

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id 834029

Natural Gas Engine

Fluid DIESEL ENGINE OIL SAE 40 (--- 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.

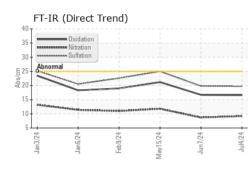
Fluid Condition

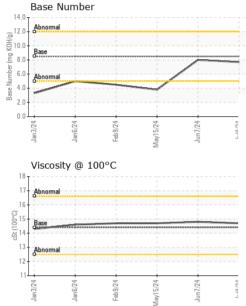
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0127213	GFL0122090	GFL0116614
Sample Date		Client Info		04 Jul 2024	07 Jun 2024	15 May 2024
Machine Age	hrs	Client Info		2379	2354	2209
Oil Age	hrs	Client Info		2234	145	2209
Oil Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	16	9	22
Chromium	ppm	ASTM D5185m	>4	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	1	0	0
Titanium	ppm	ASTM D5185m		1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>9	3	2	2
Lead	ppm	ASTM D5185m	>30	<1	0	0
Copper	ppm	ASTM D5185m	>35	2	1	5
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method				history2
ADDITIVES		methou	mmbase	Current		motory
Boron	ppm	ASTM D5185m	250	22	31	4
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	250 10	22 0	31 0	4 <1
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	250	22 0 57	31 0 58	4 <1 59
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100	22 0 57 2	31 0 58 0	4 <1 59 2
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450	22 0 57 2 602	31 0 58 0 656	4 <1 59 2 610
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000	22 0 57 2 602 1652	31 0 58 0 656 1785	4 <1 59 2 610 1712
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	250 10 100 450 3000 1150	22 0 57 2 602 1652 814	31 0 58 0 656 1785 942	4 <1 59 2 610 1712 758
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350	22 0 57 2 602 1652 814 1029	31 0 58 0 656 1785 942 1127	4 <1 59 2 610 1712 758 1000
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	250 10 100 450 3000 1150 1350 4250	22 0 57 2 602 1652 814 1029 2550	31 0 58 0 656 1785 942 1127 3368	4 <1 59 2 610 1712 758 1000 2708
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	250 10 100 450 3000 1150 1350 4250	22 0 57 2 602 1652 814 1029 2550 current	31 0 58 0 656 1785 942 1127 3368 history1	4 <1 59 2 610 1712 758 1000 2708 history2
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	250 10 100 450 3000 1150 1350 4250 limit/base >+100	22 0 57 2 602 1652 814 1029 2550 current 6	31 0 58 0 656 1785 942 1127 3368 history1 5	4 <1 59 2 610 1712 758 1000 2708 history2 7
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 ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >+100 >216	22 0 57 2 602 1652 814 1029 2550 current	31 0 58 0 656 1785 942 1127 3368 history1 5 6	4 <1 59 2 610 1712 758 1000 2708 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >+100 >216	22 0 57 2 602 1652 814 1029 2550 current 6	31 0 58 0 656 1785 942 1127 3368 history1 5	4 <1 59 2 610 1712 758 1000 2708 history2 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >+100 >216	22 0 57 2 602 1652 814 1029 2550 current 6 7 3 3	31 0 58 0 656 1785 942 1127 3368 history1 5 6 2 2 history1	4 <1 59 2 610 1712 758 1000 2708 history2 7 10 1 1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >216 >20 limit/base	22 0 57 2 602 1652 814 1029 2550 current 6 7 3 2 5 0	31 0 58 0 656 1785 942 1127 3368 history1 5 6 2 2 history1 0	4 <1 59 2 610 1712 758 1000 2708 history2 7 10 1 history2 0.1
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	250 10 100 450 3000 1150 1350 4250 limit/base >216 >20 limit/base	22 0 57 2 602 1652 814 1029 2550 current 6 7 3 3	31 0 58 0 656 1785 942 1127 3368 history1 5 6 2 2 history1	4 <1 59 2 610 1712 758 1000 2708 history2 7 10 1 1 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >216 >20 limit/base	22 0 57 2 602 1652 814 1029 2550 current 6 7 3 2 5 0	31 0 58 0 656 1785 942 1127 3368 history1 5 6 2 2 history1 0	4 <1 59 2 610 1712 758 1000 2708 history2 7 10 1 history2 0.1
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 t ppm ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 limit/base >+100 >216 >20 limit/base	22 0 57 2 602 1652 814 1029 2550 <i>current</i> 6 7 3 <i>current</i> 0 9.2	31 0 58 0 656 1785 942 1127 3368 history1 5 6 2 2 history1 0 8.7	4 <1 59 2 610 1712 758 1000 2708 history2 7 10 1 history2 0.1 11.8
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 t ppm ppm	ASTM D5185m ASTM D5185m	250 10 100 450 3000 1150 1350 4250 Imit/base >216 >20 Imit/base >20 >20 >30	22 0 57 2 602 1652 814 1029 2550 current 6 7 3 3 current 0 9.2 19.7	31 0 58 0 656 1785 942 1127 3368 history1 5 6 2 2 history1 0 8.7 19.8	4 <1 59 2 610 1712 758 1000 2708 history2 7 10 1 history2 0.1 11.8 25.0

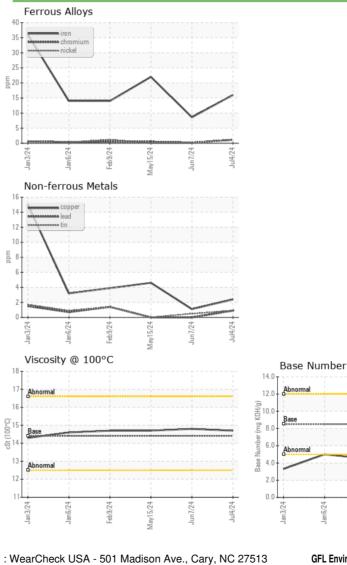


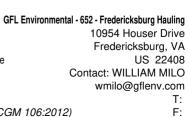
OIL ANALYSIS REPORT





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
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
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	14.4	14.7	14.8	14.7
GRAPHS						





May15/24

Feb 9/24



 Unique Number
 : 11113409
 Diagnosed
 : 09 Jul 2024 - Don Baldridge

 Certificate L2367
 Test Package
 : FLEET
 CC

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
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 * - 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)

Received

Tested

: 08 Jul 2024

: 09 Jul 2024

Report Id: GFL652 [WUSCAR] 06229916 (Generated: 07/09/2024 18:37:19) Rev: 1

Laboratory

Sample No.

Lab Number : 06229916

: GFL0127213

Submitted By: TECHNICIAN ACCOUNT

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