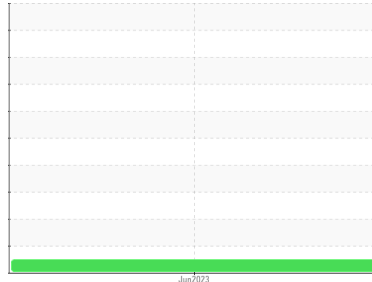


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
420

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (50 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	history 1	history 2
Sample Number	Client Info		PC0076490	---	---
Sample Date	Client Info		27 Jun 2023	---	---
Machine Age	yrs	Client Info	0	---	---
Oil Age	yrs	Client Info	2	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			NORMAL	---	---

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m) >20	<1	---	---
Chromium	ppm	ASTM D5185(m) >20	0	---	---
Nickel	ppm	ASTM D5185(m) >20	0	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m)	0	---	---
Aluminum	ppm	ASTM D5185(m) >20	<1	---	---
Lead	ppm	ASTM D5185(m) >20	0	---	---
Copper	ppm	ASTM D5185(m) >20	<1	---	---
Tin	ppm	ASTM D5185(m) >20	0	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m) 0	<1	---	---
Barium	ppm	ASTM D5185(m) 0	0	---	---
Molybdenum	ppm	ASTM D5185(m) 0	0	---	---
Manganese	ppm	ASTM D5185(m) 1	0	---	---
Magnesium	ppm	ASTM D5185(m) 0	<1	---	---
Calcium	ppm	ASTM D5185(m) 100	98	---	---
Phosphorus	ppm	ASTM D5185(m) 670	656	---	---
Zinc	ppm	ASTM D5185(m) 850	790	---	---
Sulfur	ppm	ASTM D5185(m) 1600	1431	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m) >15	<1	---	---
Sodium	ppm	ASTM D5185(m)	0	---	---
Potassium	ppm	ASTM D5185(m) >20	0	---	---

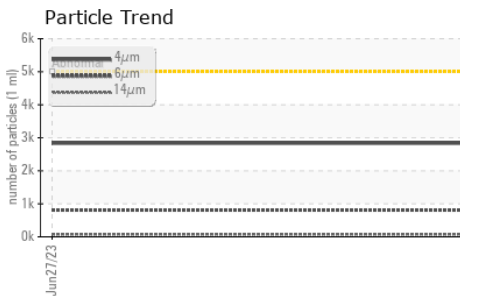
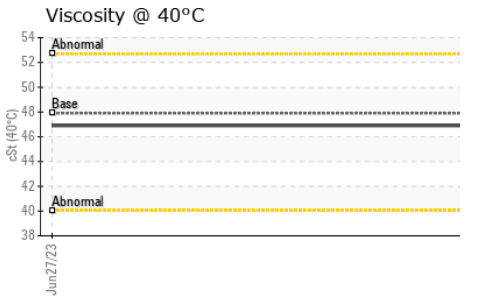
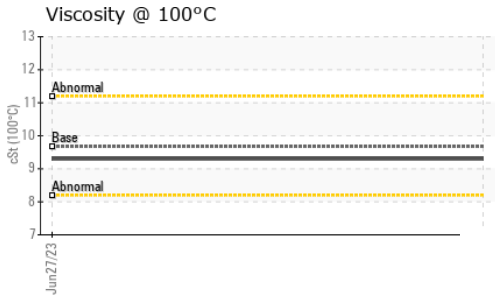
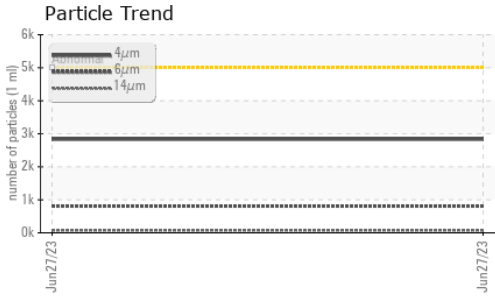
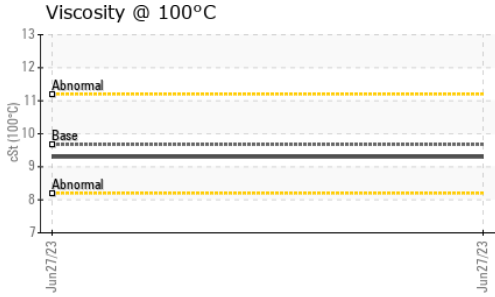
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647	>5000	2836	---	---
Particles >6µm	ASTM D7647	>1300	811	---	---
Particles >14µm	ASTM D7647	>160	73	---	---
Particles >21µm	ASTM D7647	>40	21	---	---
Particles >38µm	ASTM D7647	>10	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/17/13	---	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.60	0.60	---	---

OIL ANALYSIS REPORT



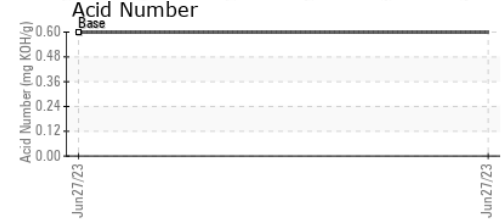
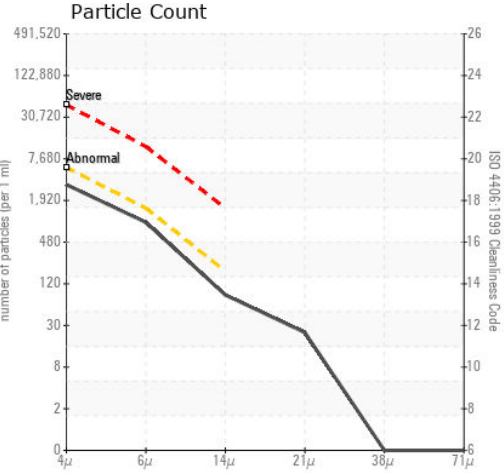
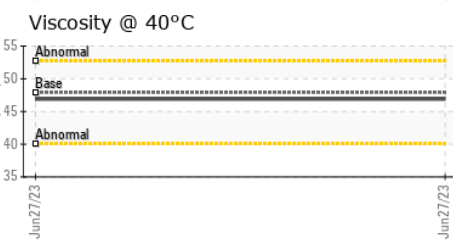
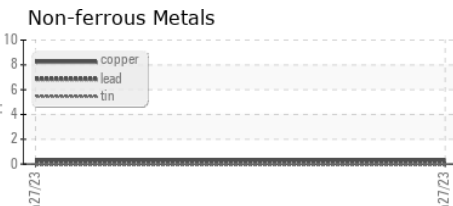
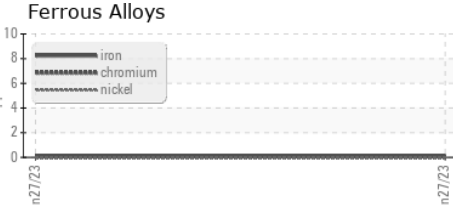
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.05	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	46.9	---
Visc @ 100°C	cSt	ASTM D7279(m)	9.67	9.3	---
Viscosity Index (VI)	Scale	ASTM D2270*	192	185	---

SAMPLE IMAGES

method	limit/base	current	history 1	history 2
Color				
Bottom				

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076490 **Received** : 29 Jun 2023
Lab Number : **02567315** **Diagnosed** : 30 Jun 2023
Unique Number : 5604361 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: KV100, VI)

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

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.