

OIL ANALYSIS REPORT

DOOSAN DX140LC NOUNITWC0811305

Diesel Engine Fluid NOT GIVEN (--- 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 condition of the oil is acceptable for the time in service.

Sample Rating Trend	NO
Aug2023	



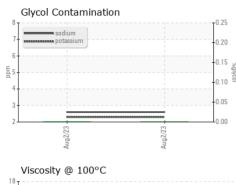
RMAL

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0811305		
Sample Date		Client Info		02 Aug 2023		
Machine Age	hrs	Client Info		1052		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0		
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	15		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>5	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	3		
Lead	ppm	ASTM D5185(m)	>40	11		
Copper	ppm	ASTM D5185(m)	>30	434		
Tin	ppm	ASTM D5185(m)	>15	0		
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)		35		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		28		
Manganese	ppm	ASTM D5185(m)		<1		
Magnesium	ppm	ASTM D5185(m)		338		
Calcium	ppm	ASTM D5185(m)		1827		
Phosphorus	ppm	ASTM D5185(m)		798		
Zinc	ppm	ASTM D5185(m)		936		
Sulfur Lithium	ppm	ASTM D5185(m) ASTM D5185(m)		2378		
CONTAMINANTS	ppm	method		<1		
			limit/base	current -	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	5		
Sodium	ppm	ASTM D5185(m)	00	3		
Potassium	ppm	ASTM D5185(m)	>20	2		
Glycol	%	ASTM D7922*		0.0		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	9.0		
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.5		



Aug2/23

OIL ANALYSIS REPORT



ation	- 0.25	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
	-0.20	Oxidation	Abs/.1mm	ASTM D7414*	>25	21.3		
	-0.15 se	VISUAL		method	limit/base	current	history1	history2
	-0.15 egy	White Metal	scalar	Visual*	NONE	NONE		
	-0.05	Yellow Metal	scalar	Visual*	NONE	NONE		
******	0.00	Precipitate	scalar	Visual*	NONE	NONE		
Aug2/23		Silt Debris	scalar	Visual*	NONE	NONE		
A		Sand/Dirt	scalar scalar	Visual* Visual*	NONE NONE	NONE NONE		
		Appearance	scalar	Visual*	NORML	NORML		
		Odor	scalar	Visual*	NORML	NORML		
		Emulsified Water	scalar	Visual*	>0.1	NEG		
		Free Water	scalar	Visual*		NEG		
		FLUID PROPER	TIES	method	limit/base	current	history1	history2
		Visc @ 100°C	cSt	ASTM D7279(m)		12.9		
	- 12/23	GRAPHS						
	Dr	Iron (ppm)			100	Lead (ppm)		
		150			100	Severe		
	E	100 - Severe			E 60	Abnormal		
		50 Abnormal			^{- 40} 20			
					0			
		Aug2/23			Aug2/23	Aug 2/23		Aug 2/23
		aluminum (ppm)			4	Chromium (p)	4
		50 T			50	T :		
		40 Severe			40	Severe		
		and a second sec			e 30	Abnormal		
		10			10			
		Aug2/23			Aug2/23	Aug2/23		Aua2/23 +
					Aug			Auc
		Copper (ppm)			40	Silicon (ppm)		
		400-			30	Severe		
		300			틆 20	Abnormal		
		200			10			
					0	5 5		3
		Aug2/23			Aug2/23	Aug2/23		Aua 2/23
		Viscosity @ 100°	С			Soot %		
		Abnormal			6.0	Severe		
	10-00	16 14 312 0 0 0 0 0 0 0 0 0 0 0 0 0			₆ و4.0	Abnormal		
		Abnormal			2.0			
		10			0.0			
		Aug2/23			Aug2/23 -	Aug2/23 -		Aug2/23 -
So 17025:2017 Lab Accredited Uniq Laboratory Test	oratory ple No. Number ue Number t Package ple report, c	: WearCheck - C8-1 : WC0811305 : <mark>02604616</mark> : 5697701 : MOB 1 (Additional	Recieved Diagnos Diagnos Tests: Gl	d : 21 ed : 22 tician : We lycol, Visual)	lington, ON L Dec 2023 Dec 2023 s Davis		460 S Contac	GA COLLEGE peedvale Drive Guelph, ON CA N1H 0A8 t: Duane Houle nestogac.on.ca
To discuss this same Test denoted (*) outs	t Package ple report, c side scope	: MOB 1 (Additional contact Customer Serv of accreditation, (m) n otion are based on the	vice at 1-8 nethod mo	300-268-213 odified, (e) te	1. ested at exterr		dhoule@co	

Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

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