

Machine Id VOLVO ECR235E 314675 Component Hydraulic System Fluid VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation.

WEAR

All component wear rates are normal.

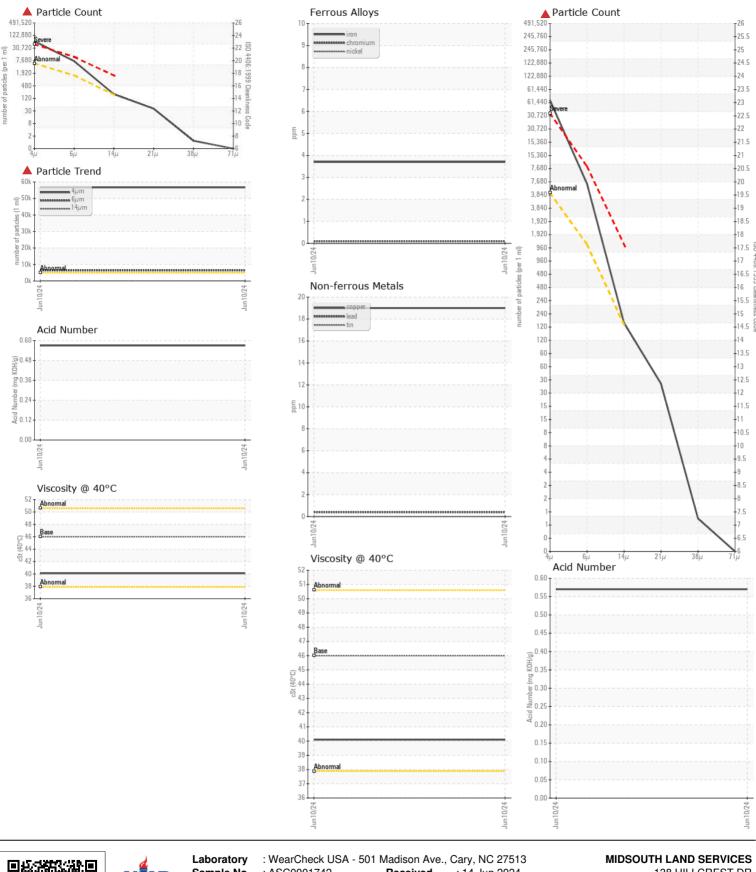
CONTAMINATION

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0001742		
Sample Date		Client Info		10 Jun 2024		
Machine Age	hrs	Client Info		2097		
Oil Age	hrs	Client Info		2097		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				SEVERE		
Iron	ppm	ASTM D5185m	>20	4		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	<1		
Lead	ppm	ASTM D5185m	>10	<1		
Copper	ppm	ASTM D5185m	>75	19		
Tin	ppm	ASTM D5185m	>10	0		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
0'''						
Silicon	ppm	ASTM D5185m	>20	4		
Potassium	ppm	ASTM D5185m	>20	<1		
Water		WC Method	>0.1	NEG		
Particles >4µm		ASTM D7647	>5000	56673		
Particles >6µm		ASTM D7647	>1300	▲ 6361		
Particles >14µm		ASTM D7647		167		
Particles >21µm		ASTM D7647	>40	34		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness	a s a la s	ISO 4406 (c)	>19/17/14	A 23/20/15		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	LIGHT		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor Emulaified Water	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.1	NEG		
Sodium	ppm	ASTM D5185m		<1		
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	<1		
Calcium	ppm	ASTM D5185m	49	65		
Phosphorus	ppm	ASTM D5185m	354	384		
Zinc	ppm	ASTM D5185m	419	499		
Sulfur	ppm	ASTM D5185m	3719	1294		
Acid Number (AN)	mg KOH/g	ASTM D8045	0.10	0.57		
Visc @ 40°C	cSt	ASTM D0045	46	40.1		
	001	101110140	10			



Sample No. : ASC0001742 Received 138 HILLCREST DR : 14 Jun 2024 Lab Number : 06210013 Tested : 17 Jun 2024 ADVANCE, NC Unique Number : 11082877 : 17 Jun 2024 - Wes Davis US 27006 Diagnosed Test Package : MOBCE Contact: Service Manager Certificate L2367 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)

Submitted By: KARRINGTON RENDLEMAN Page 2 of 2

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