

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id **139-518** Component **Diesel Engine** Fluid **MOBIL 15W40 (44 QTS)**

RECOMMENDATION

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

WEAR

All component wear rates are normal.

CONTAMINATION

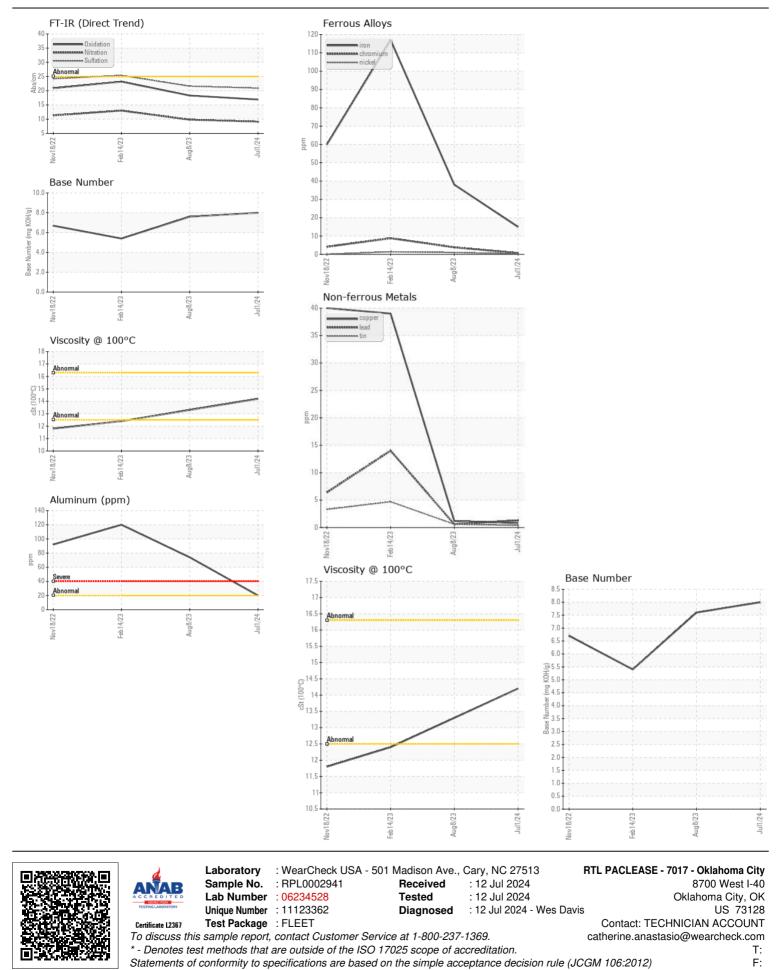
FLUID CONDITION

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

The BN result indicates that there is 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		RPL0002941	RPL0008135	RPL0008010
Sample Date		Client Info		01 Jul 2024	08 Aug 2023	14 Feb 2023
Machine Age	hrs	Client Info		8205	146225	75056
Oil Age	hrs	Client Info		1510	32897	75056
Filter Age	hrs	Client Info		1510	32897	75056
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	15	38	1 17
Chromium	ppm	ASTM D5185m	>20	<1	4	9
Nickel	ppm	ASTM D5185m	>4	<1	1	1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	20	74	120
Lead	ppm	ASTM D5185m	>40	1	<1	14
Copper	ppm	ASTM D5185m	>330	<1	1	39
Tin	ppm	ASTM D5185m	>15	<1	<1	5
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
0'''						• • • •
Silicon	ppm	ASTM D5185m	>25	4	9	▲ 34
Potassium	ppm	ASTM D5185m	>20	45	193	397
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	0/	WC Method	0	NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.7
Nitration	Abs/cm	*ASTM D7624 *ASTM D7415	>20	9.1	9.8	13.0 25.4
Sulfation Silt	Abs/.1mm	*Visual	>30	20.9 NONE	21.6	
Debris	scalar scalar	*Visual	NONE 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
		•15041	20.2		NEG	NLG
Sodium	ppm	ASTM D5185m	>118	1	4	6
Boron	ppm	ASTM D5185m		0	4	16
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		64	69	22
Manganese	ppm	ASTM D5185m		0	1	7
Magnesium	ppm	ASTM D5185m		998	1091	752
Calcium	ppm	ASTM D5185m		1139	1214	1542
Phosphorus	ppm	ASTM D5185m		1066	1127	756
Zinc	ppm	ASTM D5185m		1294	1403	998
Sulfur	ppm	ASTM D5185m	0.5	2845	3762	3144
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	18.3	23.2
Base Number (BN)	mg KOH/g	ASTM D2896		8.0	7.6	5.4
Visc @ 100°C	cSt	ASTM D445		14.2	13.3	12.4



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