

## Machine Id 914059 Component Diesel Engine DIESEL ENGINE OIL SAE 40 (--- GAL)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.	Sample Number		Client Info		GFL0074797	GFL0102982	GFL0086408
	Sample Date		Client Info		13 Feb 2024	07 Jan 2024	11 Dec 2023
	Machine Age	hrs	Client Info		833	623	467
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				NORMAL	ABNORMAL	ABNORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	10	44	39
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>20	<1	1	1
	Nickel	ppm	ASTM D5185m		<1	7	8
	Titanium	ppm	ASTM D5185m		<1	<1	<1
	Silver	ppm	ASTM D5185m	>3	1	<1	<1
	Aluminum	ppm	ASTM D5185m		2	6	6
	Lead	ppm	ASTM D5185m		_ <1	<1	<1
	Copper	ppm	ASTM D5185m	>330	46	185	213
	Tin	ppm	ASTM D5185m	>15	1	4	3
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Silicon		ASTM D5185m	. 05	10	<u>∧</u> 76	▲ 83
CONTAMINATION	Potassium	ppm	ASTM D5185m		4	8	9
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		4 <1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.5	0.4
	Nitration	Abs/cm	*ASTM D7624		6.9	10.7	9.8
	Sulfation	Abs/.1mm	*ASTM D7415		19.1	24.0	24.8
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	3	<1
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m		12	153	248
	Barium	ppm	ASTM D5185m		0	0	11
	Molybdenum	ppm	ASTM D5185m	100	64	112	115
	Manganese	ppm	ASTM D5185m	450	<1	4	4
	Magnesium	ppm	ASTM D5185m		937	678	603
	Calcium	ppm	ASTM D5185m		1088	1558	1511
	Phosphorus	ppm	ASTM D5185m		1022	795	684
	Zinc	ppm	ASTM D5185m		1196	945	844
	Sulfur	ppm	ASTM D5185m		3010	2552	2613
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.5	22.1	22.3

Base Number (BN) mg KOH/g ASTM D2896 8.5

ASTM D445 14.4

Visc @ 100°C cSt

7.0

10.0

8.2

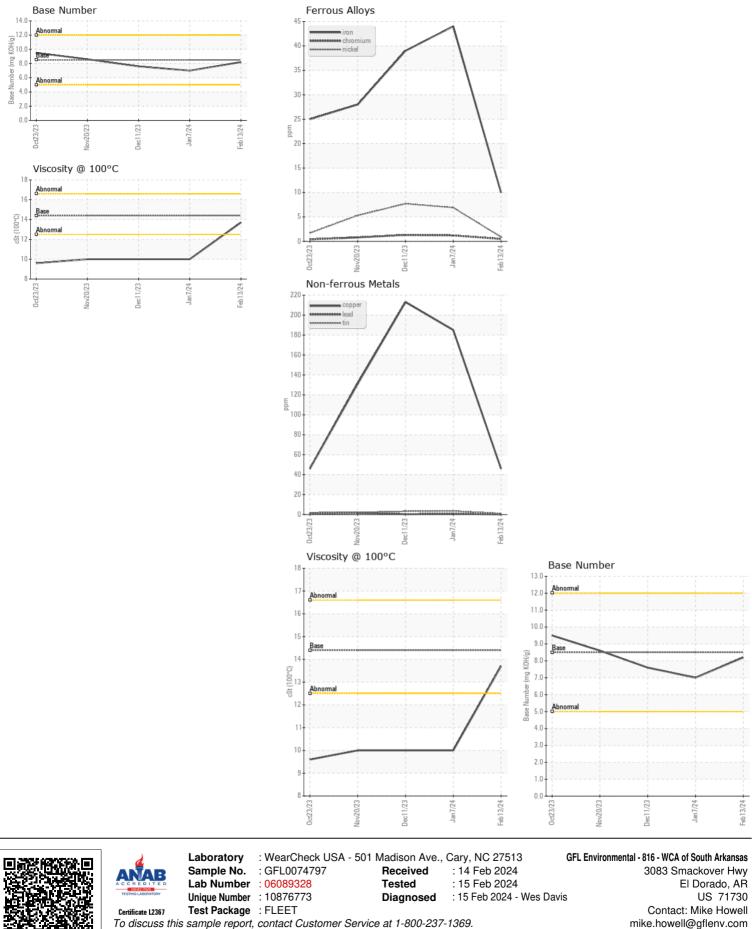
13.7

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7.6

10.0

## NORMAL WEAR NORMAL CONTAMINATION FLUID CONDITION NORMAL



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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