

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

427184 Component Transmission (Auto)

Fluid {not provided} (--- GAL)

### DIAGNOSIS

#### Recommendation

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

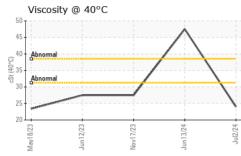
The condition of the oil is acceptable for the time in service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0123583	GFL0123529	GFL0094127
Sample Date		Client Info		02 Jul 2024	13 Jun 2024	17 Nov 2023
Machine Age	mls	Client Info		361182	358831	363621
Oil Age	mls	Client Info		361182	358831	363621
Oil Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>160	8	15	28
Chromium	ppm	ASTM D5185m	>5	<1	<1	0
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	ppm	ASTM D5185m	>50	2	2	8
Lead	ppm	ASTM D5185m	>50	1	0	3
Copper	ppm	ASTM D5185m	>225	68	75	47
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		76	<1	43
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	3	<1
	ppm ppm	ASTM D5185m ASTM D5185m		<1	3 2	<1 <1
Molybdenum Manganese Magnesium				-	2 6	
Molybdenum Manganese	ppm	ASTM D5185m		<1	2	<1
Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m		<1 3	2 6	<1 0
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		<1 3 587	2 6 2709	<1 0 375
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		<1 3 587 424	2 6 2709 913	<1 0 375 417
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 3 587 424 34	2 6 2709 913 1021	<1 0 375 417 29
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	<1 3 587 424 34 1328	2 6 2709 913 1021 3473	<1 0 375 417 29 884
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>Method</b>		<1 3 587 424 34 1328 current	2 6 2709 913 1021 3473 history1	<1 0 375 417 29 884 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	>20	<1 3 587 424 34 1328 current 4	2 6 2709 913 1021 3473 history1 14	<1 0 375 417 29 884 history2 7
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20	<1 3 587 424 34 1328 <u>current</u> 4 3	2 6 2709 913 1021 3473 history1 14 <1	<1 0 375 417 29 884 history2 7 10
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >20	<1 3 587 424 34 1328 current 4 3 2	2 6 2709 913 1021 3473 history1 14 14 <1 2	<1 0 375 417 29 884 <u>history2</u> 7 10 <1
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL	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	>20 >20 limit/base	<1 3 587 424 34 1328 current 4 3 2 2 current NONE NONE	2 6 2709 913 1021 3473 history1 14 <1 2 history1 NONE NONE	<1 0 375 417 29 884 history2 7 10 <1 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm TS ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b>	>20 >20 limit/base NONE	<1 3 587 424 34 1328 current 4 3 2 2 current NONE	2 6 2709 913 1021 3473 history1 14 <1 2 history1 NONE	<1 0 375 417 29 884 history2 7 10 <1 * history2 NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm TS ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>20 >20 limit/base NONE NONE	<1 3 587 424 34 1328 <u>current</u> 4 3 2 <u>current</u> NONE NONE NONE NONE NONE	2 6 2709 913 1021 3473 history1 14 <1 2 history1 NONE NONE	<1 0 375 417 29 884 history2 7 10 <1 history2 NONE 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 TS ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	>20 >20 limit/base NONE NONE NONE	<1 3 587 424 34 1328 <u>current</u> 4 3 2 <u>current</u> NONE NONE NONE	2 6 2709 913 1021 3473 history1 14 <1 2 history1 NONE NONE NONE NONE	<1 0 375 417 29 884 history2 7 10 <1 * history2 NONE 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 ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE	<1 3 587 424 34 1328 <u>current</u> 4 3 2 <u>current</u> NONE NONE NONE NONE NONE	2 6 2709 913 1021 3473 history1 14 <1 2 history1 NONE NONE NONE NONE NONE	<1 0 375 417 29 884 history2 7 7 10 <1 history2 NONE NONE NONE NONE NONE NONE
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	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 *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	<1 3 587 424 34 1328 <u>current</u> 4 3 2 2 <u>current</u> NONE NONE NONE NONE NONE NONE	2 6 2709 913 1021 3473 history1 14 <1 2 history1 NONE NONE NONE NONE NONE NONE	<1 0 375 417 29 884 history2 7 10 <1 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 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 XSTM D5185m Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE	<1 3 587 424 34 1328 current 4 3 2 current NONE NONE NONE NONE NONE NONE NONE NON	2 6 2709 913 1021 3473 history1 14 <1 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	<1 0 375 417 29 884 history2 7 10 <1 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 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 Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	<1 3 587 424 34 1328 <u>current</u> 4 3 2 <u>current</u> NONE NONE NONE NONE NONE NONE NONE NON	2 6 2709 913 1021 3473 history1 14 <1 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	<1 0 375 417 29 884 history2 7 10 <1 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 Odor	ppm ppm ppm ppm ppm ppm TS ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>20 >20 Iinii/base NONE NONE NONE NONE NONE NONE NONE NON	<1 3 587 424 34 1328 current 4 3 2 current 4 3 2 current NONE NONE NONE NONE NONE NONE NONE NON	2 6 2709 913 1021 3473 history1 14 <1 2 history1 NONE NONE NONE NONE NONE NONE NONE NON	<1 0 375 417 29 884 history2 7 10 <1 NONE NONE NONE NONE NONE NONE NONE NON

Report Id: GFL983 [WUSCAR] 06230683 (Generated: 07/10/2024 13:50:52) Rev: 1



# **OIL ANALYSIS REPORT**



С		FLUID PROPE	RTIES	metho	d limit/base	e current	history1	history2				
	$\wedge$	Visc @ 40°C	cSt	ASTM D4	445	24.0	47.5	27.5				
/		SAMPLE IMAG	ES	metho	d limit/base	e current	history1	history2				
23-	24	Color				no image	no image	no image				
Nov17/23	Jun13/24 Jun2/24	Bottom				no image	no image	no image				
		GRAPHS										
		Ferrous Alloys	s	Jun1324 Jun1324	4/10/2/14/14/14/14/14/14/14/14/14/14/14/14/14/							
Certificate L2367 To discuss thi		: 11114176	Receiv Tested Diagn	ved d osed 00-237-1	: 08 Jul 2024 : 09 Jul 2024 : 10 Jul 2024 - Jon <i>1369.</i>	nathan Hester	ontact: TECHNIC	st Belfort Street Sugar Land, TX US 77498				

Report Id: GFL983 [WUSCAR] 06230683 (Generated: 07/10/2024 13:50:52) Rev: 1

\* - 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) F: Submitted By: TECHNICIAN ACCOUNT Page 2 of 2

Т: