

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **EX-020** Component Left Final Drive Fluid GEAR OIL SAE 85W90 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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.

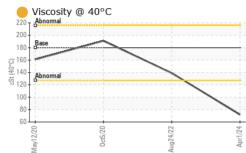
Fluid Condition

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

	ΛΑΤΙΟΝ		limit/base	current	history1	history2
Sample Number		Client Info		WC0909349	WC0705336	WC0475679
Sample Date		Client Info		01 Apr 2024	24 Aug 2022	05 Oct 2020
Machine Age	hrs	Client Info		3210	2222	1024
Oil Age	hrs	Client Info		0	2222	1024
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status				ATTENTION	ABNORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	76	123	31
Chromium	ppm	ASTM D5185m	>10	<1	2	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	3	3	<1
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>50	0	1	<1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Antimony	ppm	ASTM D5185m	>5			0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	400	78	181	74
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	0	2	2
Manganese		ASTM D5185m	12	1	2	<1
manganooo						
-	ppm		12			
Magnesium	ppm	ASTM D5185m	12	6	3	9
Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m	150	6 71	3 370	9 285
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	150 1650	6 71 487	3 370 1497	9 285 898
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	150 1650 125	6 71 487 7	3 370 1497 150	9 285 898 198
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	150 1650 125 22500	6 71 487 7 19501	3 370 1497 150 24818	9 285 898 198 15816
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	150 1650 125 22500 limit/base	6 71 487 7 19501 current	3 370 1497 150 24818 history1	9 285 898 198 15816 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	150 1650 125 22500	6 71 487 7 19501 current 11	3 370 1497 150 24818 history1 11	9 285 898 198 15816 history2 2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	150 1650 125 22500 limit/base >75	6 71 487 7 19501 <u>current</u> 11 <1	3 370 1497 150 24818 history1 11 <1	9 285 898 198 15816 history2 2 <1
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	150 1650 125 22500 <i>limit/base</i> >75 >20	6 71 487 7 19501 current 11 <1 0	3 370 1497 150 24818 <u>history1</u> 11 <1 1	9 285 898 198 15816 history2 2 <1 <1
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL	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	150 1650 125 22500 limit/base >75 >20 limit/base	6 71 487 7 19501 current 11 <1 0 current	3 370 1497 150 24818 history1 11 <1 1 1 history1	9 285 898 198 15816 history2 2 <1 <1 <1 <1
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm ppm ppm ppm ppm scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XSTM D5185m	150 1650 125 22500 Imit/base >75 >20 Imit/base NONE	6 71 487 7 19501 current 11 <1 0 current NONE	3 370 1497 150 24818 <u>history1</u> 11 <1 1 1 <u>history1</u> NONE	9 285 898 198 15816 history2 2 <1 <1 <1 history2 NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual	150 1650 125 22500 imit/base >75 >20 imit/base NONE NONE	6 71 487 7 19501 current 11 <1 0 current NONE NONE	3 370 1497 150 24818 <u>history1</u> 11 <1 1 1 <u>history1</u> NONE NONE	9 285 898 198 15816 history2 2 <1 <1 <1 history2 NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual	150 1650 125 22500 imit/base >75 >20 imit/base NONE NONE NONE NONE	6 71 487 7 19501 current 11 <1 0 current NONE NONE NONE NONE	3 370 1497 150 24818 history1 11 <1 1 1 history1 NONE NONE NONE NONE	9 285 898 198 15816 history2 2 <1 <1 <1 history2 NONE NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual	150 1650 125 22500 imit/base >75 >20 imit/base NONE NONE NONE NONE	6 71 487 7 19501 current 11 <1 0 current NONE NONE NONE NONE LIGHT	3 370 1497 150 24818 history1 11 <1 1 1 history1 NONE NONE NONE NONE NONE	9 285 898 198 15816 history2 2 <1 <1 <1 history2 NONE NONE NONE NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m XaSTM D5185m *Visual *Visual *Visual *Visual *Visual	150 1650 125 22500 Imit/base >75 >20 Imit/base NONE NONE NONE NONE NONE NONE	6 71 487 7 19501 current 11 <1 0 current 0 current NONE NONE NONE LIGHT NONE	3 370 1497 150 24818 history1 11 <1 1 1 NONE NONE NONE NONE NONE NONE NONE	9 285 898 198 15816 history2 2 <1 <1 <1 history2 NONE NONE NONE NONE NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	150 1650 125 22500 Imit/base >75 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	6 71 487 7 19501 current 11 <1 0 current 0 current NONE NONE LIGHT NONE LIGHT NONE	3 370 1497 150 24818 history1 11 <1 1 (1) 1 NONE NONE NONE NONE NONE NONE NONE NO	9 285 898 198 15816 history2 2 <1 <1 <1 history2 NONE NONE NONE NONE NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	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	150 1650 125 22500 Imit/base >75 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	6 71 487 7 19501 current 11 <1 0 current NONE NONE NONE LIGHT NONE NONE NONE NONE NONE	3 370 1497 150 24818 history1 11 <1 1 1 NONE NONE NONE NONE NONE NONE NONE	9 285 898 198 15816 history2 2 2 <1 <1 <1 history2 NONE NONE NONE NONE NONE NONE NONE NON
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual	150 1650 125 22500 Imit/base >75 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	6 71 487 7 19501 current 11 <1 0 current NONE NONE NONE LIGHT NONE NONE NONE NONE NONE NONE NONE	3 370 1497 150 24818 history1 11 <1 1 1 NONE NONE NONE NONE NONE NONE NONE	9 285 898 198 15816 history2 2 <1 <1 <1 history2 NONE NONE NONE NONE NONE NONE NONE
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm ppm ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	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	150 1650 125 22500 Imit/base >75 >20 Imit/base NONE NONE NONE NONE NONE NONE NONE NON	6 71 487 7 19501 current 11 <1 0 current NONE NONE NONE LIGHT NONE NONE NONE NONE NONE	3 370 1497 150 24818 history1 11 <1 1 1 NONE NONE NONE NONE NONE NONE NONE	9 285 898 198 15816 2 2 2 3 3 4 1 5816 Norv2 2 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3



OIL ANALYSIS REPORT



	FLUID PROPERTIE	S method	limit/base	current	history1	history2
	Visc @ 40°C c	St ASTM D445	180	72.0	139	191
	SAMPLE IMAGES	method	limit/base	current	history1	history2
	Color			no image	no image	no image
Apr1/24	Bottom			no image	no image	no image
	GRAPHS					
	Ferrous Alloys	Aug24/22	April24			
	Viscosity @ 40°C Abnomal 120 140 00000000000000000000000000000000	Aug24/22	April24			
Laboratory Sample No. Lab Number Unique Number Test Package	: <mark>06147787</mark> : 10977865 : FLEET	Received : 12 Tested : 15	Apr 2024 Apr 2024 Apr 2024 - Do		1811 I Contact	E.C. PACE CO. HOLLINS RD. ROANOKE, VA US 24012 EDDIE SECO

Certificate 12367 Test Package : FLEET 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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