

OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



Component Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

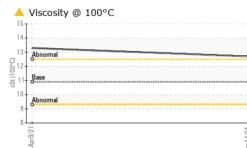
Fluid Condition

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

		<u> </u>	Apr2021	Jan2024		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0853069	WC0549793	
Sample Date		Client Info		14 Jan 2024	09 Apr 2021	
Machine Age	mls	Client Info		185420	140267	
Oil Age	mls	Client Info		0	0	
Oil Changed		Client Info		Not Changd	Changed	
Sample Status				ABNORMAL	NORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	0.0	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	27	68	
Chromium	ppm	ASTM D5185(m)	>20	1	4	
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	
Titanium	ppm	ASTM D5185(m)	>2	0	<1	
Silver	ppm	ASTM D5185(m)	>2	0	<1	
Aluminum	ppm	ASTM D5185(m)	>20	4	19	
Lead	ppm	ASTM D5185(m)	>40	1	9	
Copper	ppm	ASTM D5185(m)	>330	2	7	
Tin	ppm	ASTM D5185(m)	>15	<1	2	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	<1	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	20	54	
Barium	ppm	ASTM D5185(m)	10	0	<1	
Molybdenum	ppm	ASTM D5185(m)	100	2	106	
Manganese	ppm	ASTM D5185(m)		0	2	
Magnesium	ppm	ASTM D5185(m)	450	726	606	
Calcium	ppm	ASTM D5185(m)	3000	1367	1723	
Phosphorus	ppm	ASTM D5185(m)	1150	678	740	
Zinc	ppm	ASTM D5185(m)	1350	756	961	
Sulfur	ppm	ASTM D5185(m)	4250	2565	2230	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	9	10	
Sodium	ppm	ASTM D5185(m)		4	3	
Potassium	ppm	ASTM D5185(m)	>20	14	41	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	3.7	0.5	
Nitration	Abs/cm	ASTM D7624*	>20	12.6	13.5	
Sulfation	Abs/.1mm	ASTM D7415*	>30	29.6	31.0	



OIL ANALYSIS REPORT



	FLUID DEGR/	ADATION	method	limit/b	ase	current	history1	history2
	Oxidation	Abs/.1mm	ASTM D7414*	>25		17.1	33.3	
	VISUAL		method	limit/b	ase	current	history1	history2
	Emulsified Water	scalar	Visual*	>0.2		NEG	NEG	
	Free Water	scalar	Visual*			NEG	NEG	
- + -	FLUID PROPE	ERTIES	method	limit/b	ase	current	history1	history2
Jan 14/24	Visc @ 100°C	cSt	ASTM D7279(m)	10.9		12.7	13.3	
	GRAPHS							
	Iron (ppm)				100 -	Lead (ppm)		
	200 Severe				80 -	Severe		
	150-				60 -			
bbm	100 - Abnormal				ud 40 -	Abnormal		
	50 -				20-			
	0							
	Apr9/21			Jan 14/24		Apr9/21		
				Jar			n m)	
	Aluminum (pp	m)			⁵⁰ T	Chromium (p	pm)	
	40 Severe				40-	Severe		
ſ	= ³⁰				E 30-	1		
	20 - Abnormal				E 20-	Abnormal		
	10-				10-			
				-++	٥Ļ			
	Apr9/21			Jan 14/24	6	Apr9/2		
	Copper (ppm)			7	:	Silicon (ppm)		
	400 350 - Abnormal				80 70	Severe		
	300 -				60 -			
	250				50 - 터 40 -			
	150				30 - 20 -	Abnormal		
	50				10			
	9/21 0			4/24	0 L	1/2/6		
	Apr9,			Jan 14/	-	Aprel		
	Viscosity @ 10	0°C				Soot % Severe		
	14-				7.0-	Abnormal		
10-	Abnormal				6.0 5.0			
1100	Base				≥ ^{5.0} -			
2	10 - Abnormal				3.0	1		
	9 -				1.0-			
	Apr9/21			4/24	للـ 0.0 ة	+12/6		
	Apri			Jan 14/24		Apr3/2		
,	: WearCheck - C8	8-1175 Apple	by Line. Bur	linaton. (ON L7	L 5H9	Rush	Truck Centr
).	: WC0853069	Recieved	d :17	Jan 2024	4		745	50 Torbram F
er	: 02609195	Diagnos		Jan 2024			М	ississauga, C
nber age	: 5710281 : MOB 1	Diagnos	ucian : Ke	in Mars	UN		Conta	CA L4T 10 ct: Serdar Oł
	contact Customer S	ervice at 1-8	800-268-213	1.				truckcentres.
	of accreditation, (m				externa	al lab.	T:	(905)671-76

To discuss this samp 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.

Report Id: RUSMIS [WCAMIS] 02609195 (Generated: 01/17/2024 14:57:43) Rev: 1

CALA

ISO 17025:2017 Accredited Laboratory

Contact/Location: Serdar Okur - RUSMIS

F: