

OIL ANALYSIS REPORT

Sample Rating Trend





VOLVO L220H 3415 Component Hydraulic System Fluid

VOLVO SUPER HYDRAULIC OIL 46 (50 GAL)

DIAGNOSIS Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Area

[W/O 10508]

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

Viscosity of sample indicates oil is within ISO 68 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

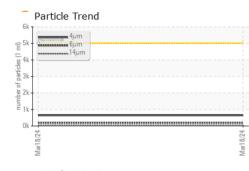
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		ML0000079		
Sample Date		Client Info		18 Mar 2024		
Machine Age	hrs	Client Info		4100		
Oil Age	hrs	Client Info		4100		
Oil Changed		Client Info		Changed		
Sample Status				ATTENTION		
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	2		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m		0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>20	1		
Copper	ppm	ASTM D5185m	>20	2		
Tin	ppm	ASTM D5185m	>20	2 <1		
Vanadium	ppm	ASTM D5185m	>20	0		
Cadmium		ASTM D5185m				
	ppm	ASTIVI DOTODIII		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	14	0		
Barium	ppm	ASTM D5185m	0.0	0		
Molybdenum	ppm	ASTM D5185m	0.0	0		
Manganese	ppm	ASTM D5185m	0.0	0		
Magnesium	ppm	ASTM D5185m	2.6	0		
Calcium	ppm	ASTM D5185m	49	55		
Phosphorus	ppm	ASTM D5185m	354	361		
Zinc	ppm	ASTM D5185m	419	484		
Sulfur	ppm	ASTM D5185m	3719	1187		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	5		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	0		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	643		
Particles >6µm		ASTM D7647	>1300	192		
Particles >14µm		ASTM D7647	>160	18		
Particles >21µm		ASTM D7647	>40	6		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/15/11		
FLUID DEGRADA		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.27		
27:29) Pov: 1					mitted By: DELA	

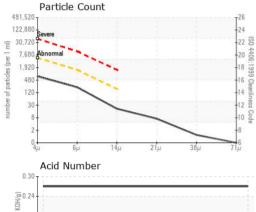
Report Id: SAVJES [WUSCAR] 06123063 (Generated: 05/01/2024 11:37:28) Rev: 1

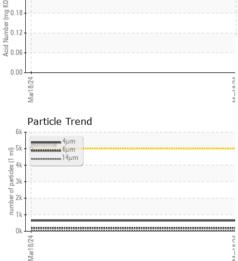
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OIL ANALYSIS REPORT







VISUAL		method	limit/bas	e current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Free Water	scalar	*Visual		NEG		
FLUID PROPERT	IES	method	limit/bas	e current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	63.94		
SAMPLE IMAGES	3	method	limit/bas	e current	history1	history2
		motriod	linitiode			
Color				•	no image	no image
Bottom					no image	no image
GRAPHS						1
Ferrous Alloys				Particle Cou	unt	
Ti			491	.520		[²
iron chromium			122	.880 -		-24
6 - nickel				Severe		
			30	,720		-23
			7	.680 Abnormal		-20
Mar18/24			Mar18/24 (per 1 ml)	000	N	
Marl			Mar1 ss (per	,920 -		-18
Non-ferrous Metals	s		article	480	.	-16
			er of p		1. A.	
copper lead			Mar18/24 number of particles (per 1 ml)	120		14
5 - tin				30-		-12
				8		10
8/24			8/24	2-		-8
Mar18/24			Mar18/2	0.		
Viscosity @ 40°C					14µ 21µ	38µ 71µ
,I 			-		cı	
)			KOH/6	0.30 0.24 0.18 0.12 0.06		
Abnormal			ßm)	0.18		
Base			mper	0.12		
0 - Abnormal			cid N	0.06		
547				0.00		
Mar18/24			Mar18/24	Mar18/24		
≥			×	×		
learCheck LISA - 501	1 Madieo	n Ave Carv	NC 2751	3 60/10		
					E STONE-A DIV OF LAU 8420 WASH	
/earCheck USA - 501 IL0000079 <mark>6123063</mark>	1 Madiso Recei Teste	ived : 19	, NC 2751) Mar 2024 5 Mar 2024			REL SAND & GRAV IINGTON BLV JESSUP, N

Centificate 12367 Test Package : CONST 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)

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Laboratory Sample No. Lab Number Unique Number

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