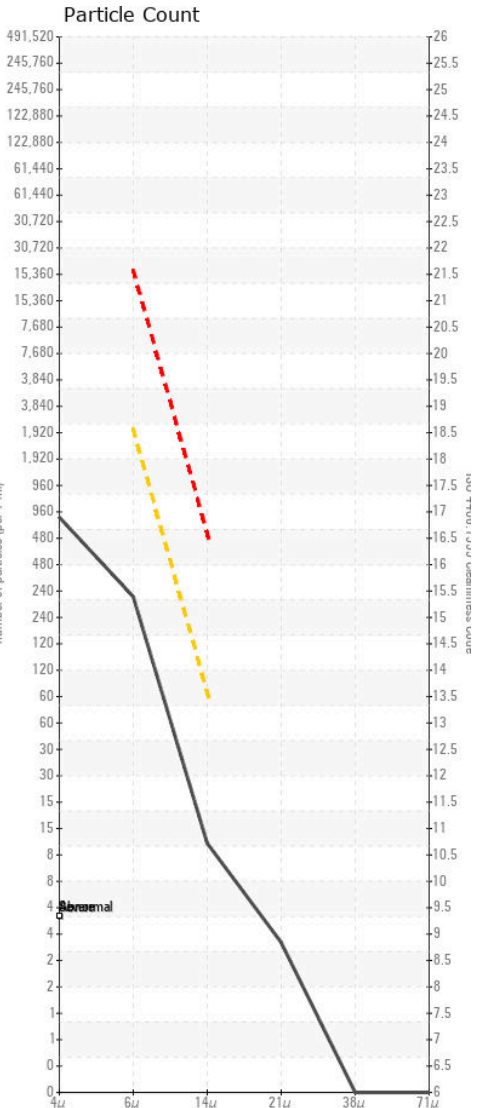
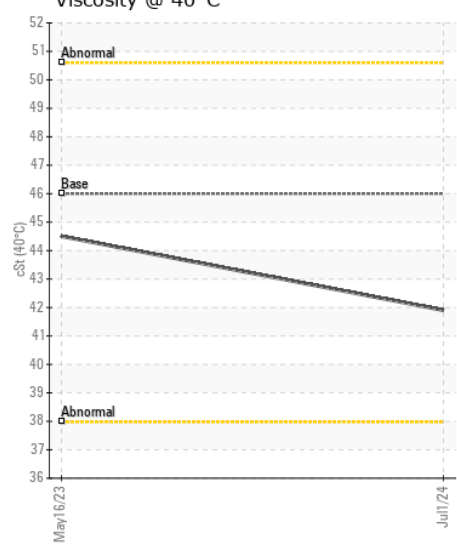
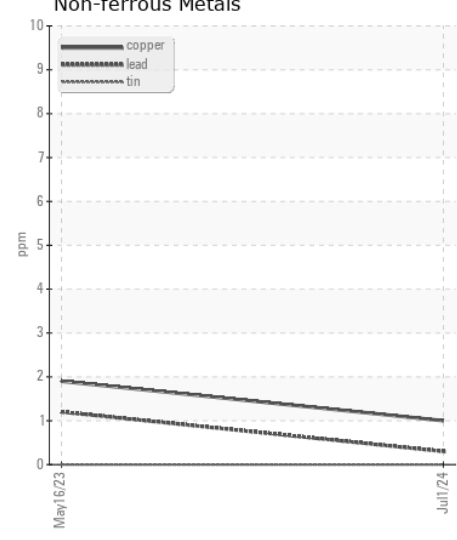
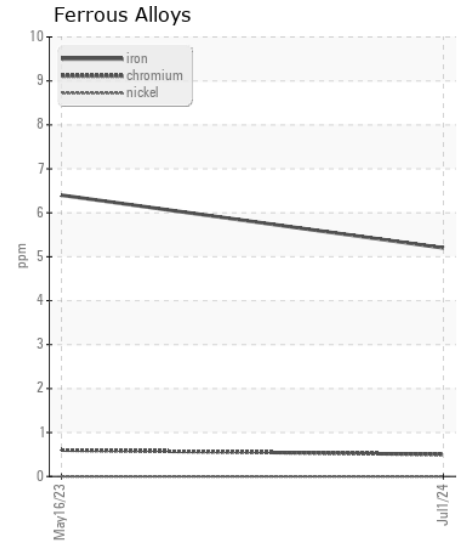
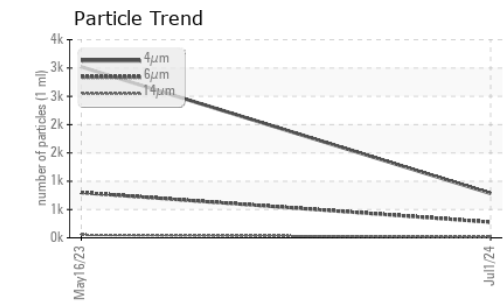
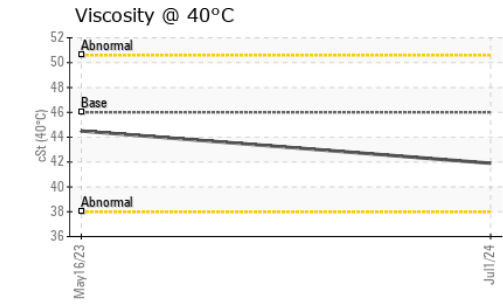
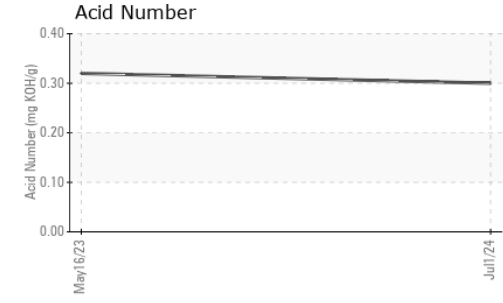
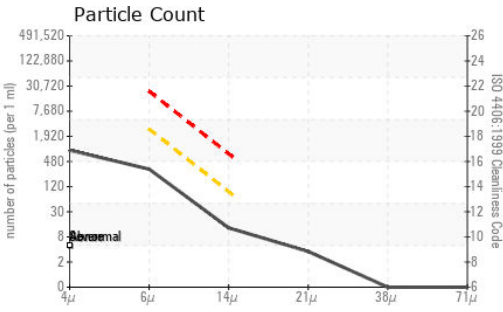
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	3	3	---
Potassium	ppm	ASTM D5185m	>20	2	1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647		784	3021	---
Particles >6µm		ASTM D7647	>2500	277	798	---
Particles >14µm		ASTM D7647	>80	11	52	---
Particles >21µm		ASTM D7647	>20	3	20	---
Particles >38µm		ASTM D7647	>4	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>-/18/13	17/15/11	19/17/13	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	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		<1	1	---
Boron	ppm	ASTM D5185m	14	0	0	---
Barium	ppm	ASTM D5185m	0.0	0	0	---
Molybdenum	ppm	ASTM D5185m	0.0	0	0	---
Manganese	ppm	ASTM D5185m	0.0	0	0	---
Magnesium	ppm	ASTM D5185m	2.6	<1	1	---
Calcium	ppm	ASTM D5185m	49	36	60	---
Phosphorus	ppm	ASTM D5185m	354	310	311	---
Zinc	ppm	ASTM D5185m	419	422	424	---
Sulfur	ppm	ASTM D5185m	3719	1827	1669	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.30	0.32	---
Visc @ 40°C	cSt	ASTM D445	46	41.9	44.5	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VKC0001255 **Received** : 08 Jul 2024
Lab Number : 06230740 **Tested** : 10 Jul 2024
Unique Number : 11114233 **Diagnosed** : 10 Jul 2024 - Wes Davis
Test Package : MOBCE

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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)