

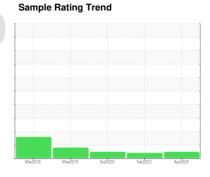
OIL ANALYSIS REPORT



[W02008217] VOLVO L90H 623805

Component Hydraulic System

MOBIL HYDRAULIC OIL AW 46 (25 GAL)





Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: W02008217)

All component wear rates are normal.

Contamination

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

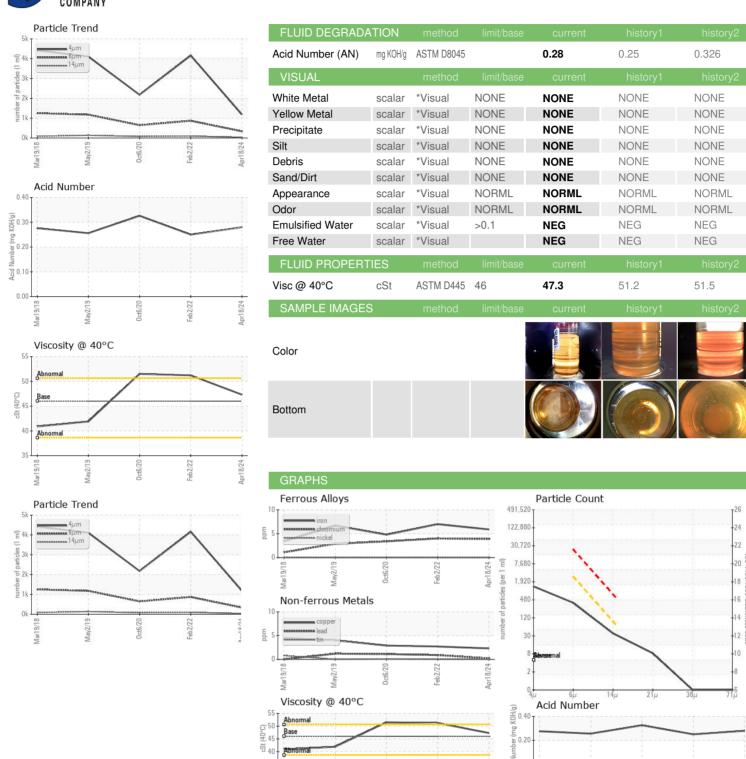
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORM	/ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		ML0001077	VCP349739	VCP265662
Sample Date		Client Info		18 Apr 2024	02 Feb 2022	06 Oct 2020
Machine Age	hrs	Client Info		12235	8524	6291
Oil Age	hrs	Client Info		4000	0	0
Oil Changed	0	Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL
CONTAMINATIO	V	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	6	7	5
Chromium	ppm	ASTM D5185m	>20	4	4	3
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	8	0
Aluminum	ppm	ASTM D5185m	>20	<1	1	<1
Lead	ppm	ASTM D5185m	>20	<1	<1	1
Copper	ppm	ASTM D5185m	>150	2	3	3
Tin	ppm	ASTM D5185m	>20	0	0	<1
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		1	6	3
Darium				0	0	0
Barium	ppm	ASTM D5185m		•	-	
Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m		3	4	<1
						<1 0
Molybdenum	ppm	ASTM D5185m		3	4	
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m		3 0	4	0
Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		3 0 14	4 0 18	0 5
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 0 14 92	4 0 18 122	0 5 87
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 0 14 92 337	4 0 18 122 372	0 5 87 342
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	3 0 14 92 337 428	4 0 18 122 372 446	0 5 87 342 463
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >20	3 0 14 92 337 428 1519	4 0 18 122 372 446 1826	0 5 87 342 463 2639
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method		3 0 14 92 337 428 1519	4 0 18 122 372 446 1826 history1	0 5 87 342 463 2639 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m	>20	3 0 14 92 337 428 1519 current	4 0 18 122 372 446 1826 history1	0 5 87 342 463 2639 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>20	3 0 14 92 337 428 1519 current	4 0 18 122 372 446 1826 history1 2	0 5 87 342 463 2639 history2 <1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>20	3 0 14 92 337 428 1519 current 1 1	4 0 18 122 372 446 1826 history1 2	0 5 87 342 463 2639 history2 <1 1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	>20 >20 limit/base	3 0 14 92 337 428 1519 current 1 1 0	4 0 18 122 372 446 1826 history1 2 1 0	0 5 87 342 463 2639 history2 <1 1 0
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	>20 >20 limit/base	3 0 14 92 337 428 1519 current 1 1 0	4 0 18 122 372 446 1826 history1 2 1 0 history1 4159	0 5 87 342 463 2639 history2 <1 1 0 history2 2180
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20 limit/base >2500 >80	3 0 14 92 337 428 1519 current 1 1 0 current 1184 336	4 0 18 122 372 446 1826 history1 2 1 0 history1 4159 867	0 5 87 342 463 2639 history2 <1 1 0 history2 2180 646
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D7647 ASTM D7647	>20 >20 limit/base >2500 >80	3 0 14 92 337 428 1519 current 1 1 0 current 1184 336 32	4 0 18 122 372 446 1826 history1 2 1 0 history1 4159 867 95	0 5 87 342 463 2639 history2 <1 1 0 history2 2180 646 74
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >2500 >80 >20 >4	3 0 14 92 337 428 1519 current 1 1 0 current 1184 336 32 7	4 0 18 122 372 446 1826 history1 2 1 0 history1 4159 867 95 20	0 5 87 342 463 2639 history2 <1 1 0 history2 2180 646 74 19



OIL ANALYSIS REPORT







Certificate 12367

Laboratory Sample No.

: ML0001077 Lab Number : 06155812 Unique Number : 10991235

Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 22 Apr 2024

0ct6/20

Tested : 23 Apr 2024 Diagnosed : 24 Apr 2024 - Don Baldridge

Feb2/22 -

MCCLUNG-LOGAN EQUIPMENT CO - MANASSAS 8450 QUARRY ROAD MANASSAS, VA US 20110

0ct6/20

Contact: MIKE MAYHUGH MMAYHUGH@MCCLUNG-LOGAN.COM

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

 st - 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)