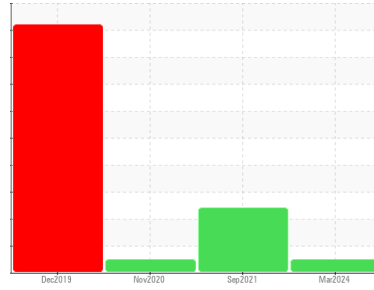


# OIL ANALYSIS REPORT



Machine Id  
**OR627**  
Component  
**Right Final Drive**  
Fluid  
**PETRO CANADA ENDURATEX EP 220 (8 LTR)**

Sample Rating Trend



**NORMAL**



## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type 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		<b>PC0080526</b>	PC0053478	PC0037762
Sample Date	Client Info		<b>08 Mar 2024</b>	09 Sep 2021	09 Nov 2020
Machine Age	hrs	Client Info	<b>9112</b>	7410	6946
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*	>500	<b>115</b>	---	---
Iron	ppm	ASTM D5185(m) >800	<b>62</b>	124	324
Chromium	ppm	ASTM D5185(m) >10	<b>2</b>	3	7
Nickel	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m) >15	<b>0</b>	<1	2
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >75	<b>7</b>	17	37
Lead	ppm	ASTM D5185(m) >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >75	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m) >8	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m) >50	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
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) 60	<b>18</b>	9	16
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	1	3
Magnesium	ppm	ASTM D5185(m) 0	<b>6</b>	22	16
Calcium	ppm	ASTM D5185(m) 0	<b>565</b>	2733	91
Phosphorus	ppm	ASTM D5185(m) 270	<b>463</b>	1080	365
Zinc	ppm	ASTM D5185(m) 0	<b>222</b>	1129	10
Sulfur	ppm	ASTM D5185(m) 11200	<b>5965</b>	10082	5057
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

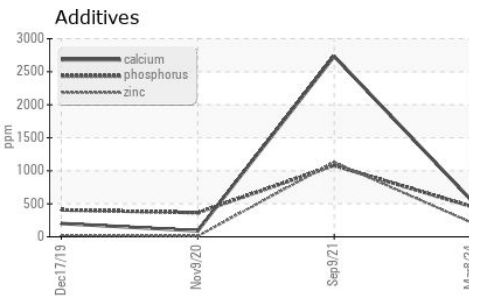
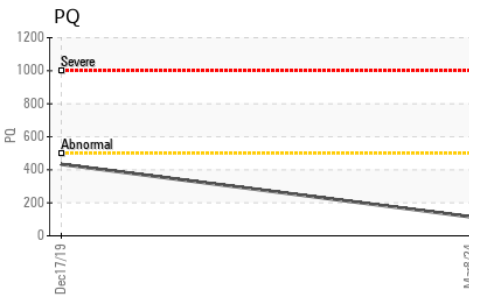
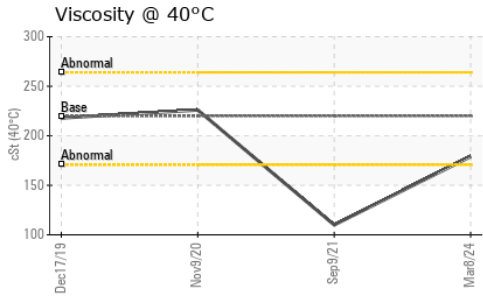
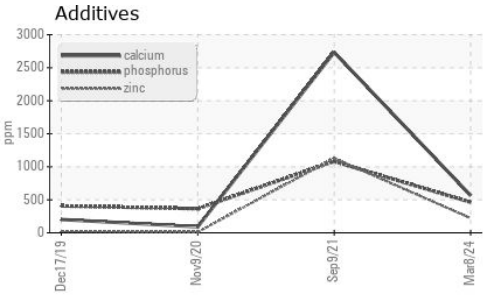
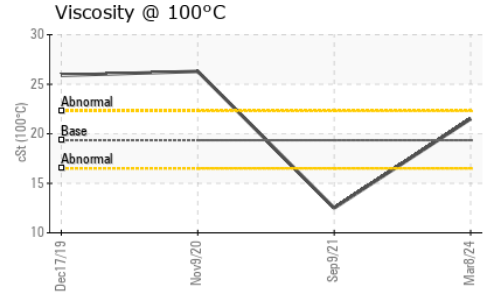
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >400	<b>27</b>	64	161
Sodium	ppm	ASTM D5185(m)	<b>3</b>	5	9
Potassium	ppm	ASTM D5185(m) >20	<b>3</b>	7	15

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.40	<b>0.71</b>	---	---

# OIL ANALYSIS REPORT



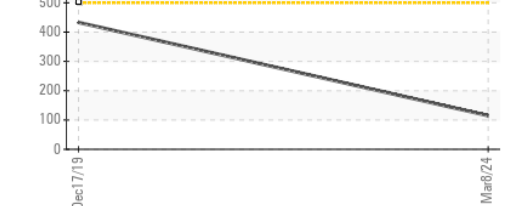
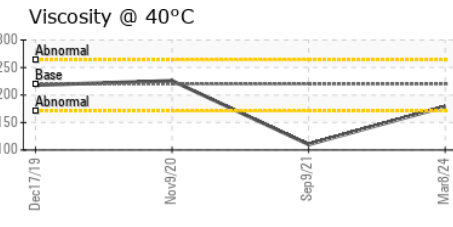
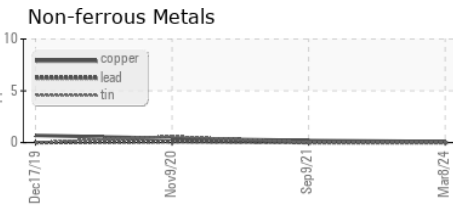
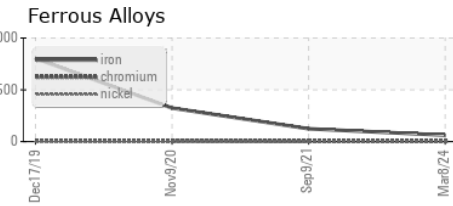
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	220	179	110
Visc @ 100°C	cSt	ASTM D7279(m)	19.35	21.5	12.5
Viscosity Index (VI)	Scale	ASTM D2270*	99	143	105

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.** : PC0080526  
**Lab Number** : 02622849  
**Unique Number** : 5747968  
**Test Package** : IND 2 ( Additional Tests: KV100, TAN Man, VI )  
**Received** : 18 Mar 2024  
**Tested** : 19 Mar 2024  
**Diagnosed** : 19 Mar 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.