

OIL ANALYSIS REPORT

Sample Rating Trend





Area (GHB926) 934028 Component Natural Gas Engine

Fluid RDL-3647 (--- 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		GFL0103387	GFL0114507	
Sample Date		Client Info		08 Jul 2024	31 Mar 2024	
Machine Age	hrs	Client Info		1955	1142	
Oil Age	hrs	Client Info		813	0	
Oil Changed		Client Info		Not Changd	Changed	
Sample Status				NORMAL	ABNORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	26	6 4	
Chromium	ppm	ASTM D5185m	>4	1	2	
Nickel	ppm	ASTM D5185m	>2	1	3	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>9	7	16	
Lead	ppm	ASTM D5185m	>30	1	2	
Copper	ppm	ASTM D5185m	>35	8	19	
Tin	ppm	ASTM D5185m	>4	1	2	
Vanadium	ppm	ASTM D5185m		<1	<1	
Cadmium	ppm	ASTM D5185m		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	1	4	
Barium	ppm	ASTM D5185m	5	0	5	
Molybdenum	ppm	ASTM D5185m	50	73	63	
Manganese	ppm	ASTM D5185m	0	3	15	
Magnesium	ppm	ASTM D5185m	560	930	898	
Calcium	ppm	ASTM D5185m	1510	1190	1201	
Phosphorus	ppm	ASTM D5185m	780	934	854	
Zinc	ppm	ASTM D5185m	870	1262	1093	
Sulfur	ppm	ASTM D5185m	2040	2770	3055	
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	8	25	
Sodium	ppm	ASTM D5185m		7	7	
Potassium	ppm	ASTM D5185m	>20	14	45	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0.1	
Nitration	Abs/cm	*ASTM D7624	>20	9.5	12.5	
		****	>30	21.4	25.3	
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	20.0	
Sulfation		*ASIM D/415 method	limit/base	current	history1	history2
FLUID DEGRA	DATION	method	limit/base >25	current	history1	history2



OIL ANALYSIS REPORT

FT-IR (Direct Trend	d)		VISUAL		method	limit/base	current	history1	history2
35 - Oxidation			White Metal	scalar	*Visual	NONE	NONE	NONE	
30 - Sulfation			Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
5 25 - Abnormal			Precipitate	scalar	*Visual	NONE	NONE	NONE	
8 25 Automa 8 20			Silt	scalar	*Visual	NONE	NONE	NONE	
15 -			Debris	scalar	*Visual	NONE	NONE	NONE	
10-	****************************		Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
54 12		24 +			*Visual	NORML	NORML	NORML	
Mar31/24		Jul8/24	Appearance Odor	scalar					
2				scalar	*Visual	NORML	NORML	NORML	
Base Number			Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
12.0 Base			Free Water	scalar	*Visual		NEG	NEG	
Base Base					method	limit/base	current	history1	history2
9.0			Visc @ 100°C	cSt	ASTM D445	15.1	13.1	14.0	
¥.0 -			GRAPHS						
2.0			Ferrous Alloys						
0.0			⁷⁰ iron						
Mar31/24		C BI	60 - new nickel						
Ma		-	50-						
Viscosity @ 100°C			e ⁴⁰						
19 ₁			40 30						
18 Abnormal			20-						
17- G16-			10						
0016 Base 8 14									
ଞ୍ଚି 14						Jul8/24 -			
13 Abnormal			Mar31/24			Jul			
12			– Non-ferrous Meta	ls					
		V C Z	²⁰						
Mar31/24		-	copper						
_			15 - tin						
			톱 10-						
			5-						
			31/24			Jul8/24			
			Mar			Ĩ			
			Viscosity @ 100°	С			Base Number		
			18 - Abnormal			12.0	Base		
			17-			10.0 S	-		
			G ¹⁶			0.8 8.0 6.0 kmpse vnmpse vnmps			
			() 16 00 15 5 14			в ш			
						quin			
			13 Abnormal			4.0			
			Abnormal			2.0			
			12				1.1		
			12			0.0	L.		
			11						8/24
			12 11 +7 12 +7 12 +7 12 +7 			0.0	Mar31/24		Jul8/24
			11						Jul8/24 +
a 1999 573 792 30. ET			: WearCheck USA - 50)1 Madiso		•, NC 27513	Mar31/24	vironmental - 09	
	ANAR S	ample No.	: WearCheck USA - 50 : GFL0103387	Recei	i ved : 10	, NC 27513 Jul 2024	Mar31/24	2699 Cochran	- Atlanta West Industrial Blvd
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Submitted By: Darrell Welch