

Make:	BETA	Sample No:	10210289
Model:	4CYL	Location:	FRENCH MARINE MOTORS LTD
Serial No:	10210289 (UNKNOWN)	Client:	FRENCH MARINE MOTORS LTD
System:	ENGINE	Kit Ref/Bottle No:	V0995291
Brand:	NOT GIVEN	Job No.:	
Grade:		Sampled:	20/01/24
Unique No.:	6163787	Received:	24/01/24

Diagnosis	Key:	Normal	Caution	Serious	Diagnostician: Sean George
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Water level serious. Wear appears satisfactory. Advice : Change fluid and check unit for source of contamination. Resample at the next service intervention. Too much water present to give reliable viscosity at 100°C result.

Results			Current Sample	Historical Samples
Sample No			10210289	
Status				
Sampled			20/01/24	
Fluid Age	HOURS			
Unit Age	HOURS		200	
Received			24/01/24	
Fluid Condition				
[ASTM D7279] - KV40	mm²/s	LM-3*	82.9	
[ASTM E2412] - Soot	wt %	LM-13	<0.1	
[ASTM E2412] - Oxidation	Abs/0.1mm	LM-13	10.81	
[ASTM E2412] - Nitration	Abs/0.1mm	LM-13	6.37	
[ASTM E2412] - Sulfation	Abs/0.1mm	LM-13	13.39	
[In-House] - BN	mg KOH/g		6.7	
Additives				
[ASTM D5185] - Boron	mg/kg	LM-5*	145	
[ASTM D5185] - Barium	mg/kg	LM-5*	0.6	
[ASTM D5185] - Calcium	mg/kg	LM-5*	2207	
[ASTM D5185] - Magnesium	mg/kg	LM-5*	40	
[ASTM D5185] - Phosphorus	mg/kg	LM-5*	743	
[ASTM D5185] - Sulphur	mg/kg	LM-5*	5292	
[ASTM D5185] - Zinc	mg/kg	LM-5*	964	
Contamination				
[In-House] - Water	%	LM-1	>10.00	
[ASTM D5185] - Sodium	mg/kg	LM-5*	3.6	
[ASTM D5185] - Potassium	mg/kg	LM-5*	1.0	
[ASTM D5185] - Silicon	mg/kg	LM-5*	5.7	
[ASTM D5185] - Lithium	mg/kg	LM-5*	0.0	
[ASTM D7279] - Fuel	-	LM-3*	N	
[In-House] - Glycol	%		0.0	
Wear Metals				
[ASTM D5185] - Aluminium	mg/kg	LM-5*	2.3	
[ASTM D5185] - Chromium	mg/kg	LM-5*	0.5	
[ASTM D5185] - Molybdenum	mg/kg	LM-5*	48	
[ASTM D5185] - Iron	mg/kg	LM-5*	7.5	
[ASTM D5185] - Copper	mg/kg	LM-5*	7.9	
[ASTM D5185] - Lead	mg/kg	LM-5*	2.0	
[ASTM D5185] - Tin	mg/kg	LM-5*	0.0	
[ASTM D5185] - Silver	mg/kg	LM-5*	0.0	
[ASTM D5185] - Nickel	mg/kg	LM-5*	0.0	
[ASTM D5185] - Manganese	mg/kg	LM-5*	0.7	
[ASTM D5185] - Titanium	mg/kg	LM-5*	0.0	
[ASTM D5185] - Vanadium	mg/kg	LM-5*	0.1	
[ASTM D5185] - Cadmium	mg/kg	LM-5*	0.6	