



THE G. W. VAN KEPPEL CO.
Construction Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO L180H 5444
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		VKC0001102	VKC0000730	---
Sample Date		Client Info		30 Jan 2024	17 May 2023	---
Machine Age	hrs	Client Info		6352	4856	---
Oil Age	hrs	Client Info		2000	0	---
Filter Age	hrs	Client Info		2000	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ATTENTION	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	4	3	---
Chromium	ppm	ASTM D5185m	>20	2	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	2	0	---
Lead	ppm	ASTM D5185m	>20	<1	2	---
Copper	ppm	ASTM D5185m	>20	3	3	---
Tin	ppm	ASTM D5185m	>20	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

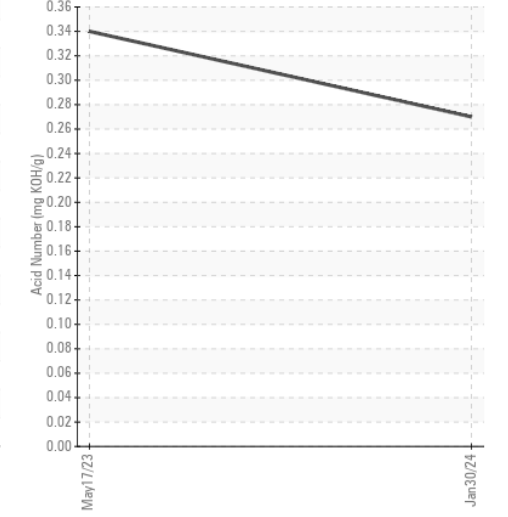
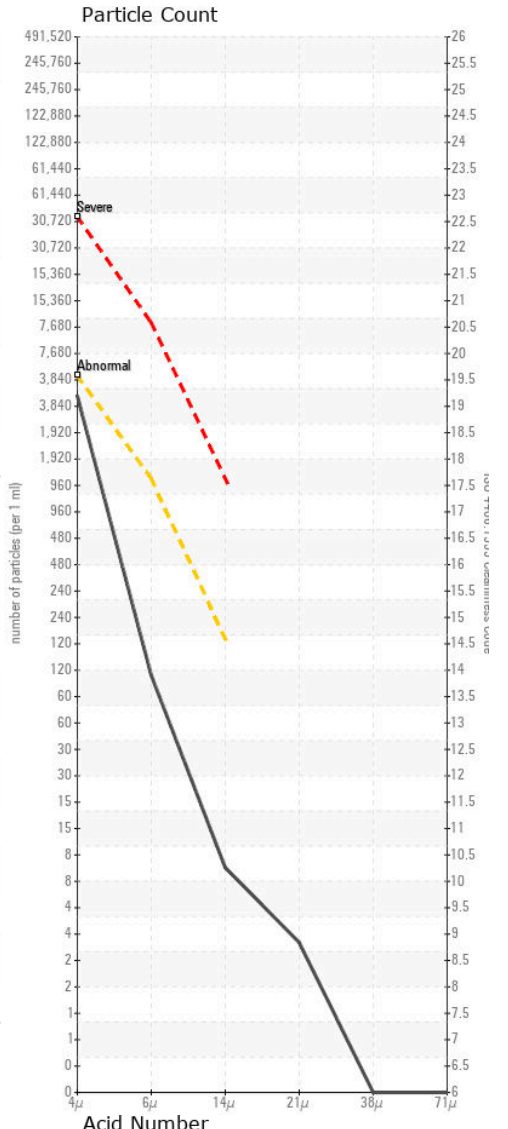
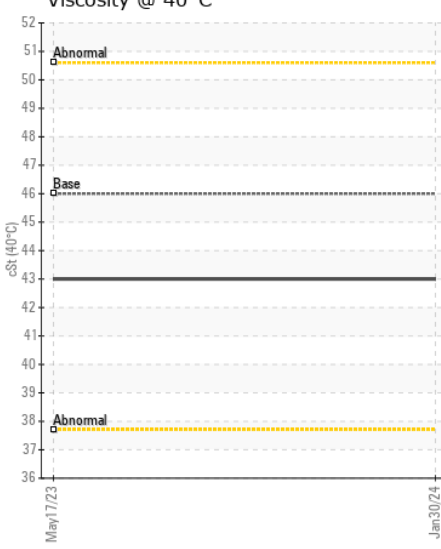
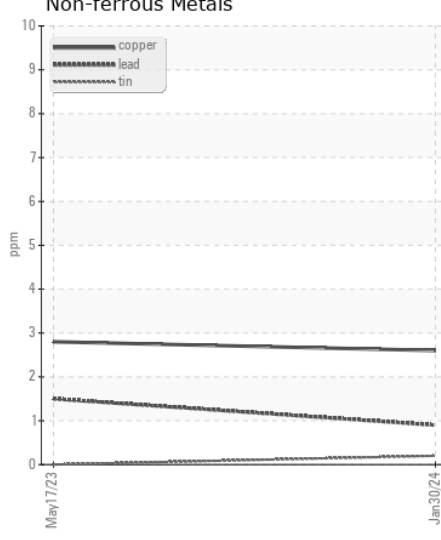
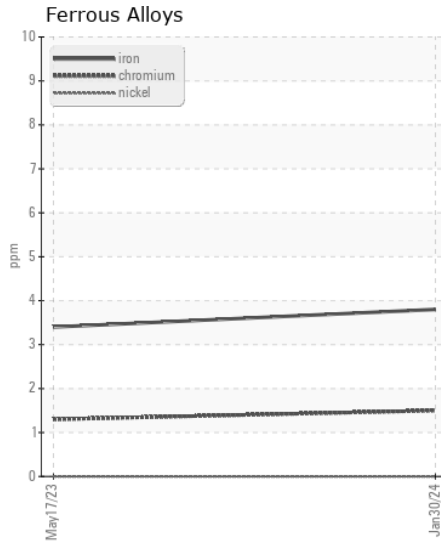
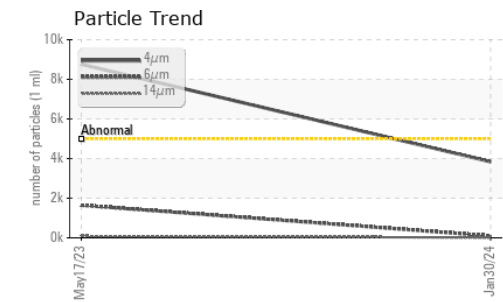
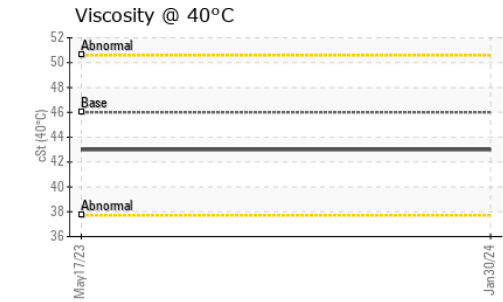
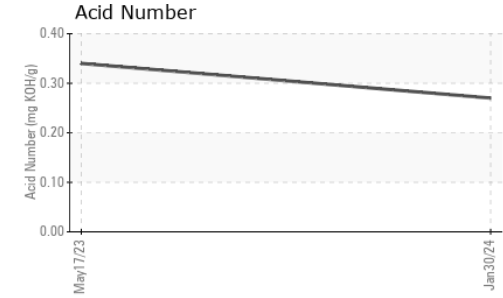
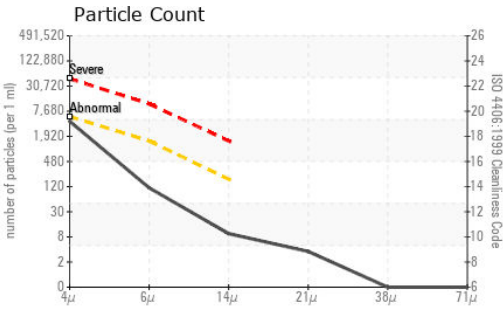
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	5	4	---
Potassium	ppm	ASTM D5185m	>20	3	1	---
Water		WC Method	>0.2	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	3841	▲ 8761	---
Particles >6µm		ASTM D7647	>1300	99	▲ 1644	---
Particles >14µm		ASTM D7647	>160	8	90	---
Particles >21µm		ASTM D7647	>40	3	26	---
Particles >38µm		ASTM D7647	>10	0	1	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/14/10	▲ 20/18/14	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	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	0	---
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	<1	0	---
Magnesium	ppm	ASTM D5185m	2.6	0	<1	---
Calcium	ppm	ASTM D5185m	49	53	54	---
Phosphorus	ppm	ASTM D5185m	354	322	320	---
Zinc	ppm	ASTM D5185m	419	413	425	---
Sulfur	ppm	ASTM D5185m	3719	927	983	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.27	0.34	---
Visc @ 40°C	cSt	ASTM D445	46	43.0	43.0	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VKC0001102 **Received** : 13 Feb 2024
Lab Number : 06088114 **Tested** : 14 Feb 2024
Unique Number : 10875559 **Diagnosed** : 14 Feb 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)