

WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ABNORMAL



Machine Id **CATERPILLAR 24-370** Right Auger SAE 80W90 (--- GAL)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as (GENERIC) SAE 80W90, however, a fluid match indicates that this fluid is SAE 80W140 Gear Oil. Please confirm the oil type and grade on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2		
Sample Number		Client Info		WC0872169				
Sample Date		Client Info		14 May 2024				
Machine Age	hrs	Client Info		50				
Oil Age	hrs	Client Info		50				
Filter Age	hrs	Client Info		0				
Oil Changed		Client Info		Changed				
Filter Changed		Client Info		N/A				
Sample Status				ABNORMAL				
Iron	ppm	ASTM D5185(m)	>200	52				
Chromium	ppm	ASTM D5185(m)	>10	<1				
Nickel	ppm	ASTM D5185(m)	>10	0				
Titanium	ppm	ASTM D5185(m)		4				

0

ppm

ppm

Silver

Aluminum

ASTM D5185(m)

ASTM D5185(m)

WEAR

All component wear rates are normal.

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There is no indication of any contamination in the oil.

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 80W140 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

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Lead	ppm	ASTM D5185(m)		0		
Copper	ppm	ASTM D5185(m)		<1		
Tin	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)		2		
Potassium	ppm	ASTM D5185(m)	>20	1		
Water		WC Method	>0.2	NEG		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	VLITE		
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 D5185(m)	>50	22		
Boron	ppm	ASTM D5185(m)	200	25		
Barium	ppm	ASTM D5185(m)	0	<1		
Molybdenum	ppm	ASTM D5185(m)	0	0		
Manganese	ppm	ASTM D5185(m)		8		
Magnesium	ppm	ASTM D5185(m)	0	3		
Calcium	ppm	ASTM D5185(m)	20	124		
Phosphorus	ppm	ASTM D5185(m)	1000	799		
Zinc	ppm	ASTM D5185(m)	20	30		
Sulfur	ppm	ASTM D5185(m)	22000	19219		
Acid Number (AN)	mg KOH/g	ASTM D974*		1.20		
Visc @ 40°C	cSt	ASTM D7279(m)	135	<u>^</u> 267		
			Contact/	Location: Jo	e Cunha - BF	RA155CAM
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CALA ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No. Received : WC0872169

: 15 May 2024 Lab Number : 02635814 **Tested** : 16 May 2024 Unique Number : 5776967 Diagnosed : 17 May 2024 - Kevin Marson

Test Package : MOB 2 (Additional Tests: TAN Man) 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.

BRANTCO CONSTRUCTION

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