



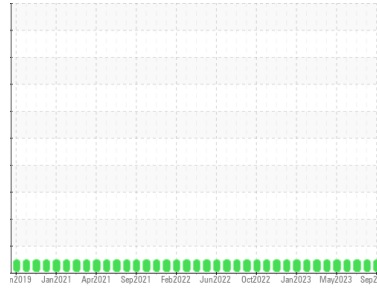
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Detroit
 Machine Id
[Detroit] Oil - Port Main Engine
 Component
Port Main Engine
 Fluid
MOBIL 15W40 (150 GAL)



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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0769302	WC0769392	WC0769395
Sample Date	Client Info			11 Sep 2023	14 Aug 2023	17 Jul 2023
Machine Age	hrs	Client Info		15322	14802	14351
Oil Age	hrs	Client Info		6906	14802	0
Oil Changed	Client Info			N/A	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>4.0		<1.0	<1.0	<1.0
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	63	60	59
Chromium	ppm	ASTM D5185m	>8	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	<1	3	2
Lead	ppm	ASTM D5185m	>18	13	11	11
Copper	ppm	ASTM D5185m	>80	11	11	12
Tin	ppm	ASTM D5185m	>14	2	2	2
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		75	84	83
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		56	57	60
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m		965	941	929
Calcium	ppm	ASTM D5185m		1843	1954	1775
Phosphorus	ppm	ASTM D5185m		1034	1063	1081
Zinc	ppm	ASTM D5185m		1382	1378	1359
Sulfur	ppm	ASTM D5185m		3244	3811	3358

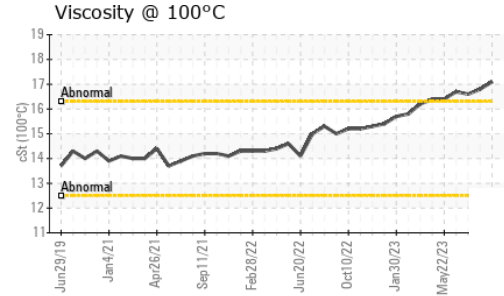
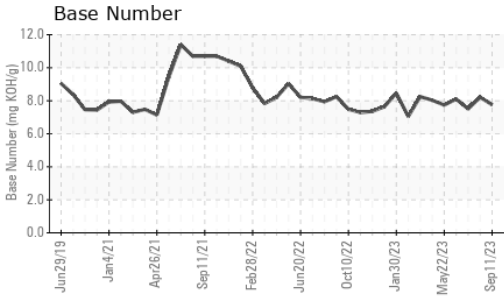
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	4	3	4
Sodium	ppm	ASTM D5185m	>118	4	4	<1
Potassium	ppm	ASTM D5185m	>20	2	2	3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.5	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	14.7	14.2	14.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	29.2	28.9	28.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	34.1	32.9	32.6
Base Number (BN)	mg KOH/g	ASTM D2896		7.76	8.21	7.51



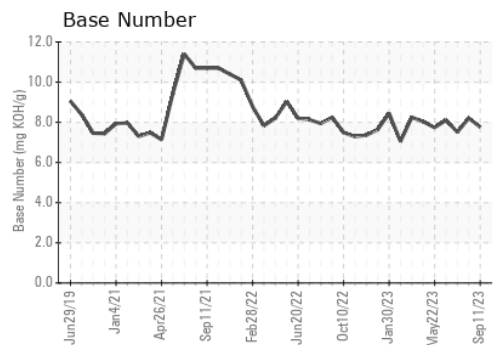
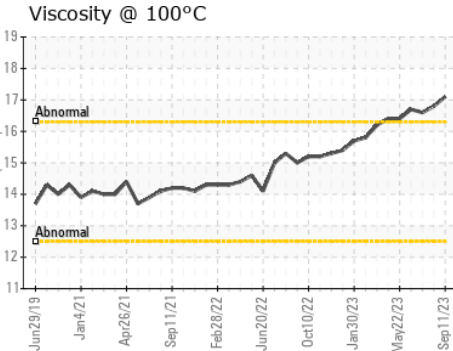
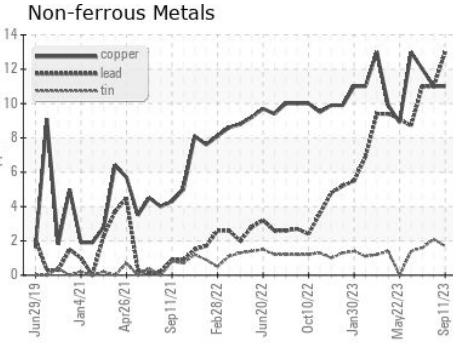
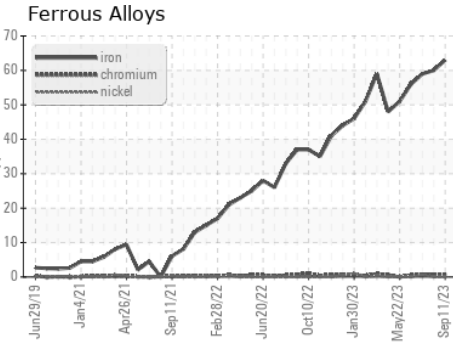
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	17.1	16.8	16.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0769302 **Received** : 02 Oct 2023
Lab Number : **05966531** **Diagnosed** : 03 Oct 2023
Unique Number : 10673082 **Diagnostician** : Sean Felton
Test Package : IND 2

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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)