

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION ATTENTION

Machine Id CR1216 Component Gearbox Fluid GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

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

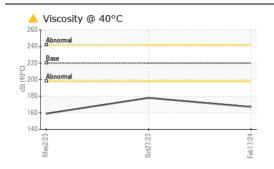
There is no indication of any contamination in the oil.

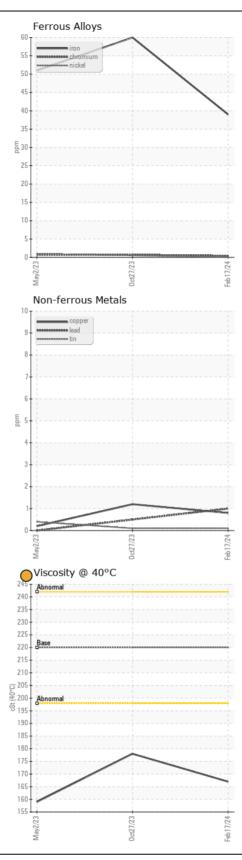
FLUID CONDITION

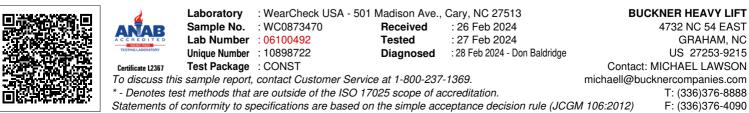
The oil viscosity is lower than normal. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0873470	WC0810400	WC0809298
Sample Date		Client Info		17 Feb 2024	27 Oct 2023	02 May 2023
Machine Age	hrs	Client Info		3481	3392	2737
Oil Age	hrs	Client Info		0	655	763
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				ATTENTION	NORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>200	39	60	51
Chromium	ppm	ASTM D5185m	>10	-1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	1
Titanium	ppm	ASTM D5185m	>10	0	<1	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	0	2	<1
Lead	ppm	ASTM D5185m	>50	1	<1	0
Copper	ppm	ASTM D5185m	>200	، <1	1	<1
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m	210	0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
				NONE		
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal Silicon	scalar ppm	*Visual ASTM D5185m	NONE	NONE 1	NONE 3	NONE <1
Silicon	ppm	ASTM D5185m	>50	1	3	<1
Silicon Potassium	ppm	ASTM D5185m ASTM D5185m	>50 >20	1 0	3	<1 3
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>50 >20 >0.2	1 0 NEG	3 1 NEG	<1 3 NEG
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>50 >20 >0.2 NONE	1 0 NEG NONE	3 1 NEG NONE	<1 3 NEG MODER
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>50 >20 >0.2 NONE NONE	1 0 NEG NONE NONE	3 1 NEG NONE NONE	<1 3 NEG MODER NONE
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>50 >20 >0.2 NONE NONE NONE	1 0 NEG NONE NONE	3 1 NEG NONE NONE	<1 3 NEG MODER NONE 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	>50 >20 >0.2 NONE NONE NONE NORML	1 0 NEG NONE NONE NONE NORML	3 1 NEG NONE NONE NONE NORML	<1 3 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	>50 >20 >0.2 NONE NONE NONE NORML NORML	1 0 NEG NONE NONE NONE NORML NORML	3 1 NEG NONE NONE NONE NORML NORML	<1 3 NEG MODER NONE NONE NORML 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	>50 >20 >0.2 NONE NONE NONE NORML NORML	1 0 NEG NONE NONE NORE NORML NEG	3 1 NEG NONE NONE NORML NORML NEG	<1 3 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	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>50 >20 >0.2 NONE NONE NORML NORML >0.2	1 0 NEG NONE NONE NORML NORML NEG 2	3 1 NEG NONE NONE NORML NORML NEG 0	<1 3 NEG MODER NONE NORE NORML NORML NEG 6
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gpm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	 >50 >20 >0.2 NONE NORME NORML >0.2 50 	1 0 NEG NONE NONE NORML NORML NEG 2 2	3 1 NEG NONE NONE NORML NORML NEG 0 <1	<1 3 NEG MODER NONE NORML NORML NEG 6 0
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	 >50 >20 >0.2 NONE NONE NORML NORML >0.2 50 15 	1 0 NEG NONE NONE NORML NORML NEG 2 2 <1	3 1 NEG NONE NONE NORML NORML NEG 0 <1 2	<1 3 NEG MODER NONE NONE NORML NORML NEG 6 0 2
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	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 ASTM D5185m	 >50 >20 >0.2 NONE NONE NORML NORML >0.2 50 15 	1 0 NEG NONE NONE NORML NORML NEG 2 <1 <1 <1	3 1 NEG NONE NONE NORML NORML NEG 0 <1 2 <1	<1 3 NEG MODER NONE NONE NORML NORML NEG 6 0 2 <1
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	 >50 >20 >0.2 NONE NORME NORML >0.2 50 15 15 	1 0 NEG NONE NONE NORML NORML NEG 2 <1 <1 0 1	3 1 NEG NONE NONE NORML NORML NEG 0 <1 2 <1 2	<1 3 NEG MODER NONE NONE NORML NORML NEG 6 0 2 <1 4
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm 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	 >50 >20 >0.2 NONE NONE NORML >0.2 50 50 50 	1 0 NEG NONE NONE NORML NORML NEG 2 <1 <1 0 1 0	3 1 NEG NONE NONE NORML NORML NEG 0 <1 2 <1 2 1	<1 3 NEG MODER NONE NONE NORML NORML NEG 6 0 2 <1 4 0
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm 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	 >50 >20 >0.2 NONE NORML NORML >0.2 50 15 15 50 50 50 50 50 	1 0 NEG NONE NONE NORML NORML NEG 2 <1 <1 0 1 0 1	3 1 NEG NONE NONE NORML NORML NEG 0 <1 2 <1 2 <1 2 1 1 5	<1 3 NEG MODER NONE NONE NORML NORML NEG 6 0 2 <1 4 0 23
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 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	 >50 >20 >0.2 NONE NORME NORML >0.2 50 15 15 50 50 50 350 	1 0 NEG NONE NONE NORML NORML NEG 2 <1 <1 <1 0 1 0 1 1 0 1 1 0 1 1 0	3 1 NEG NONE NONE NORML NORML NEG 0 <1 2 <1 2 <1 2 1 1 5 388	<1 3 NEG MODER NONE NONE NORML NORML NEG 6 0 2 6 0 2 6 0 2 2 7 4 0 23 2 57

Contact/Location: MICHAEL LAWSON - BUCGRA







Contact/Location: MICHAEL LAWSON - BUCGRA

Page 2 of 2