

# OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES



Machine Id  
**DR191**  
Component  
**3 Hydraulic System**  
Fluid  
**PETRO CANADA ENVIRON MV 46 (--- 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.

**Wear**

All component wear rates are normal.

**Contamination**

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

● **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>PC0080518</b>	---	---
Sample Date	Client Info			<b>17 Apr 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>ATTENTION</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	---	---

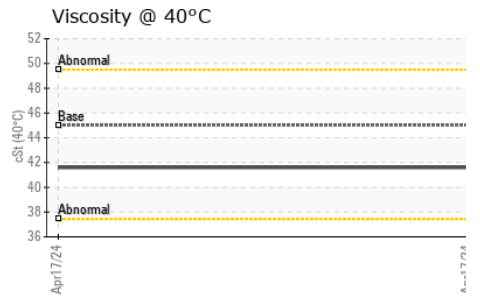
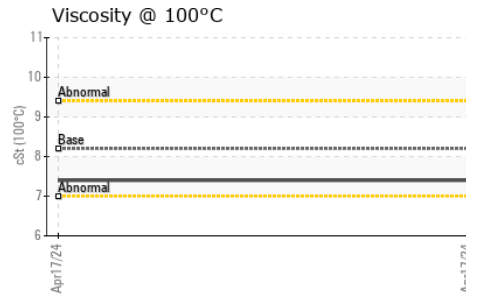
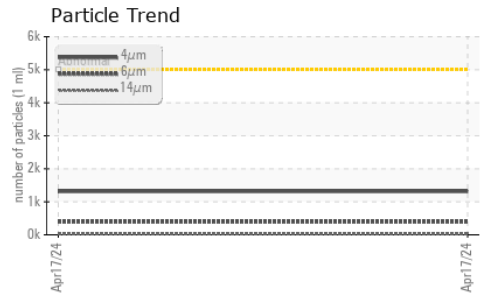
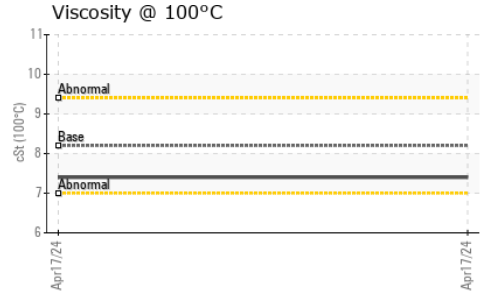
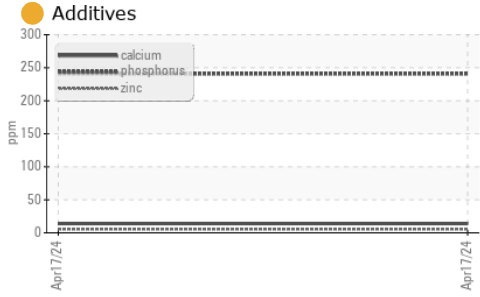
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<b>2</b>	---	---
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185(m)	>75	<b>1</b>	---	---
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	---	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>3</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	0	<b>1</b>	---	---
Calcium	ppm	ASTM D5185(m)	0	<b>14</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	650	● <b>241</b>	---	---
Zinc	ppm	ASTM D5185(m)	0	<b>6</b>	---	---
Sulfur	ppm	ASTM D5185(m)	1420	● <b>2276</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	<b>0</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>1315</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>394</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>19</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>4</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/16/11</b>	---	---

# OIL ANALYSIS REPORT



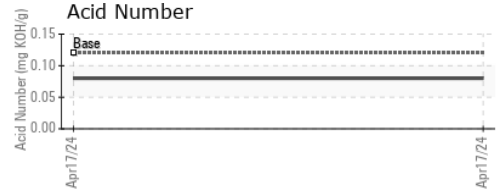
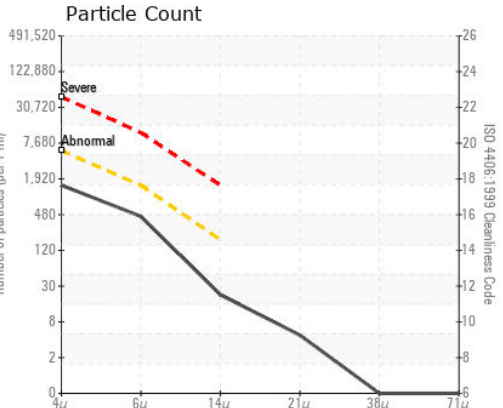
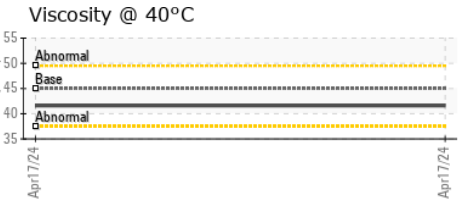
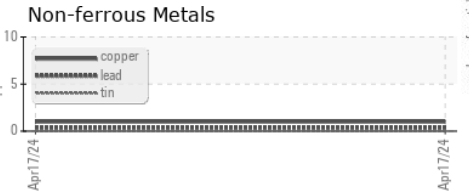
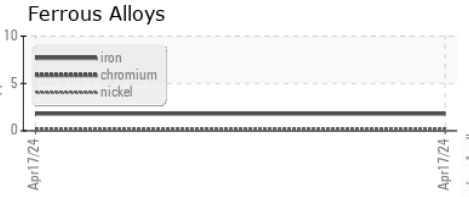
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.12	<b>0.08</b>	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	---	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	---	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	---	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	---	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	Visual*	>0.1	<b>NEG</b>	---	---
Free Water	scalar	Visual*		<b>NEG</b>	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	45.0	<b>41.6</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	8.2	<b>7.4</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	158	<b>144</b>	---	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color				no image	no image	
Bottom				no image	no image	

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations  
**Sample No.** : PC0080518 **Received** : 23 Apr 2024 151 Ram Forest Rd,  
**Lab Number** : **02630934** **Tested** : 24 Apr 2024 Stouffville, ON  
**Unique Number** : 5772087 **Diagnosed** : 24 Apr 2024 - Kevin Marson CA L4A 2G8  
**Test Package** : IND 2 ( Additional Tests: KV100, VI ) 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.