

Machine Id  
**220**

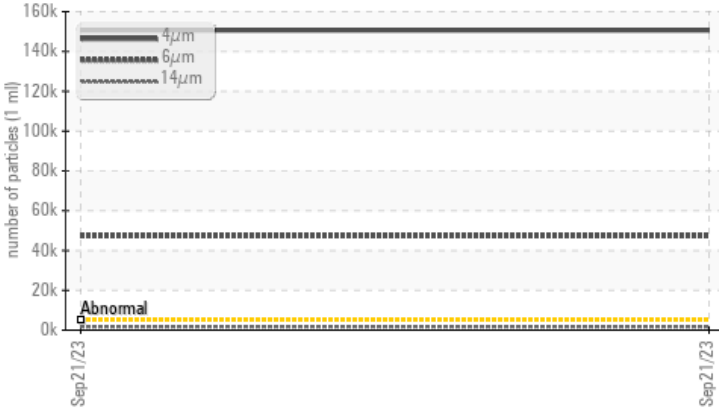
Component  
**Hydraulic System**

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



**COMPONENT CONDITION SUMMARY**

**Particle Trend**



**RECOMMENDATION**

Nous vous recommandons de vérifier tous les endroits par lesquels des contaminants peuvent pénétrer dans le système. Nous vous recommandons de remplacer le filtre et d'utiliser un système de filtrage hors-ligne afin d'améliorer la propreté du fluide. Le reniflard d'air doit être réparé. S'il n'est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessiccant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation. À NOTER: S.V.P. inclure, avec le prochain échantillon, des détails de la capacité du réservoir et le type et le degré de filtration.

**PROBLEMATIC TEST RESULTS**

Sample Status			<b>SEVERE</b>	---	---
Particles >4µm	ASTM D7647	>5000	🔴 <b>150602</b>	---	---
Particles >6µm	ASTM D7647	>1300	🔴 <b>47291</b>	---	---
Particles >14µm	ASTM D7647	>160	🔴 <b>1667</b>	---	---
Particles >21µm	ASTM D7647	>40	🔴 <b>333</b>	---	---
Particles >38µm	ASTM D7647	>10	🟡 <b>34</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	🔴 <b>24/23/18</b>	---	---

Customer Id: HUIQUE  
Sample No.: PC0062542  
Lab Number: 02592674  
Test Package: IND 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](mailto:wesd@wearcheck.ca)

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

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Information Required	---	---	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

## HISTORICAL DIAGNOSIS



Machine Id  
**220**

Component

**Hydraulic System**

Fluid

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



## DIAGNOSIS

### Recommendation

Nous vous recommandons de vérifier tous les endroits par lesquels des contaminants peuvent pénétrer dans le système. Nous vous recommandons de remplacer le filtre et d'utiliser un système de filtrage hors-ligne afin d'améliorer la propreté du fluide. Le reniflard d'air doit être réparé. S'il n'est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessiccant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation. À NOTER: S.V.P. inclure, avec le prochain échantillon, des détails de la capacité du réservoir et le type et le degré de filtration.

### Wear

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

### Contamination

Il y a une quantité élevée de matières particulaires (2 à 100 µm de taille) présente 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>PC0062542</b>	---	---
Sample Date	Client Info		<b>21 Sep 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>2063</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## WEAR METALS

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

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	<b>2</b>	---
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	---
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	---
Magnesium	ppm	ASTM D5185(m)	0	<b>2</b>	---
Calcium	ppm	ASTM D5185(m)	100	<b>100</b>	---
Phosphorus	ppm	ASTM D5185(m)	670	<b>561</b>	---
Zinc	ppm	ASTM D5185(m)	850	<b>692</b>	---
Sulfur	ppm	ASTM D5185(m)	1600	<b>1392</b>	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<b>3</b>	---
Sodium	ppm	ASTM D5185(m)		<b>7</b>	---
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	---

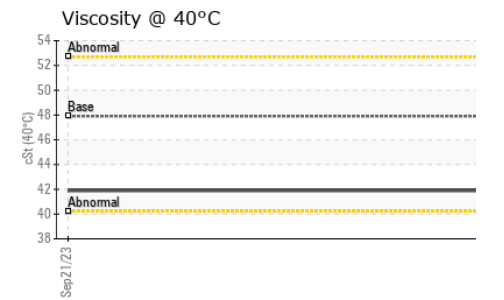
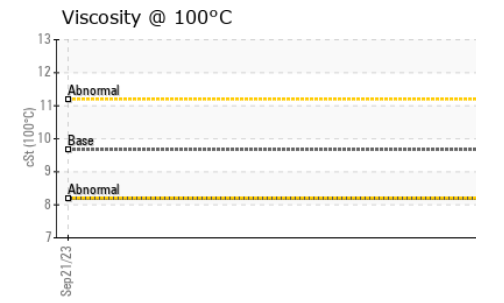
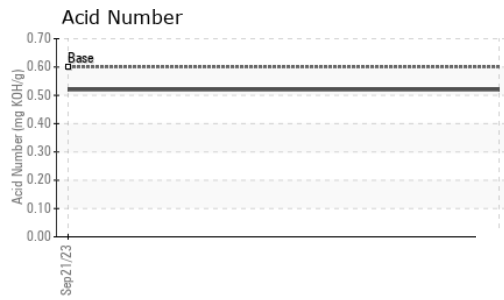
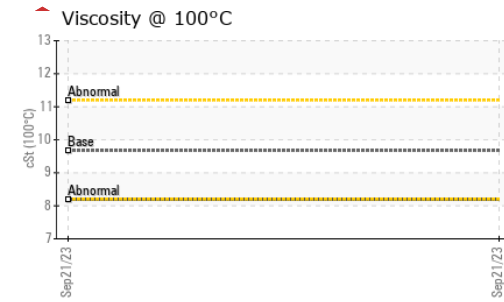
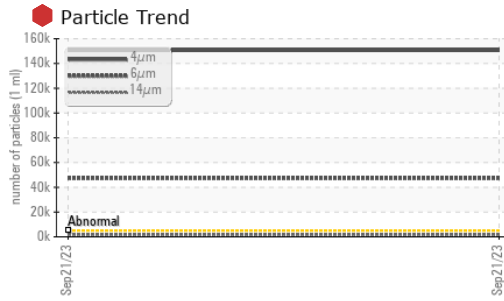
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>150602</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>47291</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>1667</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>333</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>34</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>3</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>24/23/18</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	<b>0.52</b>	---

# OIL ANALYSIS REPORT

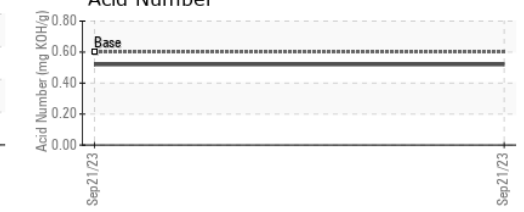
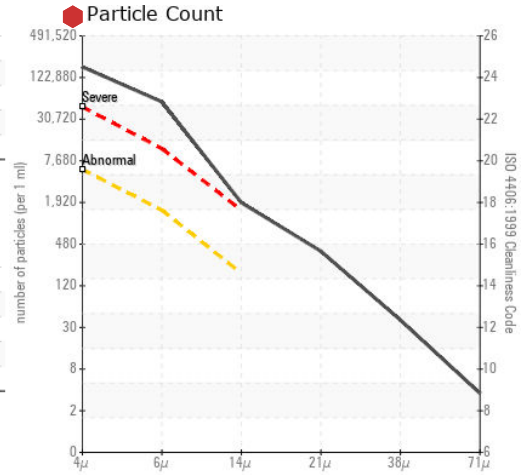
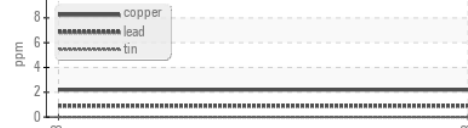
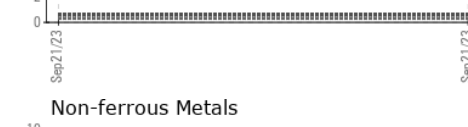
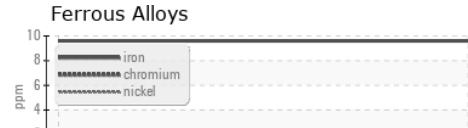


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
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	history1	history2	
Visc @ 40°C	cSt	ASTM D7279(m)	47.9	41.9	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	9.67	8.2	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	192	174	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0062542  
**Lab Number** : 02592674  
**Unique Number** : 5669753  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

**HUILES DESROCHES INC.**  
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 F: (418)621-0822

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.