

Machine Id HC2207 Component 2 Swing Drive Fluid GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

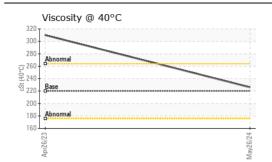
FLUID CONDITION

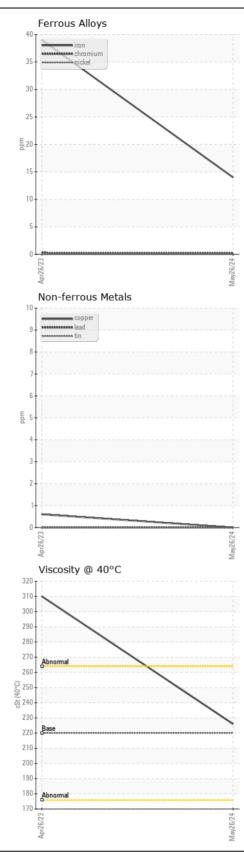
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0936025	WC0784929	
Sample Date		Client Info		26 May 2024	26 Apr 2023	
Machine Age	hrs	Client Info		8388	7638	
Oil Age	hrs	Client Info		750	974	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	Changed	
Filter Changed		Client Info		Not Changd	Changed	
Sample Status				NORMAL	ATTENTION	
			400	4.4	00	
Iron Chromium	ppm	ASTM D5185m	>400	14	39	
	ppm	ASTM D5185m	>10	<1	<1	
Nickel	ppm	ASTM D5185m	>10	0	0	
Titanium	ppm	ASTM D5185m		0	<1	
Silver	ppm	ASTM D5185m	0.5	0	0	
Aluminum	ppm	ASTM D5185m	>25	0	0	
Lead	ppm	ASTM D5185m	>50	0	0	
Copper	ppm	ASTM D5185m	>200	0	<1	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Silicon	ppm	ASTM D5185m	>50	2	4	
Potassium		ASTM D5185m	>20	0	1	
Potassium Water	ppm		>20 >0.2	_		
		ASTM D5185m		0	1	
Water	ppm	ASTM D5185m WC Method	>0.2	0 NEG	1 NEG	
Water Silt	ppm scalar	ASTM D5185m WC Method *Visual	>0.2 NONE	0 NEG NONE	1 NEG NONE	
Water Silt Debris	ppm scalar scalar	ASTM D5185m WC Method *Visual *Visual	>0.2 NONE NONE	0 NEG NONE NONE	1 NEG NONE NONE	
Water Silt Debris Sand/Dirt	ppm scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual	>0.2 NONE NONE NONE	0 NEG NONE NONE NONE	1 NEG NONE NONE	
Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>0.2 NONE NONE NONE NORML	0 NEG NONE NONE NONE NORML	1 NEG NONE NONE NONE SOLID	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>0.2 NONE NONE NORML NORML	0 NEG NONE NONE NORE NORML NORML NEG	1 NEG NONE NONE SOLID NORML NEG	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	0 NEG NONE NONE NORML NORML NEG 0	1 NEG NONE NONE SOLID SOLID NORML NEG	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	0 NEG NONE NONE NORML NORML NEG 0 51	1 NEG NONE NONE SOLID SOLID NORML NEG <1 221	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2 50 15	0 NEG NONE NONE NORML NORML NEG 0 51 <1	1 NEG NONE NONE SOLID NORML NEG <1 221 0	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	0 NEG NONE NONE NORML NORML NEG 0 51 <1 2	1 NEG NONE NONE SOLID SOLID NORML NEG <1 221 0 0	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm 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	>0.2 NONE NONE NORML NORML >0.2 50 15 15	0 NEG NONE NONE NORML NORML NEG 0 51 <1 2 2 <1	1 NEG NONE NONE SOLID SOLID NEG <1 221 0 0 0 <1	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar 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	 >0.2 NONE NORME NORML >0.2 50 15 50 	0 NEG NONE NONE NORML NORML NEG 0 51 <1 2 <1 2 <1 0	1 NEG NONE NONE SOLID NORML NEG 221 0 221 0 0 (1 3	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum 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	 >0.2 NONE NONE NORML >0.2 50 15 50 50 50 50 50 	0 NEG NONE NONE NORML NORML NEG 0 51 <1 2 <1 2 <1 0 2	1 NEG NONE NONE SOLID NORML NEG <1 221 0 221 0 0 <1 3 3 8	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron 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	 >0.2 NONE NONE NORML >0.2 50 15 15 50 50 50 50 350 	0 NEG NONE NONE NORML NORML NEG 0 51 <1 2 <1 2 <1 0 2 <1 0 2 602	1 NEG NONE NONE SOLID SOLID NEG 221 0 221 0 4 221 3 8 4 3 8 8 11113	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Malybdenum 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 ASTM D5185m	 >0.2 NONE NONE NORML >0.2 50 15 50 50 50 350 100 	0 NEG NONE NONE NORML NORML NEG 0 51 <1 2 <1 2 <1 2 <1 0 2 <1 0 2 <1 0 2 <1 3	1 NEG NONE NONE SOLID NORML NEG 221 0 221 0 21 3 4 3 8 1113 19	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron 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	 >0.2 NONE NONE NORML >0.2 50 15 15 50 50 50 50 350 	0 NEG NONE NONE NORML NORML NEG 0 51 <1 2 <1 2 <1 0 2 <1 0 2 602	1 NEG NONE NONE SOLID SOLID NEG 221 0 221 0 4 221 3 8 4 3 8 8 11113	

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Contact/Location: MICHAEL LAWSON - BUCGRA





: WearCheck USA - 501 Madison Ave., Cary, NC 27513 **BUCKNER HEAVY LIFT** Laboratory Sample No. : WC0936025 Received : 24 May 2024 4732 NC 54 EAST Lab Number : 06191370 Tested : 28 May 2024 GRAHAM, NC Unique Number : 11048122 Diagnosed : 29 May 2024 - Sean Felton US 27253-9215 Test Package : CONST Contact: MICHAEL LAWSON Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. michaell@bucknercompanies.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (336)376-8888 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (336)376-4090

Contact/Location: MICHAEL LAWSON - BUCGRA Page 2 of 2