

OIL ANALYSIS REPORT

Sample Rating Trend



Area (43480UA) 834028

Natural Gas Engine Fluid

{not provided} (--- 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

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

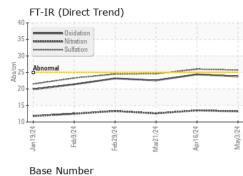
Fluid Condition

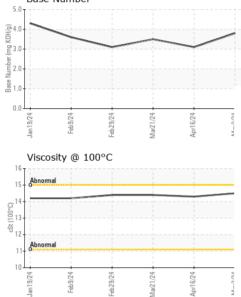
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0111907	GFL0116571	GFL0111815
Sample Date		Client Info		03 May 2024	16 Apr 2024	21 Mar 2024
Machine Age	hrs	Client Info		1149	1012	841
Oil Age	hrs	Client Info		978	171	841
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS	6	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	49	5 4	43
Chromium	ppm	ASTM D5185m	>4	1	2	<1
Nickel	ppm	ASTM D5185m	>2	2	3	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>9	4	4	3
Lead	ppm	ASTM D5185m	>30	3	4	1
Copper	ppm	ASTM D5185m	>35	18	20	15
Tin	ppm	ASTM D5185m	>4	3	3	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		0	1	0
ADDITIVES		method				history2
Boron	ppm	ASTM D5185m		6	3	7
Barium	ppm ppm	ASTM D5185m ASTM D5185m			3 4	
		ASTM D5185m		6	3	7 2 53
Barium	ppm	ASTM D5185m ASTM D5185m		6 3 60 13	3 4	7 2 53 12
Barium Molybdenum Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 3 60	3 4 58 15 789	7 2 53 12 786
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 3 60 13	3 4 58 15 789 1334	7 2 53 12 786 1259
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 3 60 13 789 1410 807	3 4 58 15 789 1334 802	7 2 53 12 786
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 3 60 13 789 1410 807 998	3 4 58 15 789 1334 802 957	7 2 53 12 786 1259
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		6 3 60 13 789 1410 807	3 4 58 15 789 1334 802	7 2 53 12 786 1259 667
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	6 3 60 13 789 1410 807 998	3 4 58 15 789 1334 802 957	7 2 53 12 786 1259 667 907
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	6 3 60 13 789 1410 807 998 2526	3 4 58 15 789 1334 802 957 2650	7 2 53 12 786 1259 667 907 2492
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon	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	6 3 60 13 789 1410 807 998 2526 current	3 4 58 15 789 1334 802 957 2650 history1	7 2 53 12 786 1259 667 907 2492 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >+100	6 3 60 13 789 1410 807 998 2526 2526 current 26	3 4 58 15 789 1334 802 957 2650 history1 31	7 2 53 12 786 1259 667 907 2492 history2 27
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 method ASTM D5185m	limit/base >+100	6 3 60 13 789 1410 807 998 2526 <u>current</u> 26 5	3 4 58 15 789 1334 802 957 2650 history1 31 5	7 2 53 12 786 1259 667 907 2492 history2 27 6
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m	limit/base >+100 >20	6 3 60 13 789 1410 807 998 2526 current 26 5 4	3 4 58 15 789 1334 802 957 2650 history1 31 5 4	7 2 53 12 786 1259 667 907 2492 history2 27 6 22
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	6 3 60 13 789 1410 807 998 2526 <u>current</u> 26 5 4 4	3 4 58 15 789 1334 802 957 2650 history1 31 5 4 4 history1	7 2 53 12 786 1259 667 907 2492 history2 27 6 22 22 history2
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	6 3 60 13 789 1410 807 998 2526 current 26 5 4 4 current 0	3 4 58 15 789 1334 802 957 2650 history1 31 5 4 history1 0	7 2 53 12 786 1259 667 907 2492 history2 27 6 22 27 6 22 27 6 22 27
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	6 3 60 13 789 1410 807 998 2526 current 26 5 4 current 0 13.2	3 4 58 15 789 1334 802 957 2650 history1 31 5 4 4 history1 0 13.5	7 2 53 12 786 1259 667 907 2492 history2 27 6 22 27 6 22 history2 0 12.6
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	Iimit/base >+100 >20 Iimit/base >20 >30	6 3 60 13 789 1410 807 998 2526 <u>current</u> 26 5 4 <u>current</u> 0 13.2 25.7	3 4 58 15 789 1334 802 957 2650 history1 31 5 4 4 history1 0 13.5 26.0	7 2 53 12 786 1259 667 907 2492 history2 27 6 22 history2 0 12.6 24.6



OIL ANALYSIS REPORT





	VISUAL		method	limit/base	current	history1	history2	
	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	
Apr16/24 . May3/24 .	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Apri May	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	NEG	
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2	
	Visc @ 100°C	cSt	ASTM D445		14.5	14.3	14.4	
	GRAPHS							
	Ferrous Alloys							
724	50 - iron		~					
Apr16/24 млл.л.	nickel							
	40							
	톱 30 -							
	20-							
	10-							
			Contractorian Cont	lasthees				
			6/24 -	May3/24 -				
	Jan 19/24 Feb 9/24	Mar21/24	Apr16/24	May				
	Non-ferrous Meta	ls						
Apr16/24 ^^^^	20 copper		1					
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	톱 10-							
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	second and a second		Carrent Street Street Street					
	24+0 24+0	/24	/24 -	/24				
	Jan 19,24 Feb9/24	Mar21/24	Apr16/24	May3/24				
	Viscosity @ 100°C				Base Number			
	16 Abnormal			4.5	,			
	15 - Abnormal			4.0 			/	
	14- G			(5)3.5 (7)40 (7)5 (7)5 (7)5 (7)5 (7)5 (7)5 (7)5 (7)5)		\checkmark	
	(J.001) 13- 75			ຍິ 2.5 ສ				
				4 2.0)			
	Abnormal			a 1.5 82 1 ()			
	11-			0.5				
	10	4				24	24	
	Jan 19,24 Feb9,24	Mar21/24	Apr16/24	May3/24	Jan 19/24 Feb 9/24	Feb29/24 Mar21/24	Apr16/24 Mav3/24	
		2	Ä	~	÷۲ –	ŭ Z	∢ 2	
aboratory	: WearCheck USA - 50	1 Madiso	on Ave., Carv	, NC 27513	GFL Envir	onmental - 652 - Fred	lericksburg Haulin	
Sample No.	: GFL0111907	Rece	ived : 09	9 May 2024	-	1095	4 Houser Drive	
	: 06174937	Teste) May 2024	1 D'	Frec	lericksburg, VA US 22408	
nique Number est Package	: 11020990 · ELEET							
	. CLECI	vice at 1-8	200-237-136	2			lo@aflenv.con	

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)

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Certificate L2367

Submitted By: TECHNICIAN ACCOUNT

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