

OIL ANALYSIS REPORT

Sample Rating Trend





Diesel Engine

DIESEL ENGINE OIL SAE 10W30 (38 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

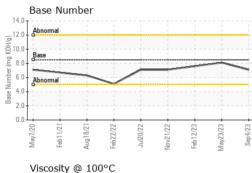
Fluid Condition

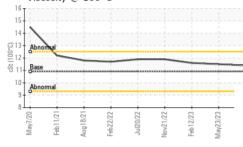
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		May2020 Fel	2021 Aug2021 Feb2022	Jul2022 Nov2022 Feb2023 May20	23 Sep2023	
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0101246	PCA0073113	PCA0073089
Sample Date		Client Info		04 Sep 2023	23 May 2023	12 Feb 2023
Machine Age	mls	Client Info		464565	430512	394507
Oil Age	mls	Client Info		30000	30000	22000
Oil Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
⁻ uel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
ron	ppm	ASTM D5185m	>65	14	13	15
Chromium	ppm	ASTM D5185m	>5	1	2	2
Nickel	ppm	ASTM D5185m		0	0	<1
Titanium	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>35	8	8	16
_ead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m		3	4	8
Гin	ppm	ASTM D5185m	>8	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base		history1	history2
Boron	ppm	ASTM D5185m	250	0	2	2
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	69	64	58
Manganese	ppm	ASTM D5185m ASTM D5185m	450	<1	<1 1040	<1 922
Magnesium Calcium	ppm	ASTM D5185m	3000	1223 1332	1157	922 1081
Phosphorus	ppm	ASTM D5185m	1150	1332	1098	969
Zinc	ppm ppm	ASTM D5185m		1490	1401	1216
Sulfur	ppm	ASTM D5185m		3727	3590	2744
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	5	4	5
Sodium	ppm	ASTM D5185m		2	1	2
Potassium	ppm	ASTM D5185m	>20	4	2	4
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.5	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.1	9.3	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	19.7	19.5
FLUID DEGRA	DATION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	15.5	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	85	7.1	8.1	7.6

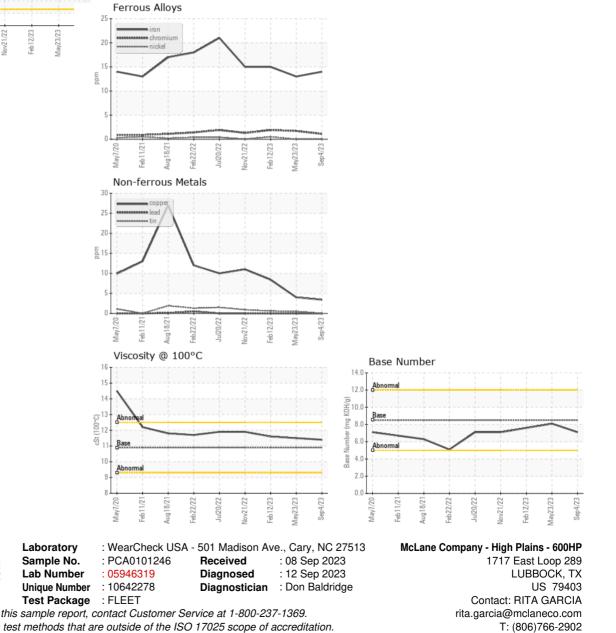


OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.9	11.4	11.5	11.6
GRAPHS						



Report Id: MCLLUB [WUSCAR] 05946319 (Generated: 09/12/2023 13:03:43) Rev: 1

Certificate L2367 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)

F: