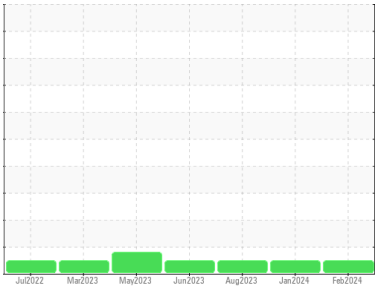
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
351040
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 5W40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC0078312**	PC	PC0078051
Sample Date		Client Info		**15 Feb 2024**	09 Jan 2024	17 Aug 2023
Machine Age	kms	Client Info		**42414**	0	197444
Oil Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	N/A	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	**<1.0**	<1.0	<1.0
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG

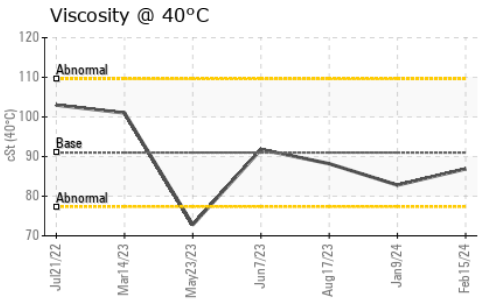
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	**12**	4	10
Chromium	ppm	ASTM D5185(m)	>20	**<1**	0	<1
Nickel	ppm	ASTM D5185(m)	>4	**<1**	0	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)	>3	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>20	**2**	2	3
Lead	ppm	ASTM D5185(m)	>40	**0**	0	0
Copper	ppm	ASTM D5185(m)	>330	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>15	**0**	0	0
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

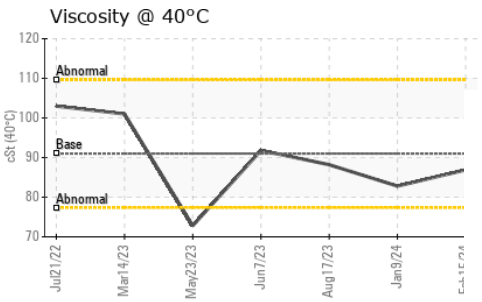
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	**35**	42	38
Barium	ppm	ASTM D5185(m)	10	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	100	**56**	56	66
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)	450	**1087**	1052	20
Calcium	ppm	ASTM D5185(m)	3000	**828**	831	1951
Phosphorus	ppm	ASTM D5185(m)	1150	**1020**	969	922
Zinc	ppm	ASTM D5185(m)	1350	**1174**	1144	1064
Sulfur	ppm	ASTM D5185(m)	4250	**2923**	2731	3917
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**4**	3	4
Sodium	ppm	ASTM D5185(m)	>44	**5**	3	4
Potassium	ppm	ASTM D5185(m)	>20	**1**	<1	1

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	**0.2**	0	0.4
Nitration	Abs/cm	ASTM D7624*	>20	**10.2**	6.8	11.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.3**	19.5	22.8

OIL ANALYSIS REPORT



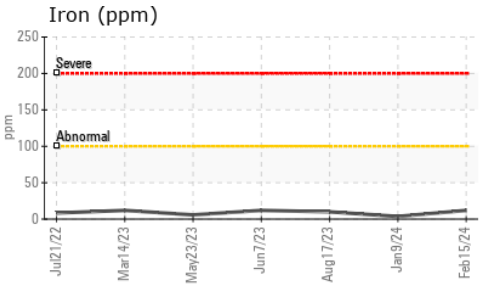


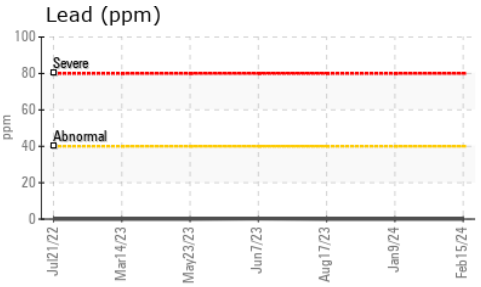
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**20.0**	17.2	21.7

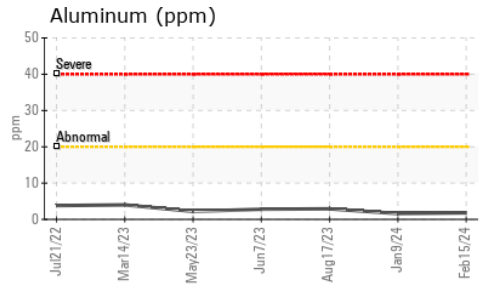
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

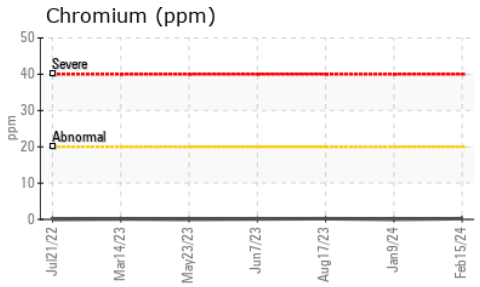
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	91	**86.9**	82.8	88.2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	**14.2**	13.2	13.2
Viscosity Index (VI)	Scale	ASTM D2270*	164	**169**	161	150

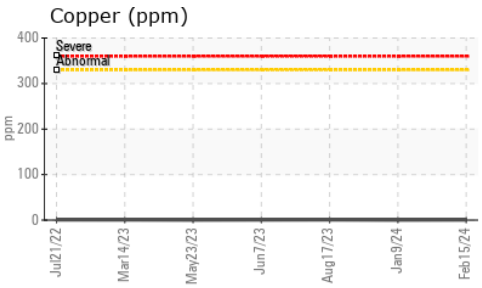
GRAPHS

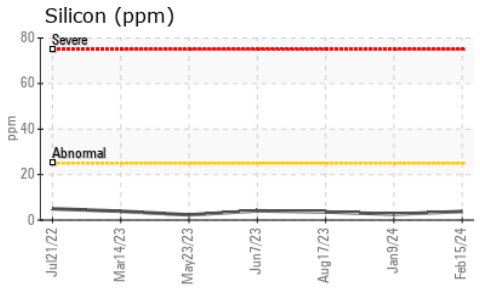


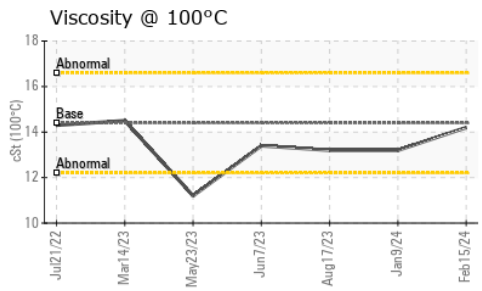


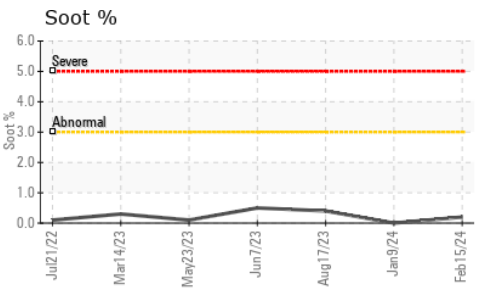












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078312
Lab Number : 02617397
Unique Number : 5734507
Test Package : MOB 1 (Additional Tests: KV40, VI)

Received : 22 Feb 2024
Tested : 22 Feb 2024
Diagnosed : 22 Feb 2024 - Wes Davis

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
151 Ram Forest Rd,
Stouffville, ON
CA L4A 2G8
Contact: Bill Acton
bacton@gipi.com
T:
F:

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.