

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Area 600HP Machine Id 217423 [600HP] Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 10W30 (38 QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		PCA0101226	PCA0098806	PCA0101260
	Sample Date		Client Info		25 May 2024	11 Apr 2024	19 Oct 2023
	Machine Age	mls	Client Info		0	699596	641328
	Oil Age	mls	Client Info		0	0	30000
	Filter Age	mls	Client Info		0	0	30000
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>65	15	25	17
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2	1	1
	Nickel	ppm	ASTM D5185m		1	0	<1
	Titanium	ppm	ASTM D5185m		2	0	0
	Silver	ppm	ASTM D5185m		<1	0	<1
	Aluminum	ppm	ASTM D5185m		7	10	3
	Lead	ppm	ASTM D5185m	>10	0	0	0
	Copper	ppm	ASTM D5185m	>180	12	7	7
	Tin	ppm	ASTM D5185m	>8	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Silicon			. 15	E	7	E
CONTAMINATION	Potassium	ppm	ASTM D5185m ASTM D5185m		5 5	7	5
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		5 <1.0	<1.0	<1.0
	Water		WC Method		<1.0 NEG	NEG	NEG
	Glycol		WC Method	>0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	<u>\</u> 2	0.7	1.1	1
	Nitration	Abs/cm	*ASTM D7624	>20	8.8	9.9	8.9
	Sulfation	Abs/.1mm	*ASTM D7024		21.0	24.0	21.5
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	0.50	2	<1	0
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		8	12	0
	Barium	ppm	ASTM D5185m		0	0	4
	Molybdenum	ppm	ASTM D5185m	100	60	61	65
	Manganese	ppm	ASTM D5185m	450	1	<1	<1
	Magnesium	ppm	ASTM D5185m		1010	881	942
	Calcium	ppm	ASTM D5185m		1179	1225	1083
	Phosphorus	ppm	ASTM D5185m		1072	1033	922
	Zinc	ppm	ASTM D5185m		1386	1310	1250
	Sulfur	ppm	ASTM D5185m		3400	2919	2615
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	20.0	17.5

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

ASTM D445 10.9

Visc @ 100°C cSt

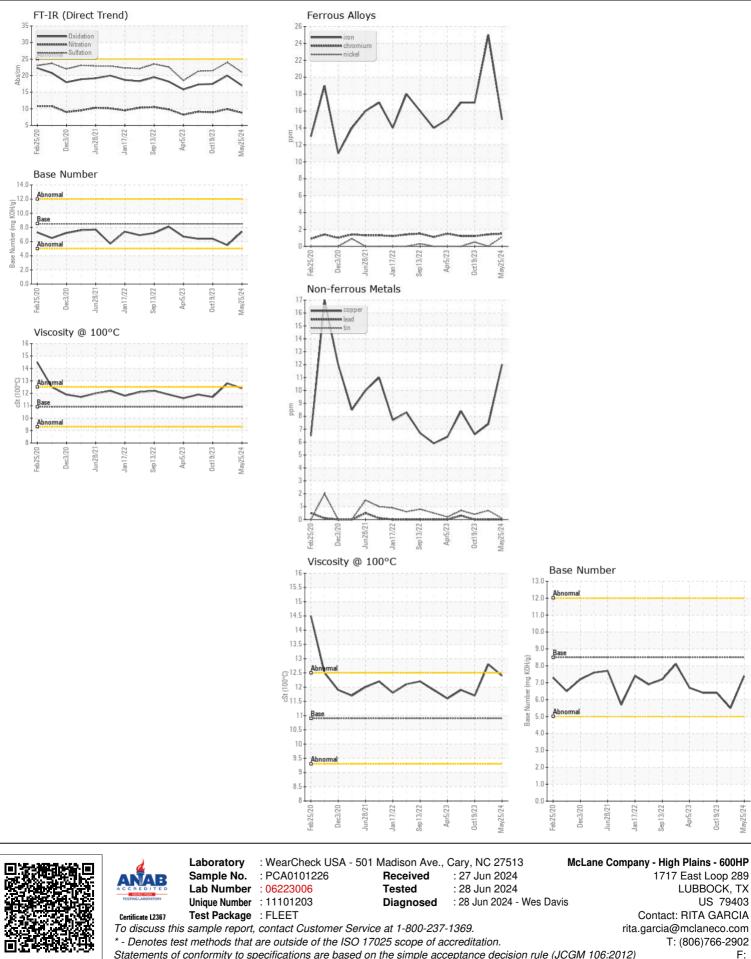
12.8

5.5 6.4

11.7

7.4

12.4



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)