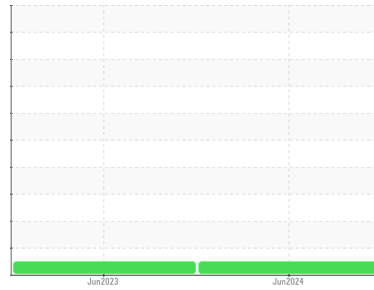


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**424**

Component

**Hydraulic System**

Fluid

**PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (25 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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

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>PC0087737</b>	PC0076485	---
Sample Date	Client Info			<b>24 Jun 2024</b>	27 Jun 2023	---
Machine Age	hrs	Client Info		<b>0</b>	0	---
Oil Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>N/A</b>	N/A	---
Sample Status				<b>NORMAL</b>	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	<b>NEG</b>	NEG	---

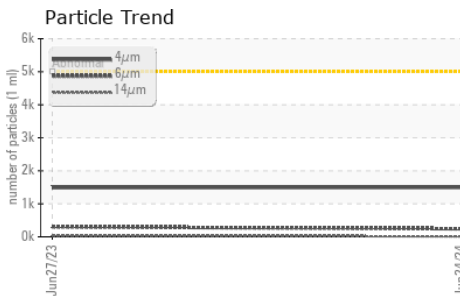
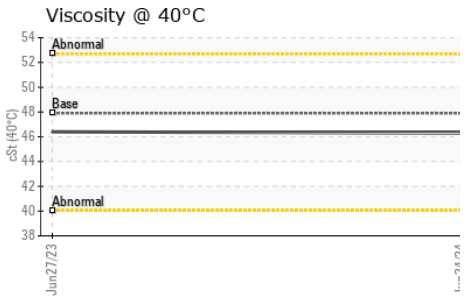
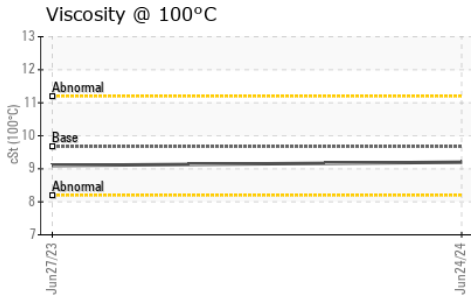
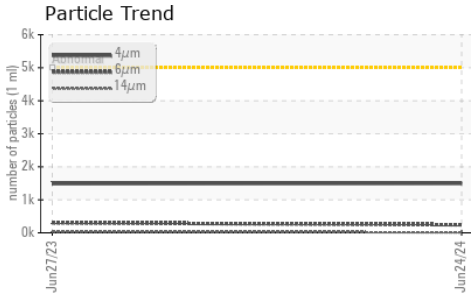
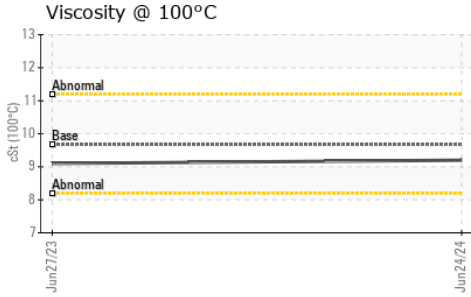
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	---
Aluminum	ppm	ASTM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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	---
Calcium	ppm	ASTM D5185(m)	100	<b>95</b>	95	---
Phosphorus	ppm	ASTM D5185(m)	670	<b>593</b>	643	---
Zinc	ppm	ASTM D5185(m)	850	<b>783</b>	783	---
Sulfur	ppm	ASTM D5185(m)	1600	<b>1429</b>	1418	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	---
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>1495</b>	1489	---
Particles >6µm		ASTM D7647	>1300	<b>243</b>	302	---
Particles >14µm		ASTM D7647	>160	<b>13</b>	33	---
Particles >21µm		ASTM D7647	>40	<b>6</b>	10	---
Particles >38µm		ASTM D7647	>10	<b>4</b>	0	---
Particles >71µm		ASTM D7647	>3	<b>4</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/15/11</b>	18/15/12	---

# OIL ANALYSIS REPORT



## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g ASTM D974*	0.60	<b>0.61</b>	0.46	---

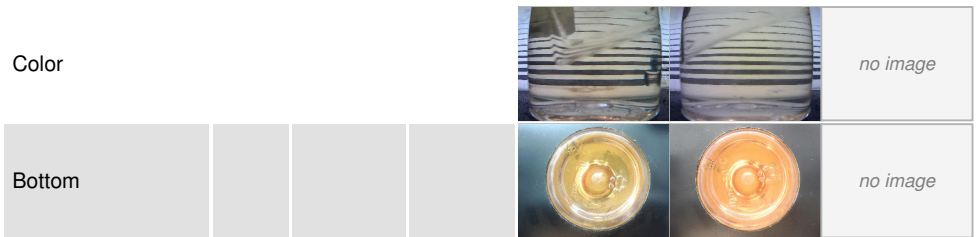
## VISUAL

method	limit/base	current	history1	history2	
White Metal	scalar Visual*	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar Visual*	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar Visual*	NONE	<b>NONE</b>	NONE	---
Silt	scalar Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar Visual*	NONE	<b>NONE</b>	NONE	---
Appearance	scalar Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar Visual*	>0.05	<b>NEG</b>	NEG	---
Free Water	scalar Visual*		<b>NEG</b>	NEG	---

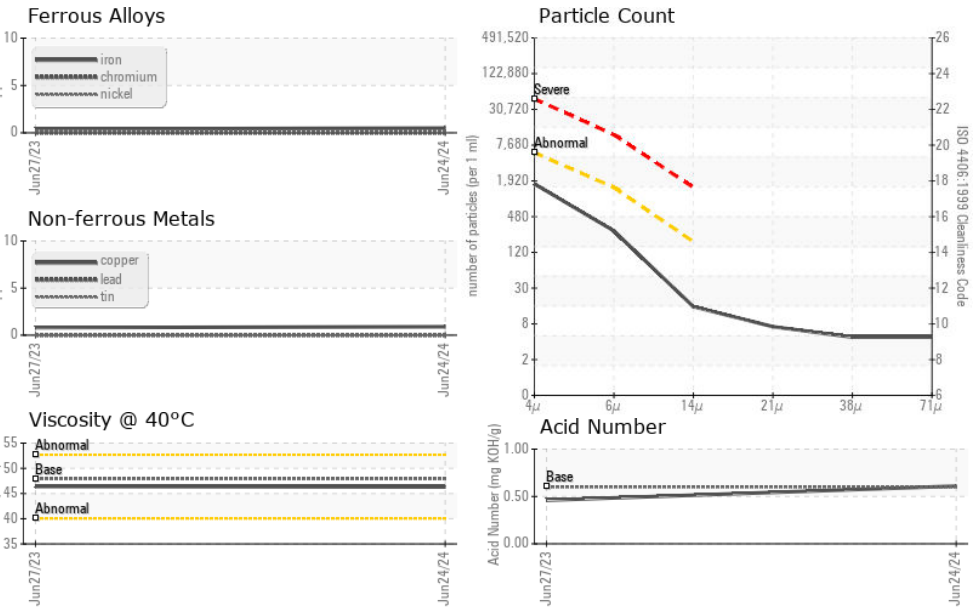
## FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 40°C	cSt ASTM D7279(m)	47.9	<b>46.3</b>	46.4	---
Visc @ 100°C	cSt ASTM D7279(m)	9.67	<b>9.2</b>	9.1	---
Viscosity Index (VI)	Scale ASTM D2270*	192	<b>185</b>	182	---

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0087737 **Received** : 25 Jun 2024  
**Lab Number** : **02644039** **Tested** : 26 Jun 2024  
**Unique Number** : 5801578 **Diagnosed** : 26 Jun 2024 - Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

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.

**WALINGA**  
 938 GLENGARRY CRESCENT  
 FERGUS, ON  
 CA N1M 2W7  
 Contact: Duane Swaving  
 duane.swaving@walinga.com  
 T: (519)787-8227  
 F: (519)787-8210