

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Area 600HP Machine Id 217419 [600HP] Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 10W30 (38 QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		PCA0101227	PCA0101191	PCA0073139
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Date		Client Info		20 May 2024	21 Dec 2023	13 Jun 2023
	Machine Age	mls	Client Info		0	0	608708
	Oil Age	mls	Client Info		0	0	30000
	Filter Age	mls	Client Info		0	0	30000
	Oil Changed		Client Info		Changed	Changed	N/A
	Filter Changed		Client Info		Changed	Changed	N/A
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>200	19	12	12
	Chromium	ppm	ASTM D5185m	>20	2	<1	1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>2	1	0	0
	Titanium	ppm	ASTM D5185m	>2	2	0	0
	Silver	ppm	ASTM D5185m	>2	1	0	0
	Aluminum	ppm	ASTM D5185m	>30	6	4	2
	Lead	ppm	ASTM D5185m	>30	<1	0	0
	Copper	ppm	ASTM D5185m	>30	9	3	3
	Tin	ppm	ASTM D5185m	>15	2	<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
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u>_</u> 30	5	4	3
CONTAMINATION	Potassium	ppm	ASTM D5185m		4	0	<1
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	/ 0.12	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.8	0.7	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.3	8.9
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.8	20.5	20.6
	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	1	<1
	Boron	ppm	ASTM D5185m	250	6	15	0
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		1	0	0
	Molybdenum	ppm	ASTM D5185m		64	61	63
	Manganese	ppm	ASTM D5185m		<1	0	<1
	Magnesium	ppm	ASTM D5185m	450	991	914	1040
	Calcium	ppm	ASTM D5185m	3000	1151	1043	1167
	Phosphorus	ppm	ASTM D5185m		1113	1029	1048
	Zinc	ppm	ASTM D5185m		1327	1270	1317
	Sulfur	ppm	ASTM D5185m		2920	2715	3408
	0.11.11	AL / 4	****	05	47.0	10.0	10.0

Oxidation

Visc @ 100°C cSt

Abs/.1mm *ASTM D7414 >25

ASTM D445 10.9

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

16.2

7.0

12.6

16.6

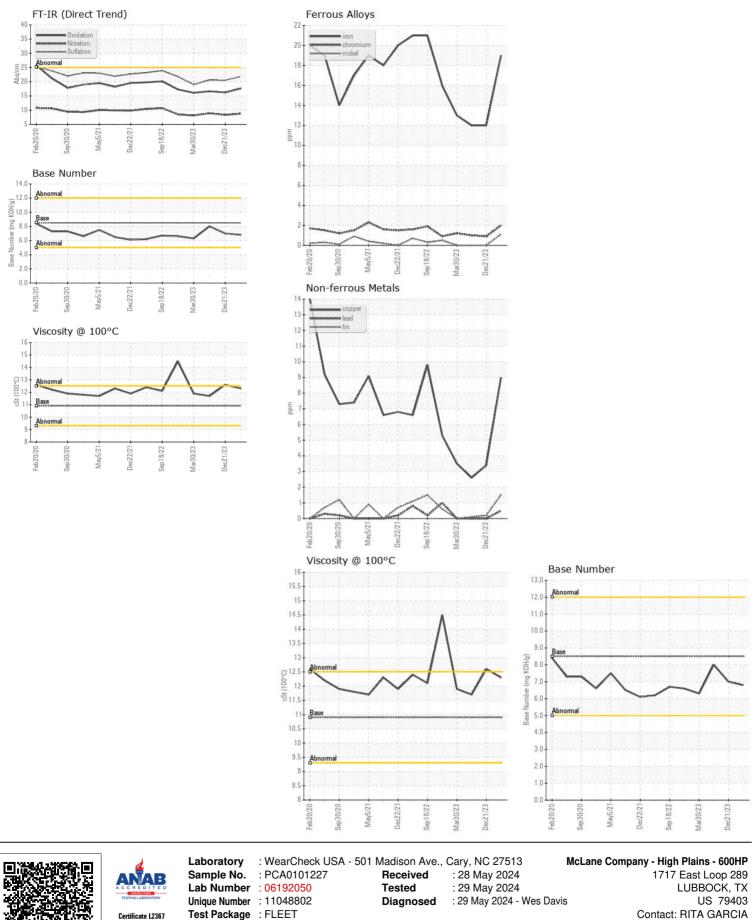
11.7

8.0

17.6

6.8

12.3



To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

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