

## [0015238]

**531501** []

## Diesel Engine

DIESEL ENGINE OIL SAE 10W30 (--- QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
RECOMMENDATION		UOIVI		LIIIII/ADII	PCA0098805		
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info				
	Sample Date	bro	Client Info		14 Apr 2024		
	Machine Age	hrs	Client Info		9961	3066	
	Oil Age	hrs	Client Info		3000	3066	
	Filter Age	hrs	Client Info		3000	3066 Channed	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	10	27	
WEAR	Chromium	ppm	ASTM D5185m		<1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	<1	
	Titanium	ppm	ASTM D5185m	- 1	0	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		2	5	
	Lead	ppm	ASTM D5185m		0	4	
	Copper	ppm	ASTM D5185m		2	25	
	Tin	ppm	ASTM D5185m		0	<1	
	Vanadium	ppm	ASTM D5185m	210	0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	24	
	Potassium	ppm	ASTM D5185m	>20	0	4	
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	10.2	14.3	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	28.1	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
	0				•	10	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	050	6	16	
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 D5185m		1	27	
	Barium	ppm	ASTM D5185m		0	3	
	Molybdenum	ppm	ASTM D5185m	100	57	23	
	Manganese	ppm	ASTM D5185m	450	<1	1	
	Magnesium	ppm	ASTM D5185m		939	645	
	Calcium	ppm	ASTM D5185m		1078	1841	
	Phosphorus	ppm	ASTM D5185m		1010	749	
	Zinc	ppm	ASTM D5185m	1350	1251	976	

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m 4250

Abs/.1mm \*ASTM D7414 >25

ASTM D445 10.9

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

4101

27.6

4.6

12.0

2954

22.9

5.5

11.7

WEAR

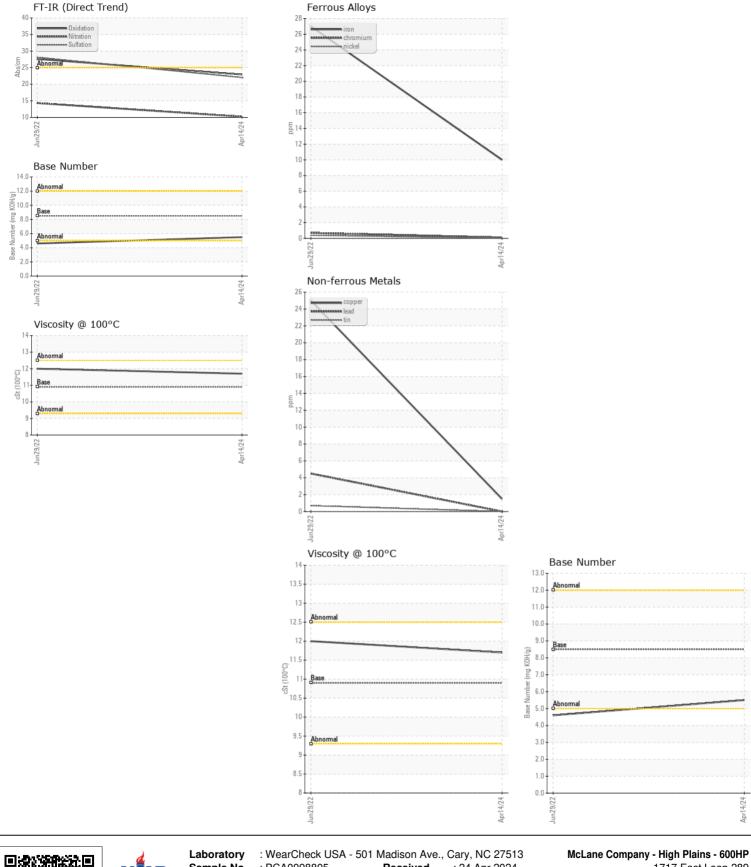
CONTAMINATION

**FLUID CONDITION** 

NORMAL

NORMAL

NORMAL



Sample No. : PCA0098805 Received 1717 East Loop 289 : 24 Apr 2024 Lab Number : 06158817 Tested : 25 Apr 2024 LUBBOCK, TX Unique Number : 10994240 Diagnosed : 25 Apr 2024 - Wes Davis US 79403 Test Package : FLEET Contact: RITA GARCIA Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. rita.garcia@mclaneco.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (806)766-2902 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: