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

NORMAL NORMAL **NORMAL** 

Machine Id ST7564

Component
Diesel Engine

PETRO CANADA SUPREME SYNTHETIC 5W40 (--- LTR)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
Resample at the next service interval to monitor.	Sample Number		Client Info		PC0088274		
	Sample Date		Client Info		21 May 2024		
	Machine Age	hrs	Client Info		5975		
	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		
VEAR	Iron	nnm	ASTM D5185(m)	>100	23		
	Chromium	ppm	ASTM D5185(m)		23 <1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185(m)		0		
	Titanium	ppm	ASTM D5185(m)	>4	0		
	Silver	ppm	ASTM D5185(m)	~3	0		
	Aluminum	ppm	ASTM D5185(m)		1		
	Lead	ppm	ASTM D5185(m)		0		
	Copper	ppm	ASTM D5185(m)		4		
	Tin	ppm	ASTM D5185(m)		<1		
	Vanadium	ppm	ASTM D5185(m)	710	0		
	variadium	ррпп	AOTNI D3103(III)				
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		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	ASTM D7844*	>3	0.3		
	Nitration	Abs/cm	ASTM D7624*	>20	10.9		
	Sulfation	Abs/.1mm	ASTM D7415*	>30	22.7		
	Emulsified Water	scalar	Visual*	>0.2	NEG		
LUID CONDITION	Sodium	ppm	ASTM D5185(m)		5		
	Boron	ppm	ASTM D5185(m)	190	28		
The condition of the oil is acceptable for the time in service.	Barium		ASTM D5185(m)		0		
	Molybdenum	ppm	ASTM D5185(m)		55		
	Manganese	ppm	ASTM D5185(m)	70	<1		
	Magnesium	ppm	ASTM D5185(m)	564	1062		
	Calcium	ppm	ASTM D5185(m)	993	808		
	Phosphorus	ppm	ASTM D5185(m)	763	964		
	Zinc	ppm	ASTM D5185(m)	835	1154		
	Sulfur	ppm	ASTM D5185(m)		2578		
	Oxidation	Abs/.1mm	ASTM D7414*		20.6		
	Visc @ 40°C	cSt	ASTM D7279(m)		84.6		
	Visc @ 100°C	cSt		14.8	13.8		
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CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No.

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations : PC0088274 Lab Number : 02637902

Unique Number : 5787064

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

: 28 May 2024 : 28 May 2024

: 28 May 2024 - Wes Davis

151 Ram Forest Rd, Stouffville, ON CA L4A 2G8 Contact: Shannon Abbott sabbott@gipi.com

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:

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