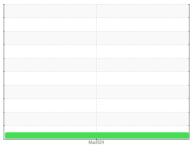


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id HITACHI 1201

Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

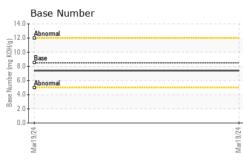
Fluid Condition

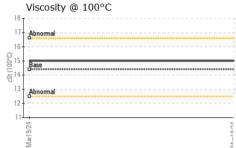
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0783501		
Sample Date		Client Info		19 Mar 2024		
Machine Age	hrs	Client Info		9920		
Oil Age	hrs	Client Info		500		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	J	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 D5185m	>100	25		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm		>20	11		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm		>330	1		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	47		
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	100	81		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	450	35		
Calcium	ppm	ASTM D5185m	3000	2345		
Phosphorus	ppm	ASTM D5185m	1150	921		
Zinc	ppm	ASTM D5185m	1350	1210		
Sulfur	ppm	ASTM D5185m	4250	3744		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9		
Sodium	ppm	ASTM D5185m	>158	<1		
Potassium	ppm	ASTM D5185m	>20	2		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	1		
Nitration	Abs/cm	*ASTM D7624	>20	9.5		
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.1		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2		
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.4		



OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
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		
Free Water	scalar	*Visual		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history
Visc @ 100°C	cSt	ASTM D445	14.4	15.0		
GRAPHS						
Ferrous Alloys						
iron						
20-						
15						
E d						
10-						
5						
4 0	***********	*****************	24			
Mar19/24			Mar19/24			
Non-ferrous Metals	-		2			
¹⁰ T						
copper						
8 - wannesses tin						
6 -						
mqq						
4						
2 -						
0						
0						
Mari 9/24			Mar1 9/24			
 Viscosity @ 100°C				5 N I		
¹⁸ T			14.0	Base Number		
17 Abnormal			12.0	Abnormal		
16-						
© 15			E S S S S S S S S S S S S S S S S S S S	Base		******
			E 0.0			
Base			Ē 6.0	Abnormal		
			2	-		
0 45 14 13 Abnormal			0.01 8.0 6.0 888 Mmper 888 84.0			
13			之 器 4.0 2.0			
13 - Abnormal 12 -			2.0)		
13 - Abnormal			2.0)		



 Unique Number
 : 10954188
 Diagnosed
 : 02 Apr 2024 - Wes Davis
 US 12212

 Certificate 12367
 Test Package
 : CONST (Additional Tests: TBN)
 Contact: BOB GOLDMAN

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 bgoldman@contractorssales.com

 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 T: (518)456-1445

 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)
 F: (518)456-1449

Received

Tested

: 01 Apr 2024

: 02 Apr 2024

Sample No. : WC0783501

Lab Number : 06134723

PO BOX 12010

ALBANY, NY