

OIL ANALYSIS REPORT



Machine Id **429142** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

DIAGNOSIS

A Recommendation

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. There is a light concentration of glycol present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0085728		
Sample Date		Client Info		26 Jun 2024		
Machine Age	kms	Client Info		455391		
Oil Age	kms	Client Info		12806		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	11		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>4	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	<1		
Aluminum	ppm	ASTM D5185(m)	>20	2		
Lead	ppm	ASTM D5185(m)	>40	<1		
Copper	ppm	ASTM D5185(m)	>330	50		
Tin	ppm	ASTM D5185(m)	>15	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	4		
Barium	ppm	ASTM D5185(m)	10	0		
Molybdenum	ppm	ASTM D5185(m)	100	79		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)	450	925		
Calcium	ppm	ASTM D5185(m)	3000	1014		
Phosphorus	ppm	ASTM D5185(m)	1150	981		
Zinc	ppm	ASTM D5185(m)	1350	1182		
Sulfur	ppm	ASTM D5185(m)	4250	2532		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	5		
Sodium	ppm	ASTM D5185(m)		<mark> </mark> 50		
Potassium	ppm	ASTM D5185(m)	>20	<u> </u>		
Glycol	%	ASTM D7922*		A 0.036		
INFRA-RED		method	limit/base	current	history1	history2
	%				history1	history2
INFRA-RED Soot % Nitration	% Abs/cm	ASTM D7844*	>3	0.2		
Soot %	% Abs/cm Abs/.1mm					



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35

2! Abs/cm 15 10

> 14 13 Abnorma

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OIL ANALYSIS REPORT

	end)		FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation Nitration			Oxidation	Abs/.1mm	ASTM D7414*	>25	15.7		
onnar Sulfation			VISUAL		method	limit/base	current	history1	history2
			White Metal	scalar	Visual*	NONE	VLITE		
			Yellow Metal	scalar	Visual*	NONE	NONE		
			Precipitate	scalar	Visual*	NONE	NONE		
		- 124 -	Silt	scalar	Visual*	NONE	NONE		
		Jun26/24	Debris	scalar	Visual*	NONE	NONE		
		,	Sand/Dirt	scalar	Visual*	NONE	NONE		
-IR (Direct Tre	end)		Appearance	scalar	Visual*	NORML	NORML		
Oxidation			Odor	scalar	Visual*	NORML	NORML		
Sulfation			Emulsified Water	scalar	Visual*	>0.2	NEG		
			Free Water	scalar	Visual*		NEG		
			FLUID PROP	ERTIES	method	limit/base	current	history1	history2
			Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.0		
		26/24	GRAPHS						
		126	Iron (ppm)				Lead (ppm)		
scosity @ 100	°C		250 200 Severe			10	Courses		
			= 150 -						
normal			Abnormal			ed 4	Abnormal		
			50			2	D -		
Se			74			/24	74 T		20
nomal			Jun 26,			Jun26/24	Jun26/24		70'3Cuu
normal			- Aluminum (ppm)			7	Chromium (p	nm)	
		~	50 T			5	рт		
		C/ 3 C -	40 - Severe			- 4			
		1	and a second sec			ш ³	Abnormal		
			10			1	T		
			126/24			Jun26/24	Jun26/24		4 C 3 C 111
			Jur			Jun			_
			Copper (ppm)			8	Silicon (ppm)		
			Abiroimal						
			300			6 E 4			
						ud 4	Automai		
			100			2			
			0++			3/24 -	/24		40
			Jun 26/24			Jun26/24	Jun26/24		4 C 3 C 111
			Viscosity @ 100°	С			Glycol Contan	nination	
			14			25	sodium	1	
						20) - managana potassium		
			G 12 Base 3 10 Abnormal			<u>لة</u> 15	⁾		-0.15 š
			Abnormal			10			-0.05
			54 12					24 -	0.00
			Jun26/24			Jun26/24	Jun26/24	Jun26/24	
			Ĵ,			- L	Ju	7	

Laboratory Test Package : MOB 1 (Additional Tests: Glycol, Visual) To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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Report Id: GFL565 [WCAMIS] 02646159 (Generated: 07/10/2024 12:48:19) Rev: 1

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