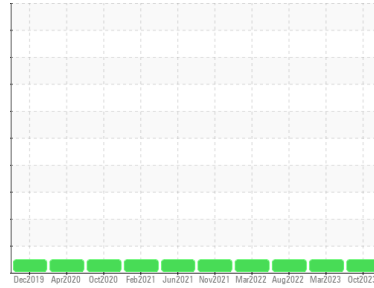


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**OR645**  
Component  
**Diesel Engine**  
Fluid  
**DISEL ENGINE OIL SAE 5W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### 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			<b>PC0082046</b>	PC0072905	PC0065363
Sample Date	Client Info			<b>25 Oct 2023</b>	19 Mar 2023	17 Aug 2022
Machine Age	hrs	Client Info		<b>0</b>	0	12350
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>2.1		<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>51	<b>15</b>	16	11
Chromium	ppm	ASTM D5185(m)	>11	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>31	<b>2</b>	2	1
Lead	ppm	ASTM D5185(m)	>26	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>26	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

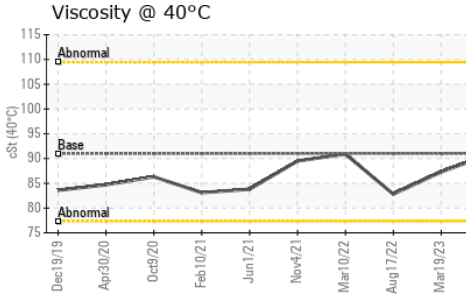
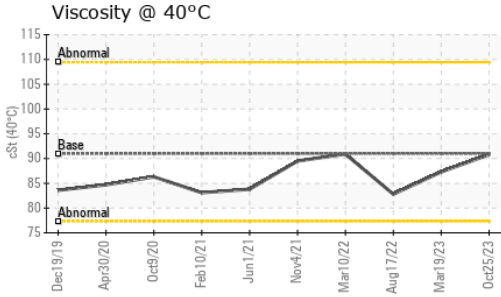
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<b>38</b>	35	37
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>61</b>	59	53
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>1049</b>	1118	1044
Calcium	ppm	ASTM D5185(m)	3000	<b>891</b>	893	858
Phosphorus	ppm	ASTM D5185(m)	1150	<b>945</b>	1094	983
Zinc	ppm	ASTM D5185(m)	1350	<b>1171</b>	1221	1152
Sulfur	ppm	ASTM D5185(m)	4250	<b>2688</b>	2822	2722
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>22	<b>5</b>	3	4
Sodium	ppm	ASTM D5185(m)	>44	<b>4</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.2	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.5</b>	9.9	8.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>20.2</b>	23.0	20.1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.6</b>	18.7	17.0

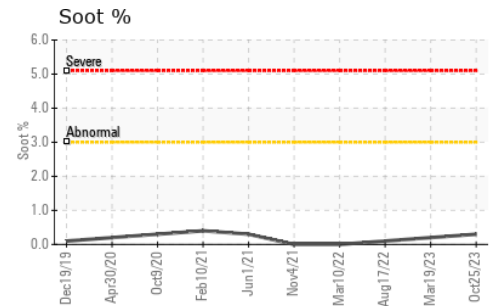
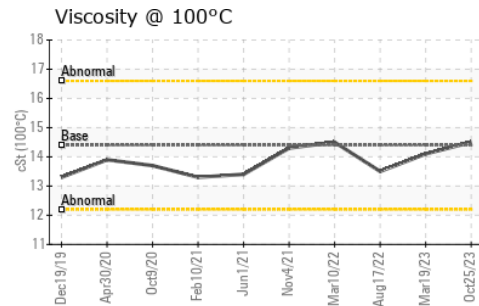
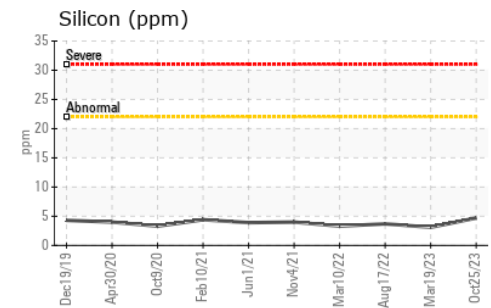
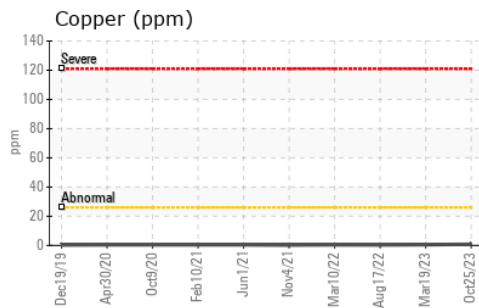
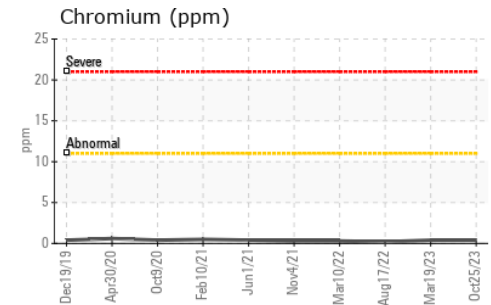
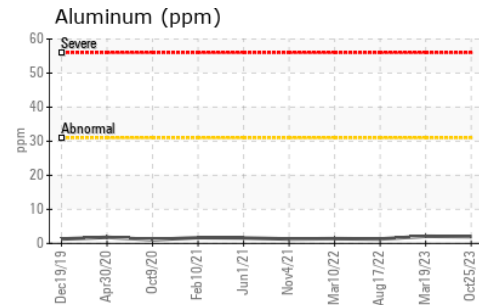
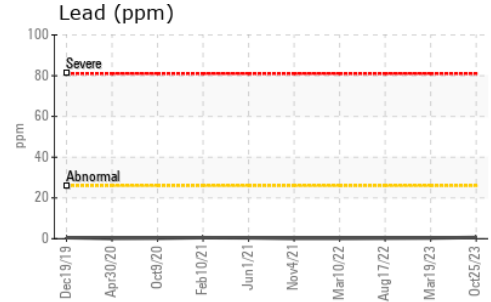
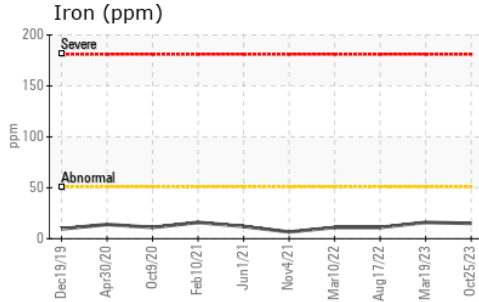
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.21	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	91	90.8	87.3
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.5	14.1
Viscosity Index (VI)	Scale	ASTM D2270*	164	166	166

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations  
**Sample No.** : PC0082046 **Received** : 26 Oct 2023  
**Lab Number** : 02592041 **Diagnosed** : 26 Oct 2023  
**Unique Number** : 5669120 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

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.

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 CA L4A 2G8  
 Contact: Bill Acton  
 bacton@gipi.com

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