WEAR CONTAMINATION FLUID CONDITION

NORMAL

MARGINAL

ABNORMAL

Machine Id **12260** 

Component
Diesel Engine

Diesel Engine							
DIESEL ENGINE OIL SAE 15W40 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number		Client Info		DC0032858		
	Sample Date		Client Info		18 Dec 2023		
	Machine Age	hrs	Client Info		1417		
	Oil Age	hrs	Client Info		250		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	16		
	Chromium	ppm	ASTM D5185m	>20	<1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	1		
	Lead	ppm	ASTM D5185m	>40	1		
	Copper	ppm	ASTM D5185m	>330	9		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	<b>&gt;</b> 25	4		
CONTAMINATION	Potassium	ppm	ASTM D5185m		<b>-</b> <1		
Light fuel dilution occurring.	Fuel	%	ASTM D3524	>5	▲ 4.2		
	Water	, ,	WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	10.3		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	2		
	Boron	ppm	ASTM D5185m	250	8		
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	10	0		
	Molybdenum	ppm	ASTM D5185m	100	6		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		88		
	Calcium	ppm	ASTM D5185m	3000	2205		
	Phosphorus	ppm	ASTM D5185m		886		
	Zinc	ppm	ASTM D5185m		1077		
	Sulfur	ppm	ASTM D5185m		3374		
	Oxidation	Abs/.1mm	*ASTM D7414		14.6		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.0		

Visc @ 100°C cSt

**11.2** 

ASTM D445 14.4





Laboratory Sample No. Lab Number **Unique Number** 

: 06056487 : 10822436

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : DC0032858 Recieved : 10 Jan 2024 Diagnosed : 12 Jan 2024

Diagnostician : Wes Davis

**Test Package**: MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN) 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)

**FRANCIS O DAY** 14900 SOUTHLAWN LN ROCKVILLE, MD

US 20850 Contact: JAMIE FORESTER

T:

F:

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