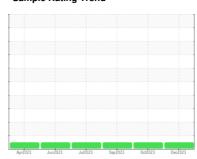


OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id
2214
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 oil

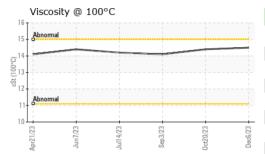
Fluid Condition

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

		Apr2023	Jun2023 Jul2023	Sep2023 Oct2023	Dec2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0878103	WC0830236	WC0849817
Sample Date		Client Info		06 Dec 2023	20 Oct 2023	03 Sep 2023
Machine Age	kms	Client Info		53007	45567	0
Oil Age	kms	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	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	8	7
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	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>9	1	1	1
Lead	ppm	ASTM D5185(m)	>30	<1	<1	0
Copper	ppm	ASTM D5185(m)	>35	1	1	1
Tin	ppm	ASTM D5185(m)	>4	<1	<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)		12	13	13
Barium	ppm	ASTM D5185(m)		<1	<1	0
Molybdenum	ppm	ASTM D5185(m)		55	54	51
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		790	811	787
Calcium	ppm	ASTM D5185(m)		1234	1250	1197
Phosphorus	ppm	ASTM D5185(m)		642	676	711
Zinc	ppm	ASTM D5185(m)		881	889	861
Sulfur	ppm	ASTM D5185(m)		1977	1989	1970
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	4	5	6
Sodium	ppm	ASTM D5185(m)		2	2	3
Potassium	ppm	ASTM D5185(m)	>20	0	0	0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	0
			>20	10 E	12.2	11.4
Nitration	Abs/cm	ASTM D7624*	>20	12.5	12.2	11.7
Nitration Sulfation	Abs/cm Abs/.1mm	ASTM D7624* ASTM D7415*	>30	22.3	22.0	20.7
	Abs/.1mm					



OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history1	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	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
ELLID DDODEDI	TIEC	and the second	Para Station and		for the second	la la la con O
FLUID PROPERTIES		method				history2

Visc @ 100°C	cSt	ASTM D72	79(m)		14.5		14.4		14.1	
GRAPHS										
Iron (ppm) 100 80 Severe Abnormal	723	73	73	50 - 50 - 40 - <u>50 -</u> 20 - 10 -	Lead (I Severe		723	733	.73	/23
Apr21/23 Jun7/23	Jul14/23	Sep3/23 -	Dec6/23		Apr21/23	Jun7/23	Jul14/23	Sep3/23	0ct20/23	Dec6/23
Aluminum (ppm)					Chromium (ppm)					
Severe		1		6-	Severe					
Abnormal				щ. 4 -	Abnormal					
5				2-						
0				0	-					_
Apr21/23 Jun7/23	Jul14/23	Sep3/23 -	Dec6/23		Apr21/23	Jun7/23	Jul14/23	Sep3/23 -	0ct20/23	Dec6/23
Copper (ppm)	7	s 3	5 -		≼ Silicon		ラ	03	ŏ	
80 Severe				200		(PPIII)				
60				150						
Abnormal				툂 100 -	Abnormal		 	 	1	
20				50-						
23 23		/23	73	0 1	- 123	/23-	- 123	/23		/23
Apr21/23 Jun7/23	Jul14/23	Sep3/23	Dec6/23		Apr21/23	Jun7/23	Jul14/23	Sep3/23	0ct20/23	Dec6/23
Viscosity @ 100	°C			1400 -	Additiv	es				
15 - Abnormal			-	1200		calcium				_
© 14 00013 8 12				를 1000 -	*******	zinc				
Abnormal				800-	-	Tongs and the State of State o	***************************************			
11				600	A. S. of Lots in Concession, Spiriter, Spirite	TERLOGICAL STREET	, marketing	***********	************	Lee
; Apr21/23 -	Jul14/23 -	Sep3/23 -	Dec6/23	- 20	Apr21/23	Jun7/23 ·	Jull 4/23	Sep3/23 -	0ct20/23 ·	Dec6/23
Ap	7	o č	g o		Ap	ゔ	크	Ø.	00	



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5695639 Test Package : MOB 1 (Additional Tests: Visual)

: WC0878103 : 02602554

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

Diagnostician : Wes Davis

: 12 Dec 2023 : 12 Dec 2023

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: