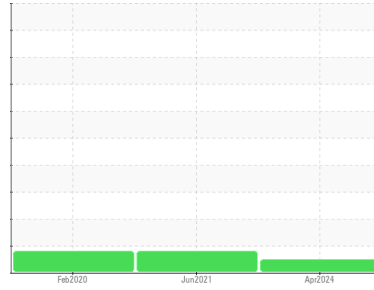


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
CR253
 Component
Left Final Drive
 Fluid

PETRO CANADA ENDURATEX EP 220 (--- GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0087863	PC0047756	PC0022594
Sample Date	Client Info		26 Apr 2024	11 Jun 2021	24 Feb 2020
Machine Age	hrs	Client Info	8766	4329	3362
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		4	---	32
Iron	ppm	ASTM D5185(m) >500	38	99	48
Chromium	ppm	ASTM D5185(m) >10	0	<1	<1
Nickel	ppm	ASTM D5185(m) >10	0	<1	<1
Titanium	ppm	ASTM D5185(m)	<1	1	<1
Silver	ppm	ASTM D5185(m)	0	<1	0
Aluminum	ppm	ASTM D5185(m) >25	4	19	<1
Lead	ppm	ASTM D5185(m) >25	0	<1	<1
Copper	ppm	ASTM D5185(m) >50	4	7	8
Tin	ppm	ASTM D5185(m) >10	0	<1	0
Antimony	ppm	ASTM D5185(m) >5	0	0	<1
Vanadium	ppm	ASTM D5185(m)	0	<1	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) 60	16	21	2
Barium	ppm	ASTM D5185(m) 0	<1	<1	10
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m) 0	<1	2	2
Magnesium	ppm	ASTM D5185(m) 0	5	20	2
Calcium	ppm	ASTM D5185(m) 0	42	167	24
Phosphorus	ppm	ASTM D5185(m) 270	387	416	291
Zinc	ppm	ASTM D5185(m) 0	6	11	14
Sulfur	ppm	ASTM D5185(m) 11200	4833	5367	15869
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

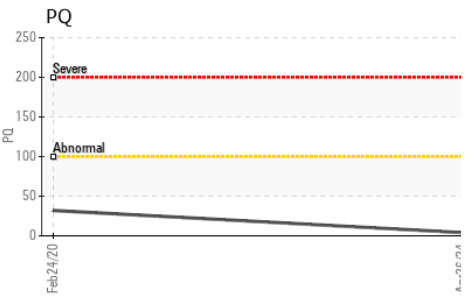
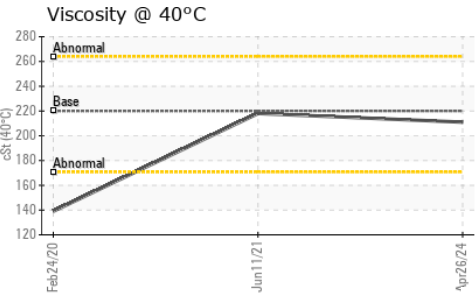
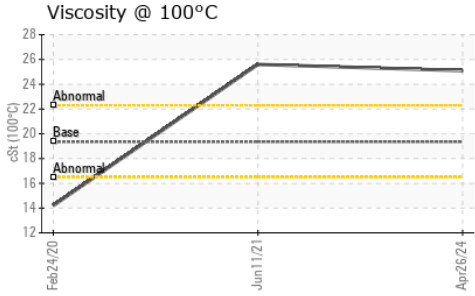
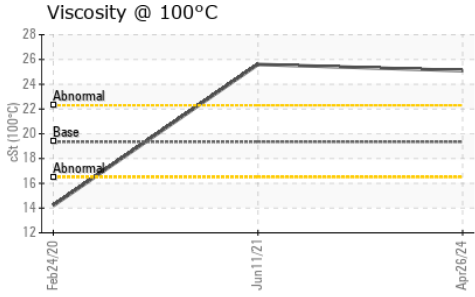
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >75	14	73	3
Sodium	ppm	ASTM D5185(m)	2	8	6
Potassium	ppm	ASTM D5185(m) >20	2	8	4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.40	0.67	---	0.812

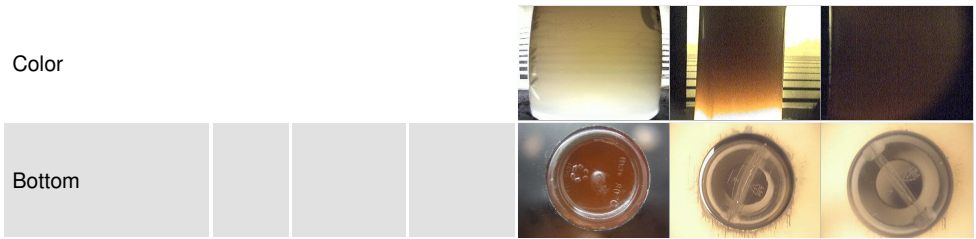
OIL ANALYSIS REPORT



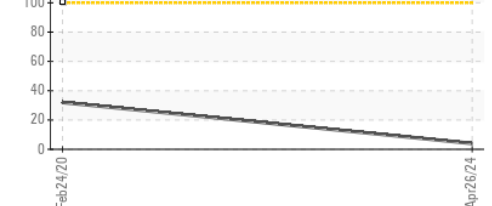
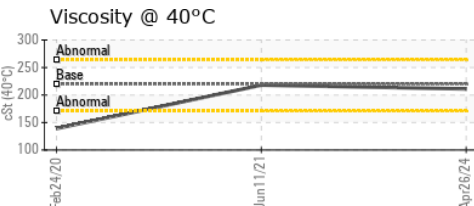
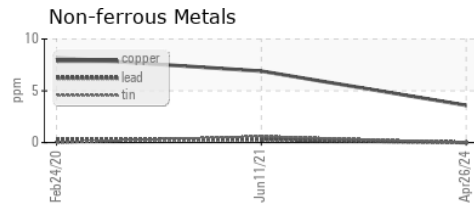
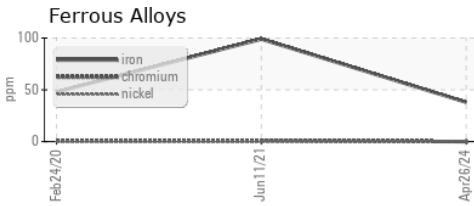
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)	220	211	218	▲ 139
Visc @ 100°C	cSt	ASTM D7279(m)	19.35	25.1	▲ 25.6	▲ 14.2
Viscosity Index (VI)	Scale	ASTM D2270*	99	149	▲ 148	99

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0087863
Lab Number : 02634679
Unique Number : 5775832
Test Package : IND 2 (Additional Tests: KV100, VI)
Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Kevin Marson

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations
 151 Ram Forest Rd,
 Stouffville, ON
 CA L4A 2G8
 Contact: Shannon Abbott
 sabbott@gipi.com
 T: (905)750-5900
 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.