

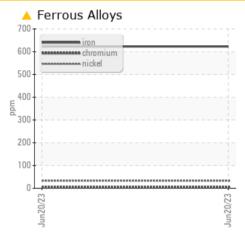
Sample Rating Trend DIRT

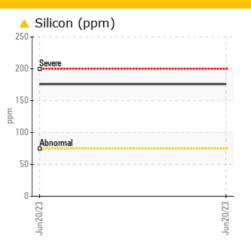


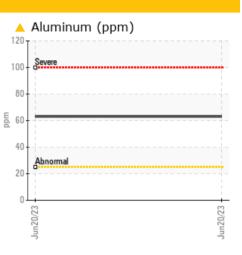
427193

Component 2 Differential Fluid GEAR OIL SAE 75W90 (--- GAL)

COMPONENT CONDITION SUMMARY







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. (Customer Sample Comment: Tag axle (2nd))

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	
Iron	ppm	ASTM D5185m	>500	🔺 623	
Nickel	ppm	ASTM D5185m	>10	A 33	
Aluminum	ppm	ASTM D5185m	>25	🔺 63	
Silicon	ppm	ASTM D5185m	>75	人 176	

Customer Id: GFL983 Sample No.: GFL0085428 Lab Number: 05887002 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

To change component or sample information: Customer Service +1 1-800-237-1369 <u>customerservice@wearcheck.com</u>

RECOMMENDED	ACTIONS			
Action	Status	Date	Done By	Description
Check Dirt Access			?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT



Machine Id 427193

Component **2 Differential** Fluid GEAR OIL SAE 75W90 (--- GAL)

DIAGNOSIS

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. (Customer Sample Comment: Tag axle (2nd))

A Wear

Gear wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

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

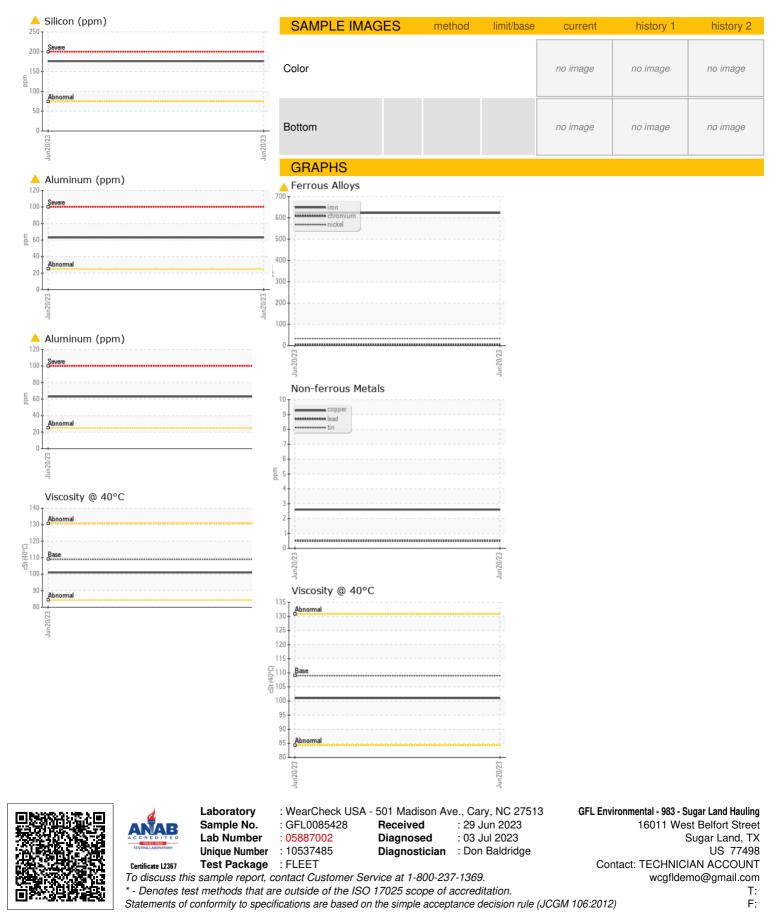
Oil Age r Oil Changed sample Status WEAR METALS r Iron r Chromium r Nickel r Titanium r Silver r Aluminum r Lead r Copper r Tin r Vanadium r ADDITIVES r Boron r Barium r Malganese r Magnesium r Calcium r Phosphorus r Sulfur r Silicon r	mls mls mls ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	Client Info Client Info Client Info Client Info Client Info Astm D5185m ASTM D5185m	limit/base >500 >10 >10 >10 >25 >25 >25 >100 >10 limit/base 400 200 12	GFL0085428 20 Jun 2023 301654 Changed ABNORMAL Current ▲ 623 5 33 4 33 4 33 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 5 5 4 4 5 5 4 4 5 5 4 4 5 5 4 4 5 5 4 4 5 5 4 4 5 5 4 4 5 5 4 4 5 5 4 4 5 5 5 5 5 5 5 5 5 5 5 6 7 5 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7		
Machine Age r Oil Age r Oil Changed Sample Status WEAR METALS Iron r Chromium r Nickel r Titanium r Silver r Aluminum r Lead r Copper r Tin r Vanadium r Cadmium r Cadmium r Molybdenum r Molybdenum r Manganese r Magnesium r Calcium r ContaMinantr	mls ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	Client Info Client Info Client Info Astm D5185m ASTM D5185m	>500 >10 >10 >25 >25 >100 >10 >imit/base	301654 301654 Changed ABNORMAL	 history 1 -	 history 2 -
Oil Age r Oil Changed r Sample Status WEAR METALS Iron p Chromium p Nickel p Titanium p Silver p Aluminum p Lead p Copper p Tin p Vanadium p Boron p Barium p Malganese p Magnesium p CoNTAMINANTS p Silicon p	mls ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	Client Info Client Info Client Info Astm D5185m Astm D5185m	>500 >10 >10 >25 >25 >100 >10 >imit/base	301654 Changed ABNORMAL current ▲ 623 5 33 <10 0 ▲ 63 <1 3 <1 0 <1 3 <1 0 <1 165 0 0 0 0 0 0 0 0 0 0 0 0 0	 history 1 	 history 2 -
Oil Changed Sample Status WEAR METALS Iron p Chromium p Nickel p Nickel p Titanium p Silver p Aluminum p Lead p Copper p Tin p Cadmium p Boron p Barium p Malganese p Magnesium p Calcium p Phosphorus p Sulfur p Sulfur p Silicon p	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	Client Info method ASTM D5185m ASTM D5185m	>500 >10 >10 >25 >25 >100 >10 >imit/base	Changed ABNORMAL current ▲ 623 5 ▲ 33 <10 0 ▲ 63 <1 3 <1 0 <1 3 <1 0 <1 165 0 0 0 0	history 1	 history 2 -
Sample Status WEAR METALS Iron Chromium Nickel Silver Aluminum Lead Copper Tin Cadmium Cadmiu	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m	>500 >10 >10 >25 >25 >100 >10 >imit/base	ABNORMAL current ▲ 623 5 33 <10 0 ▲ 63 <1 3 <1 0 <1 0 <1 0 <1 165 0 0 0 0	history 1	history 2
WEAR METALS Iron F Chromium F Nickel F Nickel F Silver F Aluminum F Lead F Copper F Tin F Vanadium F Cadmium F Boron F Barium F Malganese F Magnesium F Calcium F Sulfur F CONTAMINANTS F	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>500 >10 >10 >25 >25 >100 >10 >imit/base	current 623 5 33 <1	history 1	history 2
Iron p Chromium p Nickel p Titanium p Silver p Aluminum p Lead p Copper p Tin p Vanadium p Cadmium p Cadmium p Manganese p Magnesium p Calcium p Calcium p Calcium p Calcium p Calcium p Calcium p Calcium p	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>500 >10 >10 >25 >25 >100 >10 >imit/base	 623 5 33 <1 0 63 <1 3 <1 0 <1 0 	 history 1	 history 2
Chromium p Nickel p Titanium p Silver p Aluminum p Lead p Copper p Tin p Vanadium p Cadmium p ADDITIVES Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Sulfur p Sulfur p	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>10 >10 >25 >25 >100 >10 limit/base 400 200 12	5 ▲ 33 <1 0 ▲ 63 <1 3 <1 0 <1 0 <1 <u>current</u> 165 0 0	 history 1	 history 2
Nickel F Titanium F Silver F Aluminum F Lead F Copper F Tin F Vanadium F Cadmium F ADDITIVES Boron F Barium F Molybdenum F Magnesium F Calcium F Calcium F Calcium F Sulfur F CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	>10 >25 >25 >100 >10 limit/base 400 200 12	 33 <1 0 63 <1 3 <1 0 <1 current 165 0 0 0 	 history 1	 history 2
Titanium p Silver p Aluminum p Lead p Copper p Tin p Vanadium p Cadmium p ADDITIVES Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p	ppm ppm 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	>25 >25 >100 >10 limit/base 400 200 12	<1 0 ▲ 63 <1 3 <1 0 <1 0 <1 <u>current</u> 165 0 0 0	 history 1	 history 2
Titanium p Silver p Aluminum p Lead p Copper p Tin p Vanadium p Cadmium p Cadmium p ADDITIVES Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Calcium p Calcium p Contaminant p	ppm ppm 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	>25 >100 >10 limit/base 400 200 12	0 63 <1 3 <1 0 <1 0 <1 <u>current</u> 165 0 0 0	 history 1 	 history 2
Silver p Aluminum p Lead p Copper p Tin p Vanadium p Cadmium p Cadmium p ADDITIVES Boron p Barium p Manganese p Magnesium p Calcium p Calcium p Calcium p Calcium p Sulfur p CONTAMINANTS	ppm ppm 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	>25 >100 >10 limit/base 400 200 12	 ▲ 63 <1 3 <1 0 <1 current 165 0 0 0 	 history 1 	 history 2
Lead p Copper p Fin p Vanadium p Cadmium p Cadmium p ADDITIVES Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Calcium p ContaMINANT Silicon p	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>25 >100 >10 limit/base 400 200 12	<1 3 <1 0 <1 current 165 0 0	 history 1 	 history 2
Lead p Copper p Tin p Vanadium p Cadmium p ADDITIVES Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Calcium p Sulfur p CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>100 >10 limit/base 400 200 12	3 <1 0 <1 <u>current</u> 165 0 0	 history 1 	 history 2
Copper p Tin p Vanadium p Cadmium p ADDITIVES Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Sulfur p CONTAMINANT Silicon p	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>10 limit/base 400 200 12	<1 0 <1 <u>current</u> 165 0 0	 history 1 	 history 2
Tin provide the second	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>10 limit/base 400 200 12	0 <1 current 165 0 0	 history 1 	 history 2
Vanadium p Cadmium p ADDITIVES Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12	<1 current 165 0 0	history 1 	 history 2
ADDITIVES Boron p Barium p Molybdenum p Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS Silicon p	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12	current 165 0 0	history 1 	history 2
Boron p Barium p Molybdenum p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANT Silicon p	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	400 200 12	165 0 0		
Barium p Molybdenum p Manganese p Magnesium p Calcium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	200 12	0 0		
Molybdenum p Manganese p Magnesium p Calcium p Calcium p Calcium p Calcium p Contaminant p Sulfur p	ppm ppm ppm	ASTM D5185m ASTM D5185m	12	0		
Manganese p Magnesium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANT Silicon p	ppm ppm	ASTM D5185m		-		
Magnesium p Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS Silicon p	ppm		12	11		
Calcium p Phosphorus p Zinc p Sulfur p CONTAMINANTS Silicon p		ASTM D5185m	12			
Phosphorus p Zinc p Sulfur p CONTAMINANTS Silicon p	ppm			5		
Zinc p Sulfur p CONTAMINANT Silicon p		ASTM D5185m	150	42		
Sulfur p CONTAMINANT Silicon p	ppm	ASTM D5185m	1650	1204		
CONTAMINANTS Silicon	ppm	ASTM D5185m	125	42		
Silicon p	ppm	ASTM D5185m	22500	23131		
	S	method	limit/base	current	history 1	history 2
Sodium r	ppm	ASTM D5185m	>75	1 76		
P C C C C C C C C C C C C C C C C C C C	ppm	ASTM D5185m		3		
Potassium p	ppm	ASTM D5185m	>20	12		
VISUAL		method	limit/base	current	history 1	history 2
White Metal s	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris s	scalar	*Visual	NONE	NONE		
Sand/Dirt s	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor s	scalar	*Visual	NORML	NORML		
	scalar	*Visual	>.2	NEG		
Free Water s	scalar	*Visual		NEG		
FLUID PROPER						
Visc @ 40°C	TIES	method	limit/base	current	history 1	history 2

Report Id: GFL983 [WUSCAR] 05887002 (Generated: 07/03/2023 15:29:12) Rev: 1

Submitted By: TECHNICIAN ACCOUNT



OIL ANALYSIS REPORT



Submitted By: TECHNICIAN ACCOUNT