

## NORMAL WEAR NORMAL CONTAMINATION FLUID CONDITION NORMAL

## Machine Id 4004544 Component Front Diesel Engine DIESEL ENGINE OIL SAE 15W40 (40 LTR)

	2 2-						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC956166		
	Sample Date		Client Info		22 Nov 2023		
	Machine Age	mths	Client Info		0		
	Oil Age	mths	Client Info		3		
	Filter Age	mths	Client Info		3		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	lran			. 00	10		
WEAN	Iron	ppm	ASTM D5185(m)		13		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)		<1		
	Nickel	ppm	ASTM D5185(m)	>2	<1		
	Titanium Silver	ppm	ASTM D5185(m)	. 0	0		
		ppm	ASTM D5185(m)		0		
	Aluminum	ppm	ASTM D5185(m)		6		
	Lead	ppm	ASTM D5185(m) ASTM D5185(m)	>30	1		
	Copper Tin	ppm			3		
		ppm	ASTM D5185(m)	>0	<1		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	9		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	3		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0.2		
	Nitration	Abs/cm	ASTM D7624*	>20	12.5		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	22.6		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium		ASTM D5185(m)	. 150			
	-	ppm	ASTM D5185(m)		8		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185(m) ASTM D5185(m)	250 10	4 0		
	Barium Molybdenum	ppm	ASTM D5185(m)	100	62		
	Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m)	100	0		
	Manganese		ASTM D5185(m)	450	890		
	Calcium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	450 3000	1113		
	Phosphorus	ppm	ASTM D5185(m)		899		
	Zinc		ASTM D5185(m) ASTM D5185(m)	1350	1138		
	Sulfur	ppm ppm	ASTM D5185(m)		2640		
	Oxidation		ASTM D5165(III) ASTM D7414*		18.5		
	Data Number (DN)		AGTM D00004		18.5		

Base Number (BN) mg KOH/g ASTM D2896\* 8.5

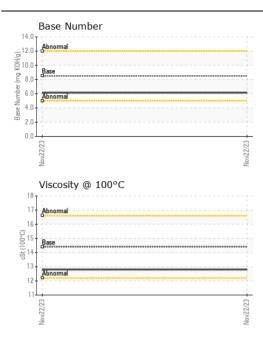
ASTM D7279(m) 14.4

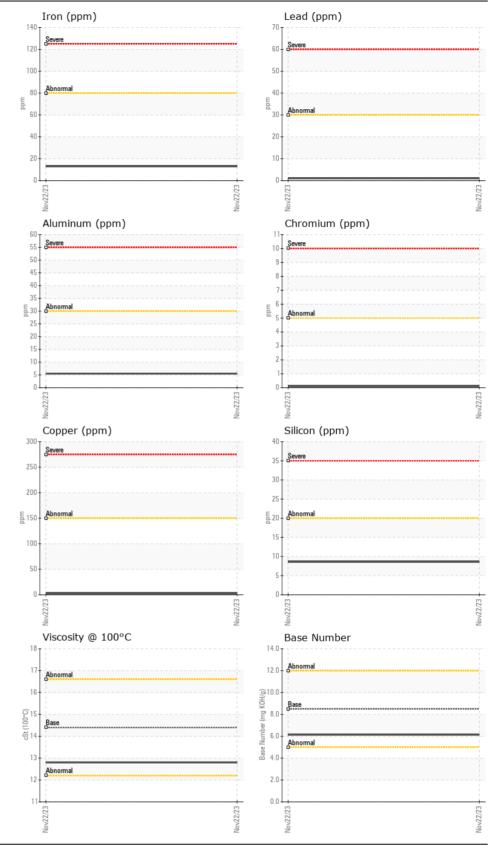
Visc @ 100°C cSt

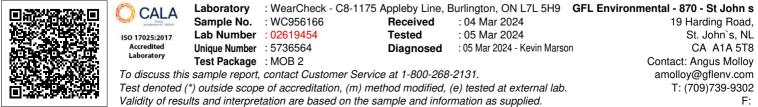
Contact/Location: Angus Molloy - GFL870

6.14

12.8







Contact/Location: Angus Molloy - GFL870 Page 2 of 2