

WEAR SEVERE CONTAMINATION SEVERE FLUID CONDITION NORMAL



LIEBHERR Machine Id 062713-1419 LIEBHERR A934CHD 062713-1419 Component Front Left Wheel Hub

{not provided} (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. 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.

WEAR

Gear wear is indicated.

CONTAMINATION

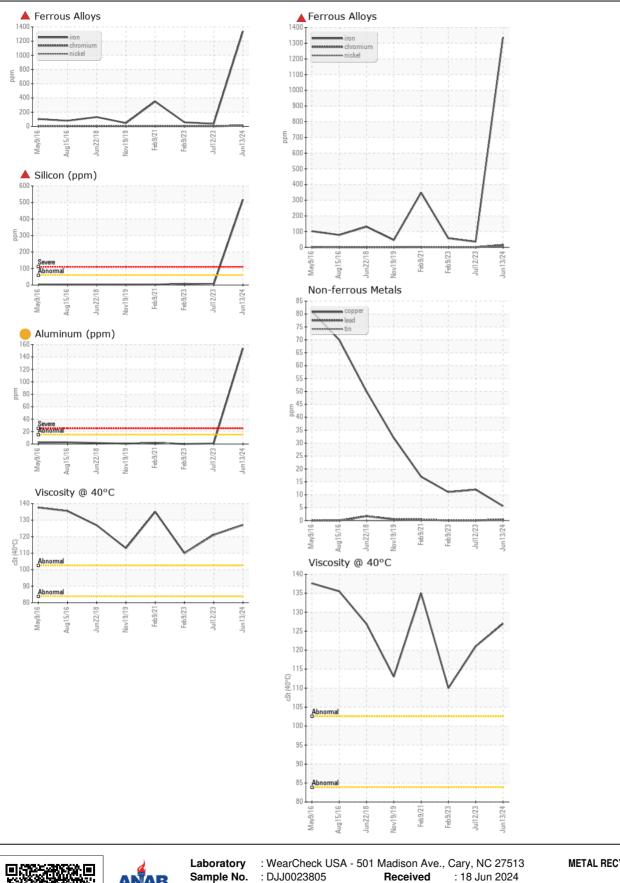
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

TestUOMMethodLimit/hoCurrentHistory1History2Sample NumberClient Info13 Jun202412 Jul202309 Feb 2023Machine AgehrsClient Info13 Jun202412 Jul202309 Feb 2023Machine AgehrsClient Info129921251512363Oil AgehrsClient Info0000Oil ChangedClient InfoMAN/AN/AN/ASample StatusClient InfoN/AN/AN/AN/ASample StatusStropper\$EVERENORMALNORMALIronppmASTM D5165>450\$1337366577ChromiumppmASTM D5165>4\$15<1<<1NickelppmASTM D5165>2\$7700SilverppmASTM D5165>4\$15<1<<1SilverppmASTM D5165>4\$154<1<0QapperppmASTM D5165>4\$154<111TinppmASTM D5165>4\$154\$100VanadiumppmASTM D5165>4\$154\$100White Metalscalar"VisualNONENONENONENONESiliconppmASTM D5165>6\$12\$11\$15SiliconppmASTM D5165>6\$12\$12\$10SiliconppmASTM D5165>20\$16							
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Phosphorus ppm ASTM D5185m 1298 542 689 Zinc ppm ASTM D5185m 1645 267 528 Sulfur ppm ASTM D5185m 4385 15832 8977	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	20 NEG NONE NONE NORML NORML NEG 13 152 0 1 1 10	3 NEG NONE NONE NORML NORML NEG 0 13 0 15 1	3 NEG NONE NONE NORML NORML NEG 5 68 1 36 1
Zinc ppm ASTM D5185m 1645 267 528 Sulfur ppm ASTM D5185m 4385 15832 8977	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	20 NEG NONE NONE NORML NORML NEG 13 152 0 1 152 0 1 10 20	3 NEG NONE NONE NORML NORML NEG 0 13 0 15 1 1 13	3 NEG NONE NONE NORML NORML NEG 5 68 1 36 1 36 1 21
Sulfur ppm ASTM D5185m 4385 15832 8977	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	20 NEG NONE NONE NORML NORML NEG 13 152 0 1 152 0 1 152 0 1 3902	3 NEG NONE NONE NORML NORML NEG 0 13 0 13 0 15 1 1 13 370	3 NEG NONE NONE NORML NORML NEG 5 68 1 36 1 36 1 21 878
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	20 NEG NONE NONE NORML NORML NEG 13 152 0 13 152 0 1 10 20 3902 1298	3 NEG NONE NONE NORML NORML NEG 0 13 0 15 1 1 13 370 542	3 NEG NONE NONE NORML NORML NEG 5 68 1 36 1 21 878 689
	Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.2 NONE NONE NORML NORML	20 NEG NONE NONE NORML NORML NEG 13 152 0 13 152 0 1 10 20 3902 1298 1645	3 NEG NONE NONE NORML NORML NEG 0 13 0 13 0 15 1 1 370 542 267	3 NEG NONE NONE NORML NORML NEG 5 68 1 36 1 36 1 21 878 689 528

Contact/Location: RYAN BOWDEN - METGAS



METAL RECYCLING SERVICES - GASTONIA 5401 S YORK HWY GASTONIA, NC US 28052 Contact: RYAN BOWDEN

T:

Centificate 12367 Test Package : CONST To discuss this sample report, contact Customer Service at 1-800-237-1369.

Lab Number : 06213898

Unique Number : 11086762

* - 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) F: (704)864-9863

: 19 Jun 2024

: 20 Jun 2024 - Don Baldridge

Tested

Diagnosed

Contact/Location: RYAN BOWDEN - METGAS Page 2 of 2