

[9320] Machine Id PETERSON 5710D 40D-2952749

Component Hydraulic System

Area

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP437699	VCP412626	
The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		10 Jan 2024	24 Aug 2023	
	Machine Age	hrs	Client Info		1361	841	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Not Changd	Not Changd	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				ABNORMAL	ATTENTION	
WEAR	Iron	ppm	ASTM D5185m	>20	4 37	17	
	Chromium	ppm	ASTM D5185m		0	<1	
The iron level is abnormal. All other component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m		0	<1	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m	>10	<1	0	
	Lead	ppm	ASTM D5185m		<1	<1	
	Copper	ppm	ASTM D5185m	>75	<1	1	
	Tin	ppm	ASTM D5185m	>10	0	<1	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m		7	1	
There is a high amount of silt (particulates < 14 microns in size) present in the oil.	Potassium	ppm	ASTM D5185m		0	2	
	Water		WC Method		NEG	NEG	
	Particles >4µm		ASTM D7647		A 176208	▲ 5549	
	Particles >6µm		ASTM D7647		A 62620	249	
	Particles >14µm		ASTM D7647		94	14	
	Particles >21µm		ASTM D7647		10	3	
	Particles >38µm		ASTM D7647		0	0	
	Particles >71µm		ASTM D7647		0	0	
	Oil Cleanliness Silt	scalar	ISO 4406 (c) *Visual	>19/17/14 NONE	25/23/14 NONE	▲ 20/15/11 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		*Visual	>0.1	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	14	2	2	
Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		▲ 111 0	0	
	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m		4	<1	
	Manganese	ppm	ASTM D5185m		<1 22	<1 7	
	Magnesium	ppm	ASTM D5185m ASTM D5185m		22 ▲ 3789	7	
	Calcium	ppm	ASTM D5185m		▲ 3789 ▲ 1000	37	

Zinc

Sulfur

Phosphorus ppm ASTM D5185m 354

ppm

Visc @ 40°C cSt ASTM D445 46

Acid Number (AN) mg KOH/g ASTM D8045

ASTM D5185m 419

ppm ASTM D5185m 3719

336

412

988

0.50

44.5

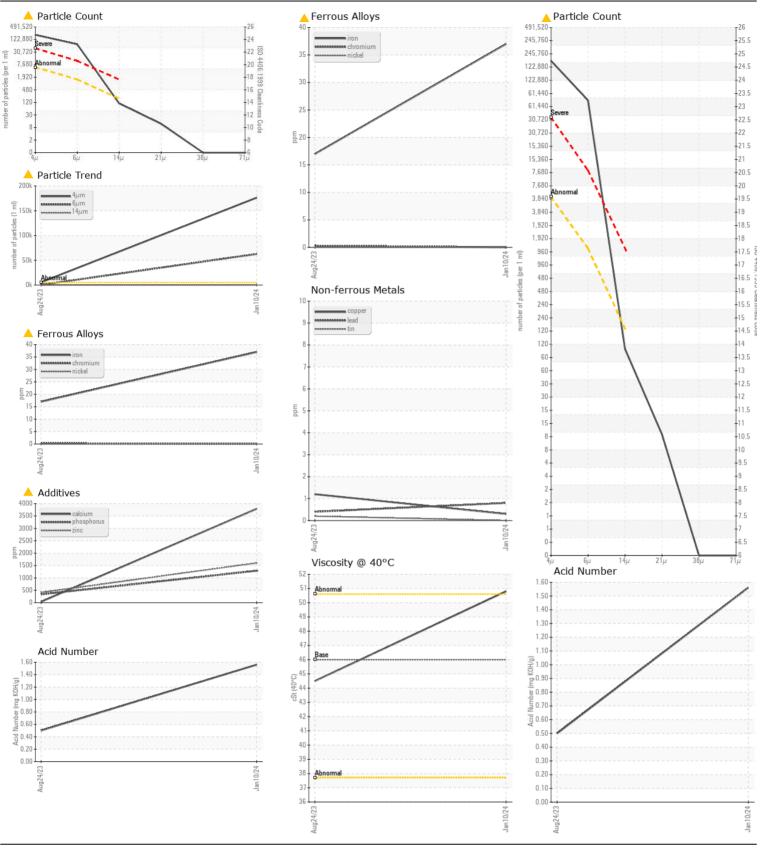
1289

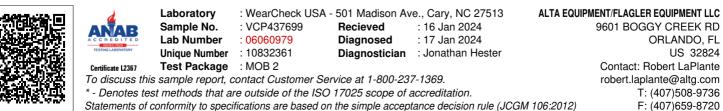
1601

3659

1.56

50.8





Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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Contact/Location: Robert LaPlante - VOLVO0096