

## Machine Id **31921** Component **Diesel Engine** Filuid **MOBIL 15W40 (--- GAL)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0939030	WC0711297	WC0711071
	Sample Date		Client Info		29 May 2024	03 Jun 2023	06 Mar 2023
	Machine Age	mls	Client Info		0	306879	274191
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	36	6	12
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	2	1	<1
	Nickel	ppm	ASTM D5185m	>4	<1	<1	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m	>3	<1	0	0
	Aluminum	ppm	ASTM D5185m	>20	10	5	5
	Lead	ppm	ASTM D5185m	>40	0	<1	0
	Copper	ppm	ASTM D5185m	>330	6	5	4
	Tin	ppm	ASTM D5185m	>15	<1	<1	0
	Vanadium	ppm	ASTM D5185m		0	<1	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION There is no indication of any contamination in the oil.	Silicon	ppm	ASTM D5185m	>25	11	4	5
	Potassium	ppm	ASTM D5185m		7	5	3
	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	1.6	0.6	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	15.0	9.1	10.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	29.7	22.4	20.5
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	2	<1	1
	Boron	ppm	ASTM D5185m		8	4	20
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		72	65	74
	Manganese	ppm	ASTM D5185m		1	1	<1
	Magnesium	ppm	ASTM D5185m		1152	995	621
	Calcium	ppm	ASTM D5185m		1283	1239	1325
	Phosphorus	ppm	ASTM D5185m		1213	1047	718
	Zinc	ppm	ASTM D5185m		1498	1361	918
	Sulfur	ppm	ASTM D5185m		3201	3681	2586
	Oxidation	Abs/.1mm	*ASTM D7414	>25	28.1	19.2	19.6
	Base Number (BN)	mg KOH/g	ASTM D2896		4.8	7.0	5.8
	Vier C 10000	. 01				10.0	440

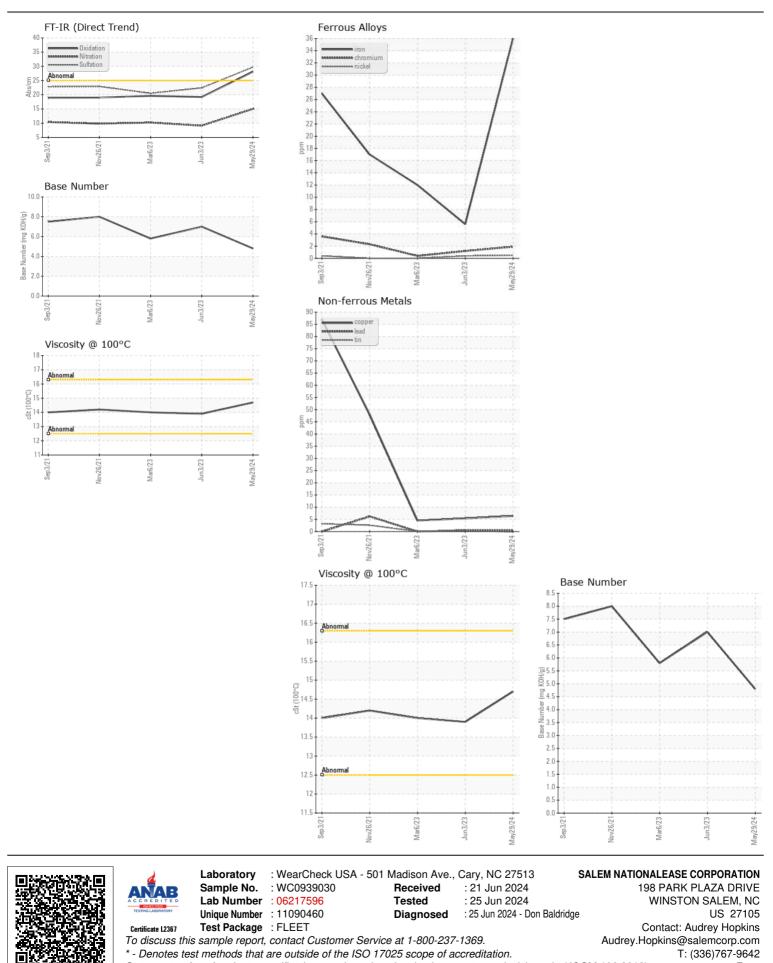
Visc @ 100°C cSt

ASTM D445

14.7

13.9

14.0



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: Audrey Hopkins - SALWIN Page 2 of 2

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