

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id **729110** Component **Diesel Engine** Fluid **MOBIL 15W40 (6 GAL)**

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

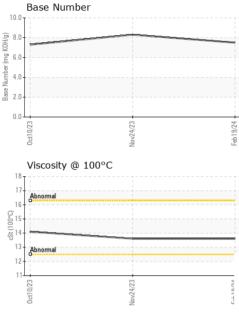
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

			2023	Nov2023 Feb20	24	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0108600	GFL0066171	GFL0066217
Sample Date		Client Info		19 Feb 2024	24 Nov 2023	10 Oct 2023
Machine Age	hrs	Client Info		10543	10080	500
Oil Age	hrs	Client Info		500	500	500
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method		NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
-	0		11 11 11	-	-	
WEAR METAL	5	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	16	18	55
Chromium	ppm	ASTM D5185m	>5	1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	0	1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>30	3	2	3
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>150	<1	<1	2
Tin	ppm		>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		2	2	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		62	58	61
Manganese	ppm	ASTM D5185m		0	0	1
Magnesium	ppm	ASTM D5185m		942	966	921
Calcium	ppm	ASTM D5185m		1076	1145	1087
Phosphorus	ppm	ASTM D5185m		996	974	975
Zinc	ppm	ASTM D5185m		1242	1272	1197
Sulfur	ppm	ASTM D5185m		2876	3016	2770
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	9	6	11
Sodium	ppm	ASTM D5185m	>118	8	6	7
	pp					
Potassium	ppm	ASTM D5185m	>20	2	0	6
INFRA-RED	ppm	ASTM D5185m method	>20 limit/base	2 current	0 history1	
INFRA-RED		method	limit/base	current	history1	history2
INFRA-RED Soot %	%	method *ASTM D7844	limit/base >3	current 0.5	history1 0.4	history2 0.6
INFRA-RED Soot % Nitration	% Abs/cm	method *ASTM D7844 *ASTM D7624	limit/base >3 >20	current 0.5 9.8	history1 0.4 8.7	history2 0.6 11.1
INFRA-RED Soot % Nitration Sulfation	% Abs/cm Abs/.1mm	method *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >3 >20 >30	current 0.5 9.8 20.2	history1 0.4 8.7 19.4	history2 0.6 11.1 21.6
INFRA-RED Soot % Nitration	% Abs/cm Abs/.1mm	method *ASTM D7844 *ASTM D7624	limit/base >3 >20	current 0.5 9.8	history1 0.4 8.7	history2 0.6 11.1
INFRA-RED Soot % Nitration Sulfation	% Abs/cm Abs/.1mm	method *ASTM D7844 *ASTM D7624 *ASTM D7415	limit/base >3 >20 >30	current 0.5 9.8 20.2	history1 0.4 8.7 19.4	history2 0.6 11.1 21.6
INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	% Abs/cm Abs/.1mm DATION	method *ASTM D7844 *ASTM D7624 *ASTM D7415 method	limit/base >3 >20 >30 limit/base	current 0.5 9.8 20.2 current	history1 0.4 8.7 19.4 history1	history2 0.6 11.1 21.6 history2



OIL ANALYSIS REPORT

VISUAL



	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Nov24/23 Feb19/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Pet	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG
	FLUID PROPE	RTIES	method	limit/base	e current	history1	history
	Visc @ 100°C	cSt	ASTM D445		13.6	13.6	14.1
	GRAPHS						
	Ferrous Alloys						
/23 -	50 - iron						
Nov24/23	nickel						
	40						
	툴 30						
	20						
	10-						
	3	723		/24			
	0ct10/23	Nov24/23		Feb19/24			
	Non-ferrous Metal			L.			
	¹⁰ T						
	copper						
	8 - the second s						
	6 -						
	mdd						
	4						
	2						
	23	ł/23		1/24			
	0ct10/23	Nov24/23		Feb19/24			
	Viscosity @ 100°C				Rasa Number		
	¹⁸				Base Number		
	17- Abnormal				8.0		
	16			(B/HC	7.0		
	ହି 15-			Mg Ki	7.0		
	20-15- 0-15- tig 14-			nber (4.0		
	13			se Nur	3.0		
	12 - Abnormal						
	11				1.0		
)/23	4/23 -				1/23 +	
	0ct1C	Nov24		Feb 19/24	0ct10/23	Nov24	
Laboratory Sample No. Lab Number	: WearCheck USA - 50 : GFL0108600 : 06108389 : 10911886	1 Madiso Recei Teste Diagn	ived : 05 ed : 06)38 - Hager W9724 WI AGER CITY US 54		

Submitted By: See also GFL904,A,B,C, 927, 938 - Andy Kane