

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



Machine Id
CATERPILLAR 574

Diesel Engine

{not provided} (--- QTS)

IENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0004956		
Sample Date		Client Info		20 Mar 2024		
Machine Age	hrs	Client Info		1508		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185m	>100	13		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	nnm	ACTM DE195m	- 2	Λ .		

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	13	
Chromium	ppm	ASTM D5185m	>20	<1	
Nickel	ppm	ASTM D5185m	>2	0	
Titanium	ppm	ASTM D5185m	>2	0	
Silver	ppm	ASTM D5185m	>2	0	
Aluminum	ppm	ASTM D5185m	>25	1	
Lead	ppm	ASTM D5185m	>40	<1	
Copper	ppm	ASTM D5185m	>330	4	
Tin	ppm	ASTM D5185m	>15	<1	
Vanadium	ppm	ASTM D5185m		<1	
White Metal	scalar	*Visual	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	
Silicon	ppm	ASTM D5185m	>25	4	
Potoccium	nnm	ACTM DE195m	× 20	Λ	

CONTAMINATION

There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	
Potassium	ppm	ASTM D5185m	>20	0	
Fuel		WC Method	>5	<1.0	
Water		WC Method	>0.2	NEG	
Glycol		WC Method		NEG	
Soot %	%	*ASTM D7844	>3	0.2	
Nitration	Abs/cm	*ASTM D7624	>20	9.2	
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	
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	
Sodium	ppm	ASTM D5185m		4	

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Odor	scalar	*Visual	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	
Sodium	ppm	ASTM D5185m		4	
Boron	ppm	ASTM D5185m		6	
Barium	ppm	ASTM D5185m		0	
Molybdenum	ppm	ASTM D5185m		56	
Manganese	ppm	ASTM D5185m		<1	
Magnesium	ppm	ASTM D5185m		812	
Calcium	ppm	ASTM D5185m		1153	
Phosphorus	ppm	ASTM D5185m		944	
Zinc	ppm	ASTM D5185m		1066	
Sulfur	ppm	ASTM D5185m		3180	
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.8	
Base Number (BN)	mg KOH/g	ASTM D2896		8.77	
Visc @ 100°C	cSt	ASTM D445		12.5	





Certificate L2367

Laboratory Sample No.

: RW0004956 Lab Number : 06154663 Unique Number: 10990086 Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Apr 2024 : 23 Apr 2024 **Tested** Diagnosed

: 23 Apr 2024 - Wes Davis

MUSKEGON, MI US 49442 Contact: ERIC KING ewking@newkirk-electric.com

NEWKIRK ELECTRIC

1875 ROBERTS ST.

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. T: (231)206-6131 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (231)724-4090