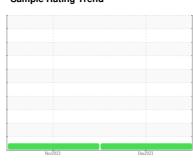


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id 2369 Component

Natural Gas Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

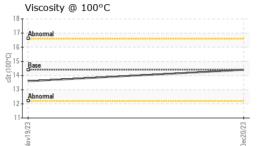
Fluid Condition

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

			Nov2023	Dec2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0878167	WC0878083	
Sample Date		Client Info		20 Dec 2023	19 Nov 2023	
Machine Age	kms	Client Info		15785	8031	
Oil Age	kms	Client Info		0	0	
Oil Changed		Client Info		N/A	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	V	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	13	32	
Chromium	ppm	ASTM D5185(m)	>4	0	<1	
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	
Titanium	ppm	ASTM D5185(m)		0	<1	
Silver	ppm	ASTM D5185(m)	>3	0	<1	
Aluminum	ppm	ASTM D5185(m)	>9	2	3	
Lead	ppm	ASTM D5185(m)	>30	<1	2	
Copper	ppm	ASTM D5185(m)	>35	4	18	
Tin	ppm	ASTM D5185(m)	>4	<1	<1	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	13	28	
Barium	ppm	ASTM D5185(m)	10	0	2	
Molybdenum	ppm	ASTM D5185(m)	100	55	79	
Manganese	ppm	ASTM D5185(m)		1	10	
Magnesium	ppm	ASTM D5185(m)	450	718	562	
Calcium	ppm	ASTM D5185(m)	3000	1179	1105	
Phosphorus	ppm	ASTM D5185(m)	1150	612	568	
Zinc	ppm	ASTM D5185(m)	1350	791	628	
Sulfur	ppm	ASTM D5185(m)	4250	1984	1910	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	10	34	
Sodium	ppm	ASTM D5185(m)	>158	2	3	
Potassium	ppm	ASTM D5185(m)	>20	3	1	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	
Nitration	Abs/cm	ASTM D7624*	>20	11.5	7.4	
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.7	20.2	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	19.2	14.3	



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	
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	
Free Water	scalar	Visual*		NEG	NEG	
FLUID PROPERTIES		method	limit/base	current	history1	history2

Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.4	13.6	
GRAPHS						
Iron (ppm) Severe Abnormal EZERIANON			Dec20/23	Lead (ppm)	De:2023
Aluminum (ppm)				Chrom	ium (ppm)	
Severe Abnormal				6 Severe Abnormal		
Copper (ppm)			Dec20/23	Silicon	(mag)	Dec20/23
Severe 60				200 Severe		
Abnormal			1/23	50		52/
Nov19/23			Dec20/23	Nov19/23		Dec20/23
Viscosity @ 100°C				Additiv 1200 1200 800 600	e calcium hosphorus	
Nov19/23			Dec20/23	Nov19/23		Dec20/23



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5698916

: WC0878167 : 02605831

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

: 02 Jan 2024 Diagnosed : 02 Jan 2024 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: Ron Skinner

ron.skinner@hamilton.ca T:

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