

## THOMPSON AND JOHNSON

## 12292

## **Diesel Engine**

DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm. Please specify the component make and model with your next sample.	Sample Number		Client Info		WC0938730		
	Sample Date		Client Info		30 May 2024		
	Machine Age	hrs	Client Info		3258		
	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				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	6		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		3		
	Silver	ppm	ASTM D5185m	>3	0		
	Aluminum	ppm	ASTM D5185m	>20	5		
	Lead	ppm	ASTM D5185m	>40	<1		
	Copper	ppm	ASTM D5185m	>330	3		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		18		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		3		
There is no indication of any contamination in the oil.	Fuel		WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.4		
	Nitration	Abs/cm	*ASTM D7624	>20	7.5		
	Sulfation	Abs/.1mm	*ASTM D7415		20.7		
	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	<u>\216</u>	1		
I LOID CONDITION	Boron	ppm	ASTM D5185m		276		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium		ASTM D5185m		<1		
	Molybdenum	ppm ppm	ASTM D5185m		98		
	Manganese	ppm	ASTM D5185m	100			
	Magnesium		ASTM D5185m	450	585		
	Calcium	ppm ppm	ASTM D5185m		1596		
	Phosphorus	ppm	ASTM D5185m		873		
	Zinc		ASTM D5185m		940		
		ppm		1000	340		

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m 4250

Abs/.1mm \*ASTM D7414 >25

ASTM D445 14.4

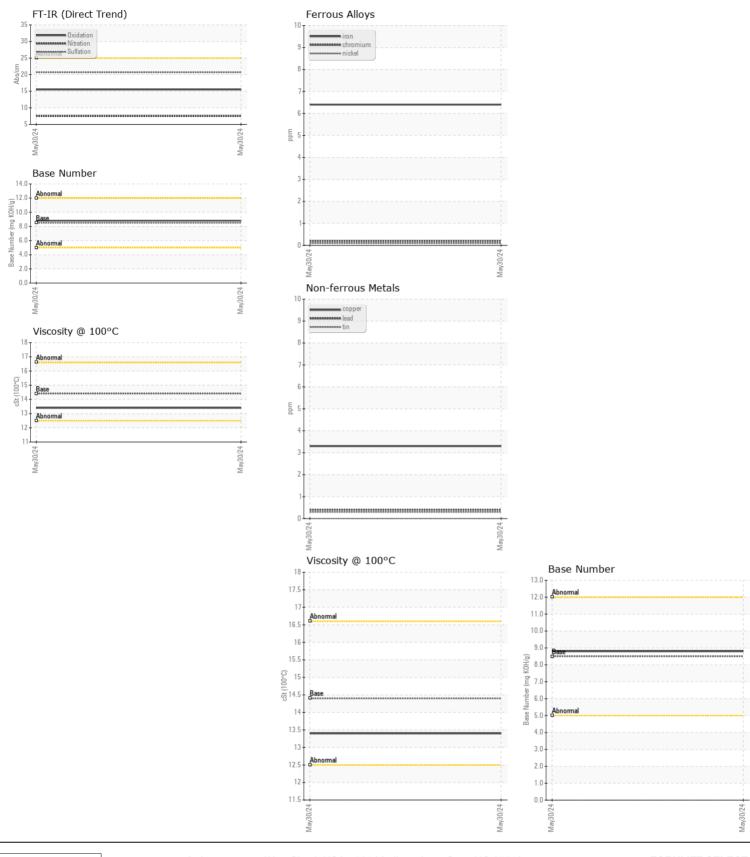
Base Number (BN) mg KOH/g ASTM D2896 8.5

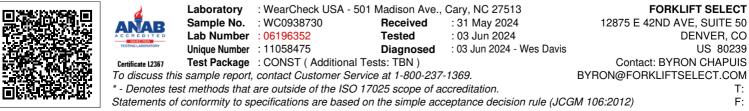
3178

15.5

8.8

13.4





Contact/Location: BYRON CHAPUIS - FORDEN Page 2 of 2