WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



## CATERPILLAR 202-2040

Component
Right Final Drive

GEAR OIL ISO 220 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		PC0084918	PC0071040	
	Sample Date		Client Info		20 Feb 2024	09 Jan 2023	
	Machine Age	hrs	Client Info		2386	1876	
	Oil Age	hrs	Client Info		510	612	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		N/A	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>800	20	29	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>10	<1	<1	
	Nickel	ppm	ASTM D5185(m)	>5	0	<1	
	Titanium	ppm	ASTM D5185(m)	>15	0	0	
	Silver	ppm	ASTM D5185(m)	>2	0	0	
	Aluminum	ppm	ASTM D5185(m)	>75	<1	0	
	Lead	ppm	ASTM D5185(m)	>10	0	0	
	Copper	ppm	ASTM D5185(m)	>75	<1	1	
	Tin	ppm	ASTM D5185(m)	>8	0	0	
	Vanadium	ppm	ASTM D5185(m)		0	0	
	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>400	<1	<1	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	1	<1	
	Water		WC Method	>0.2	NEG	NEG	
	Silt	scalar	Visual*	NONE	NONE	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	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2	2	
The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)		28	30	
	Barium	ppm	ASTM D5185(m)		0	0	
	Molybdenum	ppm	ASTM D5185(m)	15	0	0	
	Manganese	ppm	ASTM D5185(m)		0	<1	
	Magnesium	ppm	ASTM D5185(m)		2	<1	
	Calcium	ppm	ASTM D5185(m)		5	2	
	Phosphorus	ppm	ASTM D5185(m)		441	502	
	Zinc	ppm	ASTM D5185(m)		6	5	
	Sulfur	ppm	ASTM D5185(m)		5515	6053	
	Visc @ 40°C	cSt	ASTM D7279(m)		219	216	
	Visc @ 100°C	cSt	ASTM D7279(m)	19.0	25.8	26.0	

Viscosity Index (VI) Scale ASTM D2270\* 96

153

149





CALA
Turn
Accordate htt 199911

ISO 17025;2017
Accredited

 Laboratory
 : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

 Sample No.
 : PC0084918
 Received
 : 04 Mar 2024

 Lab Number
 : 02619636
 Tested
 : 04 Mar 2024

Accredited Laboratory Unique Number : 5736746 Diagnosed : 04 Mar 2024 - Kevin Marson Test Package : MOB 1 ( Additional Tests: KV100, VI )

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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