

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

CR1215 - INNER

Component Rear Left Planetary Fluid GEAR OIL ISO 220 (--- GAL)

DIAGNOSIS

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.

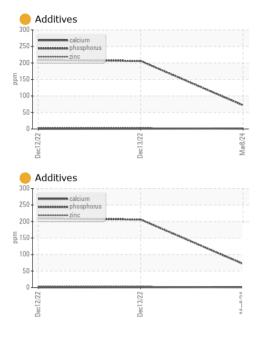
Fluid Condition

The oil viscosity is higher than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.

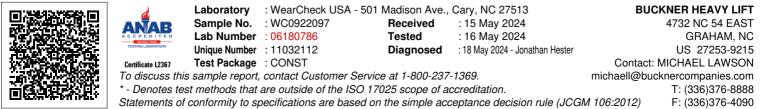
Sample Number Client Info WC0922097 WC0761834 WC0761834 WC0761834 Sample Date Client Info 06 Mar 2024 13 Dec 2022 12 Dec 2022 Machine Age hrs Client Info 3794 2737 2737 Oil Age hrs Client Info 1000 0 0 Oil Age Client Info Changed Changed Changed Changed Sample Status method Imit/base current History1 History2 War WC Method >0.2 NEG NEG NEG Chromium ppm ASTM 05155m >10 <1 0 0 Kromium ppm ASTM 05155m >500 <1 5 4 Chromium ppm ASTM 05155m >10 <1 0 0 Silver ppm ASTM 05155m >22 <1 <1 1 Silver ppm ASTM 05155m >10 <1 0 0 <	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2	
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Iron ppm ASTM D5185m >500 <1			method	limit/base	-	history1	history2	
Chromium ppm ASTM D5185m >10 <1		ppm	ASTM D5185m	>500	<1			
Nickel ppm ASTM D5185m >10 <1	Chromium		ASTM D5185m	>10	<1		0	
Titanium ppm ASTM D5185m <1	Nickel		ASTM D5185m	>10	<1	0	0	
SilverppmASTM D5185m<1	Titanium		ASTM D5185m		<1	0	0	
Aluminum ppm ASTM D5185m >25 2 0 0 Lead ppm ASTM D5185m >25 <1 0 0 Copper ppm ASTM D5185m >75 2 <1 <1 Tin ppm ASTM D5185m >10 <1 0 0 Cadmium ppm ASTM D5185m <1 0 0 0 Cadmium ppm ASTM D5185m <1 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 50 1 3 6 Barium ppm ASTM D5185m 15 <1 0 0 Molybdenum ppm ASTM D5185m 50 1 <1 <1 Calcium ppm ASTM D5185m 50 1 <1 <1 Calcium ppm ASTM D5185m 100 0 3 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>								
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Copper ppm ASTM D5185m >75 2 <1				>25	<1			
TinppmASTM D5185m>10<1	Copper					<1	<1	
VanadiumppmASTM D5185m<1			ASTM D5185m	>10	<1	0	0	
ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m50136BariumppmASTM D5185m15011MolybdenumppmASTM D5185m15<100ManganeseppmASTM D5185m50<10<1CalciumppmASTM D5185m50<1<1<1PhosphorusppmASTM D5185m501<1<1PhosphorusppmASTM D5185m350?72206209ZincppmASTM D5185m125003081287377CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m203<1<1VisualppmASTM D5185m203<1<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONENONEAstrin D5185mscalar*VisualNONENONENONENONENONESolitscalar*VisualNONE <th>Vanadium</th> <th></th> <th>ASTM D5185m</th> <th></th> <th><1</th> <th>0</th> <th>0</th>	Vanadium		ASTM D5185m		<1	0	0	
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BariumppmASTM D5185m15011MolybdenumppmASTM D5185m15<100ManganeseppmASTM D5185m50<10<1CalciumppmASTM D5185m50<10<1CalciumppmASTM D5185m501<1<1PhosphorusppmASTM D5185m35072206209ZincppmASTM D5185m100033SulfurppmASTM D5185m125003081287377CONTAMINANTSmethodimit/basecurrenthistory1history2SiliconppmASTM D5185m>7521110SodiumppmASTM D5185m>203<1<1VISUALnethodimit/basecurrenthistory1history2Vhite Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONEAstrScalar*VisualNORMLNORMLNORMLNORML <td< th=""><th>ADDITIVES</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></td<>	ADDITIVES		method	limit/base	current	history1	history2	
MolybdenumppmASTM D5185m15<1	Boron	ppm	ASTM D5185m	50	1	3	6	
MaganeseppmASTM D5185m0000MagnesiumppmASTM D5185m50<10<1CalciumppmASTM D5185m501<1<1PhosphorusppmASTM D5185m35072206209ZincppmASTM D5185m100033SulfurppmASTM D5185m125003081287377CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>7521110SodiumppmASTM D5185m>203<1<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAstricturescalar*VisualNORENONENONENONEAstricturescalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONE	Barium	ppm	ASTM D5185m	15	0	1	1	
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CalciumppmASTM D5185m501<1	Manganese	ppm	ASTM D5185m		0	0	0	
PhosphorusppmASTM D5185m35072206209ZincppmASTM D5185m100033SulfurppmASTM D5185m125003081287377CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>7521110SodiumppmASTM D5185m>7521110PotassiumppmASTM D5185m>203<1<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual0.2NEGNEGNEGNEG	Magnesium	ppm	ASTM D5185m	50	<1	0	<1	
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SiliconppmASTM D5185m<>7521110SodiumppmASTM D5185m300PotassiumppmASTM D5185m>203<1<1VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONEMODERNONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLCdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEG	Sulfur	ppm	ASTM D5185m	12500	<mark>)</mark> 3081	287	377	
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PotassiumppmASTM D5185m>203<1	Silicon	ppm	ASTM D5185m	>75	2	11	10	
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Odorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*VisualNEGNEGNEG	Sand/Dirt			NONE		NONE		
Emulsified Water scalar *Visual >0.2 NEG NEG Free Water scalar *Visual NEG NEG	Appearance	scalar						
Free Water scalar *Visual NEG NEG NEG	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
:16:28) Rev: 1 Contact/Location: MICHAEL LAWSON - BUCGRA	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG	



OIL ANALYSIS REPORT



FLUID PROPER	RTIES	method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D445	220	<mark> </mark> 393	230	233
SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image
GRAPHS						6
Ferrous Alloys	Dec13/22 alls		Mat0.24			
tin tin						
Viscosity @ 40°C	Dec13/22		Mar8/24			
Abnormal Base						
Abnormal 0ec17753	Dec13/22		Mar8/24			
earCheck USA - 5	01 Madis	on Ave., Cary	, NC 27513			R HEAVY LI



cSt (40°C)

Contact/Location: MICHAEL LAWSON - BUCGRA

Page 2 of 2