

WEAR SEVERE CONTAMINATION ABNORMAL FLUID CONDITION MARGINAL

Machine Id **1567 1567** Component **Rear Differential** Fluid **GEAR OIL SAE 75W90 (--- GAL)**

RECOMMENDATION

The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample.

WEAR

Gear wear is indicated.

CONTAMINATION

There is a moderate amount of visible silt present in the sample.

FLUID CONDITION

The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

	Test	UOM	Method	Limit/Abn	Cı	urrent	History1	History2
	Sample Number		Client Info		W	C0939254		
	Sample Date		Client Info		21	May 2024		
	Machine Age	hrs	Client Info		63	97		
	Oil Age	hrs	Client Info		0			
	Filter Age	hrs	Client Info		0			
	Oil Changed		Client Info		Cł	nanged		
	Filter Changed		Client Info		N/	A		
	Sample Status				SE	EVERE		
	Iron	ppm	ASTM D5185m	>500		2781		
	Chromium	ppm	ASTM D5185m	>10		8		
	Nickel	ppm	ASTM D5185m	>10		23		
	Titanium	ppm	ASTM D5185m			<1		
	Silver	ppm	ASTM D5185m			<1		
	Aluminum	ppm	ASTM D5185m	>25		7		
	Lead	ppm	ASTM D5185m	>25		0		
	Copper	ppm	ASTM D5185m	>100		2		
	Tin	ppm	ASTM D5185m	>10		<1		
	Vanadium	ppm	ASTM D5185m			<1		
	White Metal	scalar	*Visual	NONE		NONE		
	Vallow Matal	acalar	*\/;ould	NONE		NONE		
	reliow wietai	scalar	visuai	NONE		NONE		
	Silicon	ppm	ASTM D5185m	>75		66		
	Silicon	ppm	ASTM D5185m	>75 >20		66 21		
	Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>75 >20 >.2		66 21 NEG	 	
	Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method	>75 >20 >.2 NONE		66 21 NEG MODER		
	Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>75 >20 >.2 NONE NONE		66 21 NEG MODER NONE	 	
	Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>75 >20 >.2 NONE NONE NONE	• • • •	66 21 NEG MODER NONE	 	
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>75 >20 >.2 NONE NONE NORE		66 21 NEG MODER NONE NONE NORML		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>75 >20 >.2 NONE NONE NONE NORML		66 21 NEG MODER NONE NONE NORML		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 >.2 NONE NONE NORML NORML >.2		66 21 NEG MODER NONE NONE NORML NORML NEG		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>75 >20 >.2 NONE NONE NORML NORML >.2		66 21 NEG MODER NONE NONE NORML NORML NEG		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>75 >20 >.2 NONE NONE NONE NORML NORML >.2		66 21 NEG MODER NONE NORML NORML NEG		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	 >75 >20 >.2 NONE NONE NORML NORML >.2 400 		66 21 NEG MODER NONE NORML NORML NEG 11 72		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	 >75 >20 >.2 NONE NORML NORML >.2 400 200 		66 21 NEG MODER NONE NORML NORML NEG 11 72 0		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm ppm scalar scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	 >75 >20 >.2 NONE NONE NONE NORML NORML >.2 400 200 12 		66 21 NEG MODER NONE NORML NORML NEG 11 72 0 2		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>75 >20 >.2 NONE NONE NORML NORML >.2 400 200 12		66 21 NEG MODER NONE NORML NORML NEG 11 72 0 2 35		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >75 >20 >.2 NONE NORML NORML >.2 400 200 12 12 		66 21 NEG MODER NONE NORML NORML NEG 11 72 0 2 35 11		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >75 >20 >.2 NONE NONE NONE NORML NORML >.2 400 200 12 12 150 		66 21 NEG MODER NONE NORML NORML NEG 11 72 0 2 35 11 52		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >75 >20 >.2 NONE NONE NORML NORML >.2 400 200 12 12 150 1650 		66 21 NEG MODER NONE NORML NORML NEG 11 72 0 2 35 11 52 663		
	Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >75 >20 >.2 NONE NORML NORML >.2 400 200 12 150 1650 125 		66 21 NEG MODER NONE NORML NORML NEG 11 72 0 2 35 11 52 663 31		
	Silicon Potassium Vater Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >75 >20 >.2 NONE NORME NORML >.2 400 200 12 150 125 22500 		66 21 NEG MODER NONE NORML NORML NEG 11 72 0 2 35 11 52 663 31 19276		

Contact/Location: Leigh Dennis - CARBUTNC





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