

OIL ANALYSIS REPORT

Sample Rating Trend





Diesel Engine Fluid NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

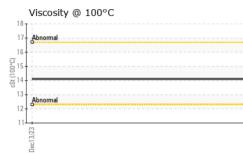
Fluid Condition

The condition of the oil is acceptable for the time in service.

				Dec2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0877965		
Sample Date		Client Info		13 Dec 2023		
Machine Age	kms	Client Info		21918		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	15		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>4	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	2		
Lead	ppm	ASTM D5185(m)	>40	1		
Copper	ppm	ASTM D5185(m)	>330	4		
Tin	ppm	ASTM D5185(m)	>15	<1		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		8		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		57		
Manganese	ppm	ASTM D5185(m)		1		
Magnesium	ppm	ASTM D5185(m)		758		
Calcium	ppm	ASTM D5185(m)		1189		
Phosphorus	ppm	ASTM D5185(m)		607		
Zinc	ppm	ASTM D5185(m)		797		
Sulfur	ppm	ASTM D5185(m)		1861		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	10		
Sodium	ppm	ASTM D5185(m)		3		
Potassium	ppm	ASTM D5185(m)	>20	<1		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	12.6		
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.2		



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°C	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	ASTM D7414*	>25	19.5		
	VISUAL		method	limit/base	current	history1	history2
	White Metal	scalar	Visual*	NONE	NONE		
	Yellow Metal	scalar	Visual*	NONE	NONE		
	Precipitate	scalar	Visual*	NONE	NONE		
Decl 3/23	Silt	scalar	Visual*	NONE	NONE		
Dec	Debris	scalar	Visual*	NONE	VLITE		
	Sand/Dirt	scalar	Visual*	NONE	NONE		
	Appearance Odor	scalar scalar	Visual* Visual*	NORML NORML			
	Emulsified Water	scalar	Visual*	>0.2	NEG		
	Free Water	scalar	Visual*	20.2	NEG		
	FLUID PROPERT	IES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D7279(m)		14.1		
	GRAPHS		()				
	Iron (ppm)				Lead (ppm)		
	250 T			100	T 2		
	200 - Severe			80 = 60	Severe		
und 1	100 - Abnormal			E 60	Abnormal		
	50 -			20			
	0			0	- 53		23
	Dec13/23			Dec13/23	Dec13/23		Dec13/23
	 Aluminum (ppm)			_	Chromium (pp	om)	_
	50 40 Severe			50	Severe		
_				40			
	30			======================================	Abnormal		
	10			10			
	3/23			0	3/23		3/23
	Dec13/23			Dec13/23	Dec13/23		Dec13/23
	Copper (ppm)				Silicon (ppm)		
	100 Severe			80	Severe		
5. E.2	300			60 長.40			
<u>□</u>	100 -			음. ⁴⁰ 20	Abnormal		
	0			0			
	Dec13/23			Dec13/23 .	Dec13/23 -		Dec13/23 .
				Dec			Dec
	Viscosity @ 100°C			6.0	Soot %		
	Abnormal				Severe		
cSt 1100~C)	14			2.0	Abnormal		
est and the second s	12 - Abnormal			²⁵ 2.0			
	10				m		
	Dec13/23			Dec13/23	Dec13/23		Dec13/23
Laboratory Test Package To discuss this sample report, co Test denoted (*) outside scope of	: WearCheck - C8-11 : WC0877965 I : 02604009 I : 5697094 I : MOB 1 (Additional T contact Customer Servi	Recieved Diagnose Diagnose Tests: Vis Tests: Vis	d : 19 ed : 20 tician : Key sual) 200-268-213 odified, (e) te	lington, ON L Dec 2023 Dec 2023 vin Marson 1. sted at exterr	7L 5H9 2200 UPPEF bal lab.	3 JAMES,, MOUNTAIN T MOU Co jeff.par T:	OF HAMILTON

Contact/Location: Jeff Parr - HAMHAM