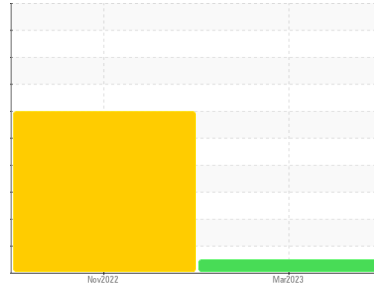




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
Deck Hydraulics

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (348 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		WC0754153	WC0754161	---
Sample Date	Client Info		20 Mar 2023	24 Nov 2022	---
Machine Age	yrs	Client Info	10	11	---
Oil Age	yrs	Client Info	1	1	---
Oil Changed	Client Info		Not Changed	Changed	---
Sample Status			NORMAL	SEVERE	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	2	3	---
Chromium	ppm	ASTM D5185(m)	>10	0	0	---
Nickel	ppm	ASTM D5185(m)	>10	<1	0	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	0	---
Aluminum	ppm	ASTM D5185(m)	>10	0	<1	---
Lead	ppm	ASTM D5185(m)	>20	<1	4	---
Copper	ppm	ASTM D5185(m)	>20	4	4	---
Tin	ppm	ASTM D5185(m)	>10	0	0	---
Antimony	ppm	ASTM D5185(m)		0	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	<1	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<1	1	---
Barium	ppm	ASTM D5185(m)	0	35	0	---
Molybdenum	ppm	ASTM D5185(m)	0	0	0	---
Manganese	ppm	ASTM D5185(m)	1	0	0	---
Magnesium	ppm	ASTM D5185(m)	0	<1	6	---
Calcium	ppm	ASTM D5185(m)	100	84	128	---
Phosphorus	ppm	ASTM D5185(m)	670	618	601	---
Zinc	ppm	ASTM D5185(m)	850	705	729	---
Sulfur	ppm	ASTM D5185(m)	1600	1555	1518	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	<1	1	---
Sodium	ppm	ASTM D5185(m)		1	35	---
Potassium	ppm	ASTM D5185(m)	>20	<1	2	---

FLUID CLEANLINESS

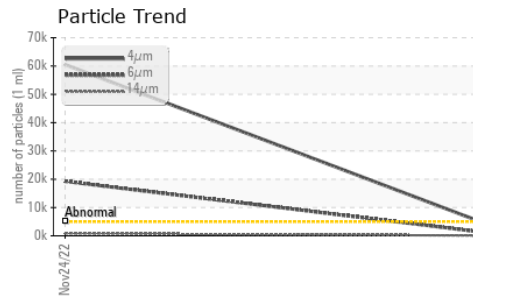
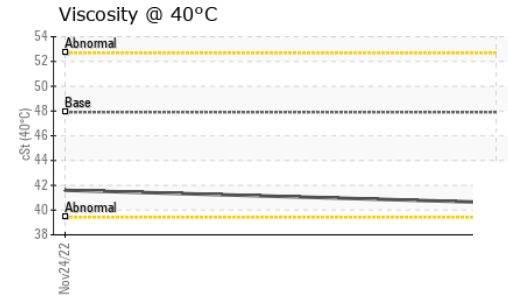
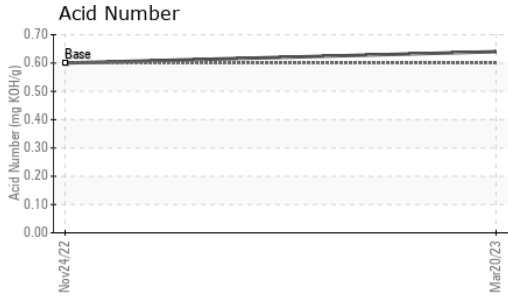
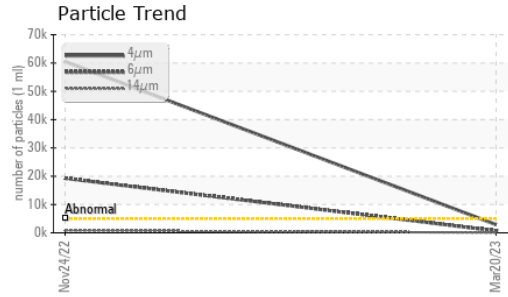
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	2892	60512	---
Particles >6µm	ASTM D7647	>1300	706	19247	---
Particles >14µm	ASTM D7647	>160	53	824	---
Particles >21µm	ASTM D7647	>40	16	120	---
Particles >38µm	ASTM D7647	>10	1	1	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/17/13	23/21/17	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.64	0.60	---



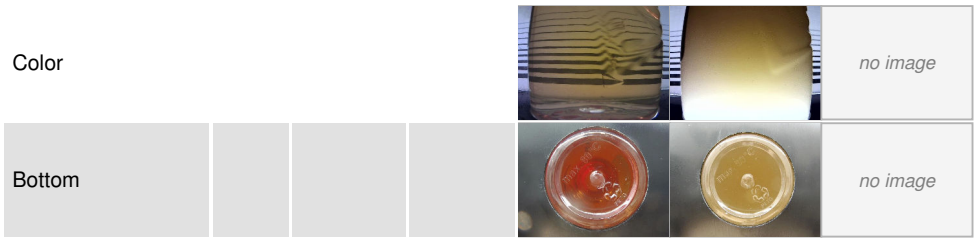
OIL ANALYSIS REPORT



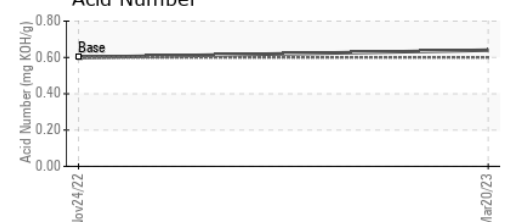
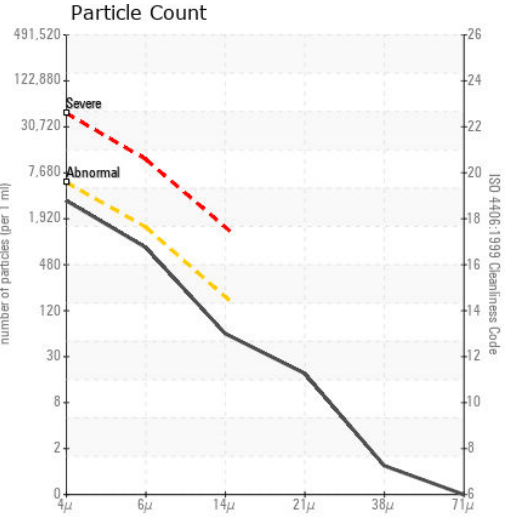
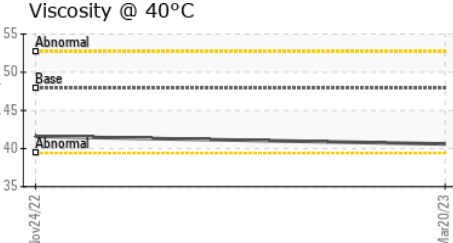
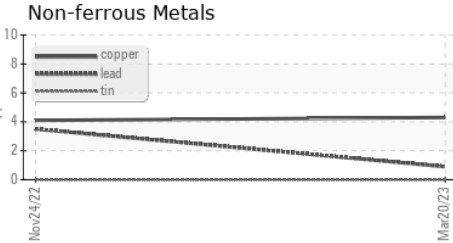
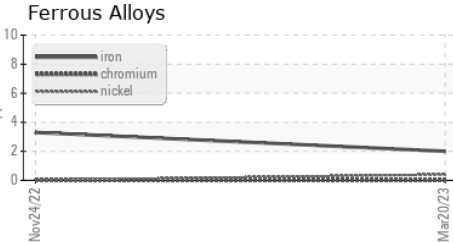
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.05	NEG	▲ .2%
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	40.6	41.6

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. : WC0754153 **Received** : 14 Apr 2023
Lab Number : 02551428 **Diagnosed** : 17 Apr 2023
Unique Number : 5564443 **Diagnostician** : Wes Davis
Test Package : MAR 2 (Additional Tests: TAN Man)

CANADIAN COAST GUARD
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 CA A1C 5X1
 Contact: Geoff Stewart
 geoffrey.stewart@dfo-mpo.gc.ca
 T: (709)772-4216
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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.