

Machine Id **12258** Component **Diesel Engine** Fluid **MOBIL 15W40 (--- QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Number		Client Info		WC0882281		
	Sample Date		Client Info		28 Dec 2023		
	Machine Age	mls	Client Info		5818		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m		63		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		14		
	Lead	ppm	ASTM D5185m		2		
	Copper	ppm	ASTM D5185m		117		
	Tin	ppm	ASTM D5185m	>15	3		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5 7		
	Potassium	ppm	ASTM D5185m		4		
Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material.	Fuel	%	ASTM D3524		0.0		
	Water	, .	WC Method		NEG		
	Glycol		WC Method	/ 0.1	NEG		
	Soot %	%	*ASTM D7844	>3	0.4		
	Nitration	Abs/cm	*ASTM D7624	>20	7.4		
	Sulfation	Abs/.1mm	*ASTM D7415		21.4		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	3		
The city is sever then normal. The DN result indicates that	Boron	ppm	ASTM D5185m		159		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m		7		
	Molybdenum	ppm	ASTM D5185m		20		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m		41		
	Calcium	ppm	ASTM D5185m		1044		
	Phosphorus	ppm	ASTM D5185m		836		
	Zinc	ppm	ASTM D5185m		1029		
	Sulfur	ppm	ASTM D5185m		2958		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7		
		1/011/	AOTH DOOOD				

Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

Visc @ 100°C cSt

4.4

9.6



