

PROBLEM SUMMARY

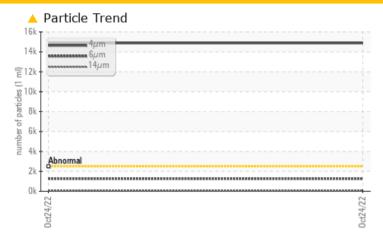
Steering Gears **Steering Gear Port**

Rear Left Steering

PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (--- GAL)

Sample Rating Trend ISO

COMPONENT CONDITION SUMMARY



RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS								
Sample Status			ABNORMAL					
Particles >4μm	ASTM D7647	>2500	<u> </u>					
Particles >6µm	ASTM D7647	>640	1260					
Particles >14μm	ASTM D7647	>80	<u>^</u> 87					
Oil Cleanliness	ISO 4406 (c)	>18/16/13	21/17/14					

Customer Id: VMASSEY Sample No.: WC0707622 Lab Number: 02519387 Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Resample	MISSED	Jan 13 2023	?	We recommend an early resample to monitor this condition.			

HISTORICAL DIAGNOSIS

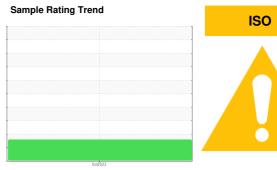


OIL ANALYSIS REPORT

Steering Gears **Steering Gear Port**

Rear Left Steering

PETRO CANADA HYDREX XV ALL SEASON H



DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

All component wear rates are normal.

Contamination

Oil Cleanliness are abnormally high. Particles >4µm are abnormally high. Particles >6µm are notably high. Particles >14µm are notably high.

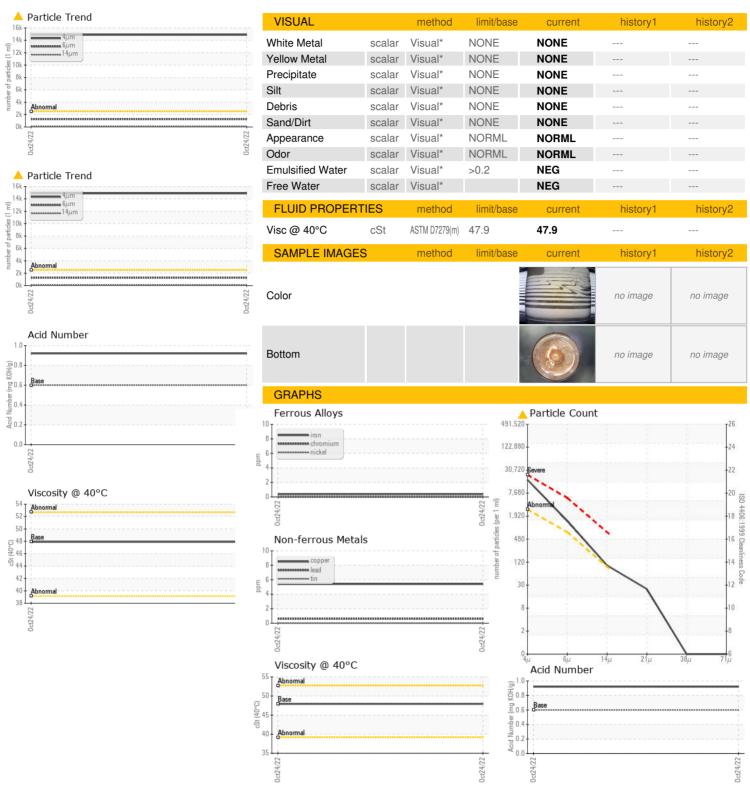
Fluid Condition

The AN level is acceptable for this fluid. The fluid is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

YDRAULIC OIL (- GAL)			Oct2022		
SAMPLE INFORM	/ATION	method	limit/base	current	history1	history2
	717 (11014	Client Info	mino base	WC0707622		
Sample Number				24 Oct 2022		
Sample Date	hue	Client Info				
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	<1		
Chromium	ppm	ASTM D5185(m)	>15	0		
Nickel	ppm	ASTM D5185(m)	>5	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>5	0		
Lead	ppm	ASTM D5185(m)	>10	<1		
Copper	ppm	ASTM D5185(m)	>50	5		
Tin	ppm	ASTM D5185(m)	>5	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium		ASTM D5185(m)		0		
	ppm					
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	0		
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	107		
Phosphorus	ppm	ASTM D5185(m)	670	708		
Zinc	ppm	ASTM D5185(m)	850	848		
Sulfur	ppm	ASTM D5185(m)	1600	1669		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	1		
Sodium	ppm	ASTM D5185(m)		0		
Potassium	ppm	ASTM D5185(m)	>20	0		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	14873		
Particles >6µm		ASTM D7647	>640	<u>▲</u> 1260		
Particles >14µm		ASTM D7647	>80	▲ 87		
Particles >21μm		ASTM D7647	>20	21		
Particles >38µm		ASTM D7647	>4	0		
•						
Particles >71µm		ASTM D7647		0		
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<u>21/17/14</u>		
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.92		



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited Laboratory

Report Id: VMASSEY [WCAMIS] 02519387 (Generated: 08/16/2023 14:53:33) Rev: 1

Laboratory Sample No. Lab Number **Unique Number**

: WC0707622

: 02519387 : 5476367

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 28 Oct 2022 Diagnosed : 31 Oct 2022 Diagnostician

: Wes Davis Test Package : MAR 2 (Additional Tests: PrtCount)

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.

Canadian Coast Guard CCGS Vincent Massey, 101 Boul. Champlain Quebec, QC

CA G1K 7Y7 Contact: Vincent Massey vincentmasseyse@ccgs-ngcc.gc.ca

T: (418)573-7423

Validity of results and interpretation are based on the sample and information as supplied.

Submitted By: Vincent Massey