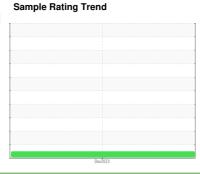


# **OIL ANALYSIS REPORT**







Machine Id 2361 Component **Natural Gas Engine** NOT GIVEN (--- GAL)

## 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.

Metal levels are typical for a new component breaking in.

## Contamination

There is no indication of any contamination in the

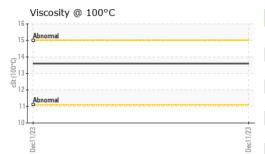
## **Fluid Condition**

The condition of the oil is acceptable for the time in service.

				Dec2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
	I/(IIIOIV	Client Info	mmoasc	WC0878118		
Sample Number Sample Date		Client Info		11 Dec 2023		
Machine Age	kms	Client Info		14873		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	47		
Chromium	ppm	ASTM D5185(m)	>4	<1		
Nickel	ppm	ASTM D5185(m)	>2	1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	<1		
Aluminum	ppm	ASTM D5185(m)	>9	4		
Lead	ppm	ASTM D5185(m)	>30	2		
Copper	ppm	ASTM D5185(m)	>35	19		
Tin	ppm	ASTM D5185(m)	>4	1		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		10		
Barium	ppm	ASTM D5185(m)		2		
Molybdenum	ppm	ASTM D5185(m)		94		
Manganese	ppm	ASTM D5185(m)		14		
Magnesium	ppm	ASTM D5185(m)		598		
Calcium	ppm	ASTM D5185(m)		1169		
Phosphorus	ppm	ASTM D5185(m)		597		
Zinc	ppm	ASTM D5185(m)		702		
Sulfur	ppm	ASTM D5185(m)		1818		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	44		
Sodium	ppm	ASTM D5185(m)		4		
Potassium	ppm	ASTM D5185(m)	>20	2		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0		
Nitration	Abs/cm	ASTM D7624*	>20	9.4		
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.2		



# **OIL ANALYSIS REPORT**



VISUAL		method				history2
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
<b>Emulsified Water</b>	scalar	Visual*	>0.1	NEG		
Free Water	scalar	Visual*		NEG		
	اه م مالم مص	lineit/lenen		la la tament	la i a ta uu . O	
FLUID PROPERTIES		method				history2

FLUID PHOPEN	IIES	method	IIIIII/base	current	riistory i	History2
Visc @ 100°C	cSt	ASTM D7279(m)		13.6		
GRAPHS						
Iron (ppm)				Lead (ppm)		
Severe			50	Severe		
0			40-			
Abnormal 40			돌.30- 20-	Abnormal		
20			10-	1		
0 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				53		53
Dec11/23			Dec11/23	Dec11/23		Dec11/23
Aluminum (ppm)				Chromium (pp	om)	
20			8-	0		
15 + Severe			6-	Severe		
Abnormal Abnormal			₩d4-	Abnormal		
5-			2.			
23 0			- 53	23		23
Dec11/23			Dec11/23	Dec11/23		Dec11/23
Copper (ppm)				Silicon (ppm)		
Severe			200	Severe		
60			150-	Ab		
Abnormal			톮100-	Abnormal		
20			50-			
23 40				1/23		
Dec11/23			Dec11/23	Dec11/		Dec11/23
Viscosity @ 100°	С			Additives		
16 Abnormal			1400	calcium	1	
			1200- 1000- 800-	************ zinc		
© 14 © 00 13 % 12			를 <sub>800</sub> -			
Abnormal			600-		••••••	***************************************
10 10 2			400			
Dec11/23			Dec11/23	Dec11/23		Dec11/23
3						



**CALA** ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number Unique Number : 5696850

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0878118 : 02603765

Recieved Diagnosed

: 18 Dec 2023 : 18 Dec 2023 Diagnostician : Wes Davis Test Package : MOB 1 (Additional Tests: Visual)

**CITY OF HAMILTON** 2200 UPPER JAMES,, MOUNTAIN TRANSIT STOREROOM

MOUNT HOPE, ON CA LOR 1W0 Contact: Jeff Parr jeff.parr@hamilton.ca

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

Validity of results and interpretation are based on the sample and information as supplied.

T: (905)546-2424 F: (905)679-4502