

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id HITACHI 3041 Component Diesel Engine Fluid {not provided} (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 0W40 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

Fuel content negligible. There is no indication of any contamination in the oil.

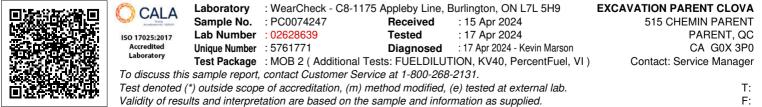
FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Viscosity of sample indicates oil is within SAE 0W40 range, advise investigate. The condition of the oil is suitable for further service.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0074247		
Sample Date		Client Info		07 Apr 2024		
Machine Age	hrs	Client Info		4300		
Oil Age	hrs	Client Info		150		
Filter Age	hrs	Client Info		150		
Oil Changed		Client Info		Not Changd		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron	nom	ASTM D5185(m)	>100	3		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	0		
Titanium	ppm	ASTM D5185(m)	24	۰ <1		
Silver	ppm	ASTM D5185(m)	>3	<1 0		
Aluminum	ppm	ASTM D5185(m) ASTM D5185(m)	>20	1		
Lead	ppm	ASTM D5185(m)	>20	י <1		
Copper	ppm ppm	ASTM D5185(m)	>330	<1		
Tin	ppm	ASTM D5185(m)	>15	0		
Vanadium	ppm	ASTM D5185(m)	>15	0		
vanadium	ppin	A310 D3103(III)				
Silicon	ppm	ASTM D5185(m)	>25	5		
Potassium	ppm	ASTM D5185(m)	>20	2		
Fuel	%	ASTM D7593*	>5	0.9		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	7.0		
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.5		
Emulsified Water	scalar	Visual*	>0.2	NEG		
Codium				•		
Sodium	ppm	ASTM D5185(m) ASTM D5185(m)		3 119		
Boron Barium	ppm	· · ·				
	ppm	ASTM D5185(m)		0 11		
Molybdenum Manganese	ppm	ASTM D5185(m) ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m) ASTM D5185(m)		0 740		
Calcium	ppm	ASTM D5185(m)		1227		
Phosphorus	ppm	ASTM D5185(m)		988		
Zinc	ppm	ASTM D5185(m)		1120		
Sulfur	ppm ppm	ASTM D5185(m)		2988		
Oxidation	Abs/.1mm	ASTM D3103(III) ASTM D7414*	>25	13.4		
Base Number (BN)	mg KOH/g	ASTM D7414 ASTM D2896*	~20	11.18		
Visc @ 40°C	cSt	ASTM D2030 ASTM D7279(m)		78.9		
Visc @ 40 C	cSt	ASTM D7279(m)		13.3		
Viscosity Index (VI)	Scale	ASTM D7279(III) ASTM D2270*		171		
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Contact/Location: Service Manager - EXCPAR





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