

## Machine Id 4336L ponent **Diesel Engine** MOBIL 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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## WEAR

FLU

All component wear rates are normal.

## CONTAMINATION

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the your metals anal elease into the lubricant and is ts. There is no indication of ar

halysis are likely a result of solder flux rele
s common on new equipment/component
ny contamination in the oil.

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06214146	IL0032332	IL0028031
Sample Date		Client Info		16 May 2024	30 Aug 2023	08 Mar 2023
Machine Age	mls	Client Info		107527	95267	85528
Oil Age	mls	Client Info		11840	10291	40000
Filter Age	mls	Client Info		0	10291	40000
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	37	26	39
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	22	15	25
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	2	<1	1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	5	4	6
Potassium	ppm	ASTM D5185m	>20	29	14	37
Fuel	ppm	WC Method	>5	0 <1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	11.6	9.7	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	21.5	25.7
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
				•		
Sodium	ppm	ASTM D5185m	>118	3	2	2
Boron	ppm	ASTM D5185m		4	4	7
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		61	62	53
Manganese	ppm	ASTM D5185m		1	<1	1
Magnesium	ppm	ASTM D5185m		963	1005	807
Calcium	ppm	ASTM D5185m		1091	1100 1057	1195 814
Phosphorus	ppm	ASTM D5185m		1038		
Zinc	ppm	ASTM D5185m ASTM D5185m		1274	1309	1081
Sulfur	ppm		> 2F	3760	3973	2849
Oxidation Base Number (BN)	Abs/.1mm	*ASTM D7414 ASTM D2896	>25	23.4 7.1	20.7 7.6	27.1 6.3
Visc @ 100°C	mg KOH/g	ASTM D2896 ASTM D445			12.8	12.5
	cSt	ASTIVI D445		12.6	12.0	12.5

WEAR

CONTAMINATION

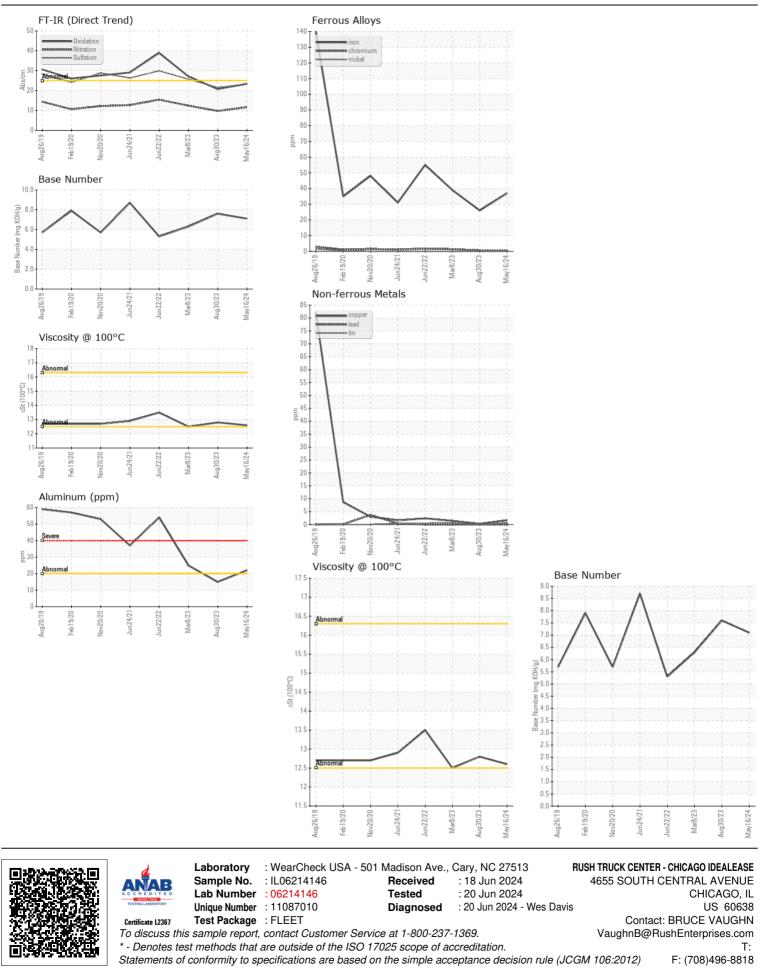
**FLUID CONDITION** 

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NORMAL

NORMAL

NORMAL



Contact/Location: BRUCE VAUGHN - IDECHIIL Page 2 of 2