

WEAR ATTENTION CONTAMINATION ABNORMAL FLUID CONDITION NORMAL

Machine Id HC2209 Component Left Track Drive Fluid GEAR OIL ISO 220 (--- 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. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

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

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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		WC0951923	WC0867433	WC0784999
Sample Date		Client Info		03 Jul 2024	04 Jan 2024	20 Apr 2023
Machine Age	hrs	Client Info		10485	0	8992
Oil Age	hrs	Client Info		1000	0	1340
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		N/A	Not Changd	Changed
Sample Status				ABNORMAL	SEVERE	SEVERE
Iron	ppm	ASTM D5185m	>1000	209	▲ 528	125
Chromium	ppm	ASTM D5185m	>30	2	7	1
Nickel	ppm	ASTM D5185m	>7	<1	2	2
Titanium	ppm	ASTM D5185m		2	6	2
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<mark>)</mark> 29	82	5 5
Lead	ppm	ASTM D5185m	>50	<1	<1	<1
Copper	ppm	ASTM D5185m	>100	6	10	4
Tin	ppm	ASTM D5185m	>5	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	maa	ASTM D5185m	>150	145	4 05	1 63
Potassium	ppm	ASTM D5185m	>20	9	23	12
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	MODER	MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	▲ 0.2%
Sodium		ASTM D5185m				д
D	ppiii			4	×	
Boron	nnm	ASTM D5185m	50	4	8	6
Boron	ppm	ASTM D5185m	50 15	4 2	8 13 0	6
Boron Barium Molybdonum	ppm ppm	ASTM D5185m ASTM D5185m	50 15	4 2 0	8 13 0	6 0
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15	4 2 0 0	8 13 0 0	6 0 <1
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15	4 2 0 0 4	8 13 0 0 6	6 0 <1 3
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50	4 2 0 4 20 37	8 13 0 0 6 54 95	6 0 <1 3 22 40
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50 50 350	4 2 0 4 20 37 450	8 13 0 6 54 95 504	6 0 <1 3 22 40
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50 50 350 100	4 2 0 4 20 37 450	8 13 0 6 54 95 504 6	6 0 <1 3 22 40 449 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50 50 350 100 12500	4 2 0 4 20 37 450 5 8320	8 13 0 6 54 95 504 6	6 0 <1 3 22 40 449 8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 15 15 50 50 350 100 12500	4 2 0 4 20 37 450 5 8329 216	8 13 0 6 54 95 504 6 6 6609 225	6 0 <1 3 22 40 449 8 9211 220

Contact/Location: MICHAEL LAWSON - BUCGRA



BUCKNER HEAVY LIFT Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : WC0951923 Received 4732 NC 54 EAST : 09 Jul 2024 Ē Lab Number : 06231799 Tested GRAHAM, NC : 10 Jul 2024 Unique Number : 11115292 Diagnosed : 11 Jul 2024 - Jonathan Hester 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

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