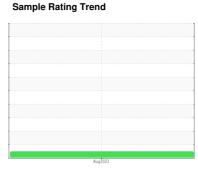


OIL ANALYSIS REPORT

Samp







AUTOCAR 832005

Component
Natural Gas Engine

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

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

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.

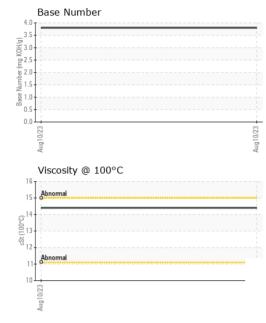
				Aug2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0087541		
Sample Date		Client Info		10 Aug 2023		
Machine Age	hrs	Client Info		973		
Oil Age	hrs	Client Info		373		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
WEAR METAL	.S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	32		
Chromium	ppm	ASTM D5185m	>4	1		
Nickel	ppm	ASTM D5185m	>2	1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>9	5		
Lead	ppm	ASTM D5185m	>30	2		
Copper	ppm	ASTM D5185m	>35	12		
Tin	ppm	ASTM D5185m	>4	2		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 8	history1	history2
	ppm		limit/base			,
Boron		ASTM D5185m	limit/base	8		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	8 <1		
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 69		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 69 8 763 1516		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 69 8 763 1516		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	8 <1 69 8 763 1516 744		
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	limit/base	8 <1 69 8 763 1516		
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 ASTM D5185m	limit/base	8 <1 69 8 763 1516 744		
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 ASTM D5185m		8 <1 69 8 763 1516 744 1018		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >+100	8 <1 69 8 763 1516 744 1018 2961 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm	ASTM D5185m	limit/base >+100	8 <1 69 8 763 1516 744 1018 2961 current 18	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m	limit/base >+100	8 <1 69 8 763 1516 744 1018 2961 current 18	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m	limit/base >+100 >20	8 <1 69 8 763 1516 744 1018 2961 current 18 6 2	history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m	limit/base >+100 >20 limit/base	8 <1 69 8 763 1516 744 1018 2961 current 18 6 2 current	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m	limit/base >+100 >20 limit/base	8 <1 69 8 763 1516 744 1018 2961 current 18 6 2 current 0.1	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185m Method ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D76145	limit/base >+100 >20 limit/base	8 <1 69 8 763 1516 744 1018 2961 current 18 6 2 current 0.1 11.6	history1 history1	history2 history2

3.8

Base Number (BN) mg KOH/g ASTM D2896



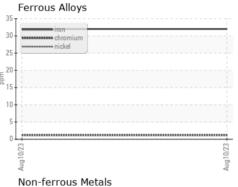
OIL ANALYSIS REPORT



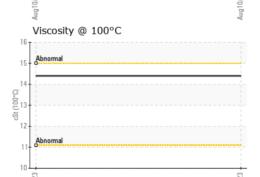
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.1	NEG		
Free Water	scalar	*Visual		NEG		

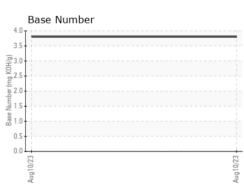
I LOID I NOI	LITTLO	method		Thistory i	HISTOL
Visc @ 100°C	cSt	ASTM D445	14.4		

GRAPHS



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mdd	6 -																															
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	2 -	 			11	 ii	16	ii	11	11		ii	i		***	::	i	ii	11	11	ii			 ;;		 					 	









Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10601948 Test Package : FLEET

: GFL0087541 : 05922001

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received Diagnosed Diagnostician : Wes Davis

: 11 Aug 2023 : 11 Aug 2023 GFL Environmental - 331 - Columbus

180 Ada Moore Rd Columbus, NC US 28722 Contact: Jason Ashley

jashley@gflenv.com

T: F:

To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)