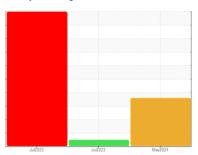


OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id
427180
Component
2 Differential

GEAR OIL SAE 80 (--- 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: 2nd Axle / Tag)

Wear

Gear wear is indicated.

Contamination

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

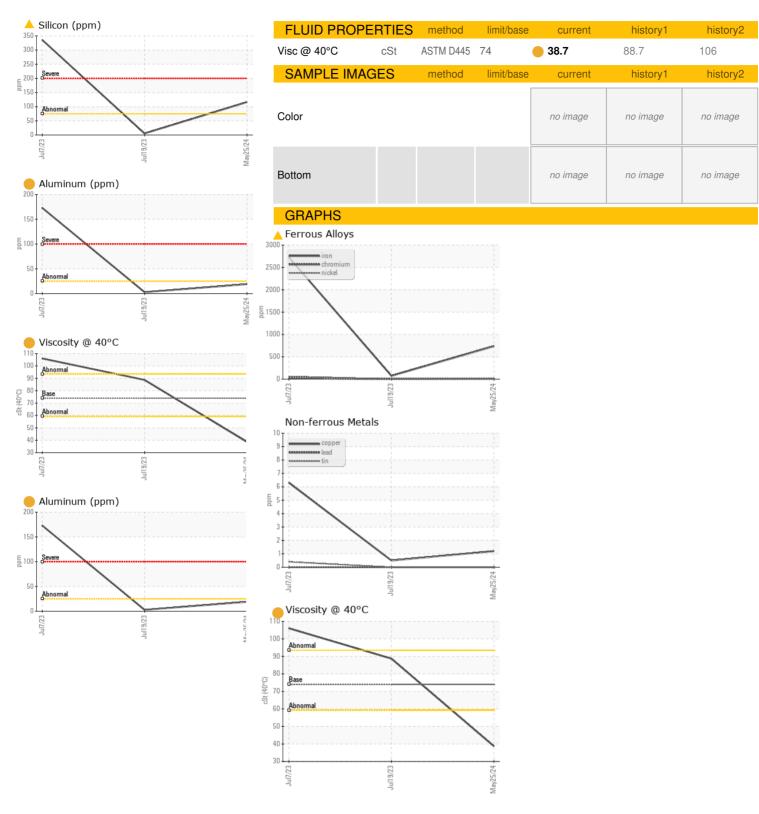
Fluid Condition

The oil viscosity is lower than normal.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number	1011	Client Info		GFL0123566	GFL0089409	GFL0085470
Sample Date		Client Info		25 May 2024	19 Jul 2023	07 Jul 2023
Machine Age	mls	Client Info		372186	340882	339095
Oil Age	mls	Client Info		372186	340882	339095
Oil Changed	11113	Client Info		Changed	Oil Added	Changed
		Ciletit iiiio		ABNORMAL	NORMAL	SEVERE
Sample Status				ADNORMAL	NORMAL	SEVERE
CONTAMINAT	ON	method	limit/base	current	history1	history2
Water		WC Method	>.2	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	736	73	▲ 2726
Chromium	ppm	ASTM D5185m	>10	4	<1	<u>^</u> 21
Nickel	ppm	ASTM D5185m	>10	6	1	5 9
Titanium	ppm	ASTM D5185m		<1	0	3
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<u> </u>	3	173
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>100	1	<1	6
Tin		ASTM D5185m	>100	0	0	<1
	ppm	ASTM D5185m	>10	0		
Vanadium	ppm			-	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	13	17	149
Barium	ppm	ASTM D5185m	200	0	0	0
	ppiii	ASTIVI DSTOSIII	=00	U	U	0
Molybdenum	ppm	ASTM D5185m	12	<1	<1	4
				_		
Molybdenum	ppm	ASTM D5185m		<1	<1	4
Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m	12	<1 8	<1 1	4 29
Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	12	<1 8 2	<1 1 <1	4 29 12
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150	<1 8 2 53	<1 1 <1 34	4 29 12 130
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650	<1 8 2 53 482	<1 1 <1 34 440	4 29 12 130 1209
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650 125	<1 8 2 53 482 43	<1 1 <1 34 440 37	4 29 12 130 1209 56
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650 125 22500 limit/base	<1 8 2 53 482 43 13274 current	<1 1 <1 34 440 37 13220 history1	4 29 12 130 1209 56 24210 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	12 12 150 1650 125 22500 limit/base >75	<1 8 2 53 482 43 13274 current	<1 1 <1 34 440 37 13220 history1	4 29 12 130 1209 56 24210 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	12 150 1650 125 22500 limit/base >75	<1 8 2 53 482 43 13274 current 116 2	<1 1 1 <1 34 440 37 13220 history1 6 0	4 29 12 130 1209 56 24210 history2 ▲ 336
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	12 12 150 1650 125 22500 limit/base >75 >20	<1 8 2 53 482 43 13274 current 116 2	<1 1 <1 34 440 37 13220 history1 6 0 <1	4 29 12 130 1209 56 24210 history2 ▲ 336 11
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	12 12 150 1650 125 22500 limit/base >75 >20 limit/base	<1 8 2 53 482 43 13274	<1 1 1 <1 34 440 37 13220 history1 6 0 <1 history1	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual	12 150 1650 125 22500 limit/base >75 >20 limit/base	<1 8 2 53 482 43 13274 current 116 2 2 current NONE	<1 1 <1 34 440 37 13220 history1 6 0 <1 history1 NONE	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19 history2 NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m **Visual	12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE	<1 8 2 53 482 43 13274	<1 1 1 <1 34 440 37 13220 history1 6 0 <1 history1 NONE NONE	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19 history2 NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m Method ASTM D5185m ASTM D5185m Method *Visual *Visual *Visual	12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE	<1 8 2 53 482 43 13274 current 116 2 2 current NONE NONE NONE	<1 1 1 <1 34 440 37 13220 history1 6 0 <1 history1 NONE NONE NONE	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19 history2 NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE	<1 8 2 53 482 43 13274	<1 1 1 <1 34 440 37 13220 history1 6 0 <1 history1 NONE NONE NONE NONE	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19 history2 NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	12 12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE	<1 8 2 53 482 43 13274	<1 1 1 <1 34 440 37 13220 history1 6 0 <1 history1 NONE NONE NONE NONE NONE NONE NONE	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19 history2 NONE NONE NONE NONE NONE NONE NONE NON
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual	12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE	<1 8 2 53 482 43 13274	<1 1 1 <1 34 440 37 13220 history1 6 0 <1 history1 NONE NONE NONE NONE NONE NONE NONE NON	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19 history2 NONE NONE NONE NONE NONE NONE NONE NON
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	12 12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE	<1 8 2 53 482 43 13274	<1 1 1 <1 34 440 37 13220 history1 6 0 <1 history1 NONE NONE NONE NONE NONE NONE NONE NON	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19 history2 NONE NONE NONE NONE NONE NONE NONE NON
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual	12 12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE	<1 8 2 53 482 43 13274	<1 1 1 <1 34 440 37 13220 history1 6 0 <1 history1 NONE NONE NONE NONE NONE NONE NONE NON	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19 history2 NONE NONE NONE NONE NONE NONE NONE NON
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m *Visual	12 12 150 1650 125 22500 limit/base >75 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	<1 8 2 53 482 43 13274	<1 1 1 <1 34 440 37 13220 history1 6 0 <1 history1 NONE NONE NONE NONE NONE NONE NONE NON	4 29 12 130 1209 56 24210 history2 ▲ 336 11 19 history2 NONE NONE NONE NONE NONE NONE NONE NON



OIL ANALYSIS REPORT





Certificate 12367

Laboratory

Sample No. : GFL0123566 Lab Number : 06197132 Unique Number : 11059255

Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** Diagnosed

: 31 May 2024 : 03 Jun 2024

: 04 Jun 2024 - Don Baldridge

16011 West Belfort Street Sugar Land, TX

US 77498 Contact: TECHNICIAN ACCOUNT

GFL Environmental - 983 - Sugar Land Hauling

wcgfldemo@gmail.com T:

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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