

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id **2302** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 10W30 (--- LTR)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		GFL0116392		
	Sample Date		Client Info		21 Jun 2024		
	Machine Age	kms	Client Info		1459433		
	Oil Age	kms	Client Info		0		
	Filter Age	kms	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	nnm	ASTM D5185(m)	<110	3		
WLAN	Chromium	ppm	ASTM D5185(m)		0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m) ASTM D5185(m)		۰ <1		
		ppm		>2	0		
	Titanium Silver	ppm	ASTM D5185(m)	. 0			
		ppm	ASTM D5185(m)		<1		
	Aluminum	ppm	ASTM D5185(m)		<1		
	Lead	ppm	ASTM D5185(m)	>45	0		
	Copper	ppm	ASTM D5185(m)		<1		
	Tin	ppm	ASTM D5185(m)	>4	0		
	Vanadium	ppm	ASTM D5185(m)	NONE	0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>30	3		
SONTAMINATION	Potassium	ppm	ASTM D5185(m)		<1		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	20.2	NEG		
	Soot %	%	ASTM D7844*	.3	0		
	Nitration	Abs/cm	ASTM D7624*	>20	5.8		
	Sulfation	Abs/.1mm	ASTM D7024 ASTM D7415*		18.2		
	Silt	scalar	Visual*	NONE	NONE		
	Debris	scalar	Visual*	NONE	NONE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
		scalar	Visual*	NORML	NORML		
	Appearance Odor	scalar	Visual*	NORIVIL	NORML		
	Emulsified Water			>0.2	NEG		
		Scalal	visuai	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		1		
	Boron	ppm	ASTM D5185(m)	250	2		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)	10	0		
	Molybdenum	ppm	ASTM D5185(m)		57		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)	450	947		
	Calcium	ppm	ASTM D5185(m)	3000	1021		
	Phosphorus	ppm	ASTM D5185(m)		988		
	Zinc	ppm	ASTM D5185(m)		1160		
	Sulfur	ppm	ASTM D5185(m)		2631		
	Oxidation	Abs/.1mm	ASTM D7414*		14.8		
	Visc @ 40°C	cSt	ASTM D7279(m)		69.8		
		cSt	ASTM D7279(m)	10.9	10.6		
	Visc @ 100°C	CSI	ASTN D1719000	10.9	10.0		



