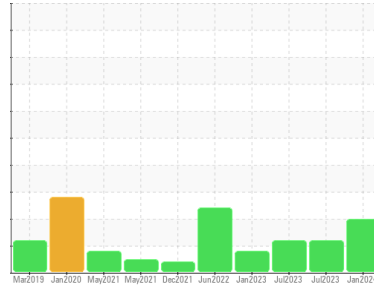




Machine Id  
**500212**

Component  
**Hydraulic System**

Fluid  
**PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL (50 LTR)**



## DIAGNOSIS

**Recommendation**  
Nous recommandons le remplacement des filtres de ce composant. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

**Wear**  
Les taux d'usure de tous les composants sont normaux.

**Contamination**  
Il y a une quantité modérée de particules (de 4 à 14 microns) dans l'huile.

**Fluid Condition**  
Le AN est acceptable pour ce fluide. l'huile peut encore servir si la contamination peut être réduite à un niveau acceptable.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>PC0062567</b>	PC0069641	PC0061768
Sample Date	Client Info	<b>29 Jan 2024</b>	16 Jul 2023	04 Jul 2023
Machine Age	hrs	<b>21229</b>	39079	38880
Oil Age	hrs	<b>21229</b>	39079	38880
Oil Changed	Client Info	<b>Not Chngd</b>	Filtered	Not Chngd
Sample Status		<b>ABNORMAL</b>	ATTENTION	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

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

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	<b>0</b>	1	<1
Barium	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm ASTM D5185(m) 1	<b>0</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	1
Calcium	ppm ASTM D5185(m) 100	<b>99</b>	89	90
Phosphorus	ppm ASTM D5185(m) 670	<b>649</b>	657	653
Zinc	ppm ASTM D5185(m) 850	<b>799</b>	778	768
Sulfur	ppm ASTM D5185(m) 1600	<b>1561</b>	1452	1411
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

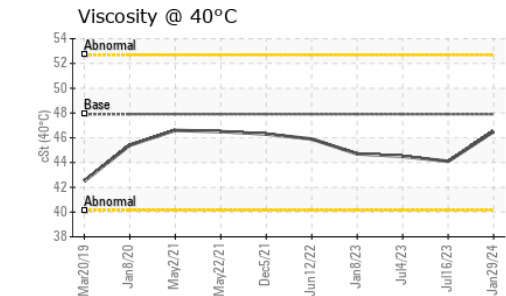
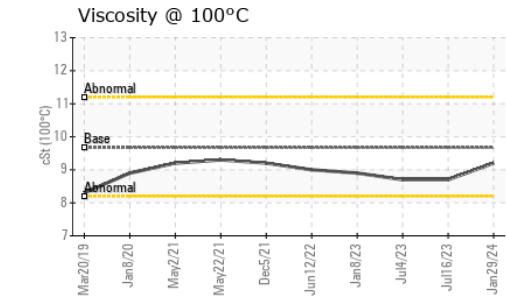
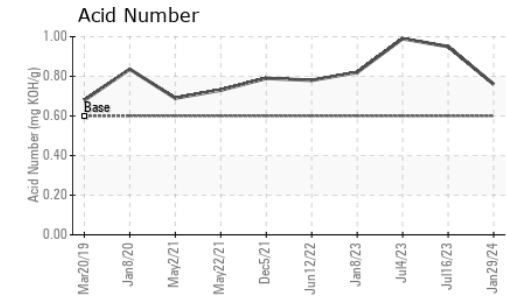
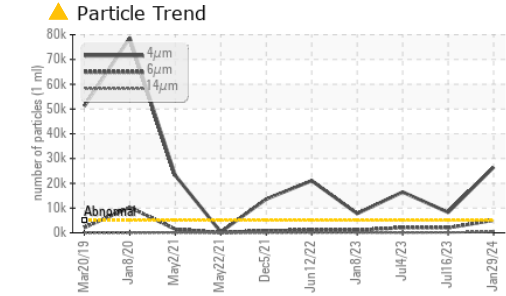
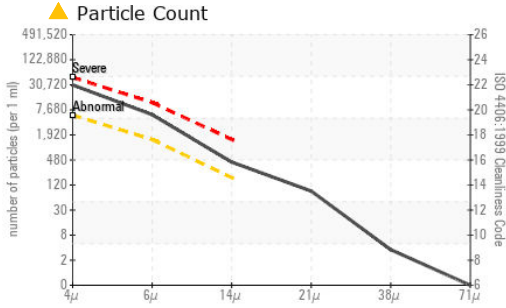
## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	<b>0</b>	14	7
Sodium	ppm ASTM D5185(m)	<b>0</b>	<1	<1
Potassium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>▲ 26481</b>	▲ 8264	▲ 16466
Particles >6µm	ASTM D7647 >1300	<b>▲ 5121</b>	▲ 2037	▲ 2059
Particles >14µm	ASTM D7647 >160	<b>▲ 376</b>	150	77
Particles >21µm	ASTM D7647 >40	<b>▲ 76</b>	36	19
Particles >38µm	ASTM D7647 >10	<b>3</b>	1	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>▲ 22/20/16</b>	▲ 20/18/14	▲ 21/18/13

# OIL ANALYSIS REPORT



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0062567  
**Lab Number** : 02612825  
**Unique Number** : 5721920  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

**Received** : 01 Feb 2024  
**Tested** : 02 Feb 2024  
**Diagnosed** : 02 Feb 2024 - Wes Davis

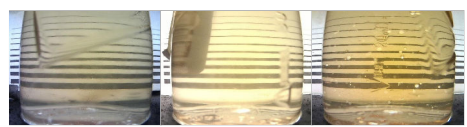
**Umano Medical**  
 230 Blvd Nilus Leclerc  
 L'Islet, QC  
 CA G0R 2C0  
 Contact: Samuel Pelletier  
 samuel.pelletier@umanomedical.com  
 T: (418)247-3986  
 F: :

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.

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	<b>0.76</b>	0.95	0.99

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	<b>46.5</b>	44.1	44.5
Visc @ 100°C	cSt	ASTM D7279(m)	9.67	<b>9.2</b>	8.7	8.7
Viscosity Index (VI)	Scale	ASTM D2270*	192	<b>184</b>	180	178

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom	