

Machine Id 8317506 Component Diesel Engine Fluid {not provided} (--- GAL)

{not provided} (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the fuel injection system. We recommend an early resample to monitor this condition.	Sample Number		Client Info		IL06157198		
	Sample Date		Client Info		26 Feb 2024		
	Machine Age	mls	Client Info		115982		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				SEVERE		
WEAR	Iron	ppm	ASTM D5185m	>100	68		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	4		
	Nickel	ppm	ASTM D5185m	>4	1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	<1		
	Aluminum	ppm	ASTM D5185m	>20	17		
	Lead	ppm	ASTM D5185m	>40	13		
	Copper	ppm	ASTM D5185m	>330	3		
	Tin	ppm	ASTM D5185m	>15	3		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		11		
There is a high amount of fuel present in the oil.	Potassium	ppm	ASTM D5185m		32		
	Fuel	%	ASTM D3524		▲ 8.9		
	Water		WC Method	>0.2	NEG		
	Glycol	0/	WC Method	0	NEG		
	Soot %	%	*ASTM D7844		1.3		
	Nitration	Abs/cm	*ASTM D7624	>20	20.1		
	Sulfation	Abs/.1mm	*ASTM D7415		22.0		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual *Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE NORML	NONE NORML		
	Appearance Odor	scalar scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
		Scalai	visual	>0.2	NLG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		12		
	Boron	ppm	ASTM D5185m		22		
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m		45		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m		472		
	Calcium	ppm	ASTM D5185m		1431		
	Phosphorus	ppm	ASTM D5185m		616		
	Zinc	ppm	ASTM D5185m		838		
	Sulfur	ppm	ASTM D5185m		2267		
			****	05			

Oxidation

Visc @ 100°C cSt

Abs/.1mm *ASTM D7414 >25

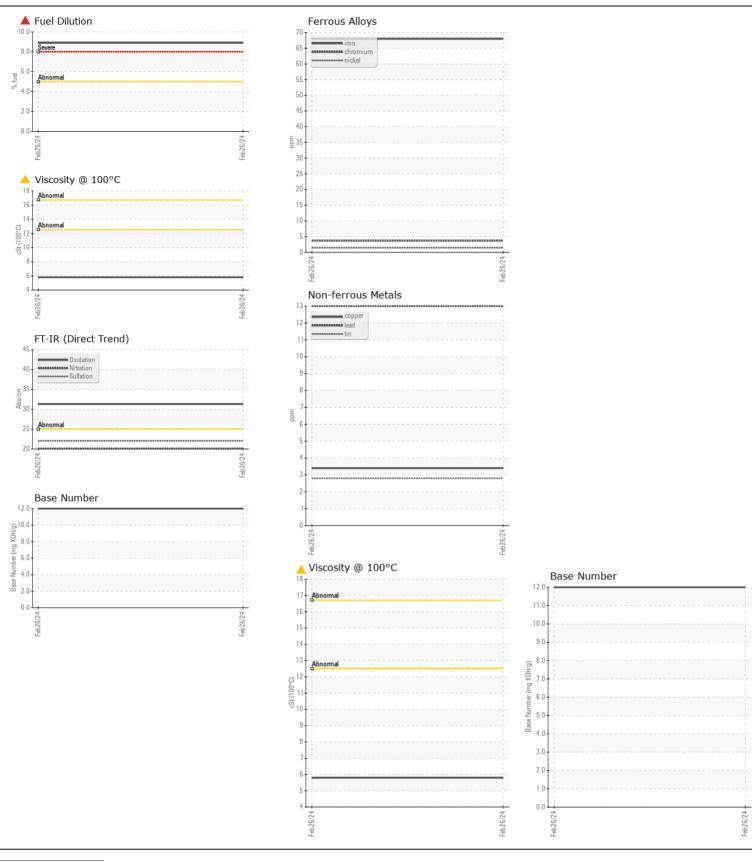
ASTM D445

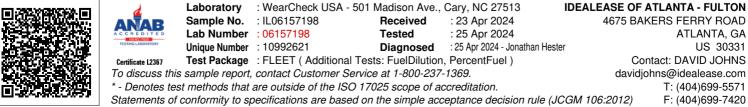
Base Number (BN) mg KOH/g ASTM D2896

31.3

12.0

5.8





Contact/Location: DAVID JOHNS - IDEATLGA Page 2 of 2