

WEAR ATTENTION CONTAMINATION ABNORMAL FLUID CONDITION NORMAL

FLEET Machine Id 2227058 (S/N 4v4nc9eh7rn631476) Component Diesel Engine

Fluid
{not provided} (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

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WW		

All component wear rates are normal.

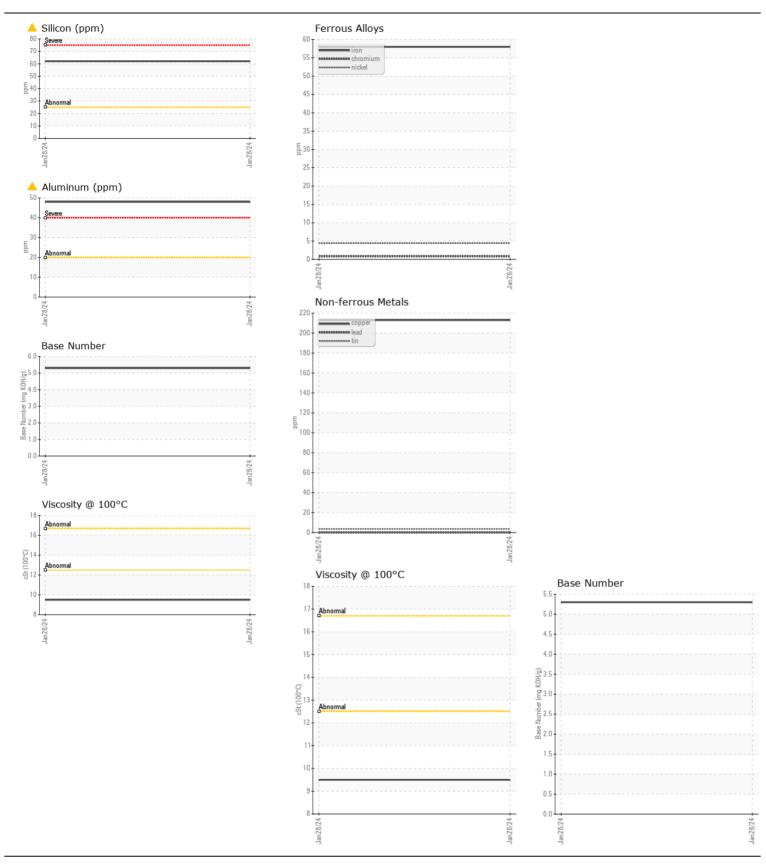
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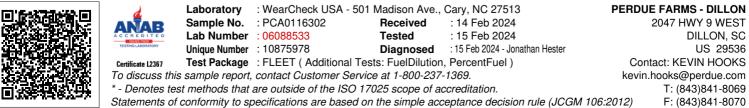
Elemental levels of silicon (Si) and aluminum (Al) indicate aluminasilicate (coarse dirt) ingress.

FLU			

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0116302		
Sample Date		Client Info		28 Jan 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		N/A		
Sample Status				ABNORMAL		
Iron	ppm	ASTM D5185m	>100	58		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>4	4		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	11		
Aluminum	ppm	ASTM D5185m	>20	4 8		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	213		
Tin	ppm	ASTM D5185m	>15	4		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	6 2		
Potassium	ppm	ASTM D5185m	>20	143		
Fuel	%	ASTM D3524	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844	>3	0.3		
Nitration	Abs/cm	*ASTM D7624	>20	12.0		
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.4		
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		
Sodium	nom	ASTM D5185m		1		
Boron	ppm	ASTM D5185m		41		
Barium	ppm	ASTM D5185m		9		
Molybdenum	ppm	ASTM D5185m		9 112		
	ppm					
Manganese	ppm	ASTM D5185m ASTM D5185m		3 621		
Magnesium Calcium	ppm	ASTM D5185m		1367		
	ppm	ASTM D5185m				
Phosphorus Zino	ppm			614 782		
Zinc	ppm	ASTM D5185m		782		
Sulfur	ppm	ASTM D5185m	. 05	2082		
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.4		
Base Number (BN)	mg KOH/g	ASTM D2896		5.3		
Visc @ 100°C	cSt	ASTM D445		9.5		





Submitted By: KEVIN HOOKS

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