

OIL ANALYSIS REPORT

Sample Rating Trend





Component Natural Gas Engine Fluid 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 oil.

Fluid Condition

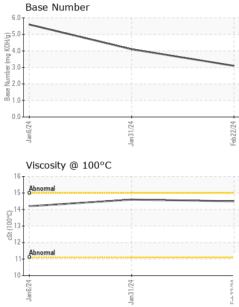
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		Jan	2024	Jan2024 Feb20	74	
SAMPLE INFOR	MATION		limit/base	current	history1	history2
Sample Number		Client Info		GFL0111846	GFL0108264	GFL0108327
Sample Date		Client Info		22 Feb 2024	31 Jan 2024	06 Jan 2024
Machine Age	hrs	Client Info		585	418	249
Oil Age	hrs	Client Info		585	418	249
Oil Changed		Client Info		Not Changd	Not Changd	N/A
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	38	46	54
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	1	1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m		0	5	5
Lead	ppm	ASTM D5185m	>30	1	<1	<1
Copper	ppm	ASTM D5185m	>35	4	18	19
Tin	ppm	ASTM D5185m	>4	<1	1	2
Antimony	ppm	ASTM D5185m	~7	0		
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		-		0
	ррпі		Prosite file and a	0	0	
ADDITIVES	ррш	method	limit/base	current	history1	history2
	ppm		limit/base		history1 10	history2 17
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron Barium	ppm	method ASTM D5185m	limit/base	current 13	history1 10	history2 17
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 13 0	history1 10 3	history2 17 3
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 13 0 2	history1 10 3 56	history2 17 3 54
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 13 0 2 <1	history1 10 3 56 10	history2 17 3 54 12
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 13 0 2 <1 54	history1 10 3 56 10 696	history2 17 3 54 12 786
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 13 0 2 <1 54 2933	history1 10 3 56 10 696 1146	history2 17 3 54 12 786 1021
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 13 0 2 <1 54 2933 951	history1 10 3 56 10 696 1146 675	history2 17 3 54 12 786 1021 809
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 13 0 2 <1 54 2933 951 1136	history1 10 3 56 10 696 1146 675 917	history2 17 3 54 12 786 1021 809 933
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		Current 13 0 2 <1 54 2933 951 1136 5006	history1 10 3 56 10 696 1146 675 917 2310	history2 17 3 54 12 786 1021 809 933 2344
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	Current 13 0 2 <1 54 2933 951 1136 5006 Current	history1 10 3 56 10 696 1146 675 917 2310 history1	history2 17 3 54 12 786 1021 809 933 2344 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185m	limit/base >+100	Current 13 0 2 <1 54 2933 951 1136 5006 Current 2	history1 10 3 56 10 696 1146 675 917 2310 history1 28	history2 17 3 54 12 786 1021 809 933 2344 history2 34
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >+100	current 13 0 2 <1 54 2933 951 1136 5006 current 2 3	history1 10 3 56 10 696 1146 675 917 2310 history1 28 <1	history2 17 3 54 12 786 1021 809 933 2344 history2 34 5
ADDITIVES 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	method ASTM D5185m	limit/base >+100 >20	Current 13 0 2 <1 54 2933 951 1136 5006 Current 2 3 <1	history1 10 3 56 10 696 1146 675 917 2310 history1 28 <1	history2 17 3 54 12 786 1021 809 933 2344 history2 34 5 11
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS	method ASTM D5185m	limit/base >+100 >20 limit/base	current 13 0 2 <1 54 2933 951 1136 5006 current 2 3 <1 current	history1 10 3 56 10 696 1146 675 917 2310 history1 28 <1 14 history1	history2 17 3 54 12 786 1021 809 933 2344 history2 34 5 11 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base >+100 >20 limit/base	current 13 0 2 <1 54 2933 951 1136 5006 current 2 3 <1 current 0	history1 10 3 56 10 696 1146 675 917 2310 history1 28 <1 14 history1 0	history2 17 3 54 12 786 1021 809 933 2344 history2 34 5 11 history2 0
ADDITIVES 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	method ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base >20	current 13 0 2 <1 54 2933 951 1136 5006 current 2 3 <1 current 0 11.9	history1 10 3 56 10 696 1146 675 917 2310 history1 28 <1 14 history1 0 12.0	history2 17 3 54 12 786 1021 809 933 2344 history2 34 5 11 history2 0 11.4
ADDITIVES 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	method ASTM D5185m ASTM D5185m	limit/base >+100 >20 limit/base ≥20 s20 >30	current 13 0 2 <1 54 2933 951 1136 5006 current 2 3 <1 current 0 11.9 24.5	history1 10 3 56 10 696 1146 675 917 2310 history1 28 <1 14 history1 0 12.0 21.9	history2 17 3 54 12 786 1021 809 933 2344 history2 34 5 11 history2 0 11.4 20.5
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAM	ppm ppm ppm ppm ppm ppm ppm ppm ppm TS TS ppm ppm ppm TS	method ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415 method	limit/base >+100 >20 limit/base >20 >30 limit/base	Current 13 0 2 <1 54 2933 951 1136 5006 Current 2 3 <1 Current 0 11.9 24.5 Current	history1 10 3 56 10 696 1146 675 917 2310 history1 28 <1	history2 17 3 54 12 786 1021 809 933 2344 history2 34 5 11 history2 0 11.4 20.5 history2



OIL ANALYSIS REPORT

VISUAL



				limit/base	current		
	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
Jan 31/24 Feb 22/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Janj	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	ERTIES	method	limit/base	current	history1	history2
	Visc @ 100°C	cSt	ASTM D445		14.5	14.6	14.2
	GRAPHS						
	Ferrous Alloys						
24	iron						
Jan 31/24 	50 - nickel						
, _	40-						
	틆 30 -						
	20						
	10						
	10						
	5 1	24		54			
	Jan6/24	Jan 31/24		Feb22/24			
		,		Ψ.			
	Non-ferrous Meta	IS					
	copper	-					
	15-						
	<u>특</u> 10						
	톨 10 -						
	툍 10- 5-						
	5-						
	5-	4					
	5-	n31/24		b22/24			
	5	Jan31/24		Feb22/24			
	Viscosity @ 100°C				Base Number		
	Viscosity @ 100°0			Feb222/24			
	Viscosity @ 100°C			6.0			
	Viscosity @ 100°C			6.0			
	Viscosity @ 100°C			6.0			
	Viscosity @ 100°0			6.0			
	Viscosity @ 100°0			6.0			
	Viscosity @ 100°0			6.0			
	Viscosity @ 100°0			6.0 5.0 (b) HOX HOX Hox Hox Hox Hox Hox Hox Hox Hox Hox Hox Hox Hox Hox			
	Viscosity @ 100°0	C		6.0 5.0 (0)HOX 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9			
	Viscosity @ 100°0			6.0 5.0 (0)H 4.0 Jun 3.0 aquiny seeg 1.0		Jan31/24	
	Viscosity @ 100°C	Jan31/24		0.0 5.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9	Janb/24	Jan31/24	
Laboratory	Viscosity @ 100°C			6.0 5.0 (0)HOX BUIL aquiny see 1.0 6, NC 27513	Janb/24	PCIEuron	
Sample No.	Viscosity @ 100°C	b)1 Madiso Recei	ved : 26	6.0 5.0 (0)(A)(0) Bull Ja 3.0 Bull Ja 3.0 Bull Ja 3.0 1.0 0.0 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Janb/24	PCIEuron ronmental - 652 - Free 1095	64 Houser Dri
Sample No. Lab Number	Viscosity @ 100°C	01 Madiso Recei Teste	ved : 26 d : 27	6.0 5.0 (0)(M) 4.0 bul 3.0 bul 3.0 1.0 6 7 Feb 2024 7 Feb 2024	6FL Envir	PCIEuron ronmental - 652 - Free 1095	dericksburg Hauli 54 Houser Driv dericksburg, V
Sample No.	Viscosity @ 100°C	b)1 Madiso Recei	ved : 26 d : 27	6.0 5.0 (0)(A)(0) Bull Ja 3.0 Bull Ja 3.0 Bull Ja 3.0 1.0 0.0 7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	6FL Envir	ronmental - 652 - Free 1095 Free	dericksburg Hauli i4 Houser Driv dericksburg, V US 2240 WILLIAM MIL

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Submitted By: TECHNICIAN ACCOUNT