

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area **[44190815] 7484** Component **Diesel Engine** Fluid **SAE 10W30 (--- GAL)**

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear Metal levels are typical for a new component breaking in.

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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0924036		
Sample Date		Client Info		13 Apr 2024		
Machine Age	kms	Client Info		80554		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	34		
Chromium	ppm	ASTM D5185(m)	>20	2		
Nickel	ppm	ASTM D5185(m)	>2	0		
Titanium	ppm	ASTM D5185(m)	>2	<1		
Silver	ppm	ASTM D5185(m)	>2	<1		
Aluminum	ppm	ASTM D5185(m)	>20	5		
Lead	ppm	ASTM D5185(m)	>40	9		
Copper	ppm	ASTM D5185(m)	>330	4		
Tin	ppm	ASTM D5185(m)	>15	1		
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)		29		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		1		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)		692		
Calcium	ppm	ASTM D5185(m)		1259		
Phosphorus	ppm	ASTM D5185(m)		576		
Zinc	ppm	ASTM D5185(m)		677		
Sulfur	ppm	ASTM D5185(m)		2315		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4		
Sodium	ppm	ASTM D5185(m)	>228	3		
Potassium	ppm	ASTM D5185(m)	>20	6		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0.3		
Nitration	Abs/cm	ASTM D7624*	>20	12.8		
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.7		



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⁸⁰ T Abnormal

75 - 70 - (0.04) 70 - (0.04) 70 - (0.04) 75 - **B**

FT-IR (Direct Trend)

Oxidation

Nitration Sulfation

Viscosity @ 40°C

Viscosity @ 40°C

55 -50 - Abnormal

OIL ANALYSIS REPORT

FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	26.8		
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*				
			>0.2			
		Visual [^]		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history
Visc @ 40°C	cSt	ASTM D7279(m)	65.0	75.0		
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	11.0		
Viscosity Index (VI)	Scale	ASTM D2270*	161	135		
GRAPHS						
Iron (ppm)				Lead (ppm)		
Server 1			10	Severe		
200 - Severe			E c	Abnormal		
Too Abnormal			d	Abhonnai		
0						
r13/24			r13/24	r13/24		
			Ap			
			6		pm)	
Servers				Savara		
Abnormal			mdd	Abnormal		
20 - 0			2			
24-10			24			
April3/			Apr13/	Apr13/		
			1			
			8			
300			6	0 -		
				Abnormal		
			2			
			3/24 -	3/24		
Apr1			Apr1	Apr1		
Viscosity @ 100°C				Soot %		
Abnormal				Abnormal		
D 12 Base						
ಕ್ಷ 10 - Abnormal				.0 -		
8				.0		
Apr13/24			Apr13/24	Apr13/24		
	VISUAL White Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPERT Visc @ 40°C Visc @ 100°C Viscosity Index (VI) GRAPHS Iron (ppm) GRAPHS Iron (ppm) Copper (ppm) Copper (ppm) Copper (ppm) Copper (ppm)	VISUAL White Metal scalar Yellow Metal scalar Precipitate scalar Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Codor scalar Emulsified Water scalar Free Water scalar Free Water cst Visc @ 40°C cSt Visc @ 100°C cSt Viscosity Index (VI) Scale GRAPHS Iron (ppm) Gevere Aluminum (ppm) Copper (ppm) Copper (ppm) Copper (ppm) Viscosity @ 100°C	VISUAL method White Metal scalar Visual* Yellow Metal scalar Visual* Precipitate scalar Visual* Silt scalar Visual* Debris scalar Visual* Sand/Dirt scalar Visual* Appearance scalar Visual* Odor scalar Visual* Emulsified Water scalar Visual* Free Water scalar Visual* Visc @ 40°C cSt ASTM D7279(m) Visc @ 100°C cSt ASTM D7279(m) Visc @ 100°C cSt ASTM D7279(m) Viscosity Index (VI) Scale ASTM D7279(m) Viscosity Index (VI) Scale ASTM D7279(m) Odo cSt ASTM D7279(m) Odo gevee abnormal Output copper (ppm) copper (ppm) Output gevee abnormal Output copper (ppm) copper (ppm) Output copper (ppm) copper (ppm) Output <	VISUAL method limit/base White Metal scalar Visual* NONE Yellow Metal scalar Visual* NONE Precipitate scalar Visual* NONE Silt scalar Visual* NONE Debris scalar Visual* NONE Sand/Dirt scalar Visual* NONE Appearance scalar Visual* NORML Odor scalar Visual* NORML Emulsified Water scalar Visual* NORML Codor scalar Visual* NORML Emulsified Water scalar Visual* NORML Visc @ 100°C cSt ASTM D7279(m) 65.0 Visc @ 100°C cSt ASTM D7279(m) 11.0 Viscosity Index (VI) Scale ASTM D7279(m) 161 GRAPHS Iron (ppm) formal formal formal Muminum (ppm) formal formal formal formal Muminum (ppm) formal formal formal <td< td=""><td>VISUAL method limit/base current White Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NORML Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML Eree Water scalar Visual* NORML NORML Visc @ 40°C cSt ASTMD7279(m) 65.0 75.0 Visc @ 100°C cSt ASTMD7279(m) 10.1 11.0 Usc @ 40°C cSt ASTMD7279(m) 161 135 GRAPHS Corport (ppm) Image: Stalar Stalar Stalar Usc @ 100°C Stalar Stalar Stalar Stalar Usc @ 100°C Stalar Stalar Stalar Stalar Usc @ 100°C Stalar <td< td=""><td>VISUAL method linit/base current history1 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Sit scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Appearance scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML Free Water scalar Visual* NORML NORML Visc @ 40°C cSt ASTM D2270* 161 135 GRAPHS Iron (ppm) </td></td<></td></td<>	VISUAL method limit/base current White Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Silt scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Sand/Dirt scalar Visual* NONE NORML Appearance scalar Visual* NORML NORML Odor scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML Eree Water scalar Visual* NORML NORML Visc @ 40°C cSt ASTMD7279(m) 65.0 75.0 Visc @ 100°C cSt ASTMD7279(m) 10.1 11.0 Usc @ 40°C cSt ASTMD7279(m) 161 135 GRAPHS Corport (ppm) Image: Stalar Stalar Stalar Usc @ 100°C Stalar Stalar Stalar Stalar Usc @ 100°C Stalar Stalar Stalar Stalar Usc @ 100°C Stalar <td< td=""><td>VISUAL method linit/base current history1 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Sit scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Appearance scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML Free Water scalar Visual* NORML NORML Visc @ 40°C cSt ASTM D2270* 161 135 GRAPHS Iron (ppm) </td></td<>	VISUAL method linit/base current history1 White Metal scalar Visual* NONE NONE Yellow Metal scalar Visual* NONE NONE Precipitate scalar Visual* NONE NONE Sit scalar Visual* NONE NONE Debris scalar Visual* NONE NONE Appearance scalar Visual* NORML NORML Appearance scalar Visual* NORML NORML Emulsified Water scalar Visual* NORML NORML Free Water scalar Visual* NORML NORML Visc @ 40°C cSt ASTM D2270* 161 135 GRAPHS Iron (ppm)

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.

F: Contact/Location: Serdar Okur - RUSMIS

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