

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id NO UNIT PC0057132 Component Diesel Engine

CASTROL MHP 154 (--- GAL)

CASTRUL MIP 154 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		PC0057132		
	Sample Date		Client Info		06 Feb 2024		
	Machine Age	hrs	Client Info		6447		
	Oil Age	hrs	Client Info		347		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
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WEAR	Iron	ppm	ASTM D5185(m)		6		
All component wear rates are normal.	Chromium Nickel	ppm	ASTM D5185(m)		0		
		ppm	ASTM D5185(m) ASTM D5185(m)	>0	<1		
	Titanium Silver	ppm	ASTM D5185(m) ASTM D5185(m)	. 0	0		
	Aluminum	ppm	ASTM D5185(m)		2		
	Lead	ppm			2 <1		
	Copper	ppm ppm	ASTM D5185(m) ASTM D5185(m)		<1		
	Tin	ppm	ASTM D5185(m)		0		
	Vanadium	ppm	ASTM D5185(m)	~7	0		
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
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CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>22	6		
	Potassium	ppm	ASTM D5185(m)	>20	<1		
There is no indication of any contamination in the oil.	Fuel		WC Method	>2.1	<1.0		
	Water		WC Method	>0.21	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0		
	Nitration	Abs/cm	ASTM D7624*	>20	11.4		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	17.0		
	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*	>0.21	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>31	<1		
	Boron	ppm	ASTM D5185(m)		4		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		<1		
	Manganese	ppm	ASTM D5185(m)		<1		
	Magnesium	ppm	ASTM D5185(m)		17		
	Calcium	ppm	ASTM D5185(m)		5623		
	Phosphorus	ppm	ASTM D5185(m)		965		
	Zinc	ppm	ASTM D5185(m)		1046		
	Sulfur	ppm	ASTM D5185(m)		10187		
	Oxidation	Abs/.1mm	ASTM D7414*	>25	10.8		
	Visc @ 40°C	cSt	ASTM D7279(m)		109		
	Visc @ 100°C	cSt	ASTM D7279(m)	13.5	12.1		
	Viceopity Index (VII)	Coole	ACTM D0070*		100		

Viscosity Index (VI) Scale ASTM D2270*

100





