

Machine Id **10994642** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

RECOMMENDATION

Metal levels are typical for a components first oil change.

WEAR

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

	Test	UOM	Method	Limit/Abn	Current	History1	History2
s has ionitor	Sample Number		Client Info		WC0862506		
	Sample Date		Client Info		12 Jan 2024		
	Machine Age	hrs	Client Info		655		
	Oil Age	hrs	Client Info		655		
	Filter Age	hrs	Client Info		655		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
	Iron	ppm	ASTM D5185(m)	>90	23		
	Chromium	ppm	ASTM D5185(m)	>20	<1		
	Nickel	ppm	ASTM D5185(m)	>2	<1		
	Titanium	ppm	ASTM D5185(m)	>2	0		
	Silver	ppm	ASTM D5185(m)	>2	0		
	Aluminum	ppm	ASTM D5185(m)	>20	1		
	Lead	ppm	ASTM D5185(m)	>40	<1		
	Copper	ppm	ASTM D5185(m)	>330	6		
	Tin	ppm	ASTM D5185(m)	>15	<1		
	Vanadium	ppm	ASTM D5185(m)		0		
	0.11.2			05			
	Silicon	ppm	ASTM D5185(m)	>25	4		
firm the	Potassium	ppm	ASTM D5185(m)	>20	<1		
	Fuel	%	ASTM D7593*	>3.0	4.6		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>6	0		
	Nitration	Abs/cm	ASTM D7624*	>20	8.3		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	22.7		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
	Sodium	ppm	ASTM D5185(m)	>158	3		
no	Boron	ppm	ASTM D5185(m)	250	42		
	Barium	ppm	ASTM D5185(m)	10	12		
	Molybdenum	ppm	ASTM D5185(m)	100	41		
	Manganese		ASTM D5185(m)	100	2		
	Magnesium	ppm	ASTM D5185(m)	450	2 539		
	-	ppm	ASTM D5185(m)				
	Calcium	ppm	()	3000	1532		
	Phosphorus	ppm	ASTM D5185(m)	1150	716		
	Zinc	ppm	ASTM D5185(m)	1350	863		
	Sulfur	ppm	ASTM D5185(m)	4250	2057		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	22.1		

ASTM D7279(m) 14.4

Visc @ 100°C cSt

CONTAMINATION

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Contact/Location: Hongwu Zhang - HVA20BOL

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