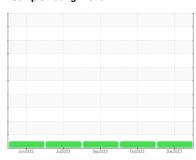


# **OIL ANALYSIS REPORT**

**Sample Rating Trend** 







Machine Id
2225
Component
Natural Gas Engine
Fluid
NOT GIVEN (--- GAL)

### DIAGNOSIS

## 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.

#### Wear

Metal levels are typical for a new component breaking in.

## Contamination

There is no indication of any contamination in the

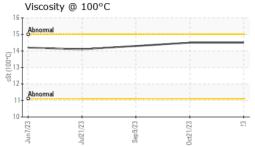
## **Fluid Condition**

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

		Jun2023	Jul2023	Sep2023 Oct2023	Dec2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0849887	WC0830085	WC0849811
Sample Date		Client Info		07 Dec 2023	21 Oct 2023	09 Sep 2023
Machine Age	kms	Client Info		37234	29388	21844
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	1	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	9	10	11
Chromium	ppm	ASTM D5185(m)	>4	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	1	2	1
Lead	ppm	ASTM D5185(m)	>30	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>35	1	1	2
Tin	ppm	ASTM D5185(m)	>4	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		14	12	9
Barium	ppm	ASTM D5185(m)		<1	<1	0
Molybdenum	ppm	ASTM D5185(m)		56	56	55
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		806	847	809
Calcium	ppm	ASTM D5185(m)		1249	1295	1250
Phosphorus	ppm	ASTM D5185(m)		665	717	710
Zinc	ppm	ASTM D5185(m)		896	912	898
Sulfur	ppm	ASTM D5185(m)		2003	2005	2022
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	5	5	8
Sodium	ppm	ASTM D5185(m)		3	2	2
Potassium	ppm	ASTM D5185(m)	>20	0	0	<1
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.9	12.6	11.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.8	22.5	22.2
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.8	20.2	20.4



## **OIL ANALYSIS REPORT**



VISUAL		method	limit/base	current	history1	histo	ry2
Emulsified Water Free Water	scalar scalar	Visual* Visual*	>0.1	NEG NEG	NEG NEG	NEG NEG	
FLUID PROPER	RTIES	method	limit/base	current	history1	histo	ry2
/isc @ 100°C	cSt	ASTM D7279(m)		14.5	14.5	14.3	
GRAPHS							
Iron (ppm)				Lead (ppm)			
Ī			5	<u></u>		<u>-</u>	
Abnormal			4	i i			
			Edd 3	1:			
			2				
Jun7/23	Sep 9/23	0ct21/23	Dec7/23	Jun7/23	Sep 9/23	Oct21/23	Dec7/23
¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬ ¬		ŏ		Chromium (pp		Õ	
Severe	, 			7 Severe			
				5			
Abnormal				Abnormal			
			mdd .	1:			
				2			
3					3	3	
Jun7/23	Sep9/23 -	Oct21/23	Dec7/23	Jun7/23	Sep9/23 -	Oct21/23	Dec7/23
Copper (ppm)				Silicon (ppm)			
Severe			20	Severe			
· i · · · · · · · · · · · · · · · · · ·			15	0			
Abnormal			 툂10	Abnormal			
0							
			5				
23	23	- 23		23 23	23	723	73
Jun7/23	Sep9/23	Oct21/23	Dec7/23	Jun7/23	Sep9/23	0ct21/	Dec7/
Viscosity @ 100°	,C		140	Additives			
Abnormal			140	C			
			120	) - ****** Zinc			
			<u>E</u> 100				
			90	) -	Mark St. of St.		
Abnormal			80 70		***************************************	MARKAGA STATESTAN	totalestes.
/23	Sep 9/23	/23	Dec7/23 +	/23	Sep9/23 +	/23	Dec7/23
Jun7/23	eb 3	Oct21/23	)ec7	Jun7/23	G day	Oct21/23	ec7,



**CALA** ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5695621 Test Package : MOB 1

: WC0849887 : 02602536

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received Diagnosed

: 12 Dec 2023 : 12 Dec 2023 Diagnostician : Wes Davis

**CITY OF HAMILTON** 2200 UPPER JAMES,, MOUNTAIN TRANSIT STOREROOM MOUNT HOPE, ON

CA LOR 1W0 Contact: Cliff Bird cliff.bird@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.

F: (905)679-4502

T: