

## **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL



Machine Id 834055 Component Natural Gas Engine Fluid NOT GIVEN (--- GAL)

### 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.

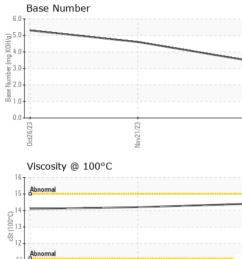
		0ct	2023	Nov2023 Nov20	23	
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0102556	GFL0098585	GFL0098653
Sample Date		Client Info		29 Nov 2023	21 Nov 2023	26 Oct 2023
Machine Age	hrs	Client Info		585	532	393
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	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	47	48	42
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	2	1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>9	4	2	3
Lead	ppm	ASTM D5185m	>30	<1	1	2
Copper	ppm	ASTM D5185m	>35	21	24	19
Tin	ppm	ASTM D5185m	>4	1	2	2
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		6	8	15
Barium	ppm	ASTM D5185m		0	0	3
Molybdenum	ppm	ASTM D5185m		51	53	50
Manganese	ppm	ASTM D5185m		12	14	12
Magnesium	ppm	ASTM D5185m		740	772	791
Calcium	ppm	ASTM D5185m		1127	1216	1159
Phosphorus	ppm	ASTM D5185m		632	613	685
Zinc	ppm	ASTM D5185m		869	892	929
Sulfur	ppm	ASTM D5185m		2324	2372	2411
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	> 100	32	37	32
	ppin	AOTIVI DOTOSITI	24100	32	37	02
Sodium	ppm	ASTM D5185m	>+100	4	<1	3
Sodium Potassium						
	ppm	ASTM D5185m		4 4	<1	3
Potassium	ppm	ASTM D5185m ASTM D5185m	>20	4 4	<1 3	3 3
Potassium INFRA-RED	ppm ppm	ASTM D5185m ASTM D5185m method	>20 limit/base	4 4 current	<1 3 history1	3 3 history2
Potassium INFRA-RED Soot %	ppm ppm %	ASTM D5185m ASTM D5185m method *ASTM D7844	>20 limit/base	4 4 current 0	<1 3 history1 0	3 3 history2 0
Potassium INFRA-RED Soot % Nitration	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824 *ASTM D7624	>20 limit/base	4 4 current 0 12.6 23.1	<1 3 history1 0 12.7	3 3 history2 0 11.9
Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7824 *ASTM D7624	>20 limit/base >20 >30	4 4 current 0 12.6 23.1	<1 3 history1 0 12.7 22.5	3 3 history2 0 11.9 20.9
Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAE	ppm ppm % Abs/cm Abs/.1mm DATION	ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415 method	>20 limit/base >20 >30 limit/base	4 4 current 0 12.6 23.1 current	<1 3 history1 0 12.7 22.5 history1	3 3 history2 0 11.9 20.9 history2



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0ct26/23

# **OIL ANALYSIS REPORT**



Nov21/23

	VISUAL		method	limit/base	current	history1	history
	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
					NONE		
	Sand/Dirt	scalar	*Visual	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 PROPI		method	limit/base	current	history1	history
1	Visc @ 100°C	cSt	ASTM D445		14.4	14.2	14.1
	GRAPHS Ferrous Alloys						
Ę							
4	+0 - Iron chromium						
mdd	30 -						
	20						
1	10						
	0ct26/23	Vov21/23		Nov29/23			
	0ct2	Nov2		Nov2			
	Non-ferrous Meta	als					
2	<sup>25</sup> T						
	copper						
4	20 - management tin						
	15 -						
bpm							
1	10-						
	5-						
			A CONTRACTOR OF THE OWNER OF THE				
		23		23			
		17		76			
	lct26/	012		0V25			
	0001 @	Nov21/23		Nov29/23			
1	Viscosity @ 100°	-		2	Base Number		
	Viscosity @ 100°	-		6.0	Base Number		
	Viscosity @ 100°	-		6.0	Base Number		
1	Viscosity @ 100°	-		6.0	Base Number		
1	Viscosity @ 100°	-		6.0	Base Number		
1	Viscosity @ 100°	-		6.0	Base Number		
cSt (100°C)	Viscosity @ 100°	-		6.0	Base Number		
cSt (100°C)	Viscosity @ 100°	-		6.0	Base Number		
cSt (100°C)	Viscosity @ 100°	-		6.0 5.0 (0)HOX Duu Ja 3.0 see 1.0	Base Number		
cSt (100°C)	Viscosity @ 100°	c		6.0 (b)HOX bu a-quinny ase 828 1.0 0.0		53	
cSt (100°C)	Viscosity @ 100°	c		6.0 (b)HOX bu a-quinny ase 828 1.0 0.0	Base Number	Nov21/23	
cSt (100°C)	Viscosity @ 100°	C		6.0 5.0 (0)HOX full aquiny see 1.0 EZ/6Z/VOV	0ct26/23	Nov21/23	
1 cst (100°C)	Viscosity @ 100°	C E2112/09/ 501 Madis		6.0 5.0 (0)HOX full aquiny squiny 2.0 1.0 5.0 5.0 0 HOX full squiny 2.0 1.0 0.0 5.0 0 HOX full squiny 2.0 1.0 1.0 1.0 1.0 1.0 HOX full squiny 2.0 1.0 HOX full squiny 2.0 1.0 HOX full squiny 2.0 HOX full squin f full squin full squin full squin full squin full squin f f f f full f full squin f f full squin f f f f f f f full f f f f f	0ct26/23	vironmental - 83	
1 cst (100-c)	Viscosity @ 100°	C EZI[2200] 501 Madis Received	<b>i</b> :11	6.0 5.0 00H00X 4.0 bu 33.0 2.0 1.0 cC/cconv rry, NC 27513 Dec 2023	0ct26/23	/ironmental - 83 22820 S S	state Route 2
cSt (100°C)	Viscosity @ 100°	C EZIZZAN 501 Madis Received Diagnose	l :11 ed :13	E	0ct26/23	/ironmental - 83 22820 S S	State Route 2 arrisonville, I
1 cst (100°C)	Viscosity @ 100°	C EZI[2200] 501 Madis Received	l :11 ed :13	6.0 5.0 00H00X 4.0 bu 33.0 2.0 1.0 cC/cconv rry, NC 27513 Dec 2023	0ct26/23	/ironmental - 83 22820 S S	State Route 2 arrisonville, I US 647
r cst (100°C)	Viscosity @ 100°	C EZI 2009 501 Madia Received Diagnost	ad :11 ad :13 ician :We	6.0 5.0 100,000 4.0 100,000 4.0 100,0000 100,0000 100,0000 100,0000 100,0000 100,0000 100,0000 100,0000 100,0000 100,00000000	0ct26/23	/ironmental - 83 22820 S S Ha	State Route 2 arrisonville, 1 US 64 AN SWANS



To discuss this sa \* - Denotes test n Statements of con IJ ' (·

Certificate L2367

Contact/Location: BRYAN SWANSON - GFL837