

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id MACK 129059-SW8904

Diesel Engine

MOBIL DELVAC ELITE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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 INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0077252		
Sample Date		Client Info		23 May 2023		
Machine Age	hrs	Client Info		8833		
Oil Age	hrs	Client Info		588		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT		method	limit/base	ourropt	history1	history2
				current		
Fuel		WC Method	>3.0	<1.0		
Glycol		WC Method		NEG		
WEAR METALS method			limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	23		
Chromium	ppm	ASTM D5185m	>20	<1		
Nickel	ppm	ASTM D5185m	>5	1		
Titanium	ppm	ASTM D5185m	>2	0		
Silver	ppm	ASTM D5185m	>2	<1		
Aluminum	ppm	ASTM D5185m	>20	9		
Lead	ppm	ASTM D5185m	>40	<1		
Copper	ppm	ASTM D5185m	>330	3		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
			in in Dase			
Boron	ppm	ASTM D5185m		40		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		93		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		621		
Calcium	ppm	ASTM D5185m		1236		
Phosphorus	ppm	ASTM D5185m		715		
Zinc	ppm	ASTM D5185m		869		
Sulfur	ppm	ASTM D5185m		3204		
CONTAMINAN	ITS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	6		
Sodium	ppm	ASTM D5185m		6		
Potassium	ppm	ASTM D5185m	>20	23		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>4	0.3		
Nitration	Abs/cm	*ASTM D7624		12.1		
Sulfation	Abs/.1mm	*ASTM D7624	>30	20.9		
FLUID DEGRA		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6		
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	5.4		

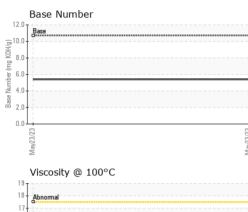


() 10.00 15. 14. Base

13 Abnormal 12 11 May23/23

OIL ANALYSIS REPORT

VISUAL



White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water	scalar scalar scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual *Visual *Visual	NONE NONE NONE NONE NONE NONE NORML	NONE NONE NONE NONE NONE	 	
Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual	NONE NONE NONE	NONE NONE NONE NONE		
Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual	NONE NONE NONE	NONE NONE NONE NONE		
Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual	NONE NONE	NONE NONE NONE		
Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar	*Visual *Visual *Visual	NONE NONE	NONE NONE		
Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar	*Visual *Visual	NONE	NONE		
Appearance Odor Emulsified Water	scalar scalar	*Visual				
Odor Emulsified Water	scalar			NORML		
Emulsified Water						
	scalar		NORML	NORML		
Free Water		*Visual	>0.2	NEG		
	scalar	*Visual		NEG		
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.2	13.7		
GRAPHS						
Ferrous Alloys						
25						
20						
20 nickel						
15-						
10						
5-						
04						
y23/2			y23/2			
			Ma			
	S					
copper						
8 - lead						
6						
4						
2						
			723			
lay23			lay23			
¹⁹				Base Number		
18 Abnormal				Base		
17-			(B)			
-16			-0.8 g			
15 - Base			ຍັ 10-			
14			Mum V			
13 Abnormal						
12-			2.0-			
11			0.0			
23/23			23/23	23/23		
Mayi			Mayi	May		
: GFL0077252 F : 05968242 F	Received	d : 03 (Oct 2023	GFL Envir	1000 S Bu	ort Arthur Hauli r siness Park I Port Arthur, T
	Ferrous Alloys	Ferrous Alloys	Ferrous Alloys	Ferrous Alloys	Ferrous Alloys	Ferrous Alloys



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Submitted By: MICHAEL KAY