



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[402022]

Machine Id
16-8115

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		VCP430075	VCP429754	VCP381004
Sample Date		Client Info		24 Apr 2024	04 Sep 2023	08 Apr 2023
Machine Age	hrs	Client Info		5000	3978	3008
Oil Age	hrs	Client Info		1000	4000	3000
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	3	7	5
Chromium	ppm	ASTM D5185(m)	>20	<1	2	1
Nickel	ppm	ASTM D5185(m)	>10	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	1	<1
Lead	ppm	ASTM D5185(m)	>20	0	1	1
Copper	ppm	ASTM D5185(m)	>150	1	2	2
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Vanadium	ppm	ASTM D5185(m)		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 D5185(m)	>20	1	6	4
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		307	1586	724
Particles >6µm		ASTM D7647	>2500	114	338	138
Particles >14µm		ASTM D7647	>80	10	32	16
Particles >21µm		ASTM D7647	>20	2	7	4
Particles >38µm		ASTM D7647	>4	1	0	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	15/14/10	18/16/12	17/14/11
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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<1	2	1
Boron	ppm	ASTM D5185(m)	14	<1	2	2
Barium	ppm	ASTM D5185(m)	0.0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	0.0	0	1	1
Manganese	ppm	ASTM D5185(m)	0.0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	2.6	4	11	10
Calcium	ppm	ASTM D5185(m)	49	71	102	107
Phosphorus	ppm	ASTM D5185(m)	354	334	389	384
Zinc	ppm	ASTM D5185(m)	419	429	442	449
Sulfur	ppm	ASTM D5185(m)	3719	1832	1786	1870
Visc @ 40°C	cSt	ASTM D7279(m)	46	43.8	42.2	42.9

