

OIL ANALYSIS REPORT

Sample Rating Trend



Area (ML7044) Machine Id AUTOCAR 832005

Component Natural Gas Engine Fluid {not provided} (--- 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

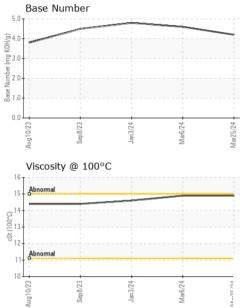
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0109601	GFL0109658	GFL0087454
Sample Date		Client Info		25 Mar 2024	06 Mar 2024	03 Jan 2024
Machine Age	hrs	Client Info		2558	2456	1956
Oil Age	hrs	Client Info		602	500	778
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	20	15	11
Chromium	ppm	ASTM D5185m	>4	2	1	1
Nickel	ppm	ASTM D5185m	>2	2	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	2	2
Lead	ppm	ASTM D5185m	>30	3	1	1
Copper	ppm	ASTM D5185m	>35	3	2	2
Tin	ppm	ASTM D5185m	>4	2	<1	1
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0
			11 1. //			le la transition
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	Method ASTM D5185m	limit/base	current 8	history1 10	nistory2 11
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	8	10	11
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	8 <1	10 0	11 0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 72	10 0 72	11 0 66
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 72 2	10 0 72 1	11 0 66 1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 72 2 693	10 0 72 1 704	11 0 66 1 656
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 72 2 693 1984	10 0 72 1 704 2080	11 0 66 1 656 1754
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 72 2 693 1984 985	10 0 72 1 704 2080 853	11 0 66 1 656 1754 805
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 72 2 693 1984 985 1176 2921	10 0 72 1 704 2080 853 1166	11 0 66 1 656 1754 805 1100
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 72 2 693 1984 985 1176 2921	10 0 72 1 704 2080 853 1166 2797	11 0 66 1 656 1754 805 1100 2582
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >+100	8 <1 72 2 693 1984 985 1176 2921 current	10 0 72 1 704 2080 853 1166 2797 history1	11 0 66 1 656 1754 805 1100 2582 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >+100	8 <1 72 2 693 1984 985 1176 2921 current 8	10 0 72 1 2080 853 1166 2797 history1 5	11 0 66 1 656 1754 805 1100 2582 history2 6
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >+100	8 <1 72 2 693 1984 985 1176 2921 current 8 4 2	10 0 72 1 704 2080 853 1166 2797 history1 5 7	11 0 66 1 656 1754 805 1100 2582 history2 6 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	limit/base >+100 >20	8 <1 72 2 693 1984 985 1176 2921 current 8 4 2	10 0 72 1 704 2080 853 1166 2797 history1 5 7 0	11 0 66 1 656 1754 805 1100 2582 history2 6 7 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base	8 <1 72 2 693 1984 985 1176 2921 current 8 4 2 2 current	10 0 72 1 704 2080 853 1166 2797 history1 5 7 0 0	11 0 66 1 656 1754 805 1100 2582 history2 6 7 <1 kistory2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base	8 <1 72 2 693 1984 985 1176 2921 current 8 4 2 2 current 0	10 0 72 1 704 2080 853 1166 2797 history1 5 7 0 bistory1 0	11 0 66 1 656 1754 805 1100 2582 history2 6 7 <1 kistory2 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base	8 <1 72 2 693 1984 985 1176 2921 current 8 4 2 2 current 0 13.5 26.9	10 0 72 1 704 2080 853 1166 2797 history1 5 7 0 history1 0 history1 0 12.2	11 0 66 1 656 1754 805 1100 2582 history2 6 7 <1 kistory2 0 12.2 23.7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	limit/base >+100 >20 limit/base >20 >30 limit/base	8 <1 72 2 693 1984 985 1176 2921 current 8 4 2 current 0 13.5 26.9 current	10 0 72 1 704 2080 853 1166 2797 history1 5 7 0 history1 0 history1 0 12.2 25.4 history1	11 0 66 1 656 1754 805 1100 2582 history2 6 7 <1 history2 0 12.2 23.7 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base >20 >30 limit/base	8 <1 72 2 693 1984 985 1176 2921 current 8 4 2 2 current 0 13.5 26.9	10 0 72 1 704 2080 853 1166 2797 history1 5 7 0 bistory1 0 12.2 25.4	11 0 66 1 656 1754 805 1100 2582 history2 6 7 <1 kistory2 0 12.2 23.7



OIL ANALYSIS REPORT

VISUAL



boratory mple No.	2: WearCheck USA - 50 : GFL0109601	970Euer D1 Madison Receiv		0.0 Mar25/24	Aug10/23		hi - 331 - Columbu 180 Ada Moore R
	14 (2) 00 13 12			(b)H00 3.0 b)H00 3.0 mper geg geg 1.0) -) -		
	Viscosity @ 100°(W	5.0	Base Num	ber	
	2	Jan3/24	Mar6/24	Mar25/24			
	Non-ferrous Meta		Ma	Mar			
	Sep 8/23	Jan 3/24	Mar6/24	Mar25/24			
1.C~~ N.A	25- 20- 15-			_			
100	GRAPHS Ferrous Alloys						
	Visc @ 100°C		ASTM D445		14.9	14.9	14.6
	Free Water FLUID PROPE		*Visual method	limit/base	NEG current	NEG t history	NEG 1 history2
Mar25/24	Odor Emulsified Water	scalar	*Visual *Visual	NORML >0.1	NORML	NORML	NORML
5/24 -	Sand/Dirt Appearance		*Visual *Visual	NONE NORML	NONE NORML	NONE NORML	NONE NORML
	Silt	scalar	*Visual *Visual	NONE	NONE	NONE	NONE
	Yellow Metal Precipitate		*Visual *Visual	NONE NONE	NONE NONE	NONE NONE	NONE

