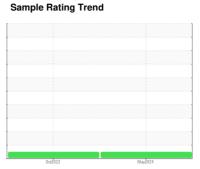


OIL ANALYSIS REPORT







Machine Id
DZ-603
Component
Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- 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

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

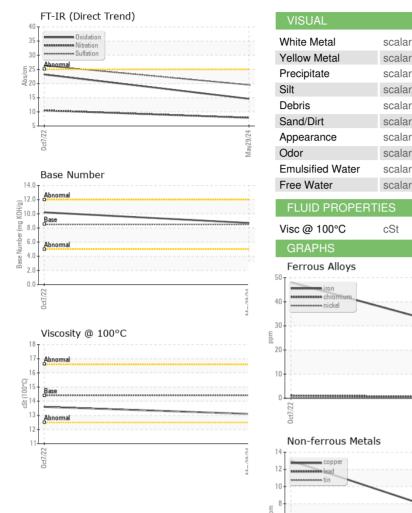
Fluid Condition

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

			0ct2022	May2024		
	4471011					
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0909361	WC0588232	
Sample Date		Client Info		29 May 2024	07 Oct 2022	
Machine Age	hrs	Client Info		2065	1619	
Oil Age	hrs	Client Info		500	500	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	V	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	25	48	
Chromium	ppm	ASTM D5185m	>20	<1	1	
Nickel	ppm	ASTM D5185m	>4	0	0	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	0	
Aluminum	ppm	ASTM D5185m	>20	3	6	
Lead	ppm	ASTM D5185m	>40	0	4	
Copper	ppm	ASTM D5185m	>330	5	13	
Tin	ppm	ASTM D5185m	>15	0	3	
Vanadium Cadmium	ppm	ASTM D5185m ASTM D5185m		0	<1	
	ppm		1: 1: 0			
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	11	22	
Barium	ppm	ASTM D5185m	10	0	0	
Molybdenum	ppm	ASTM D5185m	100	61	42	
Manganese	ppm	ASTM D5185m	450	<1	<1	
Magnesium	ppm	ASTM D5185m	450	838	541	
Calcium	ppm	ASTM D5185m ASTM D5185m	3000	1336 1026	1968 826	
Phosphorus Zinc	ppm	ASTM D5185m	1150 1350	1200	1066	
Sulfur	ppm ppm	ASTM D5185m		3547	3447	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6	13	
Sodium	ppm	ASTM D5185m	>158	2	0	
Potassium	ppm	ASTM D5185m	>20	0	0	
INFRA-RED	1-1-	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.7	1.7	
Nitration	Abs/cm	*ASTM D7624		7.9	10.5	
Sulfation	Abs/.1mm		>30	19.5	26.3	
						الماماما
FLUID DEGRADA		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.6	23.2	
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.7	10.2	

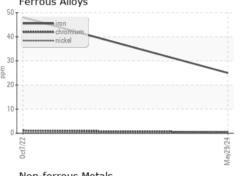


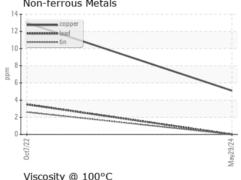
OIL ANALYSIS REPORT

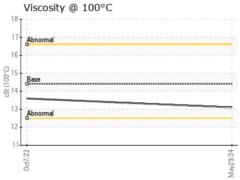


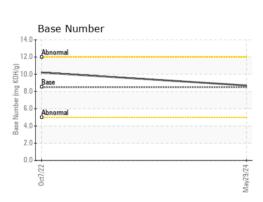
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Free Water	scalar	*Visual		NEG	NEG	
ELLID DDODEDT	150		11 11 0			
FLUID PROPERTIES		method	limit/base	current	history1	history2
Vias @ 100°C	oC+	ACTM DATE	111	121	12.6	

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Visc @ 100°C	cSt	ASTM D445	14.4	13.1	13.6	













Certificate 12367

Laboratory Sample No.

: WC0909361 Lab Number : 06235506 Unique Number : 11124340

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Test Package : FLEET

: 15 Jul 2024 Tested : 15 Jul 2024 Diagnosed : 15 Jul 2024 - Wes Davis

E.C. PACE CO. 1811 HOLLINS RD. ROANOKE, VA US 24012 Contact: EDDIE SECO ESECO@ECPACE.COM

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (540)343-6909 Contact/Location: EDDIE SECO - ECPROA

T: (276)266-5849