

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id **434026** Component Natural Gas Engine Fluid {not provided} (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

Metal levels are typical for a components first oil change.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

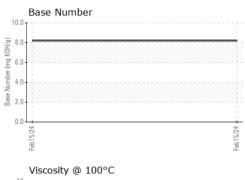
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0108287		
Sample Date		Client Info		15 Feb 2024		
Machine Age	hrs	Client Info		157		
Oil Age	hrs	Client Info		157		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	26		
Chromium	ppm	ASTM D5185m	>4	<1		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>9	3		
Lead	ppm	ASTM D5185m	>30	1		
Copper	ppm	ASTM D5185m	>35	8		
Tin	ppm	ASTM D5185m	>4	1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES						
ADDITIVE5		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	limit/base	current 41	history1	history2
	ppm ppm		limit/base			
Boron Barium		ASTM D5185m	limit/base	41		
Boron	ppm	ASTM D5185m ASTM D5185m	limit/base	41 5		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	41 5 45		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	41 5 45 3		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	41 5 45 3 717		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	41 5 45 3 717 1090		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	41 5 45 3 717 1090 696		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	41 5 45 3 717 1090 696 829	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm 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	41 5 45 3 717 1090 696 829 2209		
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	limit/base	41 5 45 3 717 1090 696 829 2209 current	 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >+100	41 5 45 3 717 1090 696 829 2209 2209 current 82	 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >+100	41 5 45 3 717 1090 696 829 2209 2209 current 82 5	 history1	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20	41 5 45 3 717 1090 696 829 2209 current 82 82 5 12	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base	41 5 45 3 717 1090 696 829 2209 2209 current 82 5 12 12 current	 history1 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base	41 5 45 3 717 1090 696 829 2209 2209 current 82 5 12 2 current 0.1	 history1 history1 history1	 history2 history2
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 >20	41 5 45 3 717 1090 696 829 2209 current 82 5 12 5 12 0.1 8.4	 history1 history1 	 history2 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 D7844 *ASTM D7844 *ASTM D7844	limit/base >+100 >20 limit/base >20 >30 limit/base	41 5 45 3 717 1090 696 829 2209 current 82 5 12 current 0.1 8.4 18.9 current	 history1 history1 history1	 history2 history2 history2 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	Imit/base >+100 >20 Imit/base >20 S20 S20 S20	41 5 45 3 717 1090 696 829 2209 current 82 5 12 5 12 0.1 8.4 18.9	 history1 history1 history1 history1	 history2 history2 history2 history2 history2



OIL ANALYSIS REPORT

VISUAL





	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
	Debris		*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
24 -		scalar					
Feb 15/24	Appearance	scalar	*Visual	NORML	NORML		
L.	Odor	scalar	*Visual	NORML	NORML		
°C	Emulsified Water	scalar	*Visual	>0.1	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445		11.4		
	GRAPHS						
	Ferrous Alloys						
	30 iron						
с.Н. 1 С. 17 М	25						
Eak	20						
	톱 15						
	10-						
	5						
	24 0						
	Feb 15/24			Feb15/24			
	Non-ferrous Metal	c					
	¹⁰ T						
	copper						
	8 - tin						
	6						
	шdd						
	4						
	2						
	2	****					
	0						
	Feb 15/24			Feb 15/24			
				꾿			
	Viscosity @ 100°C	2			Base Number		
				9.0	T ;		
	15 - Abnormal			8.0	-		
	14			(B7.0 HOX 6.0	+		
	00°C)			2 0.0 E 5 0			
	csst (100°C)			5.0 9 4.0 3.0			
	12			N 3.0			
	Abnormal						
				1.0			
	104			0.0	24 1		24 +
	Feb 15/24			Feb15/24	Feb 15/24		Feb 15/24
Laboratory	: WearCheck USA - 50				GFL Environ		dericksburg Hauling
Sample No.	: GFL0108287 r : 06091574	Receiv Testeo		Feb 2024 Feb 2024			54 Houser Drive dericksburg, VA
ISONCC (7025	r : 10884427	Diagn		Feb 2024	es Davis	FIEC	US 22408
Certificate L2367 Test Package		Lingh				Contact:	WILLIAM MILO
To discuss this sample repor	t, contact Customer Servi						ilo@gflenv.com
* - Denotes test methods that							T:
Statements of conformity to a	enerifications are based o	n the cim	nla acconta	nce decision (rule (ICGM 106.0	2012)	E٠

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

Submitted By: TECHNICIAN ACCOUNT

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