

## **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

#### 426114 Component Diesel Engine Fluid MOBIL 15W40 (11 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.

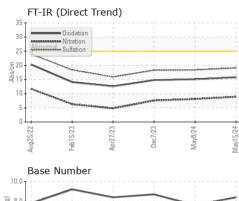
### Fluid Condition

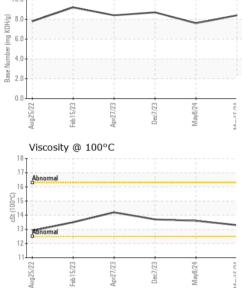
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0120440	GFL0120448	GFL0066178
Sample Date		Client Info		15 May 2024	08 May 2024	07 Dec 2023
Machine Age	hrs	Client Info		11562	265556	265556
Oil Age	hrs	Client Info		500	265556	5000
Oil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	16	15	11
Chromium	ppm	ASTM D5185m	>20	1	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	4	5	3
Lead	ppm	ASTM D5185m	>40	<1	1	<1
Copper	ppm	ASTM D5185m	>330	3	2	3
Tin	ppm	ASTM D5185m	>15	<1	1	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		and the set	11 11 11			
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	limit/base	current 4	history1 5	history2 4
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	4	5	4
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	4 <1	5 0	4
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		4 <1 65	5 0 65	4 0 58
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		4 <1 65 <1	5 0 65 <1	4 0 58 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		4 <1 65 <1 983	5 0 65 <1 1120	4 0 58 0 912 1024 943
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		4 <1 65 <1 983 1159	5 0 65 <1 1120 1326	4 0 58 0 912 1024
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		4 <1 65 <1 983 1159 1185	5 0 65 <1 1120 1326 1213	4 0 58 0 912 1024 943
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	4 <1 65 <1 983 1159 1185 1298	5 0 65 <1 1120 1326 1213 1527	4 0 58 0 912 1024 943 1157
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		4 <1 65 <1 983 1159 1185 1298 3486	5 0 65 <1 1120 1326 1213 1527 4422	4 0 58 0 912 1024 943 1157 2940
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	4 <1 65 <1 983 1159 1185 1298 3486 current	5 0 65 <1 1120 1326 1213 1527 4422 history1	4 0 58 0 912 1024 943 1157 2940 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	4 <1 65 <1 983 1159 1185 1298 3486 current 6	5 0 65 <1 1120 1326 1213 1527 4422 history1 6	4 0 58 0 912 1024 943 1157 2940 history2 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >118	4 <1 65 <1 983 1159 1185 1298 3486 <u>current</u> 6 <1	5 0 65 <1 1120 1326 1213 1527 4422 history1 6 1	4 0 58 0 912 1024 943 1157 2940 history2 5 < <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20	4 <1 65 <1 983 1159 1185 1298 3486 current 6 <1 3	5 0 65 <1 1120 1326 1213 1527 4422 history1 6 1 7	4 0 58 0 912 1024 943 1157 2940 history2 5 < <1 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 limit/base >3	4 <1 65 <1 983 1159 1185 1298 3486 current 6 <1 3 current	5 0 65 <1 1120 1326 1213 1527 4422 history1 6 1 7 7 history1	4 0 58 0 912 1024 943 1157 2940 <b>history2</b> 5 <1 <1 <1 <b>history2</b>
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 limit/base >3	4 <1 65 <1 983 1159 1185 1298 3486 current 6 <1 3 current 0.5	5 0 65 <1 1120 1326 1213 1527 4422 history1 6 1 7 <i>history1</i> 0.4	4 0 58 0 912 1024 943 1157 2940 history2 5 <1 <1 <1 <1 history2 0.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm t ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >118 >20 limit/base >3 >20	4 <1 65 <1 983 1159 1185 1298 3486 current 6 <1 3 current 0.5 8.9	5 0 65 <1 1120 1326 1213 1527 4422 history1 6 1 7 <i>history1</i> 0.4 8.1	4 0 58 0 912 1024 943 1157 2940 history2 5 <1 <1 <1 <1 history2 0.3 7.6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm t ppm ppm	ASTM D5185m ASTM D5185m	Imit/base >25 >118 >20 Imit/base >3 >20 >30	4 <1 65 <1 983 1159 1185 1298 3486 current 6 <1 3 current 0.5 8.9 19.1	5 0 65 <1 1120 1326 1213 1527 4422 history1 6 1 7 6 1 7 <b>history1</b> 0.4 8.1 18.4	4 0 58 0 912 1024 943 1157 2940 <b>history2</b> 5 <1 <1 <1 <b>history2</b> 0.3 7.6 18.3

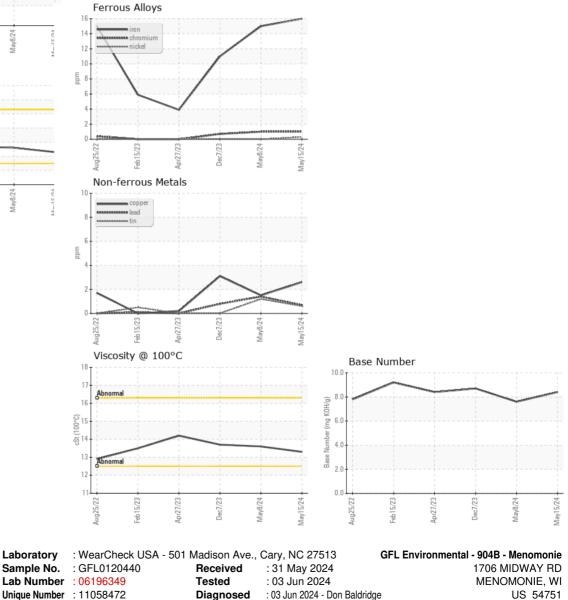


# **OIL ANALYSIS REPORT**





VISUAL		method				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		13.3	13.6	13.7
GRAPHS						





Unique Number : 11058472 Diagnosed : 03 Jun 2024 - Don Baldridge Test Package : FLEET Certificate 12367 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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Submitted By: See also GFL904,A,B,C, 927, 938 - Andy Kane

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