**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

## **NO UNIT PC0078314**

Component Diesel Engine

DIESEL ENGINE OIL SAE 5W40 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		PC0078314		
	Sample Date		Client Info		15 Feb 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185(m)	>100	4		
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	0		
	Nickel	ppm	ASTM D5185(m)	>4	<1		
	Titanium	ppm	ASTM D5185(m)		0		
	Silver	ppm	ASTM D5185(m)	>3	0		
	Aluminum	ppm	ASTM D5185(m)	>20	2		
	Lead	ppm	ASTM D5185(m)		0		
	Copper	ppm	ASTM D5185(m)		<1		
	Tin	ppm	ASTM D5185(m)	>15	0		
	Vanadium	ppm	ASTM D5185(m)		0		
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>25	3		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1		
There is no indication of any contamination in the cir.	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0		
	Nitration	Abs/cm	ASTM D7624*	>20	6.9		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)	>44	4		
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	250	57		
	Barium	ppm	ASTM D5185(m)	10	0		
	Molybdenum	ppm	ASTM D5185(m)	100	56		
	Manganese	ppm	ASTM D5185(m)		0		
	Magnesium	ppm	ASTM D5185(m)		1078		
	Calcium	ppm	ASTM D5185(m)		819		
	Phosphorus	ppm	ASTM D5185(m)		993		
	Zinc	ppm	ASTM D5185(m)		1147		
	Sulfur	ppm	ASTM D5185(m)		2916		
	Oxidation	Abs/.1mm	ASTM D7414*		17.2		
	Visc @ 40°C	cSt	ASTM D7279(m)		87.1		
	Visc @ 100°C	cSt	ASTM D7279(m)		14.2		
	Viscosity Index (VI)	Scale	ASTM D2270*	164	168		





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

Lab Number : 02617403 Unique Number : 5734513

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations : PC0078314

Received **Tested** Diagnosed Test Package : MOB 1 ( Additional Tests: KV40, VI )

: 22 Feb 2024 : 22 Feb 2024

: 22 Feb 2024 - Wes Davis

151 Ram Forest Rd, Stouffville, ON CA L4A 2G8 Contact: Bill Acton bacton@gipi.com 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: